IBM Tivoli Composite Application Manager Agent for SAP Applications Version 7.1.1.6

Reference



Note

Before using this information and the product it supports, read the information in <u>"Notices" on page</u> 467.

This edition applies to version 7.1.1 Fix Pack 4 of IBM[®] Tivoli[®] Composite Application Manager Agent for SAP Applications (product number 5725-I45) and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Workspaces reference

A workspace is the working area of the Tivoli Enterprise Portal application window. The Navigator tree that is displayed at the left of the workspace contains a list of the workspaces provided by the agent.

About workspaces

Use the Navigator tree that is displayed at the left of the workspace to select the workspace you want to see. As part of the application window, the right side of the status bar shows the Tivoli Enterprise Portal Server name and port number to which the displayed information applies and the ID of the current user.

When you select an item in the Navigator tree, a default workspace is displayed. When you right-click a Navigator item, a menu that includes a Workspace item is displayed. The Workspace item contains a list of workspaces for that Navigator item. Each workspace has at least one view. Some views have links to other workspaces. You can also use the Workspace Gallery tool as described in the *IBM Tivoli Enterprise Portal User's Guide* to open workspaces.

The workspaces in the Navigator are displayed in a Physical view that shows your enterprise as a physical mapping or a dynamically populated logical view that is agent-specific. You can also create a Logical view. The Physical view is the default view.

This monitoring agent provides predefined workspaces. You cannot modify or delete the predefined workspaces, but you can create new workspaces by editing them and saving the changes with a different name.

The SAP agent provides various default workspaces. These workspaces are displayed in the Navigator tree under the following subnodes for this monitoring agent:

:Grp subnode

Contains both instance and system specific workspaces

:Ins subnode

Contains instance level workspaces

:Lds subnode

Contains Solution Manager Landscape workspaces

:mySAP node

Contains agent level workspaces

:PI subnode

Contains SAP PI server details workspaces

:Slm: subnode

Contains MAI related workspaces

:Sol: subnode

Contains Solution Manager server details workspaces

:Sys subnode

Contains system level workspaces

Workspace views can be any combination of query-based views, event views, and special purpose views.

Additional information about workspaces

For more information about creating, customizing, and working with workspaces, see "Using workspaces" in the *Tivoli Enterprise Portal User's Guide*.

For a list of the predefined workspaces for this monitoring agent and a description of each workspace, see Predefined workspaces and the information about each individual workspace.

Some attribute groups for this monitoring agent might not be represented in the predefined workspaces or views for this agent. For a full list of the attribute groups, see <u>"Attribute groups and attributes" on page</u> 78.

Predefined launch definitions

Predefined launch definitions enable you to analyze SAP data by connecting to transactions in the SAP system.

Some workspace table views contain predefined launch definitions that enable you to connect to a specific transaction on the SAP system being monitored. These launch definitions open the SAPGUI on the Tivoli Enterprise Portal client. The predefined transactions are those that might be helpful in analyzing the SAP data shown on a particular workspace. See the *IBM Tivoli Monitoring User's Guide* for information about how to work with launch definitions.

See the "Using the sapschut comand" section in the *ITCAM Agent for SAP Applications Installation and Configuration Guide* for information about how to configure **sapshcut** to work with the launch feature.

Action links

You use Action links to complete a specific action, such as close an alert.

Some workspace table views have action links. These links perform some action on the SAP system related to the data being displayed. The link takes you to a new Results workspace that displays the status and result of executing the requested action. The following action links are included:

- Close Alert
- · Close Alerts of the same type
- Refresh Database Statistics
- Enable Gateway Statistics
- Reset Gateway Statistics
- Disable Gateway Statistics

Note: These action links differ from regular workspace links because they result in an action taking place.

Time spans

The SAP agent workspace views presents data over real time and extended time interval time spans.

SAP agent workspace views are designed to present both summary and detailed information. You might find that the summary and detailed workspaces present different data in some workspaces. This difference can happen when the views report data over different time spans.

The following guidelines apply to IBM Tivoli Composite Application Manager Agent for SAP Applications views and time spans:

- By default, all views report real time data. In this case, all views in a workspace report a consistent set of information.
- Views that support extended time span reporting show the Tivoli Enterprise Portal time span symbol in the view.
- When you use the time span option to collect more data for a view, it only affects that view. Summary views continue to report real time data only. In this case, the views might show different information.
- The real time interval varies for each attribute group. You change the real time interval by using the configuration transaction in SAP that is provided by the SAP agent. For more information, see the "Default sample periods" section in the *ITCAM Agent for SAP Applications Installation and Configuration Guide*. You also change the real time interval for the attribute group from the Tivoli Enterprise Portal by using the predefined Launch definition, Sample Periods for IBM Tivoli Monitoring Reports. See the "Predefined launch definitions" section in the *ITCAM Agent for SAP Applications Installation and Configuration and Configuration*.

Transport request count

You use transport Request count to count the number of times that a transport is imported.

The duration for measuring the count of transport import is taken from the **/IBMMON/ITM_CNFG** table. The duration is a configurable parameter. You view the Import Count in the Transport Request table under the Transport Requests navigator item.

The Import Count shows the transport numbers that are imported during the past X hour, for example. **X** is a parameter from **/IBMMON/ITM_PERD** and it represents the number of times that a transport was imported.

Using max record count

Maximum record count restricts the data returned in the Tivoli Enterprise Portal for workspaces. You optimize the performance of the agent by using this feature.

About this task

By default the maximum row count is 100, and the workspace returns a maximum of 100 rows.

Procedure

To change the maximum row count that is returned, complete the following steps:

- On a Windows platform:
 - a. Go to the %candle_home%\TMAITM6 directory.
 - b. Open the KSAENV_XXX file.
 - c. Change the Row Count setting.
 - d. Restart the agent.

For example, update the "ITM_BPM_ALERTS" entry for the Business Process Alert row count.

- On a non Windows platform:
 - a. Go to the \$candle_home/config directory.
 - b. Open the hostname_XXX.config file.
 - c. Change the Row Count setting.
 - d. Restart the agent.

For example, update the "ITM_BPM_ALERTS" entry for the Business Process Alert row count

Predefined workspaces

Predefined workspaces provide information, such as instance configuration, alerts, and work processes. You cannot delete predefined workspaces but you can edit them.

The SAP agent provides the following predefined workspaces, which are organized by navigator item:

- :SAP
 - System Summary (default)
 - Agent Log

• :Ins

- Instance Configuration
 - Instance Configuration (default)
- Alerts
 - Alerts (default)

- <u>Close Alert Results</u> (linked)
- Close All Alert Results (linked)
- CCMS Monitoring
 - Alerts (default)
 - Current State Overview
 - Current State Details
- Work Processes
 - Work Processes (default)
- Operating System
 - Operating System and LAN (default)
 - Historical Operating System
- File Systems
 - File Systems (default)
- Buffers and Memory
 - Buffer Performance (default)
 - Memory
 - Number Range Buffer
- Workload Performance
 - Service Response Time (default)
 - Transaction Performance
 - User Transaction Performance
 - User Performance
 - Application Performance
 - Sub-Application Performance
 - Historical Service Response Time
- User Activity
 - Active Users (default)
 - Logon Information
 - User Information (linked)
- Gateway Statistics
 - Gateway Statistics (default)
 - Disable Gateway Statistics Results (linked)
 - Enable Gateway Statistics Results (linked)
 - Reset Gateway Statistics Results (linked)
- Log and Traces
 - System Log (default)
 - Developer Traces
 - System Log Detail (linked)
- :Sys
 - System Summary
 - System Summary (:Sys level)
 - System Summary (:SAP level)

- License Information
- Locks and Updates
 - Enqueue Locks (default)
 - Asynchronous Updates
- Batch Processing
 - Batch Jobs (default)
 - Batch Data Create
 - Batch Data Create Log (linked)
 - Batch Job Log (linked)
- Spool and Output
 - Spool Requests (default)
 - Spool Output (linked)
 - Output Requests
- Document Interchange
 - Transactional RFC (default)
 - Data Transfer Information (Superseded)
 - Data Transfer Information
- Document Archiving
 - Archive Monitor (default)
- Logon and Server Groups
 - Logon Groups (default)
- SAP Office
 - SAP Office Inbox (default)
- Database
 - Database (default)
 - DB2 Performance History
 - DB2 Performance History for Last Week
 - DB2 Database Summary
 - DB2 Database Details
 - Refresh Database Statistics Results
 - Historical Database
 - SAP MaxDB Database
 - SAP MaxDB History
 - MSSQL Database
- Transport Requests
 - Transport Log (linked)
 - Transport Objects and Steps (linked)
 - Transport Requests (default)
- Logs and ABAP Dumps
 - ABAP Dumps (default)
 - Database Logs
 - SAProuter Log

- HTTP Services
 - HTTP Services Details (default)
- ICM Monitor
 - ICM Monitor (default)
 - ICM Monitor Service
- Message Server Monitor
 - Message Server Monitor
- Connection Monitoring
 - Connection Monitoring
 - ABAP Connection Details
 - HTTP Connections
 - Internal Connections
 - TCP/IP Connections
 - Connections Via ABAP Driver
- qRFC Queues
 - qRFC Inbound Queue Details
 - qRFC Inbound Queue Overview
 - qRFC Outbound Queue Details
 - qRFC Outbound Queue Overview
 - qRFC Queues Overview
 - gRFC Saved Inbound Queue Overview
 - qRFC Saved Inbound Queue Details
 - qRFC Scheduler Overview
 - qRFC QOUT scheduler details
 - qRFC QIN scheduler details
- lds
 - Databases
 - Database Details
 - Database Overview (default)
 - Database Logs
 - Database
 - Systems
 - Clients Details (linked)
 - Instance Details (linked)
 - Software Components Details (linked)
 - Systems Overview (default)
 - System Details (linked)
 - System Topology (linked)
- sol
 - Solution Monitoring
 - Business Process Monitoring Alerts
 - Early Watch Alerts

- Solution Overview (default)
- System Monitoring Current Status
- System Monitoring Historical Alerts
- System Monitoring Open Alerts
- pl
 - Business Process Engine
 - Business Process Engine Status
 - Component Monitoring
 - Component Monitoring URL
 - Job Monitoring
 - Background Job Logs
 - Job Monitoring (default)
 - Workflow Trace Logs
 - Workflow Trace Logs Detail
 - XML Messages Monitoring
 - XML Message Log
 - Persistence Layer Analysis
 - XML Message Processing Statistics
 - Synchronous Asynchronous Communication
 - Runtime Cache
 - Status of Runtime Cache
 - List of Services
 - List of Party
 - Process Component
 - Software Component
 - Integration Process
 - Receiver Determination
 - Interface Determination
 - Sender Agreement
 - Receiver Agreement
 - Communication Channel
 - Mapping
 - Split Mapping
 - Alert Category
 - Adapter Engine Connection Data Cache
- Slm
 - Alert Inbox
 - MAI Alert Inbox
 - Connection Alerts
 - Database Alerts
 - Host Alerts
 - Process Integration Alerts

- Technical Instance Alerts
- Technical Components Alerts
- Technical System Alerts
- Technical Scenario Alerts
- PI Monitoring
 - PI Monitoring Overview
 - Message Monitoring
 - PI Channel Monitoring
- System Monitoring
 - System Monitoring
- Solution Monitoring
 - Solution Overview
- Business Process Monitoring
 - Business Process Monitoring

The descriptions of each workspace apply to the default settings (the components of the workspace in its original configuration). Any changes or updates that you make to a workspace might not be reflected in the description of the workspace.

ABAP Connection Details workspace

The Advanced Business Application Programming (ABAP) Connection Details workspace displays information about RFC connections of the ABAP type.

The ABAP Connection Details workspace is the workspace for the Connection Monitoring navigator item in the Sys subnode. This workspace displays the following information about ABAP connection in a tabular view:

- RFC Connection
- RFC Type
- RFC Status
- Load Balancing
- Logon Group
- Target Host
- RFC Service Number
- · Gateway Host
- · Gateway Service
- Logon Language
- Logon Client
- Logon User
- Trusted System
- Secure Network Communication
- Trace Status
- Destination Lock Status
- Keep Alive Timeout
- Authorization for Destination
- RFC Logon GUI

Adapter Engine Connection Data Cache workspace

The Adapter Engine Connection Data Cache workspace provides information about the Adapter Engine Connection cache data.

This workspace displays the following information in a tabular view:

- Runtime ID
- Adapter Engine Name
- Adapter Engine Type
- Message URL
- User Name
- SAPshcut Parameters

ABAP Dumps workspace

Advanced Business Application Programming (ABAP) Dumps is the default workspace for the Logs and ABAP Dumps navigator group.

The ABAP Dumps workspace provides status information for each SAP ABAP dump generated for the SAP managed systems that you are monitoring. This workspace provides the following specific information for each dump:

- · Program associated with the dump
- · Host computer where the dump originated
- · User who created the dump
- Date and time the dump was created
- Names of the instances associated with ABAP dumps
- Summary count of dumps by program
- Summary count of dumps by user
- Summary count of dumps for last 24 hours

You can use the data for specific dumps for the following purposes:

- Identify the number of ABAP dumps generated for a specific SAP instance
- · Identify runtime problems that are occurring on your system

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

- ABAP Dump Analysis (ST22)
- Sample Period for ITM Reports

The workspace includes the following views:

- ABAP Dumps by Program
- ABAP Dumps by User
- ABAP Dumps Count
- ABAP Dump Information

Active Users workspace

Active Users is the default workspace for User Activity navigator group. This predefined workspace provides information about all users currently logged on to your SAP instance.

This workspace provides the following information about all users currently logged on to your SAP instance:

• Summary count of users by client

- Summary count of all sessions by user
- Complete list of logged on users
- Terminal name and address for each user
- Session start time for each user
- · Current transaction for each user
- · Memory usage for each user
- · Connection type for each user

You can use the session data for specific users for the following purposes:

- · Learn about who is logged on to your system
- Determine if the user load is correctly distributed across all the servers
- Anticipate and plan for optimal performance on your SAP system components

The workspace table view has predefined launch definitions. You can use the launch definitions to run the following transaction on the SAP system: User List (SM04)

All user entries listed in the workspace have predefined Link options. You can use the link options to perform the following action: Get detailed user information. This links to the User Information workspace, allowing you to see more detailed information about the logged on user.

Agent Log workspace

The Agent Log workspace provides information about the agent and the connection to the SAP system.

Agent Log is a predefined workspace that provides information about the monitoring agent connection to the SAP system. This workspace shows the following types of conditions:

- Agent connected and fully operational
- Failure to connect to the SAP system, with detailed messages describing the connection failure. The following reasons for connection failure are typical:
 - Incorrect agent configuration for hostname, instance number, user ID, or client number
 - Network connection problems or firewall problems between systems, if using remote management
 - Locked or undefined user ID
 - Incorrect password
- Connection established, but incompatible versions between the agent code and the installed SAP agent transport. In this case, install the corresponding transport on the SAP system.

Use this workspace to ensure that the agent has connected to the SAP system and is fully operational. If any errors are shown, correct those errors.

Alert Category workspace

The Alert Category workspace provides information about the standard alert objects that are defined in the system in Runtime Workbench or Integration Directory.

This workspace displays the following information in a tabular view:

- System Name
- Software Component Version
- Name
- Namespace
- Alert Category
- Long Name of an Alert Category
- Description of Alert Category
- SAPshcut Parameters

Alert Overview workspace

The Alert Overview workspace provides information about alerts, for example, the status of the alert.

The Alert Overview workspace provides the following information:

- Alert Id
- Alert Time Stamp
- Alert Technical Name
- Alert Name
- Alert Text Value
- Alert Description
- Managed Object Name
- Managed Object Type
- Alert Category
- Alert Severity
- Alert Rating
- Alert Priority
- Status

This workspace also contains a table view for the following types of alert that depend on the type of managed object:

- Database
- Host (Server)
- Process Integration (PI/XI) Domain
- Technical Instance
- Technical Component
- Technical System
- Technical Scenario
- Connection

Alerts workspace

Use the Alerts workspace to view alerts from the Centralized (CEN) Computing Center Management System (CCMS) and the SAP agent. This workspace provides specific information about each alert, such as the date and time that the alert occurred.

Alerts is the default workspace for the Alerts navigator group. Alerts is a predefined workspace that provides a comprehensive view of SAP CCMS alerts occurring on the SAP systems that you are monitoring. This workspace displays all alerts reported by CCMS and all alerts reported by the SAP agent. The following specific information is provided for each alert:

- Date and time that the alert occurred
- · Severity level of the alert, either critical or warning
- · Message text associated with the alert
- Identifying information, such as the alert number and class, assigned by SAP
- · Identifier to show whether the alert was raised by the SAP agent or by SAP CCMS
- Summary count of alerts by severity
- Summary count of alerts by class

You use the alert data for SAP systems collected by the SAP agent for the following purposes:

• Review the severity of an alert and plan corrective action

- Identify system conditions that result in poor performance
- · Learn more about an alert by reviewing its message and class

All alerts listed in the workspace have predefined Link options. You use the link options to complete the following actions:

- Close Alert. This action closes the selected alert in the SAP system and displays the results in the Close Alert Results workspace.
- Close Alerts of the same type. This action closes the selected alert in the SAP system. In addition, it closes all other alerts in the SAP system that are members of the same CCMS MTE class. The results of this action are displayed in the Close All Alerts Results workspace.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

- CCMS Monitoring (RZ20)
- Performance Monitoring Menu (STUN)
- Performance, SAP Statistics, Workload (ST03)
- DB Performance Monitor (ST04)
- Operating System Monitor (ST06)
- Statistical Records (STAT)
- Thresholds for ITM Generated Alerts
- Sample Periods for ITM Reports

For each alert with a severity of warning, a system administrator evaluates the conditions that causes the alert and considers available options for taking corrective action.

For each alert with a severity of critical, a system administrator evaluates the conditions that causes the alert and plans immediate corrective action. The following actions are possible:

- · Identifying and reconfiguring instances with heavy usage
- Rebalancing system loads
- · Supplying application instances with additional memory
- Correcting archiving problems

Alert timestamps workspace

Alerts have two timestamps associated with them: user time and Greenwich Mean Time (GMT). You can view alerts in the Tivoli Enterprise Portal by these timestamps. These timestamps are reported as Occurrence Time and Occurrence Time GMT.

When viewing Computing Center Management System (CCMS) alerts in the Tivoli Enterprise Portal, it is important to understand the meaning of the Occurrence Time attribute, what influences its value, and how it affects the information you see. This is particularly important when monitoring SAP systems across large geographic areas.

- All CCMS alerts have two timestamps associated with them: user time and Greenwich Mean Time (GMT). Both of these timestamps are available in the SAP agent. User time is reported as Occurrence Time; GMT is reported as Occurrence Time GMT.
- When you view CCMS alerts in the Tivoli Enterprise Portal, the default workspace displays alerts using only Occurrence Time.
- The value of Occurrence Time is based on the SAP user ID used to retrieve the alerts. You specify this user ID when you configure the SAP agent for a SAP system. The default user ID is IBMMON_AGENT.
- The value of Occurrence Time is also based on the Time Zone setting in the SAP system for this SAP user ID. By default, the IBMMON_AGENT Time Zone setting is the SAP System Time Zone, which is generally the time zone in which the SAP servers reside. This might not be the time zone in which you are viewing the Tivoli Enterprise Portal, so you might not be certain about the age of the alerts.

- If you are viewing alerts and the Occurrence Time does not meet your expected times, you can do any of the following:
 - To see the alerts in your local time, have the SAP administrator change the time zone of the user ID to match your local time zone. To do this, change the default user ID (IBMMON_AGENT) or create a new user ID specifically for your use with the SAP Agent. When you see the alerts, the times are relative to your local time, so you can determine the exact age of the alerts. This approach is recommended if all the servers in one SAP system reside in the same time zone.
 - View all alerts in GMT by modifying the Alert workspace and querying to report the Occurrence Time GMT attribute. In this way, you must mentally adjust the alert times based on the time difference between your time zone and GMT. This approach might be required if the servers in one SAP system are distributed across multiple time zones.

Special alerts generated by the SAP agent

This workspace provides information about alerts from Computing Center Management System (CCMS) and alerts that are raised from the agent. For example, the class associated with the alert and the alert severity is shown.

In addition to reporting alerts from CCMS, this workspace also reports internal alerts raised by the agent itself. These predefined agent alerts are listed in the following table.

Alert number	Alert severity	Alert class	Alert message
9900	Critical	System	Lost connection to SAP system SSS SSS = SID
9901	Critical	Update	Updates not active
9902	Critical	Update	Terminated updates
9903	Warning (nn > 0) Critical	Update	nn updates pending
	(nn => 10)		nn = number
9904	Warning (nn => 5) Critical (nn => 10)	Printer	nn output requests pending for printer PPPP
			nn = number
			PPPP = printer
9905	Critical	System	Logon not possible
9906	Critical	System	Spool consistency check failed
9907	Warning (nn => 1) Critical (nn => 2)	Database	nn Oracle exclusive lock waits
			nn = number
9908	Warning (nn => 30) Critical (nn => 60)	Database	Oracle exclusive lock wait pending nn seconds nn = number
9909	Critical	System	Statistics file too large (The SAP statistics file is over twice the optimum size.)

Alert number	Alert severity	Alert class	Alert message
9910	Warning	System	Performance collector job not running
9911	Warning (nnnn > 1000) Critical (nnnn = > 1500)	Tivoli	Excessive data collected for workspace, nnnn rows deleted workspace = workspace name nnnn = number
9912	Critical	CCMS Alerts	CCMS alerts collection did not complete. Last started at HH:MM:SS on MM/DD/YYYY
9913	Critical	System	Operating system collector (saposcol) error occurred - eeeeee
9914	Critical	Database	Oracle statistics are not available, verify performance collector job is running

Application Performance workspace

The Application Performance workspace provides information about the performance of the application, such as the number of database calls for each instance.

Application Performance is a predefined workspace that contains the following specific information about application performance for each instance:

- Application
- Description
- Number of dialog steps
- Average and total response time, CPU time, wait time, and database request in milliseconds
- Total database bytes requested in KB
- Total number of database calls

Archive Monitor workspace

The Archive Monitor workspace provides information about the Archive Monitor, such as the number of archiving errors and the number of background archiving jobs that are active.

Archive Monitor is the default workspace for the Document Archiving navigator group. Archive Monitor is a predefined workspace that provides the following information about data in the Archive Monitor:

- Number of open asynchronous errors
- Archive device status information
- Number of open spool requests
- · Number of background archiving jobs that are active
- Number of background jobs scheduled
- Number of archiving errors

You use the data for specific instances for the following purposes:

· Learn about the number of errors on the system

- Reduce the potential for bottlenecks and future trouble spots
- · Anticipate and plan for optimal performance on your SAP system components

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transaction on the SAP system: ArchiveLink: Monitoring (OAM1)

Asynchronous Updates workspace

The Asynchronous Updates workspace identifies database update requests that must be either reprocessed or deleted.

Asynchronous Updates is a predefined workspace that provides information about the status of pending and failed database update requests. You use this information to identify failed database updates that need to be reprocessed or deleted. This workspace includes the following information:

- · Server on which database updates are occurring
- User ID of the person performing the update requests
- · Status of the update request
- Type of error that occurred during an update
- Name of the function module for the program executing the update request
- Program executing the update request
- · Summary count of updates by status
- · Summary count of failed updates by program

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

- Update Records (SM13)
- Sample Periods for ITM Reports

Background Job Logs workspace

The Background Job Logs workspace provides information on logs for Background Jobs.

Use the Background Job Logs workspace to display information about Background Jobs for the Job Monitoring navigator group.

This workspace provides the following information about Background Jobs:

- Message Text
- Message Class
- Message Number
- Message Type
- Timestamp

Batch Data Create workspace

The Batch Data Create workspace enables you to monitor BDC sessions, so that you can improve performance. For example, you can reduce scheduling conflicts in your mySAP system.

Batch Data Create (BDC) is a predefined workspace that provides information about the contents of BDC sessions and metrics that enable you to monitor the status of a session. You use the Batch Data Create workspace to review the contents of defined BDC sessions and monitor their progress. The following information is included for BDC sessions:

- · Summary count of sessions by status
- · Name of session including its status, such as being created, in error, or completed
- · Date and time the session was created, and by whom
- · Date and time the session was most recently modified

- Start mode for the session, such as automatic or manual
- · Metrics for transactions and screens associated with this BDC session

You use the data in the Batch Data Create workspace for the following purposes:

- · Anticipate scheduling conflicts for BDC sessions running in your mySAP system
- · Reduce the risk for system bottlenecks and trouble spots
- Plan reconfiguration of BDC sessions to improve performance
- · Identify sessions with errors for manual correction

All batch data create sessions listed in the workspace have predefined Link options. You use the link options to complete the following action: View batch data create log. This option links to the Batch Data Create Log workspace in which you view detailed information about the batch data create processing.

The workspace table view has predefined launch definitions. You can use the launch definitions to execute the following transactions on the mySAP system:

- Batch Input Monitoring (SM35)
- Sample Periods for ITM Reports

Batch Data Create Log workspace

The Batch Data Create Log workspace provides information about batch data create sessions.

Batch Data Create Log is a predefined workspace that contains the following specific information about a batch data create session:

- Session name
- Execution host
- Transaction
- Screen number
- Message number and text

After reviewing the information in this workspace, return to the Batch Data Create workspace to continue reviewing other batch data create requests.

Batch Job Log workspace

The Batch Job Log workspace provides information about specific batch jobs. For example, this workspace includes information about the job, such as the job name and the job number.

Batch Job Log is a predefined workspace that shows the log for a given batch job. This workspace contains the following specific information about a batch job:

- Job name
- Job number
- Message number
- Message time
- Message text

After reviewing the information in this workspace, return to the Batch Jobs workspace to continue reviewing other batch jobs.

The workspace table view has predefined launch definitions. You use the launch definitions to execute the following transactions on the mySAP system:

- Job Selection (SM37)
- Sample Periods for ITM Reports

Batch Jobs workspace

The Batch Jobs workspace is the default workspace for the Batch Processing navigator group.

The Batch Jobs workspace provides information about defined batch jobs that are scheduled to run or that completed running on your mySAP systems. Use the Batch Jobs workspace to evaluate information about completed and scheduled batch processing and plan for adjustments to improve performance.

This workspace provides the following information about defined batch jobs on your mySAP systems:

- Summary count of all jobs by job class
- Summary count of all jobs by job completion status
- Job name and class
- Status of the job, such as defined, scheduled, or active
- · Identifying information for the system executing the job
- Start and end time for the job, including the most recent changes in its scheduling
- Name of the person who defined the job initially
- Name of the person who has made recent changes in its scheduling
- Name of the variant within a step

All batch jobs listed in the workspace have predefined Link options. You use the link options to complete the following action: View batch log. This option links to the Batch Job Log workspace in which you view detailed information about the batch job processing.

The workspace table view has predefined launch definitions. You use the launch definitions to execute the following transactions on the mySAP system:

- Job Selection (SM37)
- Sample Periods for ITM Reports

BPE Inbound Processing Status Monitoring for Errors workspace

The BPE Inbound Processing Error Status workspace provides information on the status of queued errors and errors in BPE Inbound Processing.

BPE Inbound Processing Status Monitoring for Error is a predefined workspace for the Business Process Engine navigator group.

Use the BPE Inbound Processing Error Status workspace to provide information on the status of queued errors and errors in BPE Inbound Processing

This workspace provides the following information about BPE Inbound Processing Errors:

- Message ID
- Queue Name
- Retry Count
- Status
- Received Timestamp
- Maximum Number of Messages
- Quality of Service
- Maximum Wait Time
- Configuration Version
- Queue Assignment
- Maximum Memory per Message Package
- Maximum Wait Time
- Number of Queues

BPE Inbound Processing Status Monitoring for Temporary Errors workspace

The BPE Inbound Processing Status Monitoring for Temporary Errors workspace provides information on the status of temporary errors, logically deleted and locked messages in BPE Inbound Processing.

BPE Inbound Processing Status Monitoring for Temporary Errors is a workspace for the Business Process Engine navigator group.

This workspace provides the following information about BPE Inbound Processing Temporary Errors:

- Message ID
- Queue Name
- Retry Count
- Status
- Received Timestamp
- Maximum Number of Messages
- Quality of Service
- Maximum Wait Time
- Configuration Version
- Queue Assignment
- Maximum Memory per Message Package
- Maximum Wait Time
- Number of Queues

The workspace table view has predefined launch definitions. You use the launch definitions to execute the following transactions on the SAP system:

• BPE Inbound Processing Message Monitoring Details by Message Id (SXI_SHOW_MESSAGE)

Buffer Performance workspace

The Buffer Performance workspace provides information about buffers in your mySAP system, such as the buffer space allocated and the number of requests, hits, and misses in your mySAP system.

Buffer Performance is the default workspace for the Buffers and Memory navigator group. The Buffer Performance workspace provides information about the performance of buffers on your mySAP systems. You use the Buffer Performance workspace to evaluate information about anticipated buffer performance and to plan for adjustments to improve performance.

Buffer Performance is a predefined workspace that provides the following information about the performance of buffers on your mySAP systems:

- · Hit ratio for the buffer you are monitoring
- Number of buffer requests, hits, and misses
- · Number of times requested information was not available in the buffer
- Buffer space allocated and the space available, in KB
- Number of directory entries allocated and those available
- Number of objects and number of frames swapped
- Number of buffer resets, as well as the date and time that the last reset occurred
- · Number of objects in the buffer
- Number of inserts, changes, and deletes for each monitored object

Youuse the buffer performance data for your mySAP systems for the following purposes:

- · Monitor buffer performance and anticipate necessary adjustments to improve future performance
- Reduce the size of over allocated and under utilized buffers

The workspace table view has predefined launch definitions. You use the launch definitions to execute the following transaction on the mySAP system: Setups/Tune Buffers (ST02)

Business Process Engine Status workspace

The Business Process Engine Status workspace allows you to review the status of the Business Process Engine in the SAP PI/XI system.

The Business Process Engine (BPE) Status workspace is the default workspace for the Business Process Engine navigator group under the PI/XI subnode.

This workspace provides the following information about the Business Process Engine

- Class Name
- Component Name
- Engine Status
- Process Type

The workspace table view has predefined launch definitions. You use the launch definitions to execute the following transactions on the SAP system:

• Business Process Engine Status (SWF_XI_ADM_BPE_DISP)

Business Process Monitoring workspace

The Business Process Monitoring workspace provides information about the status of Business Process Monitoring alerts and alert messages for predefined business processes in the Solution Manager system.

The Business Process Monitoring workspace is a link workspace from the Solution Overview workspace to the Solution Monitoring navigator group.

Threshold values are defined for business processes that are configured in the Solution Manager system for the connected satellite system. When these threshold values are reached, an alert is generated in the Solution Manager system.

The Business Process Monitoring workspace provides the following information about Business Process Monitoring:

- System Name
- Solution ID
- Monitoring ID
- Alert Type
- Alert Rating
- Alert Message
- Alert Timestamp
- Monitoring Type
- SAP System
- Client
- Sample Time
- Sample Interval Start
- Sample Interval End

Business Process Monitoring Alerts workspace

The Business Process Monitoring Alerts workspace provides information about the status of Business Process Monitoring alerts and alert messages for predefined business processes in Solution Manager

The Business Process Monitoring Alerts is the link workspace from the Solution Overview workspace for Solution Monitoring navigator group.

Note: Business processes configured in the Solution Manager system for the connected satellite system have threshold values defined. When these threshold values are crossed an alert is generated in the Solution Manager.

This workspace provides the following information about the Business Process Engine:

- Solution Id
- Monitoring Id
- Alert Type
- Alert Rating
- Alert Message
- Alert Timestamp
- Monitoring Type
- SAP System

Business Process Monitoring Alerts (:Slm level) workspace

The Business Process Monitoring Alerts workspace provides information about the MAI alerts that are related to the BPMON_OBJ managed object type, which is for business process monitoring. This workspace is only applicable for Solution Manager 7.2.

This workspace displays the following information in a tabular view:

- System Name
- Alert Name
- Alert Id
- Alert Priority
- Alert Rating
- Alert Severity
- Alert Timestamp
- Technical Name (MEA)
- Managed Object Name
- Status
- Alert Text Value
- Category
- Object Type
- Alert Description
- Managed System
- SAPshcut Parameters
- System Label
- Sample Time
- Logon Parameters

Clients Details workspace

The Clients Details workspace provides information about clients that are available in the satellite systems and also configured in the Solution Manager System landscape.

Clients Details is a predefined workspace under the Systems navigator group.

This workspace provides the following client information

- Client- A legally and organizationally independent unit which uses the SAP system.
- Client Name

- Group Keys
- Host name of the satellite system
- IP address of the satellite system
- Name of the user who lastly change client configuration
- Date of last change
- Name of the logical system to which this client corresponds to

The workspace table view has predefined launch definitions. You can use the launch definitions to execute the following transactions on the SAP system:

• Solution Manager System Landscape (SMSY)

Close Alert Results workspace

The Close Alert Results workspace provides information about the results of closed alerts.

Close Alert Results is a predefined workspace that displays the results of closing a single mySAP alert.

After seeing these results, you can return to the Alerts workspace to see the updated list and to continue handling other open alerts.

Close All Alerts Results workspace

The Close All Alerts Results workspace provides information about the closed alerts in a CCMS MTE class.

You must confirm that all alerts closed successfully.

After seeing these results, you return to the Alerts workspace to see the updated list and to continue handling other open alerts.

Component Monitoring URL workspace

The Component monitoring URL workspace allows you to review the url and the user name in component monitoring.

This predefined workspace contains only one row, which is the URL associated with Component Monitoring. Component Monitoring URL is the workspace for the Component Monitoring navigator group under PI/XI subnode. You click the URL to open the browser workspace that contains details of any error messages for the PI/XI components.

This workspace provides the following information:

- Component Monitoring URL
- User name

Communication Channel workspace

The Communication Channel workspace provides detailed information about the type and configuration of an adapter that is used during inbound or outbound processing.

This workspace displays the following information in a tabular view:

- System Name
- Communication Party
- Communication Component
- Communication Channel
- Adapter Engine Type
- Adapter Engine Name
- Adapter Name
- Adapter Namespace
- Adapter Software Component

- Message Protocol
- Message Protocol Version
- Transport Protocol
- Transport Protocol Version
- Call Direction
- From Party Agency
- From Party Schema
- To Party Agency
- To Party Schema
- SAPshcut Parameters

Connection Alerts workspace

The Connection Alerts workspace provides information about the alerts that are related to all the connections such as ABAP connections or RFC connections for underlying instances of the central monitoring system and its satellite systems.

This workspace displays the following information in a tabular view:

- System Name
- Object Type
- Alert ID
- Alert Time Stamp
- Alert Technical Name
- Alert Name
- Alerts Text
- Alert Description
- Managed Object Name
- Managed Object Type
- Alert Category
- Alert Severity
- Alert Priority
- Sample Time
- SAPshcut Parameters

Connection Monitoring workspace

The Connection Monitoring workspace displays information about connection monitoring in graphical and tabular views.

The Connection Monitoring workspace is the default workspace for the Connection Monitoring navigator item in the Sys subnode. This workspace displays the following information:

- The count of the RFC connection status in graphical view.
- Detailed information of connection monitoring in tabular view.

The tabular view provides the following information about connection monitoring:

- RFC Connection
- RFC Type
- RFC Status
- Description

- Created By
- Created On
- Last Changed By
- Changed On

Connection Monitoring Details workspace

The Connections Monitoring Details workspace displays information about connection monitoring details in a tabular view.

The Connection Monitoring Details workspace is a linked workspace for the Connection Monitoring navigator item in the Sys subnode. This linked workspace is available from both the Advanced Business Application Programming (ABAP) Connection Details workspace and the HTTP Connection Details workspace. The Connections Monitoring Details workspace displays the following information about Connection Monitoring in a tabular view:

- RFC Connection
- RFC Type
- RFC Ping
- RFC Logon Message
- RFC Latency
- RFC Ping Message

Connections Via ABAP Driver workspace

The Connections Via Advanced Business Application Programming (ABAP) Driver workspace displays information about Connections Via ABAP Driver in a tabular view.

The Connections ABAP Driver workspace is the workspace for the Connection Monitoring navigator node in the Sys navigator item. This workspace displays the following information about the Connections Via ABAP Driver in a tabular view:

- RFC Connection
- RFC Type
- RFC Status
- Driver Program
- · Gateway Host
- Gateway Service
- Authorization for Destination
- Trace Status
- Keep Alive Timeout (in seconds)

Current State Details workspace

The Current State Details workspace is the predefined workspace for the Centralized (CEN) Computing Center Management System (CCMS) monitoring navigator group.

This workspace provides information about the current state from the CCMS. This workspace contains the following information:

- Summary count of the current state by status
- Name of the application instance
- Current state of the MTE (Monitoring tree element)
- Name of the monitoring context
- Occurrence time of the alert

· Name of the monitor set and monitor

Related concepts

"Alerts workspace" on page 11

Use the Alerts workspace to view alerts from the Centralized (CEN) Computing Center Management System (CCMS) and the SAP agent. This workspace provides specific information about each alert, such as the date and time that the alert occurred.

Current State Overview workspace

Current state Overview is the predefined workspace for the CCMS monitoring navigator group.

This workspace shows a topology view of the alerts and the current state that is configured for the monitor sets. This workspace contains the following information:

- Topology view of alerts
- Name of the configured monitor set
- Name of the configured monitor
- · Status of the alert and the current state of the alert

Database Alerts workspace

The Database Alerts Workspace provides information about the alerts that are related to all the database systems for underlying instances of the central monitoring system and its satellite systems.

This workspace displays the following information in a tabular view:

- System Name
- Object Type
- Alert ID
- Alert Time Stamp
- Alert Technical Name
- Alert Name
- Alerts Text
- Alert Description
- Managed Object Name
- Managed Object Type
- Alert Category
- Alert Severity
- Alert Priority
- Sample Time
- SAPshcut Parameters

Database Details workspace

The Database Details workspace provides information about the databases configured in the Solution Manager System Landscape.

Database Details is a predefined workspace under the Systems navigator group.

This workspace provides the following database information:

- Name of the database system configured in the Solution Manager System Landscape
- Database system status in the solution manager (It can be Active or Inactive).
- Database vendor name
- Database release information

- Database patch level
- Database host name

The workspace table view has predefined launch definitions. You use the launch definitions to execute the following transactions on the SAP system:

• Solution Manager System Landscape (SMSY)

Database Logs workspace

Database Logs is a predefined workspace that contains data from the Database Backup Log file, the Database Archive Log file, and the SAPBA log file.

This workspace helps you monitor specific information that indicates if errors occurred, for example, in backing up the database. For the selected managed system, this workspace includes information such as the following:

- Text from each Database Log file
- Name of the log file
- Date and time the data was collected

You can use this data for the following purposes:

- Determine if your database is reporting errors. If so, contact your database administrator with this information.
- Examine the log data for new or unexpected messages and investigate why they are occurring.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- DBA Operation Logs (DB14)
- Sample Periods for ITM Reports
- Log File Names for ITM Reports

Database Overview workspace

The Database overview workspace provides overview information about the database configured in the Solution Manager System landscape.

Database Overview is the default workspace for the Databases navigator group.

This workspace provides the following database information:

- Name of the database system configured in the Solution Manager System landscape.
- Database system status in the solution manager (Active or Inactive).

All database systems listed in the workspace have predefined Link options. You use the link options to complete the following action:

• View database details: This option links to the Database Details workspace in which you view detailed information about the database system.

It also provides information about databases configured on Solution Manager 7.2, such as name, vendor, release, global Id, caption, creation date, system landscape directory Id, system landscape directory key, description, remote connection, type, system bits, connection address, and cluster type.

The workspace table view has predefined launch definitions. You use the launch definitions to execute the following transactions on the SAP system:

• Solution Manager System Landscape (SMSY)

Data Base workspace

The Data Base workspace provides information about the metrics that are available in an oracle database. It provides summary and detailed information about your Oracle database.

Data Base is the default workspace for the Database navigator group. This predefined workspace reports database metrics for Oracle databases. It displays the database instance and the type of objects in it.

If your mySAP system is not using an Oracle database, then this workspace does not display any information about your database.

This workspace provides summary and detailed information about your database. Summary information reports the following information that is aggregated by major object type:

- Number of objects of this type
- Size information

Detailed information reports the following information for each object in the database:

- Object name and type
- Status
- Size information

You use the database metrics for your mySAP systems for the following purposes:

- · Identify objects that will fail on the next attempt to extend them
- · Identify objects that are in too many extents
- · Anticipate bottlenecks and trouble spots in database performance
- Plan changes to improve database performance
- Create situations that generate alerts that notify you of potential trouble spots in database performance

This workspace supports a predefined Link option. You can use the link option to perform the following action: Refresh database statistics. This option opens the Refresh Database Statistics workspace, and submits job RSORATOD to the mySAP system for processing.

The workspace table view has predefined launch definitions. You use the launch definitions to execute the following transactions on the mySAP system:

- Tables and Indexes Monitor (DB02)
- DB Performance Monitor (ST04)

Data Transfer Information workspace (Superseded)

The Data Transfer Information workspace provides information about the data transfer by using container as Intermediate Documents (IDocs) through Electronic Data Interchange (EDI) files.

This workspace contains the following information about IDocs:

- · Summary count of IDocs by their current status
- · Summary count of IDocs by transfer partner
- Date and time the IDoc was created
- IDoc status description
- Logical message type
- IDoc partner port

This workspace contains the following information about EDI files:

- Number of the record within a file that was last processed successfully
- Path and file name of the EDI file being processed
- Name of the mySAP system being monitored

Review the information in the Data Transfer Information workspace to monitor the flow of Intermediate Documents into and out of your mySAP system. You identify errors that affect the timely update of production data in the local or the remote mySAP system, or in external applications.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- Display IDoc (WE02)
- IDoc Lists (WE05)
- IDoc Statistics (WE07)
- Status File Interface (WE08)
- Sample Periods for ITM Reports

Data Transfer Information workspace

The Data Transfer Information workspace provides information about the data transfer by using container as Intermediate Documents (IDocs) through Electronic Data Interchange (EDI) files.

This workspace contains the following information about IDocs:

- Summary count of IDocs by their current status
- Summary count of IDocs by transfer partner
- · Date and time the IDoc was created
- IDoc status description
- Logical message type
- IDoc partner port
- IDoc receiver partner port, name, type, and function
- IDoc sender partner port, name, type and function

This workspace contains the following information about EDI files:

- Number of the record within a file that was last processed successfully
- Path and file name of the EDI file being processed
- Name of the mySAP system being monitored

Review the information in the Data Transfer Information workspace to monitor the flow of Intermediate Documents into and out of your mySAP system. You identify errors that affect the timely update of production data in the local or the remote mySAP system, or in external applications.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- Display IDoc (WE02)
- IDoc Lists (WE05)
- IDoc Statistics (WE07)
- Status File Interface (WE08)
- Sample Periods for ITM Reports

DB2 Database Details workspace

The DB2 database details workspace provides information about the DB2 database.

DB2 Database Details is the workspace for the Database navigator group.

This workspace contains graphical and table views. The graphical view shows the comparison of log files. The table view shows database details and it includes the following information:

- Log Files
- Dynamic Query Management

- Lock Timeout (microSec)
- Number of I/O Servers
- Logs space used by Database (byte)

DB2 Database Summary workspace

The DB2 Database Summary is a workspace for the Database navigator group that contains information about the DB2 Database.

Use the graphical and table views of this workspace to compare the size of different database files like for example primary file size and secondary file size.

This workspace provides the following DB2 database information:

- Cache Page Size
- Heap Size
- Log File Size
- Operating System
- Database Release Level

DB2 Performance History workspace

The DB2 performance history workspace shows the performance history of the DB2 database in the SAP system.

DB2 Performance History is the workspace for the Database navigator group.

You use this workspace to review commit statements, deadlocks, and rollback statements. This workspace provides the following information:

- · Commit statements
- Deadlocks
- Rollback statements
- Index physical reads
- · Index logical reads
- Index physical writes
- · Lock wait time
- Average Logical Read Time (ms)
- Average Physical Writes Time (ms)

DB2 Performance History for Last Week workspace

The DB2 performance history for last week workspace shows the Performance History of the DB2 database for the last seven days.

DB2 Performance History for Last Week is the workspace for the Database navigator group. You use this workspace to review commit statements, rollback statements, deadlocks, and lock waits.

This workspace provides the following information:

- Commit Statements
- Deadlocks
- Rollback Statements
- Index Physical Reads
- Index Logical Reads
- Index Physical Writes
- Lock Escalation

• X Lock Escalation

Developer Traces workspace

Developer Traces is a predefined workspace that contains data from the developer trace files and the error files.

Use the Developer Traces workspace to review error messages pertaining to mySAP system. This workspace provides the following information:

- Data lines from the trace or the error file
- Name of the mySAP instance being monitored
- Name of the trace file or of the error file

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- Display Developer Traces (ST11)
- Sample Periods for ITM Reports
- Log File Names for ITM Reports

Disable Gateway Statistics Results workspace

Disable Gateway Statistics Results is a predefined workspace that provides status information on a request to disable gateway statistics.

A message that indicates that the statistics were disabled is displayed.

Ensure that gateway statistics were disabled.

After seeing these results, you return to the Gateway Statistics workspace, but you cannot see any gateway statistics information because this collection is now disabled.

Early Watch Alerts workspace

The Early Watch Alerts workspace provides information about early watch alerts occurring in the satellite SAP systems.

Early Watch Alerts is the link workspace from the Solution Overview workspace for the Solution Monitoring navigator group.

This workspace provides the following early watch alert information

- Solution Id
- Session Number
- Rating
- Type
- Planned Date
- Installation Number

Enable Gateway Statistics Results workspace

The Enable Gateway Statistics Results predefined workspace provides status information on a request to enable gateway statistics.

A message indicating that the statistics were enabled is displayed.

Ensure that gateway statistics are enabled.

After seeing these results, you return to the Gateway Statistics workspace to see the available gateway statistics information.

Enqueue Locks workspace

The Enqueue Locks workspace is the default workspace for the Locks and Updates navigator group.

Use the lock statistics provided by the Enqueue Locks workspace to review lock information for work processes on specific instances. This workspace provides the following information:

- Number of locks held
- User ID of the person locking a process
- Name of the object being locked

Viewing lock statistics in this workspace helps you to protect concurrent access to work processes.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transaction on the SAP system: Display and Delete Locks (SM12)

File Systems workspace

The File Systems workspace is the default workspace for the File Systems navigator group. This workspace provides information about the file systems on the mySAP instance, such as the capacity of the file system.

Use the File Systems workspace to view information about the configuration and usage of the file systems on the mySAP instance that you are monitoring.

This workspace provides the following file system information:

- Name of the file system
- Allocated capacity of the file system, including space used and space available
- Text describing the file system status, for example, static or dynamic
- Estimated number of days for non-static file systems to become full

You use the file system data for your mySAP systems for the following purposes:

- Anticipate trouble spots in management of your file systems
- Plan for changes to your file system allocation to improve performance
- Create situations that generate alerts to notify you of potential trouble spots in your file systems, such as the system filling rapidly

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- CCMS Monitoring (RZ20)
- Local File System Monitor (AL18)

Gateway Statistics workspace

The Gateway Statistics workspace is the default workspace for the Gateway Statistics navigator group.

Use the Gateway Statistics workspace to view statistical information for the specific mySAP instance that you are monitoring.

This workspace provides the following statistical information:

- Connection identifier
- Remote host name
- Number of connections on the mySAP Gateway
- Local TCP/IP address
- Local APPC version
- Local transaction program name
- Connection number

- Remote logical unit name
- · User ID of the person connected to the Gateway
- · Number of errors encountered by the gateway

All gateway connections listed in the workspace have predefined Link options. You can use the link options to perform the following actions:

- Enable statistics. This option causes the mySAP system to start collecting statistics for this gateway connection. Use this option if the workspace reports no data available for a gateway connection.
- Disable statistics. This option causes the mySAP system to stop collecting statistics for this gateway connection.
- Reset gateway statistics. This option causes the mySAP system to reset its gateway statistics counters to zero. Use this option to get the most recent information about the gateway connection.

The workspace table view has predefined launch definitions. You can use the launch definitions to run the following transaction on the mySAP system: Gateway Monitor (SMGW)

Historical Database

The Historical Database workspace provides summary and detailed historical information about your database.

Historical Database is a predefined workspace that provides the same information as the summary information in the Data Base workspace, but at historically spaced time intervals.

Historical Operating System workspace

The Historical Operating System workspace provides historical information about the operating system and LAN on which the mySAP instance runs.

Historical Operating System is a predefined workspace that provides the same information as the Operating System and LAN workspace, but at historically spaced time intervals.

Historical Service Response Time workspace

The Historical Service Response Time workspace provides historical diagnostic information about the services that are configured in the mySAP system.

Historical Service Response Time is a predefined workspace that provides the same information as the Service Response Time workspace, but focused on Dialog response time, at historically spaced time intervals.

Host Alerts workspace

The Host Alerts workspace provides information about the alerts that are related to all the operating systems for underlying instances of the central monitoring system and its satellite systems.

This workspace displays the following information in a tabular view:

- System Name
- Object Type
- Alert ID
- Alert Time Stamp
- Alert Technical Name
- Alert Name
- Alerts Text
- Alert Description
- Managed Object Name
- Managed Object Type

- Alert Category
- Alert Severity
- Alert Priority
- Sample Time
- SAPshcut Parameters

HTTP Connections workspace

The HTTP Connections workspace displays information about HTTP connections in a tabular view.

The HTTP Connections workspace is the workspace for the Connection Monitoring navigator item in the Sys subnode. This workspace displays the following information about HTTP Connections in a tabular view:

- RFC Connection
- RFC Type
- RFC Status
- RFC Host
- RFC SYSID
- Proxy Host
- Proxy User
- Proxy Service
- SSL Client Identity
- Logon with User
- Assertion Ticket Status
- Assertion Ticket System
- Assertion Ticket Client
- Destination Lock Status
- Authority
- HTTP Timeout
- Connection Type Path
- Category of RFC Connections
- SAP Authentication Ticket
- RFC ALIAS

HTTP Services workspace

The HTTP Services workspace provides information about the HTTP Services in graphical view.

HTTP Services is the default workspace for the HTTP Services navigator group.

This workspace provides the following HTTP Services information:

- Number of services used by user
- Number of active inactive services
- Number of services for a host

HTTP Services Details workspace

The HTTP services details workspace is the default workspace for the HTTP Services navigator group. Use the HTTP services details workspace to display information about HTTP Services in graphical view. This workspace provides the following information:

- Number of services used by user
- · Number of active and inactive services
- Number of services for a host

Integration Process workspace

The Integration Process workspace is used to monitor the messages for cross component systems.

The Integration process is a process that is defined for cross system process messages. This workspace displays the following information in a tabular view:

- System Name
- Party in Directory
- Integration Process Component
- Task
- SAP Release
- Return Code
- Repository Name
- Repository Namespace
- Repository Software Component (SWSC)
- Sample Time
- SAPshcut Parameters

Interface Determination workspace

The Interface Determination workspace provides detailed information about the mapping that is to be used to process a message and the condition under which the message is to be sent to the specified interface.

This workspace displays the following information in a tabular view:

- System Name
- Sequence
- From Action Namespace
- From Action Name
- From Party
- From Service
- To Party
- To Service
- To Action Namespace
- To Action Name
- Required
- Version ID
- Support Package
- Component
- Mapping Namespace
- Mapping Name
- Processing Sequence
- Parameter ID
- Operation

- Interface Name
- Interface Namespace
- To Operation
- SAPshcut Parameters

Internet Communication Manager (ICM) Monitor Service workspace

The ICM monitor service workspace provides information on the status of ICM Services.

ICM Monitor Service is a predefined workspace for the ICM Monitor navigator group.

This workspace provides the following information about services configured for ICM Monitor:

- Status of the service
- Internet Protocol ID used
- Timeout period in seconds for keeping service alive
- Timeout period in seconds for maximum processing time
- SSL Client Verification
- ICM Service Name or Port Number on which the ICM request accepts the corresponding protocol
- Fully qualified host name to which the port is linked

The workspace table view has predefined launch definitions. You use the launch definitions to execute the following transactions on the SAP system:

• Internet Communication Manger (SMICM)

Internet Communication Manager (ICM) Monitor workspace

The ICM monitor workspace monitors the status of ICM requests to and from the internet.

ICM Monitor is the default workspace for the ICM Monitor navigator group.

Note: ICM requests and responses are handled by worker threads.

This workspace provides the following information about ICM Monitor:

- ICM status
- Thread ID assigned by operating system (similar to PID for processes)
- Current trace level
- Current, peak and Maximum worker threads that can be created
- Current, peak and Maximum connection that can be used
- Current, peak and Maximum queue entries
- Status of the thread
- Type of request the thread is currently processing
- Connection Identifier of Service
- GUID for the Connection Identifier

The workspace table view has predefined launch definitions. You use the launch definitions to execute the following transactions on the SAP system:

• Internet Communication Manger (SMICM)

Instance Configuration workspace

The Instance Configuration workspace is the default workspace for the Instance Configuration navigator group.

Use the Instance Configuration workspace to view information about the mySAP instance configuration.

This workspace provides the following information:

- Number and type of mySAP configured services
- Name and TCP/IP address for application instances

You use the configuration data for application instances for the following purposes:

- Evaluate the current configuration of your mySAP system components
- Review the current configuration of mySAP services, such as batch, dialog, enqueue, gateway, message, spool, and update
- · Reduce the potential for bottlenecks and future trouble spots
- · Anticipate and plan for optimal performance on your mySAP system components

Instance Details workspace

The Instance Details workspace provides information about instances of satellite systems configured in the Solution Manager System landscape.

Instance Details is a predefined workspace under the Systems navigator group.

This workspace provides the following instance information:

- Instance Name
- · Server name on which this instance is running
- Logical system name
- Product name of the satellite system
- · Group keys

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

• Solution Manager System Landscape (SMSY)

Instance Summary workspace

The Instance Summary workspace is the default workspace for the sub-agent-level navigator node.

Use the Instance Summary workspace to quickly determine which areas of instance monitoring require more detailed investigation by viewing summary information about a mySAP instance, such as the number of alerts, work processes, and CPU utilization.

This workspace provides the following information:

- Type and number of work processes
- Number of Critical and Warning alerts
- · CPU utilization for the server on which the instance is running
- Number of logged on users
- Average response time for programs and transactions

Internal Connections workspace

The Internal Connections workspace displays information about internal connections in a tabular view.

The Internal Connections workspace is the workspace for the Connection Monitoring navigator item in the Sys subnode. This workspace displays the following information about Internal Connections in a tabular view:

- RFC Connection
- RFC Type
- RFC Status
- Gateway Host
- · Gateway Service

- Authorization for Destination
- Keep Alive Timeout (in seconds)
- Trace Status

Job Monitoring workspace

The Job Monitoring workspace provides information about jobs and background jobs.

Job Monitoring is the workspace for the Job Monitoring navigator group.

The Job Monitoring workspace contains two views, the first view shows overview information about jobs and the second view shows information about Background Jobs.

This workspace provides the following job monitoring information:

- Job Status
- Job Name
- Job ID
- Job Type
- Job Created By

License Information workspace

The License Information workspace under System Summary navigator item provides information about the license of the installed SAP application.

This workspace includes the License Information view that displays the following information in a tabular view:

- System name
- Managed system
- System number
- · Hardware key
- Software product
- Installation number
- · License begin date
- · License end date
- License date
- · Validity
- Number of days to expiry
- Logon parameters
- SAPshcut parameters
- System label

List of Party workspace

The List of Party workspace provides detailed information about the communication parties of both the sender and the receiver.

This workspace displays the following information in a tabular view:

- System Name
- Party ID
- Party
- Schema
- Sample Time

SAPshcut Parameters

List of Services workspace

The List of Services workspace provides detailed information about the services of a sender or receiver in Cache Monitoring.

This workspace displays the following information in a tabular view:

- System Name
- Component Id
- Schema
- Communication Component
- Service Type
- Flag
- Party
- Sample Time
- SAPshcut Parameters

Lock Count Information workspace

The Lock Count Information workspace displays the total count of locks, total count of arguments of locked objects, and total count of owners of locked objects in the SAP system.

Logon Groups workspace

The Logon Groups workspace provides information about Logon Group and Server Group statistics.

Logon Groups is the default workspace for the Logon and Server Groups navigator group. Logon Groups is a predefined workspace that provides Logon Group and Server Group statistics that you can use to monitor individual groups. This workspace includes the following information:

- Maximum allowed response time for a particular instance in this Logon group
- Number of events occurring per minute on an instance
- Maximum number of users allowed in this Logon group for a particular instance

You can use the data for specific logon groups to identify system load problems.

The workspace table view has predefined launch definitions. Use the launch definitions to execute the following transactions on the mySAP system:

- Maintain CCMS Logon Groups (SMLG)
- Maintain RFC Server Group Assignment (RZ12)

Logon Information workspace

The Logon Information workspace provides information about the logon and logoff statistics for the mySAP system.

Logon Information is a predefined workspace that provides user logon and user logoff statistics so that you can monitor the security of your system. Specifically, this workspace includes the following information:

- List of users who are currently locked
- · List of users who currently have failed password attempts
- Chronological log of all logon and logoff activity to this instance, showing user ID, the action taken, and additional detailed information

Use this workspace to maintain security throughout your mySAP system. If this information indicates an unusually high number of unsuccessful logon attempts for a particular user, immediately evaluate why this is occurring, then take prompt action to resolve this possible breach of security.

Use this workspace to quickly determine if a user is having trouble logging on because the user ID is locked. If the user ID is locked, determine the cause. If the user ID must be unlocked, enter the mySAP system to unlock the ID.

The workspace table view has predefined launch definitions. Use the launch definitions to run the following transaction on the SAP system:

Sample Periods for ITM Reports

MAI Alert Inbox workspace

The Messaging and Alert Infrastructure (MAI) Alert Inbox workspace is a predefined workspace that provides information about alerts, for example, the name and description of an alert. By using this workspace, you can manage the alerts.

The MAI Alert inbox workspace is user-specific and it displays alerts according to the alert configuration. The Alert monitoring system monitors alerts from various business scenarios that define the Alert category. A category contains various properties and other specifications that define the alerts within that category, for example expiry date, or the escalation recipient. Alert categories are assigned to an alert classification. If you do not want to create a classification, you can create categories within the default Unclassified classification folder.

However, it is better to create different alert classifications to group alert categories together that belong to the same topic, for example, Object Type (Metric/Alert/Event).

This workspace is the default workspace for the MAI Alert Inbox attribute group. This workspace contains the following views:

- Alert count by rating
- · Alert count by object type
- Alert overview

This workspace provides information about the following attributes:

- Alert ID
- Alert Time Stamp
- Alert Technical Name
- Alert Name
- Alert Text Value
- Alert Description
- Managed Object Name
- Managed Object Type
- Alert Category
- Alert Severity
- Alert Rating
- Alert Priority
- Status

Also, this workspace has separate workspaces with table views for the following types of alerts that depend on the Managed object type:

- Database
- Host (Server)
- Process Integration (PI/XI) Domain
- Technical Instance
- Technical Component
- Technical System

- Technical Scenario
- Connection

Mapping workspace

The Mapping workspace provides the overall message mapping data from the outbound and the inbound interfaces.

This workspace displays the following information in a tabular view:

- System Name
- Software Component ID
- Version Support Package
- Direction
- Step
- Mapping Required
- Mapping Type
- Mapping Program
- Mapping Namespace
- Mapping Name
- IFM Namespace
- IFM Name
- OFM Namespace
- OFM Name
- Container ID
- Parameter ID
- Mapping Step Container ID
- Mapping Message Container ID
- SAPshcut Parameters

Memory workspace

The Memory workspace provides information about non-buffer areas, such as the size allocated to these memory areas.

Memory is a predefined workspace that contains the following specific information about non-buffer memory areas:

- Size allocated, used, and free in KB and percentage
- · Maximum used in KB and percentage

The workspace table view has predefined launch definitions. Use the launch definitions to run the following transaction on the mySAP system:

• Setups/Tune Buffers (ST02)

Message Details workspace

The Message Details workspace is a linked workspace that provides information about Process Integration (PI) messages, for example, errors, backlog, and message flow. These PI messages relate to the PI components in the PI domain that are configured in the Solution Manager Messaging and Alert Infrastructure (MAI).

The Message Details workspace is associated with the PI Monitoring navigator item under the Solution Monitoring (SLM) subnode.

This workspace has a table view that provides the following information:

- Time Range
- PI Domain Name
- Sender Component
- Receiver Component
- Receiver Interface
- Sender Namespace
- Receiver Namespace
- Sender Party
- Receiver Party
- Sender Channel
- Receiver Channel
- Error Count
- Scheduled Count
- Cancelled Count
- Forwarded Count
- Success Count
- PI Component Name
- Sample Interval Start
- Sample Interval End

Message Monitoring workspace

The Message Monitoring workspace provides information about time ranges in relation to Messaging and Alert Infrastructure (MAI) Process Integration (PI) message monitoring.

The available time ranges are shown in the table view. You select the time range to view the message details information of that time range in the Message details workspace.

This workspace has a table view that provides the following information:

- Time Range
- Description
- Sample Interval Start
- Sample Interval End

Message Server Monitor workspace

Message Server Monitor is the default workspace for the Message Server Monitor navigator group. Message Server Monitor is the predefined workspace that provides the following information about Message Server:

- · Name of the message server
- · Status of the server
- · Host name of the message server
- Connection time
- Login time
- Number of messages received
- · Number of messages sent

The workspace table view has predefined launch definitions. Use the launch definitions to run the following transaction on the SAP system:

• Message Server Monitor (SMMS)

MSSQL Database workspace

The MSSQL Database workspace provides information about the summary and details of MSSQL database and log information.

The MSSQL Database is a workspace of the Database navigator group.

This workspace provides the following information:

- Allocated and free log size (in MB)
- MSSQL database summary, such as database name, release, type, and size
- MSSQL database details, such as version, start time, memory setting, physical memory, and number of CPUs configured

The workspace includes the following views:

- MSSQL Database Summary
- MSSQL Database Details
- Log Information

Number Range Buffer workspace

The Number Range Buffer workspace provides information about the number range buffer, for example, the buffer size.

Number Range Buffer is a predefined workspace that contains the following specific information about the number range buffer for the instance:

- · Maximum and current number of entries
- · Maximum and current number of indexes
- Buffer size
- Number of Buffer, Get, Server, and Database calls
- Number of conflicts
- Number of timeouts
- Number of Buffer responses less than 50 microseconds, less than 1 millisecond, and greater than 1 millisecond
- Number of server responses less than 1 millisecond, less than 50 milliseconds, and greater than 50 milliseconds
- Sample time

Operating System and LAN workspace

The Operating System and LAN workspace provides information about the operating system and the local area network on which the SAP instance runs.

Operating System and LAN is the default workspace for the Operating System navigator group. Operating System and LAN is a predefined workspace that you can use to monitor the performance of your SAP instance, the operating system on which it runs, and the local area network (LAN) to which it is connected. You view the monitored operating system data in the Operating System and LAN workspace to determine whether external conditions are affecting your SAP application server performance.

This workspace includes the following information:

- CPU utilization
- Load average
- Memory configuration
- · Paging and swapping activity
- · LAN activity

Additionally, the SAP agent provides a historical version of this workspace. You can request to view up to 24 hours of historical data for each component of this workspace.

The workspace table view has predefined launch definitions. Use the launch definitions to run the following transaction on the SAP system:

• Operating System Monitor (ST06)

Oracle Database workspace

Oracle database is the default workspace for the Database navigator group.

This predefined workspace provides information about the Oracle database. This workspace includes the following information:

- · Name of the database instance
- Type of database object, for example, table index, or database
- · Status of the database object
- · Amount of space used by the database object and the amount of space available

Oracle Historical database workspace

Oracle Historical database is the predefined workspace for the Database navigator group.

This workspace provides a summary of the oracle database information. This workspace contains the following information:

- Name of the database instance
- · Name of the database server
- Type of database object, for example, table index, or database

Output Requests workspace

The Output Requests workspace provides information about output requests, such as the number of print requests that were processed.

Output Requests is a predefined workspace that contains the following specific information about output requests:

- Spool number and title
- Client
- Creator
- · Print request time and minutes pending
- Output device and format
- · Recipient
- Department
- Copies
- Size
- Number of print requests processed, in error, and failed
- Host spool ID
- Spooler system and host names
- Total count of output requests for each status

The workspace table view has predefined launch definitions. Use the launch definitions to run the following transactions on the mySAP system:

- Output Controller (SP01)
- Display Spool Requests (SP02)

• Sample Periods for ITM Reports

The workspace includes the following views:

- Processed Print Requests by Output Device
- Errors by Output Device
- Output Requests Status Count
- Output Request Information

Persistence Layer Analysis workspace

Persistence Layer Analysis is a predefined workspace under the XML Message Monitoring navigator group. This workspace provides information related to XML messages processed by the PI/XI Integration Engine and persisted in the switch tables.

This workspace provides the following information about the persistence layer of the PI/XI system:

- XML messages overview Provides information about the number of XML messages currently present in the database, and in client, deleted, or archived messages
- · Switch table overview Shows the number of messages persisted in various switch tables
- Current fill level
- · Name of the current container table
- Name of the current master table
- Number of table entries in the master table
- Reorganization Status

The workspace table view has predefined launch definitions. Use the launch definitions to run the following transaction on the SAP system:

• Persistence Layer Analysis (SXMS_MONI_DB)

PI Channel Monitoring workspace

The PI Channel Monitoring workspace provides information about the communication channels that are set up for the selected adapter engine.

The PI Channel Monitoring workspace is the workspace for the PI Monitoring navigator group. This workspace displays the following information:

- The count of the Channel Processing Status in graphical view.
- Detailed information of PI Channel in tabular view.

The tabular view of this workspace provides the following information about defined Channels on your SAP systems:

- PI Channel Name
- · Processing Status
- Adapter Engine
- Adapter Type
- Direction
- Party
- Adapter Namespace Name
- Log Detail
- Include for Alerting

PI Monitoring Overview workspace

The PI Monitoring Overview workspace is the default workspace for the PI Monitoring Navigator node. This workspace displays information about PI Monitoring in a graphical and a table view.

This workspace provides the following information:

- A count of the available status in graphical view
- A count of the self-test status in graphical view
- PI monitoring details in table view

The Table view provides the following information:

- PI Domain Name
- PI Domain Description
- Component Name
- Component Type
- Component Stack
- Available Status
- Available Rating
- Self-test Status
- Self-test Rating

Process Component workspace

The Process Component workspace provides detailed information about the process components that are being used for the message exchanges in cache monitoring.

This workspace displays the following information in a tabular view:

- System Name
- Process Component Directory
- Process Component Repository
- Process Component Namespace Repository
- Sample Time
- SAPshcut Parameters

Process Integration (PI/XI) Alerts workspace

The Process Integration (PI/XI) Alerts workspace provides information about the alerts that are related to all the Process Integration components for underlying instances of the central monitoring system and its satellite systems.

This workspace displays the following information in a tabular view:

- System Name
- Object Type
- Alert ID
- Alert Time Stamp
- Alert Technical Name
- Alert Name
- Alerts Text
- Alert Description
- Managed Object Name
- Managed Object Type

- Alert Category
- Alert Severity
- Alert Priority
- Sample Time
- SAPshcut Parameters

qRFC Inbound Queue Details workspace

The qRFC Inbound Queue Details workspace provides information about logical units of work (LUW) of the qRFC inbound queue.

qRFC Inbound Queue Details is a predefined workspace for the qRFC Queues navigator group under the Sys subnode.

This workspace provides the following information about logical units of work (LUW) of the inbound queue:

- Logical unit of work (LUW) Host ID
- Logical unit of work (LUW) Process ID
- Logical unit of work (LUW) timestamp
- User name
- Name of Function Module
- Status of an aRFC call
- Number of attempts
- Name of the calling program
- Queue status
- Queue error message

qRFC Inbound Queue Overview workspace

The qRFC Inbound Queue Overview workspace allows you to view information about inbound qRFC Communication within the SAP system, or within a remote system.

qRFC Inbound Queue Overview is a predefined workspace for the qRFC Queues navigator group under the Sys subnode.

Note: The inbound queue is at the server side.

This workspace provides the following information about qRFC inbound queues:

- Inbound queue name
- Inbound queue destination
- qRFC Inbound queue status
- Queue error message
- Number of queue entries
- First time of queue execution
- Last time of queue execution
- First Transaction ID (TID) of the queue
- Queue version
- Queue supplement

All inbound queues listed in the workspace have predefined Link options. You use the link options to complete the following action:

• View inbound queue details: This option links to the qRFC inbound Queue Details workspace in which you can view inbound queue Logical unit of work (LUW) details.

The workspace table view has predefined launch definitions. You use the launch definitions to execute the following transactions on the SAP system:

• qRFC Monitor (Inbound Queue) (SMQ2)

qRFC Outbound Queue Overview workspace

The qRFC Outbound Queue Overview workspace provides information about outbound qRFC Communication within the SAP system, or with a remote system.qRFC

qRFC Outbound Queue Overview is a predefined workspace for the qRFC Queues navigator group under the Sys subnode.

Note: The qRFC Outbound Queue Overview outbound queue is at the client side.

This workspace provides the following information about qRFC outbound queues:

- Outbound queue name
- Outbound queue destination
- qRFC Outbound queue status
- Queue error message
- Number of queue entries
- · Name of queue for which the current queue is waiting
- · First time of queue execution
- · Last time of queue execution
- First Transaction ID (TID) of the queue
- · Queue version
- Queue supplement

All outbound queues listed in the workspace have predefined Link options. You use the link options to complete the following action:

• View outbound queue details: This option links to the qRFC outbound Queue Details workspace in which you can view outbound queue Logical unit of work (LUW) details.

The workspace table view has predefined launch definitions. You use the launch definitions to execute the following transactions on the SAP system:

• qRFC Monitor (Outbound Queue) (SMQ1)

qRFC Outbound Queue Details workspace

The qRFC Outbound Queue Details workspace provides information about logical units of work (LUW) of the qRFC outbound queue.

The qRFC Outbound Queue Details is a predefined workspace for the qRFC Queues navigator group under the Sys subnode.

This workspace provides the following information about logical units of work (LUW) of the outbound queue:

- Logical unit of work (LUW) Host ID
- · Logical unit of work (LUW) Process ID
- Logical unit of work (LUW) timestamp
- User name
- Name of Function Module
- Status of an aRFC call
- Number of attempts
- Name of the calling program

- Queue status
- Queue error message

qRFC QIN Scheduler Details workspace

The qRFC QIN Scheduler Details workspace provides information about the selected qRFC QIN records on the qRFC QIN Scheduler Overview view of the qRFC Scheduler Overview workspace.

The qRFC QIN Scheduler Details workspace is a link workspace from the qRFC QIN Scheduler Overview view of the qRFC Scheduler Overview workspace. The qRFC QIN Scheduler Details workspace provides the following information about the selected qRFC QIN record:

- System Name
- Client
- Queue Name
- Type
- Registration Mode
- Maximum Runtime (Sec)
- Attempts
- Pause
- Destination with LOGON Data
- User Name
- Timestamp of Application Server
- Sample Time

qRFC Queues Overview

The qRFC Queues Overview is the predefined default workspace for the qRFC Queues navigator group.

This workspace provides the following information about qRFC queues:

- Number of outbound queues by queue status
- Number of inbound queues by queue status

qRFC QOUT scheduler details workspace

The qRFC QOUT Scheduler Details workspace provides information about the selected qRFC QOUT record on the qRFC QOUT Scheduler Overview view of the qRFC Scheduler Overview workspace.

The qRFC QOUT Scheduler Details workspace is a link workspace from the qRFC QOUT Scheduler Overview view of the qRFC Scheduler Overview workspace.

This workspace provides the following information about the selected qRFC QOUT record:

- System Name
- Client
- Destination
- Type
- Status
- Active connection
- Processing Without tRFC
- Maximum Number of Connections
- Maximum Runtime (Sec)
- User Name
- Host ID

• Sample Time

qRFC Saved Inbound Queue Overview workspace

The qRFC Saved Inbound Queue Overview workspace provides information about inbound qRFC Communication queues that are saved while processing.

qRFC Saved Inbound Queue Overview is a predefined workspace for the qRFC Queues navigator group under the Sys subnode.

This workspace provides the following information about qRFC saved inbound queues:

- Saved Inbound queue name
- Saved Inbound queue destination
- qRFC Inbound queue status
- Queue error message
- Number of queue entries
- First time of queue execution
- Last time of queue execution
- First Transaction ID (TID) of the queue
- Queue version
- Queue supplement

All saved inbound queues listed in the workspace have predefined Link options. You use the link options to complete the following action:

• View saved inbound queue details: This option links to the qRFC saved inbound Queue Details workspace in which you can view saved inbound queue Logical unit of work (LUW) details.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

• qRFC Monitor (Saved Inbound Queue) (SMQ3)

qRFC Saved Inbound Queue Details workspace

The qRFC Saved Inbound Queue Details workspace provides information about logical units of work (LUW) of the qRFC inbound queue.

qRFC Saved Inbound Queue Details is a predefined workspace for the qRFC Queues navigator group under the Sys subnode.

This workspace provides the following information about logical units of work (LUW) of the saved inbound queue:

- Logical unit of work (LUW) Host ID
- Logical unit of work (LUW) Process ID
- Logical unit of work (LUW) timestamp
- User name
- Name of Function Module
- Status of an aRFC call
- Number of attempts
- Name of the calling program
- Queue status
- Queue error message

qRFC scheduler overview workspace

The qRFC Scheduler Overview workspace belongs to the qRFC Queues navigator group. This predefined workspace contains informations about the qRFC message queues in the SAP system.

You use this workspace to review the following information:

- System Name
- Client
- Scheduler
- Scheduler Status
- Number of Entries
- Number of Active Connections
- Last Update
- Host ID
- Sample Time

The workspace table view displays attributes from the **SAP_qRFC_Message_Queue_Information** attribute group.

Receiver Agreement workspace

The Receiver Agreement workspace provides detailed information about the communication channel and the inbound sender and receiver interfaces.

A receiver agreement contains a reference to a communication channel. A receiver agreement is made between a sender and a receiver for an inbound interface. This workspace displays the following information in a tabular view:

- System Name
- From Party
- From Service
- To Party
- To Service
- Interface Name
- Interface Namespace
- Software Component ID
- Validation
- Communication Channel
- SAPshcut Parameters

Receiver Determination workspace

The Receivers Determination workspace provides information about the services receiver attributes and the party receiver attributes.

This workspace displays the following information in a tabular view:

- System Name
- From Party
- From Service
- To Party
- To Service
- Interface namespace
- Software Component ID

- Validation
- Communication Channel
- SAPshcut Parameters

Refresh Database Statistics Results workspace

The Refresh Database Statistics Results workspace provides information about database statistics that have been updated.

Refresh Database Statistics Results is a predefined workspace that provides status information about a request to refresh the database statistics. The expected information is that job RSORATOD was submitted in the mySAP system and that updated statistics will be available shortly.

After you review the information in this workspace, return to the Data Base workspace to view the updated database statistics.

Reset Gateway Statistics Results workspace

The Reset Gateway Statistics Results workspace provides information about gateway statistics.

Reset Gateway Statistics Results is a predefined workspace that provides status information about a request to reset gateway statistics. A message that indicates that the statistics were reset is displayed.

Ensure that gateway statistics were reset.

After seeing these results, you can return to the Gateway Statistics workspace to see the latest gateway statistics information.

License Information workspace

The License Information workspace under System Summary navigator item provides information about the license of the installed SAP application.

This workspace includes the License Information view that displays the following information in a tabular view:

- System name
- Managed system
- System number
- Hardware key
- Software product
- Installation number
- License begin date
- · License end date
- License date
- Validity
- · Number of days to expiry
- Logon parameters
- SAPshcut parameters
- System label

SAP MaxDB Database workspace

The SAP MaxDB Database workspace provides information about the status and details of the SAP MaxDB database.

The SAP MaxDB Database is a workspace of the Database navigator group.

This workspace provides the following information:

- The percentage of data and catalog cache hit ratios
- Log area
- Summary and details of SAP MaxDB database, such as database name, database release, database type, total size, database server, cache converter size (pages), catalog cache size (pages), and so on

The workspace includes the following views:

- Cache Hit Ratio in Percentage
- Log Information
- SAP MaxDB Database Summary
- SAP MaxDB Database Details

SAP MaxDB History workspace

The SAP MaxDB History workspace provides historical data about the SAP MaxDB database.

The SAP MaxDB History is a workspace of the Database navigator group.

This workspace provides the following information:

- The percentage of used and free database
- The number of commit rollback statements
- The percentage of cache hit ratio
- The fill level and activity details of SAP MaxDB Database

The workspace includes the following views:

- Commit and Rollback Statements
- Cache Hit Ratio in Percentage
- SAP MaxDB Fill Level Details
- SAP MaxDB Activity Details

SAP Office Inbox workspace

The SAP Office Inbox workspace provides statistics for the SAP office inbox, such as the name of the user that owns a mail item.

SAP Office Inbox is the default workspace for the SAP Office navigator group. SAP Office Inbox is a predefined workspace that contains the following SAP Office inbox statistics:

- Date and time the mail item was received
- Name of the user who currently owns a mail item
- Number of attachments included in the mail item
- Status of the mail item

Use this workspace to monitor and to import SAP Office Inbox mail items. You can also ensure that important items are being processed in a timely manner.

Each row in the SAP Office Inbox table links to the User Information workspace for the given user ID.

All inbox items listed in the workspace have predefined Link options. You can use the link options to complete the following action:

Get User Information

This option links to the User Information workspace, where you can see detailed information about the user.

The workspace table view has predefined launch definitions. Use the launch definitions to execute the following transactions on the mySAP system:

• SAPoffice Inbox (SO01)

• Sample Periods for ITM Reports

SAProuter Logs workspace

The SAProuter Logs workspace provides information about the SAP router log file.

SAProuter Logs is a predefined workspace that provides information about data in the SAP router log file. You use the SAProuter Logs workspace to review log data pertaining to your mySAP system. SAProuter Logs is a predefined workspace that contains data from the log file. You use this information to see who is using the mySAP systems and from which IP address. Specifically, this workspace includes the following information:

- Text from the SAPROUTER log file
- Date and time recorded in the SAPROUTER log
- Name of the mySAP system being monitored

The workspace table view has predefined launch definitions. Use the launch definitions to execute the following transactions on the mySAP system:

- Sample Periods for ITM Reports
- Log File Names for ITM Reports

Sender Agreement workspace

The Sender Agreement workspace provides detailed information about the communication channel and the outbound sender and receiver interfaces.

A sender agreement contains a reference to a communication channel. A sender agreement is made between a sender and a receiver with regards to an outbound interface. This workspace displays the following information in a tabular view:

- System Name
- From Party
- From Service
- To Party
- To Service
- Interface Namespace
- Interface Name
- Software Component ID
- Validation
- Communication Channel
- SAPshcut Parameters

Server Details workspace

Server Details is the predefined workspace for the Servers navigator group.

This workspace provides information about the SAP systems that run on a specific server. This workspace contains the following information:

- Name of the SAP system
- Version of the SAP system
- SAP system number and system ID
- Product Instance of the SAP server
- Installation Number
- System Attribute

Server Overview workspace

Server Overview workspace is the default workspace for the Servers navigator group.

This predefined workspace contains information about all the servers and hosts that run on SAP systems that are configured with Solution Manager. The following information is provided for each server:

- Host name
- IP address
- CPU details
- CPU frequency in Mhz
- Number of CPUs
- Main memory (RAM) size in kb
- Virtual memory size in mb
- Type of operating system
- · Version of the operating system
- Hardware manufacturer information
- Application server hardware information
- · Central system routing information
- Central system to server routing information
- Sap Application Performance and Sustainability (SAPS) measured value
- SAPS vendor information

This workspace shows the hardware information in relation to each server. It also shows the performance of the SAP system that runs on the server.

Service Response Time workspace

The Service Response Time workspace provides diagnostic information about the services that are configured in the mySAP system.

Service Response Time is the default workspace for the Workload Performance navigator group. Service Response Time is a predefined workspace that provides diagnostics for each configured mySAP service running on the application instances you are monitoring. This workspace includes metrics for response time, wait time, CPU time, and database request time. For each configured mySAP service, this workspace provides the following information:

- Metrics for minimum, maximum, and average response time
- Metrics for minimum, maximum, and average wait time
- Frequency of requests per minute for this service during the sample period

The workspace table view has predefined launch definitions. Use the launch definitions to run the following transactions on the mySAP system:

- Performance, SAP Statistics, Workload (ST03)
- Sample Periods for ITM Reports

Software Component workspace

The Software Component workspace provides detailed information about the software component that is being installed for cache monitoring.

This workspace displays the following information in a tabular view:

- System Name
- TOP
- Priority

- Basis
- Sample Time
- SAPshcut Parameters

Software Components Details workspace

Software Components Details is a predefined workspace under the Systems navigator group that provides information about the software components of the satellite system configured in Solution Manager System Landscape.

This workspace provides the following information:

- · Software component name, which is a set of objects that are always delivered together
- Type of component
- SAP release information
- · Support package level of the software component
- Group keys
- Component version

The workspace table view has predefined launch definitions. You can use the launch definitions to run the Solution Manager System Landscape (SMSY) transaction on the SAP system.

Solution Overview workspace

The Solution Overview is the default workspace for the Solution Monitoring navigator group. This predefined workspace contains information about solutions in the SAP system.

You can use this workspace to view the following information:

- System Name
- Solution ID
- Solution Name
- Solution status
- Sample Time

The workspace table view displays the attributes from the Messaging and Alerts Infrastructure (MAI) Solution Overview attribute group.

Split Mapping workspace

The Split Mapping workspace provides detailed information about splitting of inbound interfaces messages.

This workspace displays the following information in a tabular view:

- System Name
- Version ID
- Version Support Package
- Parameter Type
- Mapping Namespace
- Mapping Name
- Interface namespace
- Interface Name
- SAPshcut Parameters

Spool Output workspace

The Spool Output is a predefined workspace that provides information about all output requests for one spool request.

This workspace includes the following information:

- Spool number and title
- Client
- Creator
- · Print request time and minutes pending
- · Output device and format
- · Recipient
- Department
- Copies
- Size
- Number of print requests processed, in error, and failed
- Host spool ID
- Spooler system and host names

After reviewing the information in this workspace, return to the Spool Requests workspace to continue viewing other spool requests.

The workspace table view has predefined launch definitions. You can use the launch definitions to run the following transactions on the mySAP system:

- Output Controller (SP01)
- Display Spool Requests (SP02)
- Sample Periods for ITM Reports

Spool Requests workspace

The Spool Requests workspace is a predefined workspace that provides information about spool requests in the mySAP system, such as the number and size of spool requests that are created.

Spool Requests is the default workspace for the Spool and Output navigator group. Spool Requests is a predefined workspace that provides information about spooling activity on the mySAP systems that you are monitoring, including associated output requests to designated devices and the following information:

- · Summary count of print requests by output device
- · Summary count of errors by output device
- Number and size of spool requests created
- Creator of the spool requests
- · Number of copies and the form required for printing
- · Print device selected for printing and the print status

All spool requests listed in the workspace have predefined Link options. You use the link options to complete the following action: View output requests. This link option opens the Output Requests workspace.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- Output Controller (SP01)
- Display Spool Requests (SP02)
- Sample Periods for ITM Reports

Status of Runtime Cache workspace

The Status of Runtime Cache workspace displays the status of the Runtime Engine cache.

The Status of Runtime Cache workspace is a default workspace. This workspace displays the following information in a tabular view:

- System Name
- Status
- Description
- Sample Time
- SAPshcut Parameters

Sub-Application Performance workspace

Sub-Application Performance is a predefined workspace that contains information about sub-application performance for each instance, such as the total number of database calls in the mySAP system.

This workspace provides the following information about sub-application performance for each instance:

- Application
- Description
- Number of dialog steps
- Average and total response time, CPU time, wait time, and database request in milliseconds
- Total database bytes requested in KB
- Total number of database calls

Synchronous Asynchronous Communication workspace

The Synchronous Asynchronous Communication workspace provides information about the Synchronous Asynchronous communication status.

Synchronous Asynchronous Communication is the workspace for the XML Message Monitoring navigator group.

This workspace provides the following information about Communication status:

- Synchronous Message ID
- Asynchronous Message ID
- Transfer Date
- Status
- Server

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

- XML Message Details by Synchronous Message Id (SXI_SHOW_MESSAGE)
- XML Message Details by Asynchronous Message Id (SXI_SHOW_MESSAGE)

System Details workspace

The System Details workspace provides information about satellite systems configured in the Solution Manager System landscape

System Details is a predefined workspace under the Systems navigator group.

This workspace provides the following system information:

- · Host name of the database of the satellite system
- IP Address of the database system
- Database operating system release

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- Operating system type of the database system
- Host name of the satellite system
- Installation number
- Host name of the message server
- IP address of the message server
- Message server operating system release
- Message server operating system type
- Product type of the satellite system
- Product version of the satellite system
- · Name of the transport domain
- System number of the SAP server
- Gateway Interface Port Number

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

• Solution Manager System Landscape (SMSY)

System Log Detail workspace

The System Log Detail workspace provides information about system log messages.

System Log Detail is a predefined workspace that contains complete detailed information about a selected system log message.

After viewing this detailed information, you can return to the System Log workspace to continue viewing other system log messages.

The workspace table view has predefined launch definitions. Use the launch definitions to run the following transactions on the mySAP system:

- Online System Log Analysis (SM21)
- Sample Periods for ITM Reports

System Log workspace

System Log is the default workspace for the Logs and Traces navigator group. This predefined workspace provides detailed information about system log entries, such as the transaction code associated with the log entry.

This workspace provides the following information:

- · Type of task associated with the entry
- · Client and user activity that resulted in the log entry
- · Transaction code associated with the entry
- Message information, such as number, class, and descriptive text
- · Summary count of messages by message ID
- Summary count of messages by message class

All messages listed in the workspace have predefined Link options. You use the link options to complete the following action: Get detailed message information. This option links to the System Log Detail workspace, in which you can see all the detailed information about the syslog message.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- Online System Log Analysis (SM21)
- Sample Periods for ITM Reports

System Monitoring Current Status workspace

The System Monitoring Current Status workspace displays the status of system monitoring alerts in the satellite systems.

The System Monitoring Current Status is the link workspace from the Solution Overview workspace for the Solution Monitoring navigator group.

This workspace provides the following information about system monitoring alerts:

- Alert Description
- Alert Rating
- Monitoring Object
- MTE (Monitoring Tree Element) name
- · Previous Object

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

System Monitoring Current Status (SOLUTION_MANAGER)

System Monitoring Historical Alerts workspace

The System Monitoring Historical Alerts workspace provides information about historical alerts generated for satellite systems of the selected solution.

System Monitoring Historical Alerts is a predefined workspace for the Solution Monitoring navigator group.

This workspace provides the following historical alert information:

- Alert message
- · Alert severity
- Alert unique identifier
- Client number
- Occurrence time of the alert
- User name

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

• SAP Solution Manager (DSWP)

System Monitoring Open Alerts workspace

The System Monitoring Open Alerts workspace displays information about open system monitoring alerts in the satellite systems.

System Monitoring Open Alerts is the link workspace from the Solution Overview workspace for the Solution Monitoring navigator group.

This workspace provides the following System Monitoring alert information:

- · Alert Description
- Alert Rating
- Monitoring object
- Type
- MTE (Monitoring Tree Element) Name
- · Previous Object

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

• System Monitoring Open Alerts (SOLUTION_MANAGER)

System Monitoring workspace

The System Monitoring workspace provides status information in relation to the SAP system. This workspace is the default workspace for the System Monitoring navigator node.

This workspace provides the following views:

• Graphical view

Count the Availability status

Count the Configuration status

Table view

Detailed status information about the following:

- Availability
- Configuration
- Exception
- Performance
- Product Version
- System Name
- Technical System Name

System Overview workspace

The System Overview workspace provides overview information about satellite systems configured in the Solution Manager System landscape.

System Overview is the default workspace for the Systems navigator group.

This workspace provides the following system overview information:

- Name of the satellite system configured in the Solution Manager System Landscape
- Host name of the satellite system
- Message server host name of the satellite system
- · Database host name of the satellite system
- Type of the database of satellite system
- Installation number of the satellite system

It also provides information about databases configured on Solution Manager 7.2, such as type, installation number, license number, creation date, and product flag.

All satellite systems listed in the workspace have predefined Link options. You use the link options to perform the following actions:

- View system topology: This option links to the System Topology View workspace where you see a topology view of the satellite system.
- View clients details: This option links to the Client Details workspace where you view detailed information about clients that are available in the satellite system.
- View instances details: This option links to the Instances Details workspace where you view detailed information about instances of the satellite system.
- View software components details: This option links to the Software Component Details workspace where you view detailed information about software components that are available in the satellite system
- View system details: This option links to the System Details workspace where you view detailed information about the satellite system.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

• Solution Manager System Landscape (SMSY)

System Summary (:mySAP level) workspace

The System Summary (:mySAP level) workspace provides summary information, such as the number of work processes on each instance, dialog number, update number, batch number, spool number, and status of the instance.

System Summary (agent level) is the default workspace for the agent-level navigator node. This predefined workspace provides the following summary information about a mySAP system:

- System identifying information, such as SID, system description, system releases, database host, and central instance
- Summary information about each instance in the system: instance name, host on which the instance is running, type and number of work processes on each instance
- System summary information, such as system name; system start time; number of instances that are running, down, or passive; central instance name; and database name

Use this workspace to quickly determine which instances might require more detailed investigation.

System Summary (:Sys level) workspace

System Summary (system level) is the default workspace for the System Summary navigator group. This predefined workspace provides information about the selected mySAP managed system that you are monitoring.

Use this System Summary workspace to correlate data with information from associated workspaces so that you can evaluate key elements that impact system performance throughout your mySAP enterprise efficiently.

Use this information to plan the following corrective actions:

- Reconfigure application instances and associated mySAP services
- Reconfigure the Operation Mode State for one or more instances
- Reconfigure logon load balancing to more evenly distribute the user load between application servers

System Topology workspace

The System Topology workspace provides a topology view of the satellite systems that are configured in the Solution Manager System landscape.

System Topology is a predefined workspace that provides a view of the satellite systems in the Solution Manager System Landscape.

This workspace provides the following system topology information:

- · Clients created in the system
- Instances available in the system
- · Software components of the system

TCP/IP Connections workspace

The TCP/IP Connections workspace displays information about TCP/IP connections in a tabular view.

The TCP/IP Connections workspace is the workspace for the Connection Monitoring navigator item in the Sys subnode. This workspace displays the following information about TCP/IP Connections in a tabular view:

- RFC Connection
- RFC Type

- RFC Status
- RFC Host
- Gateway Host
- Gateway Service
- Start Type
- Identification of Program
- RFC Server Program Name
- Logon with User
- SAP Authentication Ticket
- Assertion Ticket Status
- Assertion Ticket System
- Assertion Ticket Client
- Secure Network Communication
- Destination Lock Status
- Trace Status
- Authorization for Destination
- Keep Alive Timeout

Technical Component Alerts workspace

The Technical Component Alerts workspace provides information about the alerts that are related to all the technical components such as Alert Framework or Data Connector for underlying instances of the central monitoring system and its satellite systems.

This workspace displays the following information in a tabular view:

- System Name
- Object Type
- Alert ID
- Alert Time Stamp
- Alert Technical Name
- Alert Name
- Alerts Text
- Alert Description
- Managed Object Name
- Managed Object Type
- Alert Category
- Alert Severity
- Alert Priority
- Sample Time
- SAPshcut Parameters

Technical Instance Alerts workspace

The Technical Instance Alerts workspace provides information about the alerts that are related to all the systems for underlying instances of the central monitoring system and its satellite systems.

This workspace displays the following information in a tabular view:

• System Name

- Object Type
- Alert ID
- Alert Time Stamp
- Alert Technical Name
- Alert Name
- Alerts Text
- Alert Description
- Managed Object Name
- Managed Object Type
- Alert Category
- Alert Severity
- Alert Priority
- Sample Time
- SAPshcut Parameters

Technical Scenario Alerts workspace

The Technical Scenario Alerts workspace provides information about the alerts that are related to all the customer specific technical scenarios that are used in self-monitoring, system connection, and connection monitoring for underlying instances of the central monitoring system and its satellite systems.

This workspace displays the following information in a tabular view:

- System Name
- Object Type
- Alert ID
- Alert Time Stamp
- Alert Technical Name
- Alert Name
- Alerts Text
- Alert Description
- Managed Object Name
- Managed Object Type
- Alert Category
- Alert Severity
- Alert Priority
- Sample Time
- SAPshcut Parameters

Technical System Alerts workspace

The Technical System Alerts workspace provides information about the alerts that are related to all the technical systems such as ABAP or JAVA of underlying instances of the central monitoring system and its satellite systems.

This workspace displays the following information in a tabular view:

- System Name
- Object Type
- Alert ID
- Alert Time Stamp

- Alert Technical Name
- Alert Name
- Alerts Text
- Alert Description
- Managed Object Name
- Managed Object Type
- Alert Category
- Alert Severity
- Alert Priority
- Sample Time
- SAPshcut Parameters

Transaction Performance workspace

The Transaction Performance is a predefined workspace that contains information about all transactions for each instance, such as the total number of database calls.

This workspace provides the following information about all transactions for each instance:

- Program or Tran code
- Description
- Dialog steps
- Average response time, CPU time, wait time, and database request time in milliseconds
- Total response time, CPU time, wait time, database request time in milliseconds
- Total bytes requested for databases in KB
- Total number of database calls
- Average extended memory and private memory in KB
- · Maximum extended memory per session and per tran in KB

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- Performance, SAP Statistics, Workload (ST03)
- Sample Periods for ITM Reports

Transactional RFC workspace

The Transactional RFC is the default workspace for the Document Interchange navigator group. This workspace provides information about data in the Transactional RFC file. This predefined workspace provides information that helps you determine the status of asynchronous Remote Function Calls. For example, this workspace describes the size of the data that is transferred by the RFC.

This workspace provides the following information:

- Unique transaction identifier for the RFC
- Logical target of the RFC
- Size of the data that is transferred by the RFC
- Number of retries allowed in attempting to connect to a specified system
- · Summary count of transactions by status
- Summary of total amount of data for each target system

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

• Asynchronous RFC Error Log (SM58)

• Sample Periods for ITM Reports

Transport Log workspace

The Transport Log is a predefined workspace that provides detailed log information about monitored transport steps, such as the Log file name.

This workspace provides the following information:

- Log file name
- Display and error levels
- Message numbers and message text

After reviewing the information in this workspace, return to the Transport Objects and Steps workspace to continue reviewing other transport step logs.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- Transport Organizer (SE10)
- Sample Periods for ITM Reports

Transport Objects and Steps workspace

The Transport Objects and Steps is a predefined workspace that shows the objects and steps for a given transport request. Because all transports contain objects, you always see information about transport objects. Transport step information is available only after the transport has been run. If you do not see transport step information, the transport might not have been run yet.

This workspace provides the following information about transport objects:

- Object name
- · Object type
- Object function
- Program ID

This workspace provides the following information about transport steps:

- Target system
- Step name
- Return code
- Execution time
- Logfile name

All transport steps listed in the workspace have predefined link options. You use the link options to complete the View log action. This option links to the Transport Log workspace, where you can see detailed information about this transport step.

All transport steps listed in the workspace have predefined Link options. You use the link options to complete the following actions: View log. This option links to the Transport Log workspace, allowing you to see detailed information about this transport step.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- Transport Organizer (SE10)
- Sample Periods for ITM Reports

After reviewing the information in this workspace, return to the Transport Requests workspace to continue reviewing other transport requests.

Transport Requests workspace

The Transport Requests is the default workspace for the Transport Requests navigator group. This predefined workspace provides detailed information about transport requests in the mySAP systems that you are monitoring. For example, the User ID for the owner of the request is shown.

Use the Transport Requests workspace to monitor transport system activity and find specific details about transport requests in your enterprise. You can make changes to your development, test, and production systems.

This workspace contains information about the request (for example, numeric identifier and description), and its category (for example, customizing, repair, task, and workbench). This workspace also includes the following information:

- User ID for the owner of the request
- Date and time the request was most recently changed
- Status of the request, such as documentation, locked, or released
- Identifiers for the system and computer where the request originated
- · Identifiers for the systems and computers to which the requests have been imported
- Indicator for the highest return code for the request

All transport requests listed in the workspace have predefined Link options. You use the link options to complete the following action: View transport objects and steps. Use this link to open the Transport Objects and Steps workspace.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- Transport Organizer (SE10)
- Sample Periods for ITM Reports

User Information workspace

The User Information is a predefined workspace that contains the information for each user, such as the User ID and the name of the user in the mySAP system.

User Information is a predefined workspace that contains the following specific information for each user:

- User ID
- Client
- Full name of user
- Telephone number
- Fax number
- Function
- Department
- Cost Center
- Country
- Building
- Room

After viewing the information in this workspace, return to your previous workspace to resume your normal work activities.

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- User Maintenance (SU01)
- Work Process Overview (SM50)

User Performance workspace

The User Performance is a predefined workspace that contains information about application performance for each instance, such as the User ID associated with the user. This workspace also provides information about application performance, such as the total number of calls in the mySAP system.

This workspace provides the following information about application performance for each instance:

- User ID
- Description
- Number of dialog steps
- Average and total response time, CPU time, wait time, and database request in milliseconds
- Total database bytes requested in KB
- Total number of database calls

User Transaction Performance workspace

The User Transaction Performance is a predefined workspace that contains information about every unique combination of user ID and transaction or program name for each instanc. For example, user information such as the User ID is shown and information about transactions is shown, such as the total number of database calls.

This workspace provides the following information:

- User ID
- Program or Tran code
- Description
- Dialog steps
- Average response time, CPU time, wait time, and database request time in milliseconds
- Total response time, CPU time, wait time, database request time in milliseconds
- Total bytes requested for databases in KB
- Total number of database calls
- Average extended memory and private memory in KB
- · Maximum extended memory per session and per tran in KB

This workspace provides information that is more specific than the Transaction Performance or User Performance workspaces. The Transaction Performance workspace provides information about every transaction, but this information is aggregated across all users. The User Performance workspace provides information about every user, but this information is aggregated across all transactions. The User Transaction Performance workspace provides information about every user, but this information about all transactions. The User Transaction Performance workspace provides information about all transactions, but aggregates only on the combination of user and transaction pair to provide greater granularity in the report.

Work Processes workspace

The Work Processes is the default workspace for the Work Processes navigator group. This predefined workspace contains information about the mySAP work processes in this instance. Use this workspace to review status and performance information for all defined work processes in this instance.

This workspace provides the following information:

- Number of database reads
- User ID of the person currently using a process
- · Total memory allocated to a specific process
- · Summary of work processes by type
- Identification of long running work processes

· Status of work processes

Use the data for specific work processes for the following purposes:

- Find out which processes are running, how long they have been running, and how many errors have occurred
- · Reduce the potential for bottlenecks and future trouble spots
- · Anticipate and plan for optimal performance on your mySAP system components

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the mySAP system:

- Work Process Overview (SM50)
- List of SAP Systems (SM51)

Workflow Trace Logs Details workspace

From the Workflow Trace Logs Details workspace you can view logs for workflows that are defined in the PI/XI subnode.

Workflow Trace Logs Details is the workspace for the Workflow Trace Logs navigator group under the PI/XI subnode.

This workspace provides the following workflow trace log information:

- Description
- Status
- Trace component of the workflow trace
- · Name of the creator of workflow trace
- Log creation time
- Activation time
- · Activation end time
- Expiry time
- Description of trace level
- · Workflow trace id
- Parent workflow trace id

XML Message Log Workspace

The XML Message Log workspace displays information about XML Message Logs.

XML Message Logs is the default workspace for the XML Message Monitoring navigator group under the PI/XI subnode.

This workspace provides the following XML Message Log information:

- Message ID
- Sending System
- Receiving System
- Message Type
- Interface Name to receive and send XML message

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

• XML Message Details by Message ID(SXI_SHOW_MESSAGE)

XML Messages Processing Statistics workspace

The XML Messages Processing Statistics workspace displays information about XML Message Processing Statistics.

XML Messages Processing Statistics is the predefined workspace for XML Message Monitoring navigator group.

This workspace provide the following XML Message Processing information:

- XML Messages with Errors
- XML Messages Manually Canceled
- XML Messages Not Yet Processed
- XML Messages Being Edited
- Correctly Processed XML Messages
- Archived XML Messages
- XML Messages Marked for Deletion
- Deleted XML Messages
- Average XML Messages Processed per Day
- Minimum XML Messages Processed per Day
- Maximum XML Messages Processed per Day
- XML Messages Processed Today

The workspace table view has predefined launch definitions. You use the launch definitions to run the following transactions on the SAP system:

• Processing Statistics (SXI_STAT)

Chapter 2. Attributes reference

Attributes are the application properties that are being measured and reported by the IBM Tivoli Composite Application Manager Agent for SAP Applications.

About attributes

Attributes represent the detailed information about SAP resources reported by the SAP agent. Attributes are organized by tables or attributes groups, where each attribute group is a collection of related attributes. This section provides a description of all attribute groups and the attributes they contain.

There are five types of attribute groups:

Instance level

Instance level attributes provide information about one SAP application server or instance.

Lds level

Lds level attributes provide information about Solution Manager Landscape details.

PI level

PI level attributes provide information about SAP PI server details.

Solution level

Solution level attributes provide information about Solution Manager solution monitoring details.

System level

System level attributes provide information about the SAP system as a whole. These attributes are not specific to one application server or instance.

Use attributes to create new queries to report only those attributes of interest and to create customized workspace views. The attributes you select in your queries are displayed as column headings in your table views.

Use attributes to create new situations to monitor conditions of interest to you. Tailor the situations by specifying one or more attributes and their corresponding threshold values.

For information about workspaces, click **Workspaces** in the help contents. For information about situations, click **Situations** in the help contents.

Additional information about attributes

For more information about using attributes and attribute groups, see the *Tivoli Enterprise Portal User's Guide*.

For a list of the attribute groups, a list of the attributes in each attribute group, and descriptions of the attributes for this monitoring agent, see "Attribute groups and attributes" on page 78.

Attribute groups for the monitoring agent

The SAP agent contains the following attribute groups. The table name depends on the maximum table name limits of the target database being used for the Tivoli Data Warehouse. If the maximum name is 30 characters, any warehouse table name longer than 30 characters is shortened to 30 characters.

- Attribute group name: ABAP Dump Count
- Table name: KSADMPCNT
- Attribute group name: ABAP Dumps
 - Table name: KSADUMPS
 - Warehouse table name: KSA_R/3_ABAP_DUMPS or KSADUMPS
- Attribute group name: Active Users

- Table name: KSAUSERS
- Warehouse table name: KSA_R/3_ACTIVE_USERS or KSAUSERS
- Attribute group name: Alerts
 - Table name: KSAALERTS
 - Warehouse table name: KSA_R/3_ALERTS or KSAALERTS
- Attribute group name: Archive Monitor
 - Table name: KSAARCHIVE
 - Warehouse table name: KSA_R/3_ARCHIVE_MONITOR or KSAARCHIVE
- Attribute group name: Batch Data Creates
 - Table name: KSABDC
 - Warehouse table name: KSA_R/3_BATCH_DATA_CREATE or KSABDC
- Attribute group name: Batch Data Create Log
 - Table name: KSABDCLOG
- Attribute group name: Batch Job Logs
 - Table name: KSAJOBLOG
- Attribute group name: Batch Jobs
 - Table name: KSAJOBS
 - Warehouse table name: KSA_R/3_BATCH_JOBS or KSAJOBS
- Attribute group name: Buffer Performance
 - Table name: KSABUFFER2
 - Warehouse table name: KSA_R/3_BUFFER_PERFORMANCE_64 or KSABUFFER2
- Attribute group name: Buffer Performance (Superseded)
 - Table name: KSABUFFER
 - Warehouse table name: KSA_R/3_BUFFER_PERFORMANCE or KSABUFFER
- Attribute group name: CCMS Current State
 - Table name: KSAMTSTATE
 - Warehouse table name: KSA_R/3_CCMS_CURRENT_STATE or KSAMTSTATE
- Attribute group name: Central Instance Configuration
 - Table name: KSASYSCI
- Attribute group name: Data Base Detail
 - Table name: KSAORADTL
- Attribute group name: Data Base Summary
 - Table name: KSAORASUM
 - Warehouse table name: KSA_R/3_DATA_BASE_SUMMARY or KSAORASUM
- Attribute group name: Database Logs
 - Table name: KSADBALOGS
- Attribute group name: DB2 Configuration Information
 - Table name: KSACONINF
 - Warehouse table name: KSA_DB2_CON_INFO or KSACONINF
- Attribute group name: DB2 Performance History
 - Table name: KSADB2INFTable name: KSADB2INF

- Warehouse table name: KSA_DB2_DB12_BACKUPHIST or KSADB2INF
- Attribute group name: Developer Traces
 - Table name: KSADEVTRAC
- Attribute group name: EDI Files
 - Table name: KSAEDIFILE
 - Warehouse table name: KSA_R/3_EDI_FILES or KSAEDIFILE
- Attribute group name: File Systems
 - Table name: KSAFSYSTEM
 - Warehouse table name: KSA_R/3_FILE_SYSTEMS or KSAFSYSTEM
- Attribute group name: Gateway Connections
 - Table name: KSAGWYCONN
 - Warehouse table name: KSA_R/3_GATEWAY_CONNECTIONS or KSAGWYCONN
- Attribute group name: Gateway Statistics
 - Table name: KSAGWYSTA2
- Attribute group name: Gateway Statistics(Superseded)
 - Table name: KSAGWYSTAT
- Attribute group name: Instance Configuration
 - Table name: KSASYS
 - Warehouse table name: KSA_R/3_INSTANCE_CONFIGURATION or KSASYS
- Attribute group name: Intermediate Documents
 - Table name: KSAIDOCS
 - Warehouse table name: KSA_R/3_INTERMEDIATE_DOCUMENTS or KSAIDOCS
- Attribute group name: License Information
 - Table name: KSALICINFO
- Attribute group name: Lock Entries
 - Table name: KSALOCKS
 - Warehouse table name: KSA_R/3_LOCK_ENTRIES or KSALOCKS
- Attribute group name: Logon Groups
 - Table name: KSALOGNGRP
 - Warehouse table name: KSA_R/3_LOGON_GROUPS or KSALOGNGRP
- · Attribute group name: Logon Information
 - Table name: KSALOGNINF
 - Warehouse table name: KSA_R/3_LOGON_INFORMATION or KSALOGNINF
- Attribute group name: MAI Alerts
 - Table name: KSAMAINBX
 - Warehouse table name: KSA_SAP_MAI_ALERTS or KSAMAINBX
- Attribute group name: MAI Business Process Monitoring
 - Table name: KSAMAIBPM
- Attribute group name: MAI Message Flow Detail
 - Table name: KSAMAIMSGF
- Attribute group name: MAI Message Monitor

- Table name: KSAMAIMSGM
- Attribute group name: MAI PI Channel Monitoring Alerts
 - Table name: KSAMAICHN
 - Warehouse table name: KSA_SAP_MAI_PICHN_MON or KSAMAICHN
- Attribute group name: MAI PI Comp
 - Table name: KSAMAIPIMN
 - Warehouse table name: KSA_SAP_MAI_PI_MON or KSAMAIPIMN
- Attribute group name: MAI Solution Overview
 - Table name: KSAMAISVEW
 - Warehouse table name: KSA_SAP_MAI_SOL_VIEW or KSAMAISVEW
- Attribute group name: MAI System Monitoring
 - Table name: KSASYSMON
 - Warehouse table name: KSA_SAP_MAI_SYS_MON or KSASYSMON
- · Attribute group name: Managed mySAP
 - Table name: KSAMI2
 - Warehouse table name: KSA_MANAGED_MYSAP or KSAMI2
- Attribute group name: Managed mySAP Agent
 - Table name: KSAMI
 - Warehouse table name: KSA_MANAGED_MYSAP_AGENT or KSAMI
- Attribute group name: Message Server Configuration
 - Table name: KSAMSGSCNF
 - Warehouse table name: KSA_R/3_MESSAGESERVER_CONFIGURATION or KSAMSGSCNF
- Attribute group name: MSSQL Database Detail
 - Table name: KSASQLDTL
 - Warehouse table name: KSA_R/3_MSSQL_DATABASE_DETAIL or KSASQLDTL
- Attribute group name: MSSQL Database Summary
 - Table name: KSASQLSUM
 - Warehouse table name: KSA_R/3_MSSQL_DATABASE_SUMMARY or KSASQLSUM
- Attribute group name: Number Range Buffer Details
 - Table name: KSANUMDTL
 - Warehouse table name: KSA_R/3_NUMBER_RANGE_BUFFER_DETAILS or KSANUMDTL
- Attribute group name: Number Range Buffer Summary
 - Table name: KSANUMSUMM
 - Warehouse table name: KSA_R/3_NUMBER_RANGE_BUFFER_SUMMARY or KSANUMSUMM
- Attribute group name: Operating System Performance
 - Table name: KSAOSP
 - Warehouse table name: KSA_R/3_OPERATING_SYSTEM_PERFORMANCE or KSAOSP
- Attribute group name: Oracle Database Performance Overview
 - Table name: KSAORAPERF
 - Warehouse table name: KSA_R/3_ORACLE_DATA_BASE_PERFORMANCE_OVERVIEW or KSAORAPERF
- Attribute group name: Output Requests

- Table name: KSAOUTPUT
- Warehouse table name: KSA_R/3_OUTPUT_REQUESTS or KSAOUTPUT
- Attribute group name: Output Requests Status Count
 - Table name: KSAOUTCNT
- Attribute group name: Perform Requested Action
 - Table name: KSAR3ACTN
- Attribute group name: PI/XI BPE Inbound Status Monitoring
 - Table name: KSABPESTM
 - Warehouse table name: KSA_PI_BPE_MONITORING or KSABPESTM
- Attribute group name: PI/XI Business Process Engine Status
 - Table name: KSABPESTTS
 - Warehouse table name: KSA_PI_BP_ENGINE_STATUS or KSABPESTTS
- Attribute group name: PI/XI Component Monitoring
 - Table name: KSACOMMON
- Attribute group name: PI/XI Integration Engine Background Job
 - Table name: KSABAGJOB
 - Warehouse table name: KSA_PI_INTENG_BACKGROUND_JOB or KSABAGJOB
- Attribute group name: PI/XI Integration Engine Job Overview
 - Table name: KSAJOBOVW
 - Warehouse table name: KSA_PI_INTENG_JOB_OVERVIEW or KSAJOBOVW
- Attribute group name: PI/XI Persistence layer analysis
 - Table name: KSAPERLAYR
 - Warehouse table name: KSA_PI_XI_PERSIST_LAYER or KSAPERLAYR
- Attribute group name: PI/XI Process Statistics
 - Table name: KSAPROSSTS
 - Warehouse table name: KSA_PI_PROSS_STATISTICS or KSAPROSSTS
- Attribute group name: PI/XI Run Time Cache Alert
 - Table name: KSARNCHEAT
- Attribute group name: PI/XI Run Time Cache Monitoring
 - Table name: KSARNCHEMN
- Attribute group name: PI/XI Run Time Cache Statistics
 - Table name: KSARNCHEST
- Attribute group name: PI/XI SYN ASYN COMM
 - Table name: KSASYNASYN
 - Warehouse table name: KSA_PI_XI_SYN_ASYN_COMM or KSASYNASYN
- Attribute group name: PI/XI Workflow Trace Logs
 - Table name: KSAWORKFLW
 - Warehouse table name: KSA_PI/XI_WF_TRACE or KSAWORKFLW
- Attribute group name: PI/XI XML Message Logs
 - Table name: KSAXMLLOG
 - Warehouse table name: KSA_PI_XI_XML_LOG or KSAXMLLOG

- Attribute group name: SAP ABAP Connection Monitoring
 - Table name: KSACONABAP
- Attribute group name: SAP Connection Details
 - Table name: KSACONCHK
- Attribute group name: SAP Connection Monitoring
 - Table name: KSACONMON
 - Warehouse table name: KSA_SAP_CONNECTION_MONITORING or KSACONMON
- Attribute group name: SAP HTTP Connection Monitoring
 - Table name: KSACONHTTP
 - Warehouse table name: KSA_SAP_CONNECTION_HTTP or KSACONHTTP
- Attribute group name: SAP HTTP Services
 - Table name: KSAHTTPSRV
 - Warehouse table name: KSA_SAP_HTTP_SRVS or KSAHTTPSRV
- Attribute group name: SAP ICM Monitor
 - Table name: KSAICMINFO
 - Warehouse table name: KSA_SAP_ICM_MON_INFO or KSAICMINFO
- Attribute group name: SAP ICM Service
 - Table name: KSASERINFO
 - Warehouse table name: KSA_SAP_ICM_SER_INFO or KSASERINFO
- Attribute group name: SAP MaxDB Activity History
 - Table name: KSAMDBAHIS
 - Warehouse table name: KSA_SAP_MAXDB_ACTIVITY_HISTORY or KSAMDBAHIS
- Attribute group name: SAP MaxDB Details
 - Table name: KSAMDBDTL
 - Warehouse table name: KSA_SAP_MAXDB_DETAIL or KSAMDBDTL
- Attribute group name: SAP MaxDB Fill History
 - Table name: KSAMDBHIS
 - Warehouse table name: KSA_SAP_MAXDB_FILL_HISTORY or KSAMDBHIS
- Attribute group name: SAP MaxDB Log Details
 - Table name: KSAMDBLOG
 - Warehouse table name: KSA_SAP_MAXDB_LOG_DETAIL or KSAMDBLOG
- Attribute group name: SAP MaxDB Summary
 - Table name: KSAMDBSUM
 - Warehouse table name: KSA_SAP_MAXDB_SUMMARY or KSAMDBSUM
- Attribute group name: SAP Message Server Monitor
 - Table name: KSASMMS
 - Warehouse table name: KSA_SAP_MESSAGE_SERVER_MONITOR or KSASMMS
- Attribute group name: SAP Office Inbox
 - Table name: KSAOFFICE
 - Warehouse table name: KSA_R/3_SAP_OFFICE_INBOX or KSAOFFICE
- Attribute group name: SAP qRFC Inbound Queues

- Table name: KSAQRFCIN
- Warehouse table name: KSA_SAP_QRFC_INBOUND_QUEUES_OVERVIEW or KSAQRFCIN
- Attribute group name: SAP qRFC Inbound Queues LUW Details
 - Table name: KSAQINLUW
- Attribute group name: SAP qRFC Message Queue Detail
 - Table name: KSAQINOUT
- Attribute group name: SAP qRFC Message Queue Information
 - Table name: KSAQRFCOVW
- Attribute group name: SAP qRFC Outbound Queues Details
 - Table name: KSAQRFCLUW
- Attribute group name: SAP qRFC Outbound Queues Overview
 - Table name: KSAQRFCOUT
 - Warehouse table name: KSA_SAP_QRFC_OUTBOUND_QUEUE_OVERVIEW or KSAQRFCOUT
- Attribute group name: SAP qRFC Saved Inbound Queues
 - Table name: KSAQRFCSA
 - Warehouse table name: KSA_SAP_QRFC_SAVED_INBOUND_QUEUES_OVERVIEW or KSAQRFCSA
- Attribute group name: SAP qRFC Saved Inbound Queues LUW Details
 - Table name: KSAQSALUW
- Attribute group name: SAP TCPIP Connection Monitoring
 - Table name: KSACONTCP
 - Warehouse table name: KSA_SAP_CONNECTION_TCPIP or KSACONTCP
- Attribute group name: Saprouter Log
 - Table name: KSASAPROUT
- Attribute group name: Service Response Time
 - Table name: KSAPERF
 - Warehouse table name: KSA_R/3_SERVICE_RESPONSE_TIME or KSAPERF
- Attribute group name: Set Default Sample Period
 - Table name: KSAPERIOD
- Attribute group name: Solution Manager Alerts History
 - Table name: KSASOLALTH
- Attribute group name: Solution Manager Business Process Alerts
- Table name: KSABPMDTL
- Attribute group name: Solution Manager Clients
 - Table name: KSALDSCLNT
- Attribute group name: Solution Manager Early Watch Alerts
 - Table name: KSASOLEWA
- Attribute group name: Solution Manager Landscape Databases
 - Table name: KSALDSDB
 - Warehouse table name: KSA_SOLMAN_LANDSCAPE_DATABASES or KSALDSDB
- Attribute group name: Solution Manager Landscape Databases And System
 - Table name: KSASLDSDB

- Warehouse table name: KSA_SOLMAN_LANDSCAPE_DB_SYS or KSASLDSDB
- Attribute group name: Solution Manager Landscape Software Components
 - Table name: KSALDSSOFT
- Attribute group name: Solution Manager Landscape System Topology
 - Table name: KSALDSSYST
- Attribute group name: Solution Manager Servers
 - Table name: KSALDSASRV
 - Warehouse table name: KSA_SOLMAN_SERVERS_OVERVIEW or KSALDSASRV
- Attribute group name: Solution Manager Solution Overview
 - Table name: KSASLSYVEW
 - Warehouse table name: KSA_SOLMAN_SOLUTION_OVERVIEW or KSASLSYVEW
- Attribute group name: Solution Manager System Instance
 - Table name: KSALDSINST
- Attribute group name: Solution Manager System Landscape Overview
 - Table name: KSALDSSYSO
 - Warehouse table name: KSA_SOLMAN_LDS_SYS_OVERVIEW or KSALDSSYSO
- Attribute group name: Solution Manager System Monitoring Alerts
 - Table name: KSASLSYALT
- Attribute group name: Solution Manager Systems On Server
 - Table name: KSASRVDTLS
- Attribute group name: Spool Requests
 - Table name: KSASPOOL
 - Warehouse table name: KSA_R/3_SPOOL_REQUESTS or KSASPOOL
- Attribute group name: System Log
 - Table name: KSASLOG
- Attribute group name: System Log details
 - Table name: KSASDETAIL
- Attribute group name: System Logon Information
 - Table name: KSALGNINFS
 - Warehouse table name: KSA_R/3_LOGON_INFORMATION_SYS or KSALGNINFS
- Attribute group name: Topology Information
 - Table name: KSAMAP
- Attribute group name: Transaction Performance
 - Table name: KSATRANS
- Warehouse table name: KSA_R/3_TRANSACTION_PERFORMANCE or KSATRANS
- Attribute group name: Transaction Performance Task Type
 - Table name: KSATRANST
 - Warehouse table name: KSA_R/3_TRANS_PERF_TASK_TYPE or KSATRANST
- Attribute group name: Transactional RFC
 - Table name: KSATRANRFC
 - Warehouse table name: KSA_R/3_TRANSACTIONAL_RFC or KSATRANRFC

- Attribute group name: Transport Logs
 - Table name: KSACTSLOG
- Attribute group name: Transport Objects
 - Table name: KSACTSOBJ
- Attribute group name: Transport Requests
 - Table name: KSACTS
 - Warehouse table name: KSA_R/3_TRANSPORT_REQUESTS or KSACTS
- Attribute group name: Transport Steps
 - Table name: KSACTSSTEP
- Attribute group name: Updates Information
 - Table name: KSAUPDATES
 - Warehouse table name: KSA_R/3_UPDATES_INFORMATION or KSAUPDATES
- Attribute group name: User Information
 - Table name: KSAUSRINFO
- Attribute group name: Work Processes
 - Table name: KSAPROCESS
 - Warehouse table name: KSA_R/3_WORK_PROCESSES or KSAPROCESS

Historical data collection attributes

When an attribute group is configured for historical data collection, the attributes that are entered into the historical database are determined differently depending on whether you configured historical data collection to take place on the Tivoli Enterprise Monitoring Server or the Tivoli Enterprise Monitoring Agent.

A size restriction limits the attributes that are collected and stored for historical data collection on the Tivoli Enterprise Monitoring Server. In particular, the R/3_Instance_Configuration attribute group limits the attributes that it collects for historical data collection. The attributes that are not collected for this attribute group are listed in this table:

Table 1. R/3 Instance Configuration attributes not collected at the Tivoli Enterprise Monitoring Server			
Column name Attribute name			
OPMODE	Operation Mode		
DESCRIPT	System Description		
PMVALUE	Value		
ORIGINNODE	Managed System		
APPSRVNM	_		
SAMP_TIME	Sample_Time		
SYSNAME	-		
UDESCRIPT	System Description		
PMDESC	Description		
PARAMETER	Logon Parameters		
SAMPLENO	_		
ROWNO	_		

No size restriction is associated with data stored at the Tivoli Enterprise Monitoring Agent, so all attributes in the R/3_Instance_Configuration attribute group are collected and stored for historical data collection. This can result in some rows in the historical database having values for these attributes and some rows not having values for these attributes depending on where historical data collection took place.

Attribute groups and attributes

The SAP agent contains many different attributes and attribute groups.

This monitoring agent contains the following attribute groups:

- ABAP Dumps
- ABAP Dump Count
- Active Users
- Alerts
- Archive Monitor
- Background Job
- Batch Data Create
- Batch Data Create Log
- Batch Jobs
- Batch Job Logs
- Buffer Performance (Superseded)
- Buffer Performance
- Business Process Engine Inbound Status Monitoring
- Business Process Engine Status
- <u>CCMS Current State</u>
- "Central Instance Configuration attributes" on page 111
- Client Information
- <u>Component Monitoring</u>
- Data Base Detail
- Database Logs
- Data Base Summary
- DB2 Configuration
- DB2 Performance History
- Developer Traces
- EDI Files
- File Systems
- Gateway Connections
- Gateway Statistics
- Historical Alerts
- HTTP Services
- ICM Monitor
- ICM Monitor Services
- Instance Configuration
- Integration engine Job Overview
- Intermediate Documents

- License Information
- Lock Entries
- Logon Groups
- Logon Information
- MAI Alert Inbox
- MAI PI Component Monitoring
- Message Server Monitor
- "MSSQL Database Detail attributes" on page 170
- <u>"MSSQL Database Summary attributes" on page 172</u>
- Number Range Buffer Details
- <u>Number Range Buffer Summary</u>
- Operating System Performance
- Output Requests
- Output Requests Status Count
- Perform Requested Action
- Persistence Layer Analysis
- Process Statistics
- qRFC Inbound Queues
- qRFC Inbound Queues Logical Unit of Work (LUW)
- qRFC Outbound Queues
- **QRFC Outbound Queues Details**
- qRFC Saved Inbound Queues
- qRFC Saved Inbound Queues LUW
- SAP Office Inbox
- Saprouter Log
- "SAP MaxDB Activity History attributes" on page 201
- "SAP MaxDB Details attributes" on page 202
- "SAP MaxDB Fill History attributes" on page 206
- "SAP MaxDB Log Details attributes" on page 207
- <u>"SAP MaxDB Summary attributes" on page 208</u>
- Servers Details
- Servers Overview
- Service Response Time
- Set Default Sample Period
- Solution Manager Business Process Alerts
- Solution Manager Early Watch Alerts
- Solution Manager landscape Database
- Solution Manager Landscape Software Components
- Solution Manager System Instance
- Solution Overview
- Spool Requests
- Synchronous and Asynchronous communication alerts
- System Log

- System Log Details
- System Monitoring Alert View
- System Monitoring
- System Overview
- System Topology
- Topology Information
- Transactional RFC
- Transactional RFC Logs
- Transaction Performance
- Transaction Performance Task Type
- Transport Logs
- Transport Objects
- Transport Requests
- Transport Steps
- Updates Information
- User Information
- Workflow Trace Logs
- Work Processes
- XML Message Logs

IBM Tivoli Monitoring provides other attribute groups that are available to all monitoring agents, for example Universal Time and Local Time. The attributes in these common attribute groups are documented in the Tivoli Enterprise Portal Help.

The remaining sections of this chapter contain descriptions of the SAP agent attribute groups, which are listed alphabetically. Each description contains a list of attributes in the attribute group.

Disk capacity planning for historical data

Disk capacity planning for a monitoring agent is a prediction of the amount of disk space to be consumed by the historical data in each attribute group that is collecting historical data. Required disk storage is an important factor when you are defining data collection rules and your strategy for historical data collection.

The Capacity planning for historical data table provides the following information, which is required to calculate disk space for this monitoring agent:

Table	Table name as it is displayed in the warehouse database, if the attribute group is configured to be written to the warehouse. The table name listed here corresponds to the table name in <u>"Attribute groups for the monitoring agent" on page 69</u> .
Attribute group	Name of the attribute group that is used to create the table in the warehouse database if it is short enough to fit in the table naming constraints of the database that is being used for the warehouse. The attribute group name listed here corresponds to the Warehouse table name in <u>"Attribute groups for the monitoring agent" on page 69</u> .
Bytes per row (agent)	Estimate of the record length for each row or instance that is written to the agent disk for historical data collection. This estimate can be used for agent disk space planning purposes.

Database bytes per row (warehouse)	Estimate of the record length for detailed records that are written to the warehouse database, if the attribute group is configured to be written to the warehouse. Detailed records are records that have been uploaded from the agent for long-term historical data collection. This estimate can be used for warehouse disk-space planning purposes.
Aggregate bytes per row (warehouse)	Estimate of the record length for aggregate records that are written to the warehouse database, if the attribute group is configured to be written to the warehouse. Aggregate records are created by the Summarization agent for attribute groups that have been configured for summarization. This estimate can be used for warehouse disk- space planning purposes.

In addition to the information in the tables, you must know the number of rows of data that you plan to collect. An attribute group can have single or multiple rows of data, depending on the application environment that is being monitored. For example, if your attribute group monitors each processor in your computer and you have a dual processor computer, the number of rows is two.

Table	Attribute group	Bytes per row (agent)	Database bytes per row (warehous e)	Aggregate bytes per row (warehous e)
KSASYSCI	Central_Instance_Configuration	1472	1472	3771
KSACONINF	DB2_CON_INFO	674	708	745
KSADB2INF	DB2_DB12_BACKUPHIST	413	421	458
KSAWORKFLW	PI/XI_WF_Trace	469	473	510
KSABPESTM	PI_BPE_Monitoring	412	419	456
KSABPESTTS	PI_BP_ENGINE_STATUS	409	405	442
KSACOMMON	PI_Component_Monitoring	770	762	799
KSABAGJOB	PI_IntEng_Background_Job	570	570	607
KSAJOBOVW	PI_IntEng_Job_Overview	362	359	396
KSAPROSSTS	PI_PROSS_STATISTICS	350	344	381
KSAPERLAYR	PI_XI_Persist_layer	683	697	734
KSARNCHEAT	PI_XI_RNTCHE_ALT	3594	3626	3663
KSARNCHEMN	PI_XI_RNTCHE_MON	3720	3757	3794
KSARNCHEST	PI_XI_RNTCHE_STAT	1804	1821	1858
KSASYNASYN	PI_XI_SYN_ASYN_COMM	406	406	443
KSAXMLLOG	PI_XI_XML_Log	1295	1266	1303
KSADMPCNT	R/3_ABAP_Dump_Count	496	489	565
KSADUMPS	R/3_ABAP_Dumps	907	913	950
KSAUSERS	R/3_Active_Users	854	867	1138
KSAALERTS	R/3_Alerts	2438	2393	2430
KSAARCHIVE	R/3_Archive_Monitor	613	565	1148

Table	Attribute group	Bytes per row (agent)	Database bytes per row (warehous e)	Aggregate bytes per row (warehous e)
KSABDC	R/3_Batch_Data_Create	677	691	1118
KSABDCLOG	R/3_Batch_Data_Create_Log	1646	1653	1690
KSAJOBLOG	R/3_Batch_Job_Logs	1156	1160	1197
KSAJOBS	R/3_Batch_Jobs	966	985	1103
KSABUFFER	R/3_Buffer_Performance	669	719	1950
KSABUFFER2	R/3_Buffer_Performance_64	749	807	2126
KSAMTSTATE	R/3_CCMS_Current_State	1380	1394	1431
KSAORADTL	R/3_Data_Base_Detail	673	697	1796
KSAORASUM	R/3_Data_Base_Summary	621	638	1565
KSADBALOGS	R/3_Database_Logs	662	657	694
KSADEVTRAC	R/3_Developer_Traces	692	689	726
KSAEDIFILE	R/3_EDI_Files	893	895	932
KSAFSYSTEM	R/3_File_Systems	908	915	1397
KSAGWYCONN	R/3_Gateway_Connections	1343	1362	1438
KSAGWYSTAT	R/3_Gateway_Statistics	781	1080	3418
KSAGWYSTA2	R/3_Gateway_Statistics_64	981	1184	3622
KSASYS	R/3_Instance_Configuration	1460	1457	3639
KSAIDOCS	R/3_Intermediate_Documents	1217	1240	1277
KSALICINFO	R/3_License_Information	557	557	594
KSALOCKS	R/3_Lock_Entries	850	861	1058
KSALOGNGRP	R/3_Logon_Groups	694	700	932
KSALOGNINF	R/3_Logon_Information	673	680	795
KSALGNINFS	R/3_Logon_Information_Sys	673	680	795
KSASQLDTL	R/3_MSSQL_Database_Detail	969	982	1265
KSASQLSUM	R/3_MSSQL_Database_Summary	543	547	994
KSANUMDTL	R/3_Number_Range_Buffer_Details	602	605	642
KSANUMSUMM	R/3_Number_Range_Buffer_Summary	624	574	1274
KSAOSP	R/3_Operating_System_Performance	668	661	1686
KSAOUTPUT	R/3_Output_Requests	1021	1039	1353
KSAOUTCNT	R/3_Output_Requests_Status_Count	614	607	644
KSAR3ACTN	R/3_Perform_Requested_Action	964	963	1000
KSAOFFICE	R/3_SAP_Office_Inbox	1286	1309	1428

Table	Attribute group	Bytes per row (agent)	Database bytes per row (warehous e)	Aggregate bytes per row (warehous e)
KSASAPROUT	R/3_Saprouter_Log	692	688	725
KSAPERF	R/3_Service_Response_Time	694	739	1909
KSAPERIOD	R/3_Set_Default_Sample_Period	406	399	436
KSASPOOL	R/3_Spool_Requests	786	801	1033
KSASLOG	R/3_System_Log	1031	1041	1117
KSASDETAIL	R/3_System_Log_details	1049	1015	1052
KSAMAP	R/3_Topology_Information	709	689	765
KSATRANST	R/3_Trans_Perf_Task_Type	1237	1274	2928
KSATRANS	R/3_Transaction_Performance	1237	1274	2928
KSATRANRFC	R/3_Transactional_RFC	1422	1456	1634
KSACTSLOG	R/3_Transport_Logs	938	941	978
KSACTSOBJ	R/3_Transport_Objects	619	616	653
KSACTS	R/3_Transport_Requests	890	901	938
KSACTSSTEP	R/3_Transport_Steps	554	552	589
KSAUPDATES	R/3_Updates_Information	1313	1324	1361
KSAUSRINFO	R/3_User_Information	1467	1416	1453
KSAPROCESS	R/3_Work_Processes	1072	1100	1902
KSABPMDTL	SAP_BPM_ALERTS	691	694	731
KSACONCHK	SAP_Conn_CHECK	921	927	1003
KSACONABAP	SAP_Connection_ABAP	2558	2577	2614
KSACONHTTP	SAP_Connection_HTTP	2829	2848	2885
KSACONMON	SAP_Connection_Monitoring	589	589	626
KSACONTCP	SAP_Connection_TCPIP	3473	3495	3532
KSAHTTPSRV	SAP_HTTP_SRVS	1180	1195	1232
KSAICMINFO	SAP_ICM_MON_INFO	392	400	437
KSASERINFO	SAP_ICM_SER_INFO	365	364	401
KSAMAINBX	SAP_MAI_ALERTS	1958	1973	2010
KSAMAIBPM	SAP_MAI_BP_MON	1201	1208	1245
KSAMAIMSGF	SAP_MAI_MSG_FDL	1768	1780	1817
KSAMAIMSGM	SAP_MAI_MSG_TRG	655	652	689
KSAMAICHN	SAP_MAI_PICHN_MON	1311	1318	1355
KSAMAIPIMN	SAP_MAI_PI_MON	750	752	789

Table	Attribute group	Bytes per row (agent)	Database bytes per row (warehous e)	Aggregate bytes per row (warehous e)
KSAMAISVEW	SAP_MAI_SOL_VIEW	676	674	711
KSASYSMON	SAP_MAI_SYS_MON	614	618	655
KSAMDBAHIS	SAP_MaxDB_Activity_History	529	533	960
KSAMDBDTL	SAP_MaxDB_Detail	1158	1231	4462
KSAMDBHIS	SAP_MaxDB_Fill_History	523	523	724
KSAMDBLOG	SAP_MaxDB_Log_Detail	608	626	1522
KSAMDBSUM	SAP_MaxDB_Summary	553	552	589
KSASMMS	SAP_Message_Server_Monitor	350	342	379
KSAQINLUW	SAP_qRFC_Inbound_Queue_Details	733	749	786
KSAQRFCIN	SAP_qRFC_Inbound_Queues_Overview	532	537	574
KSAQINOUT	SAP_qRFC_MsgQueue_Detail	459	467	504
KSAQRFCOVW	SAP_qRFC_MsgQueue_Info	344	342	379
KSAQRFCLUW	SAP_qRFC_Outbound_Queue_details	661	673	710
KSAQRFCOUT	SAP_qRFC_Outbound_Queue_overview	556	562	599
KSAQSALUW	SAP_qRFC_Saved_Inbound_Queue_ Details	757	774	811
KSAQRFCSA	SAP_qRFC_Saved_Inbound_Queues_ Overview	476	479	516
KSASOLEWA	SolMan_Early_Watch_Alert	619	618	655
KSALDSSYSO	SolMan_LDS_SYS_Overview	830	843	919
KSALDSSYST	SolMan_LDS_SYS_Topology	344	339	454
KSALDSSOFT	SolMan_LDS_Soft_Comp	378	365	402
KSALDSCLNT	SolMan_Landscape_Client	405	394	431
KSASLDSDB	SolMan_Landscape_DB_Sys	4106	4133	4170
KSALDSDB	SolMan_Landscape_Databases	512	508	545
KSALDSINST	SolMan_Landscape_Instance	412	398	435
KSASLSYALT	SolMan_SYS_MON_Alerts	1474	1496	1572
KSASRVDTLS	SolMan_Servers_Details	329	326	363
KSALDSASRV	SolMan_Servers_Overview	733	737	774
KSASOLALTH	SolMan_Solution_Alerts_History	810	811	887
KSASLSYVEW	SolMan_Solution_Overview	404	397	434

For more information about historical data collection, see the IBM Tivoli Monitoring Administrator's Guide.

ABAP Connection Monitoring attributes

Advanced Business Application Programming (ABAP) Connection Monitoring is a system level attribute group that provides information about RFC connection of type ABAP, Internal, and Via ABAP driver.

Authorization for Destination Authorization to use for a destination.

Destination Lock Status Displays whether the RFC connection is modifiable. The following values are possible:

Y = Modifiable

X = Non-Modifiable

Driver Program Name of the Driver program for the connection type Via ABAP Driver.

Gateway Host Gateway host for the RFC connection.

Gateway Service Gateway service number for the RFC connection.

Keep Alive Timeout Keep Alive timeout value. The following values are possible:

2 = Default Gateway Value

0 = Timeout Inactive

Load Balancing Displays whether the load balancing is active for the RFC connection. The following values are possible:

Y = Inactive

X = Active

Logon Client Client that is used for the logon procedure of the RFC connection

Logon Group Logon group details for the load balancing of ABAP connection.

Logon Language Language that is used for the logon procedure of the RFC connection.

Logon User User who has used the logon procedure of the RFC connection.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

RFC Connection Name of the RFC destination specified in the function call.

RFC Logon GUI Displays whether the logon screen for RFC logon is active. The following values are possible:

- Y = Inactive
- X = Active

RFC Service Number Service number that is used in the configuration of the RFC destination.

RFC Status Status of the RFC connection. The following values are possible:

- 1 = Active
- 2 = Inactive
- 0 = Unknown

RFC Type Type of the RFC destination that is being monitored. The following values are possible:

- 3 = ABAP Connection
- G = HTTP Connections to External Server
- I = Internal Connections
- L = Logical Connections
- T = TCP IP Connections
- X = Connections via ABAP Driver
- 2 = Connection to R2 System
- S = Start External Program Using SNA or APPC
- M = CMC Connections

H = HTTP Connections to ABAP Server

Sample Time The time stamp for the date and time the agent collected data from the mySAP system. This attribute is not for use in situations.

SAPshcut_Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string with a maximum of 120 characters.

Secure Network Communication Displays whether the option for SNC is checked for the RFC connection. The following values are possible:

- Y = Inactive
- X = Active

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string with a maximum of 37 characters.

System Name System ID of the SAP System running on the server. The valid format is an alphanumeric string with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Target Host Name of the target host configured for the RFC connection.

Trace Status Displays whether the trace is active for the RFC connection. The following values are possible:

- Y = Inactive
- X = Active

Trusted System Displays whether the option for Trusted System is checked for the RFC connection. The following values are possible:

- Y = Inactive
- X = Active

ABAP Dumps attributes

ABAP Dumps is a system level attribute group that provides information about ABAP short dumps occurring in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Client A text string identifier or name for the source client where the ABAP dump was created.

Create Time The time stamp for the date and time the ABAP dump was created.

Dump Title A text string identifier or name for the ABAP dump that was created. For example, DBIF RSQL INVALID CURSOR indicates the name of the ABAP dump.

Hold Status The hold status for the ABAP dump. One of the following values is possible:

X = Held F = Free

Host A text string identifier or name for the computer serving as the host where the ABAP dump was created. For example, ddrum2 indicates the name of the host where the ABAP dump was created.

Include Name A text string identifier or name for the ABAP INCLUDE name. This attribute provides single-byte character support only. For example, LY210U58 indicates the ABAP INCLUDE name.

Include Name (Unicode) A text string identifier or name for the ABAP INCLUDE name. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Line NumberThe numeric identifier for the line of code in the ABAP INCLUDE where the error occurred.

Line Number (Superseded) The numeric identifier for the line of code in the ABAP INCLUDE where the error occurred. For example, 750 indicates the line in the code where the error occurred. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Mode NumberThe mode number for the ABAP dump.

Program Name The text string identifier for the ABAP program that generated the ABAP dump. This attribute provides single-byte character support only. For example, SAPLY210 indicates the name of the ABAP program.

Program Name (Unicode) The text string identifier for the ABAP program that generated the ABAP dump. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch

- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

Userid The text string identifier for the person who generated the ABAP dump. For example, LSMITH is the name of the person who generated the ABAP dump.

ABAP Dump Count attributes

The ABAP Dump Count is a system level attribute group that provides information about the count of ABAP dumps in the SAP system.

Instance Name The name of the application instance such as ddrum2_PRD_00 that is being monitored for the ABAP dumps in a SAP system.

Logon Parameters The parameters that are passed to the KSA3 transaction code to run Take Action commands. This attribute cannot be used for situations.

Managed System The identifier for the monitored SAP resource. This attribute cannot be used for situations. The valid format is an alphanumeric string with a maximum of 64 characters.

SAPshcut Parameters The parameters that are passed to run the sapshcut command for opening the SAPGUI. The valid format is an alphanumeric string with a maximum of 120 characters.

System Label The system label that is generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server that is associated with the target SAP system. The valid format is an alphanumeric string with a maximum of 37 characters.

System Name The system identifier (SID) for the SAP system that is being monitored, for example, PRD. The valid format is an alphanumeric string with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +IN = ICM_Not_Running +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data (No data available on SAP) --- = Not_Supported_for_this_SAP_version

Total ABAP Dump Count The current count of ABAP dumps that are generated for all applicable application server instances in the SAP system.

Active Users attributes

Active Users is an instance level attribute group that provides information about users that are currently logged on to a mySAP instance. This attribute group can be used in queries, situations, and workspace views.

Client A text string identifier or name for the source client session. For example, 800 identifies the name of the client for this session.

Echoed To Session The user ID for a different user on this mySAP system. Use this text string attribute to identify sessions being echoed to the SAPGUI screens of other users for the purposes of monitoring, troubleshooting, or training personnel. For example, LBROWN identifies the name of the session echoed.

External Sessions An integer value for the total number of external (true) sessions. For example, 2 specifies the total number of external sessions. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Instance Name The name of the application instance you are monitoring. The valid format is a text string. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Internal Sessions An integer value for the total number of automatically opened internal sessions. For example, 3 specifies the total number of internal sessions. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

IP Address The IP address of the workstation running the SAPGUI presentation. For example, 170.106.1.1 is the IP address.

IP Address (v4/v6) The IP address of the workstation running the SAPGUI presentation. This attribute is long enough to hold IPv4 or IPv6 addresses.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Sample Time The time stamp for the date and time the agent collected the data. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Session Number The identifier for the user session, a numeric value. For example, 2 is the number of the session.

Session Time The time stamp for the date and time of the last session.

Session Title The screen title of the session, a text string. For example, ABAP/4 Function Modules is the screen title of the session. This attribute provides single-byte character support only.

Session Title (Unicode) The screen title of the session, a text string. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Terminal The host name of the terminal running the SAPGUI presentation. Use this text string attribute to specify or exclude a specific terminal. For example, LBROWN is the name of the terminal being used.

Time The time stamp for the time of the last user activity.

Transaction Code The transaction code in which the most recent activity for a user took place. The code identifies each program that can be started from a menu in the mySAP system using a text string. For example, ST03 is the identifier for the mySAP transaction code.

Type Type of connection for each user who is logged on to the SAP instance. The following values provide information about the connection:

4 = GUI 32 = RFC 202 = PLUGIN 2 = SYSTEM

User Key The numeric identifier for the memory protection key for the user. For example, 216 is the name of the memory protection key for the user.

User Page Size The page size, in KB, consumed by the user, a numeric value. For example, 16384 is the page size consumed by the user. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

User Private Memory The private memory, in KB, allocated to the user, a numeric value. For example, 34267 is the private memory allocated to the user. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

User Roll Size The roll size (where user memory is temporarily saved and retrieved from roll space), in KB, allocated to the user, a numeric value. For example, 11468 is the roll size allocated to the user. The following value is also possible

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

User Total Memory The total memory, in KB, consumed by the user, a numeric value. For example, 739313 is the total memory consumed by the user. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Userid The name of the user logged on to this session, a text string. For example, LBROWN is the name of the person using this session.

Alerts attributes

Alerts is an instance level attribute group that provides information about CCMS and mySAP Agent alerts occurring in a mySAP instance. CCMS alerts are similar to IBM Tivoli Monitoring situations in that they alert you to conditions in which a monitored valued has exceeded a threshold value. This attribute group can be used in queries, situations, and workspace views.

Alert Field Name The MTE attribute name, a text string. This attribute applies to CCMS alerts only.

Alert Index Internal handle for the alert id.

Alert Msg An alert message from the CCMS that provides more details on the reason for the alert.

Alert Object Name The MTE object name, a text string. This attribute applies to CCMS alerts only.

Alert Severity Actual alert severity value from the SAP system.

Alert Status The alert status, a number that indicates Open or Acknowledged. This attribute applies to CCMS alerts only. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Alert Unique Identifier The alert unique identifier that is used to close an alert in a SAP system. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Alert Value The severity value from the CCMS. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Class A category associated with an alert, as defined by mySAP system. For example, DATABASE indicates that this alert involves database performance.

Extended Alert Unique Identifier The extended alert unique identifier that is used to close an alert in a SAP system. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Instance Name The name of the application instance you are monitoring, a text string. For example, DDRUM2_PRD_00.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Message The text associated with an alert generated by mySAP system. This attribute provides singlebyte character support only. For example, NO BACKUPS ON RECORD indicates that no backup was detected. For CCMS alerts, this attribute contains a concatenation of all of the texts from the branches of the CCMS alert tree. This is the whole alert tree for the single alert in one attribute.

Message (Unicode) The text associated with an alert generated by mySAP system. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment. For CCMS alerts, this attribute contains a concatenation of all of the texts from the branches of the CCMS alert tree. This is the whole alert tree for the single alert in one attribute.

Monitoring Segment Name Name of the monitoring segment.

Monitor The CCMS Monitor to which this alert belongs, a text string. This attribute applies to CCMS alerts only.

Monitor Set The CCMS Monitor Set to which this alert belongs, a text string. This attribute applies to CCMS alerts only.

MTE Class A text string for the monitoring tree element in CCMS with which this alert is associated.

MT Index Internal handle for TID that is used for the link from the current state view to the alert view.

Number A unique identifier assigned by the SAP agent that represents the alert type and subtype. Use this numeric value or range of values to identify or exclude an alert. For example, 517.

Occurrence Time The time stamp for the date and time that an alert or range of alerts occurred.

Occurrence Time GMT The time at which the alert occurred in Greenwich mean time.

Raised By The system that raised the alert, which is either the SAP agent or mySAP CCMS, a text string value. The following values are included

S = SAP

C = IBM Tivoli Monitoring

Sample Time The time stamp for the date and time the agent collected the data. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Severity A number that represents the level of severity used to identify or exclude a category of alert. The following values are possible:

- 0 = Normal (never reported by the SAP agent)
- 1 = Warning
- 2 = Critical

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the database server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Archive Monitor attributes

Archive Monitor is a system level attribute group that provides information about document archiving occurring in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Archive Device Status The status of the archive device. The following values are possible:

0 = OK 1 = Missing 2 = N/A

Archiving Errors The number of errors that occurred during the archiving process. For example, 8 indicates the number of errors that occurred. The following value is also possible:

-1 = Missing. The archiving process is not configured in the SAP system.

Archiving Queues The number of queues that were generated during the archiving process. For example, 8 indicates the number of queues that were created. The following value is also possible:

-1 = Missing. The archiving process is not configured in the SAP system.

Background Archiving The number of background archiving jobs that are active. For example, 3 indicates the number of archiving jobs that are active in the background.

Background Confirmation The number of background files that are confirmed. For example, 5 indicates the number of background files that are confirmed.

Background File Processing The number of background files processed. For example, 13 indicates the number of background files processed. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Background Retrieval The number of background jobs retrieved. For example, 12 indicates the number of background jobs retrieved.

Background Scheduled The number of background jobs scheduled. For example, 25 indicates the number of background jobs scheduled.

Bar Code Archive Files The number of bar code archive files. For example, 152 indicates the number of bar code archive files.

Confirmation Errors The number of archiving confirmation errors. For example, 15 indicates the number of archiving confirmation errors. The following value is also possible:

-1 = Missing. The archiving process is not configured in the SAP system.

Confirmation Queues The number of archiving confirmation queues. For example, 23 indicates the number of archiving confirmation queues. The following value is also possible:

-1 = Missing. The archiving process is not configured in the SAP system.

Logging Entries The number of logging entries. For example, 15 indicates the number of logging entries.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Open Asynchronous Errors The number of open asynchronous errors. For example, 6 indicates the number of open asynchronous errors.

Open Asynchronous Requests The number of open asynchronous requests. For example, 9 indicates the number of open asynchronous requests.

Open Bar Codes The number of open bar codes. For example, 7 indicates the number of open bar codes.

Open Spool Errors The number of open spool errors. For example, 4 indicates the number of open spool errors. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Open Spool Requests The number of open spool requests. For example, 7 indicates the number of open spool requests. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Retrieval Errors The number of retrieval errors. For example, 6 indicates the number of retrieval errors. The following value is also possible:

-1 = Missing. The archiving process is not configured in the SAP system.

Retrieval Queues The number of retrieval queues. For example, 4 indicates the number of retrieval queues. The following value is also possible:

-1 = Missing. The archiving process is not configured in the SAP system.

Sample Time The time stamp for the date and time the agent collected data from mySAP system. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the database server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Transactional Rfc Requests The number of transactional RFC spool requests. For example, 4 indicates the number of Transactional RFC spool requests. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Background Job attributes

Background Job is an instance level attribute group that provides monitoring information of PI/XI Background Jobs and Job Logs. This attribute group can be used in queries, reports, and workspace views.

Job Created By The name of the SAP user who scheduled a job or a job-step to run. This user does not have to be the user who authorized the job to run. The valid format is an alphanumeric string, with a maximum of 12 characters.

Job ID ID of the background Job. The valid format is an alphanumeric string, with a maximum of 8 characters.

Job Name Name of the background job. The valid format is an alphanumeric string, with a maximum of 32 characters.

Job Status Status of the Job. The valid format is an alphanumeric string, with a maximum of 1 characters. The following values are possible:

- F = Finished
- A = Canceled
- R = Active
- Y = Ready
- S = Released
- P = Scheduled
- Z = Released/Scheduled
- Other = Unknown

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is an alphanumeric string, with a maximum of 64 characters.

Message Class Class associated with the background Job. The valid format is an alphanumeric string, with a maximum of 20 characters.

Message Number Message Number associated with the background job. The valid format is a 4-byte integer.

Message Text Message text uncoded, including the parameters inserted and the text. The valid format is an alphanumeric string, with a maximum of 200 characters.

Message Type Type of background job that is shown in the log. The valid format is an alphanumeric string, with a maximum of 1 characters.

Sample Time The date and time that the agent collected data from SAP. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is time stamp.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the SAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log

+++ = No_applicable_data (No data available on SAP)

Timestamp Job start date and time. The valid format is time stamp.

Batch Data Create attributes

Batch Data Create is a system level attribute group that provides information about the configuration, progress, and performance of BDC sessions in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Authorization ID for the permission for the session, a text string. For example, RSMITH indicates the person who authorized the session.

Client The name of the client session. For example, 800 identifies the source client for this session.

Completed Screens The number of completed screens in this BDC session. For example, 21 indicates the number of screens that completed.

Completed Transactions The number of completed transactions in this BDC session. For example, 35 indicates the number of transactions that completed.

Created The time stamp for the date and time the BDC session or range of sessions occurred.

Creator A text string identifier or user ID for the user who created the session. For example, RSMITH indicates the name of the person who created the session.

Deleted Screens The number of deleted screens in this BDC session. For example, 3 indicates the number of screens that were deleted in this session.

Deleted Transactions The number of deleted transactions in this BDC session. For example, 4 indicates the number of transactions that were deleted in this session.

Error Screens The number of screens with errors. For example, 2 indicates the number of screens with errors.

Error Transactions The number of transactions with errors. For example, 4 indicates the number of transactions with errors.

Last Changed The time stamp for the date and time the session was most recently modified.

Locked Until The time stamp for the specific date and time, or range, before which this session or a range of sessions cannot be processed.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Pending Screens The number of screens not yet completed in this BDC session. For example, 2 indicates the number of screens not yet completed.

Pending Transactions The number of transactions not yet completed in this BDC session. For example, 4 identifies the number of transactions not yet completed in this session.

Queue Id The BDC queue Id from APQI-QID. This attribute is not for use in situations.

Sample Interval End The time stamp for the specific date and time that the collection period stopped. This attribute is not for use in situations.

Sample Interval Start The time stamp for the specific date and time that the collection period started. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Session Name A text string identifier or name for the BDC session. This attribute provides single-byte character support only. For example, RSMITH081358 indicates the name of the session.

Session Name (Unicode) A text string identifier or name for the BDC session. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Start Mode The process used to begin the session. The following values are possible:

- A = Automatic
- M = Manual
- ? = Unknown

Status The status for the session. The following values are possible:

- C = Being Created
- E = Errored
- F = Completed
- P = Pending
- R = Processing
- S = InBackground
- L = Locked
- ? = Unknown

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the database server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system:

- +AB = ABAP_Version_Mismatch
- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

Total Screens The total number of screens in this BDC session. For example, 6 indicates the total number of screens for this session.

Total Transactions The total number of transactions in this BDC session. For example, 67 identifies the number of transactions for this session.

Batch Data Create Logs attributes

Batch Data Create Logs is a system level attribute group that provides log information for a particular Batch Data Create session. This attribute group can be used in queries, situations, and workspace views.

Created The time stamp for the date and time the BDC session was created.

Execution Host A text string identifier or name for the computer serving as the execution host. For example, agoural indicates the name of the execution host.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Message Number A text string identifier or name for the system message. For example, S74 indicates the identifier for the system message.

Message Text The descriptive text of the system message. This attribute provides single-byte character support only. For example, CONVERSATION ID 53659 indicates the text of the system message.

Message Text (Unicode) The descriptive text of the system message. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Message Time The time stamp for the date and time the message was logged in to the BDC log.

Queue Id The BDC queue Id from APQI-QID. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Screen Number A text string identifier or name for the transaction screen. For example, RSMITH081358 is the identifier for the transaction screen.

Session Name A text string identifier or name for the BDC session. This attribute provides single-byte character support only. For example, RSMITH081358 indicates the identifier for the BDC session.

Session Name (Unicode) A text string identifier or name for the BDC session. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the database server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system:

- +AB = ABAP_Version_Mismatch
- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

Transaction A unique identifier for the transaction whose processing resulted in the log entry. This attribute provides single-byte character support only. For example, A309 indicates the identifier for the transaction.

Transaction (Unicode) A unique identifier for the transaction whose processing resulted in the log entry. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Batch Jobs attributes

Batch Jobs is a system level attribute group that provides information about the configuration, progress, and performance of batch jobs in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Client An identifier for the execution client. For example, 800 indicates the identifier for the client.

Defined By An identifier for the user who defined the batch job. For example, RSMITH specifies the user who defined the batch job.

Definition Time The time stamp for the date and time that the batch job was defined.

Delay A parameter that calculates the delayed time in seconds.

Duration The calculated run time in minutes. A value of -1 indicates that there is no data at this time.

End Time The time stamp for the date and time the batch job stopped.

Execution Host The name of the computer serving as the execution host. For example, agoura1 is the name of the computer serving as the execution host.

Execution Instance The name of the instance where this job actually ran.

Job Class A category for the batch job. The following values are possible:

A = A B = B

C = C

Job ID String identifier for a batch job. This attribute replaces the Job Number attribute. For example, 1158100A identifies the number of a batch job.

Job Name A text string identifier or name for the batch job. This attribute provides single-byte character support only. For example, COLLECTOR FOR PERFORMANCE specifies the name of the batch job.

Job Name (Unicode) A text string identifier or name for the batch job. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Job Number The identifying number for the IDoc.

Job Number (Superseded) A numeric identifier for the batch job. This attribute is being deprecated. Refer to the Job ID attribute. The following value is possible:

-1 = Non-numeric_job_number

Last Changed By A text string identifier or user ID for the user who last modified the batch job. For example, SBROWN specifies the name of the user who last changed the batch job.

Last Changed Time The time stamp for the date and time the batch job was most recently modified.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Number of Steps The sum of the number of steps completed for this job. For example, 9 indicates the number of steps completed for this job.

Other Scheduling Type A text string identifier for alternative types of scheduling. The following values are possible:

- E = Event
- J = AfterJob
- O = Opmode

Other Scheduling Value A text string identifier for alternative scheduling values. For example, FIRST JOB indicates the job name for an alternate scheduling type of AfterJob.

Periodic A text string indicator for how often the batch job is scheduled to run. For example, 02 HOURS indicates the job is scheduled to run every two hours.

Sample Interval End The time stamp for the stopping time of the data supplied by the Monitoring Agent for mySAP system. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data returned by the Monitoring Agent for mySAP system. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Scheduled Latest Time The time stamp for the date and time after which the job must not run.

Scheduled Start Time The time stamp for the date and time the batch job is scheduled to begin.

Start Time The date and time the batch job began.

Status The status of the batch job. The following values are possible:

- A = Cancelled
- F = Finished
- P = Scheduled
- R = Active
- S = Released
- ? = Unknown

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Target Host An identifier or name for the computer designated as the target host.

Target Instance The name of the application instance where this job is configured to run.

Variant Name of the variant within a step.

Batch Job Logs attributes

Batch Job Logs is a system level attribute group that provides log information about one batch job in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Job ID String identifier for a batch job. This attribute replaces the Job Number attribute. For example, 1158100A identifies the number of a batch job.

Job Name A text string identifier or name for the batch job. This attribute provides single-byte character support only. For example, COLLECTOR_FOR_PERFORMANCE specifies the name of the batch job.

Job Name (Unicode) A text string identifier or name for the batch job. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Job Number A numeric identifier for the batch job. This attribute is being deprecated. Refer to the Job ID attribute. The following value is possible:

-1 = Non-numeric_job_number

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Message Number A text string identifier or name for the system message. For example, S741 indicates the identifier for the system message.

Message Number (610) Job log message number from TBTC5-MSGID and TBTC5-MSGNO through BP_JOBLOG_READ. This number consists of the message ID plus the message number.

Message Text Descriptive text associated with the system message. This attribute provides single-byte character support only. For example, CONVERSATION ID 53659 indicates the text of the system message.

Message Text (Unicode) Descriptive text associated with the system message. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Message Time The time stamp for the date and time the message was logged in to the job log.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +JB = Non-numeric_job_number +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Buffer Performance attributes (Superseded)

Buffer Performance is an instance level attribute group that provides information about mySAP buffers and memory areas in one mySAP instance. This attribute group contains a large number of attributes. Not all attributes apply to every object reported. When an attribute does not apply to a particular object type, the attribute will have a value of -1. This attribute group can be used in queries, situations, and workspace views.

Changes The number of buffer updates. For example, 9 indicates the number of buffer updates. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -2147483648 = Value_Exceeds_Minimum 2147483647 = Value_Exceeds_Maximum

DB Accesses The number of times the database was accessed when the requested data was not available in the buffer. For example, 254 indicates the number of times the database was accessed. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.
-2147483648 = Value_Exceeds_Minimum
2147483647 = Value Exceeds Maximum

DB Access Quality (%) An indicator expressed as a percentage to indicate the percentage of requests that were satisfied from the buffer. This percentage must be close to 100%, and is calculated as (db_accesses_saved * 100) / (db_accesses + db_accesses_saved). For example, 99.37 indicates the percentage of requests that were satisfied.

DB Accesses Saved The number of times the database accesses were saved. Database accesses occur when the requested data is not available in the buffer. For example, 57456 indicates the number of times the database accesses were saved. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum

2147483647 = Value_Exceeds_Maximum

Deletes The number of buffer deletes. For example, 9 indicates the number of buffer deletes. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum

2147483647 = Value_Exceeds_Maximum

Directory Allocated The maximum number of objects that the buffer can hold, because one directory entry is required for each object that the buffer contains. For example, 12289 indicates the number of directory entries defined for a buffer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum

2147483647 = Value_Exceeds_Maximum

Directory Free The number of directory entries that are currently not in use, which is the number of new objects that can be added to this buffer if the buffer size is large enough. For example, 12140 indicates the number of directory entries not in use. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

- -2147483648 = Value_Exceeds_Minimum
- 2147483647 = Value_Exceeds_Maximum

Directory Free Percent The percentage of the directory that is free. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Directory Used The number of directory entries that are currently in use, which is the number of objects currently in the buffer. For example, 149 indicates the number of directory entries currently in use. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.
-2147483648 = Value_Exceeds_Minimum
2147483647 = Value_Exceeds_Maximum

Directory Used Percent The percentage of the directory that was used. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Encoded Name The encoded version of the Name attribute. The following values are possible:

- A = CALE
- B = CUA
- C = EIBUF
- D = ESM
- E = FTAB
- F = IRBD
- G = OTR
- H = PRES
- I = PXA
- J = SNTAB
- K = TABL
- L = TABLP
- M = TTAB
- N = MDH
- 1 = ExtendedMemory
- 2 = HeapMemory
- 3 = PageArea
- 4 = RollArea
- ? = Unknown

Frames Swapped The number of frames swapped in the buffer. For example, 1 indicates the number of frames swapped in the buffer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum 2147483647 = Value_Exceeds_Maximum

Hitratio (%) An identifier, expressed as a percentage, indicating the percentage of requests that were satisfied from the buffer. The percentage is calculated (buffer_hits * 100) / buffer_requests), and must be close to 100%. For example, 99.37 indicates the percentage of requests that were satisfied from the buffer.

Hits The number of times the requested data was available in the buffer. For example, 17268 indicates the number of times the data was available in the buffer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum

2147483647 = Value_Exceeds_Maximum

Inserts The number of buffer inserts. For example, 28 indicates the number of buffer inserts. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum

2147483647 = Value_Exceeds_Maximum

Instance Name The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Last Reset The time stamp for most recent date and time that the buffer was cleared out.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Max Used A numeric value metric specific to roll area, page area, heap, and extended memory. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum

2147483647 = Value_Exceeds_Maximum

Max Used Percent A numeric value metric specific to roll area, page area, extended memory, and heap. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Misses The number of times the requested data was not available in the buffer. For example, 468 indicates the number of times the requested data was not available in the buffer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum

2147483647 = Value_Exceeds_Maximum

Name A text string identifier or name for the buffer or memory area. For example, Heap memory indicates the name of a memory area and IRBD Initial Records indicates the name of the buffer.

Objects In Buffer The number of objects in the buffer. For example, 189 indicates the number of objects in the buffer. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum

2147483647 = Value_Exceeds_Maximum

Objects Swapped The number of objects swapped in the buffer. For example, 3 indicates the number of objects swapped in the buffer. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -2147483648 = Value_Exceeds_Minimum 2147483647 = Value_Exceeds_Maximum

Requests The number of buffer requests. For example, 17417 indicates the number of buffer requests. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -2147483648 = Value_Exceeds_Minimum 2147483647 = Value_Exceeds_Maximum

Sample Time The time stamp for the date and time the agent collected data from mySAP system. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Size Allocated (kb) The amount of space, in KB, allotted for the buffer. For example, 5859 indicates the amount of space allotted for the buffer. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -2147483648 = Value_Exceeds_Minimum 2147483647 = Value_Exceeds_Maximum

Size Free (kb) The amount of buffer space or memory area available, in KB. For example, 4836 indicates the amount of buffer space available. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -2147483648 = Value_Exceeds_Minimum 2147483647 = Value_Exceeds_Maximum

Size Free Percent The percentage free for buffers and memory areas such as roll, page, and extended memory. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Size In Memory (kb) A memory size metric specific to roll area, page area, and extended memory. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum

2147483647 = Value_Exceeds_Maximum

Size On Disk (kb) A disk-size metric specific to roll area and page area. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum

2147483647 = Value_Exceeds_Maximum

Size Reserved (kb) The size reserved by mySAP for internal buffer management. The value is Size Allocated minus Size Used and Size Free. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum

2147483647 = Value_Exceeds_Maximum

Size Reserved Percent The percentage reserved by mySAP for internal buffer management. The values are Size Reserved divided by Size Allocated. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Size Used (kb) The amount of buffer space used, in KB. Use this attribute to specify the amount of buffer space used. For example, 629 indicates the amount of buffer space used. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-2147483648 = Value_Exceeds_Minimum 2147483647 = Value_Exceeds_Maximum

Size Used Percent The percentage used for buffers and memory areas such as roll and page. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System NameThe SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Total Resets The total number of times the buffer space was cleared out. Resets occur automatically during system initialization, as well as manually. For example, 9 indicates the number of times the buffer space was cleared out. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -2147483648 = Value_Exceeds_Minimum 2147483647 = Value_Exceeds_Maximum

Buffer Performance attributes

Buffer Performance is an instance level attribute group that provides information about SAP buffers and memory areas in one SAP instance. This attribute group contains a large number of attributes and it represents buffer utilization. Not all attributes apply to every object reported. When an attribute does not apply to a particular object type, the attribute has a value of -1. You use this attribute group in queries, situations, and workspace views.

Changes Number of buffer updates. For example, 9 indicates the number of buffer updates. The valid format is a 8-byte integer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

DB Accesses Number of times the database was accessed when the requested data was not available in the buffer. For example, 254 indicates the number of times the database was accessed. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

DB Access Quality (%) An indicator expressed as a percentage to indicate the percentage of requests that were satisfied from the buffer. This percentage must be close to 100%, and is calculated as follows: (db_accesses_saved * 100) / (db_accesses + db_accesses_saved). For example, 99.37 indicates the percentage of requests that were satisfied.

DB Accesses Saved Number of times the database accesses were saved. Database accesses occur when the requested data is not available in the buffer. For example, 57456 indicates the number of times that the database accesses were saved. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

-9223372036854775808 = Value_Exceeds_Minimum

9223372036854775807 = Value_Exceeds_Maximum

Deletes Number of buffer deletes. For example, 9 indicates the amount of buffer deletes. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Directory Allocated Maximum amount of objects that the buffer holds because one directory entry is required for each object that the buffer contains. For example, 12289 indicates the amount of directory entries defined for a buffer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time.
-9223372036854775808 = Value_Exceeds_Minimum
9223372036854775807 = Value_Exceeds_Maximum

Directory Free Number of directory entries that are currently not in use. If the buffer size is large enough, this amount determines the new objects that you can add to this buffer. For example, 12140 indicates the number of directory entries not in use. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Directory Free Percent Percentage of the directory that is free. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Directory Used Number of directory entries that are currently in use, which is the number of objects currently in the buffer. For example, 149 indicates the amount of directory entries currently in use. The valid format is a 8-byte integer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Directory Used Percent Percentage of the directory that was used. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time

Encoded Name Encoded version of the Name attribute. The following values are possible:

A = CALEB = CUAC = EIBUFD = ESME = FTABF = IRBDG = OTRH = PRESI = PXAJ = SNTAB K = TABLL = TABLPM = TTABMDH=N N = MDH1 = ExtendedMemory 2 = HeapMemory 3 = PageArea

4 = RollArea

? = Unknown

Frames Swapped Number of frames swapped in the buffer. For example, 1 indicates the number of frames swapped in the buffer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Hitratio (%) An identifier, expressed as a percentage, indicating the percentage of requests that were satisfied from the buffer. The percentage is calculated as follows: (buffer_hits * 100) / buffer_requests) and it must be close to 100%. For example, 99.37 indicates the percentage of requests that were satisfied from the buffer.

Hits Amount of times that the requested data was available in the buffer. For example, 17268 indicates the number of times the data was available in the buffer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Inserts Number of buffer inserts. For example, 28 indicates the number of buffer inserts. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Instance Name Name of the application instance that you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance that you are monitoring.

Last Reset Time stamp for the most recent date and time that the buffer was cleared out.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not available for use in situations.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Max Used Metric specific to roll area, page area, extended memory and heap. The valid format is a 8-byte integer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Max Used Percent Metric specific to roll area, page area, and extended memory. The valid format is a 4byte integer. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Misses Number of times that the requested data was not available in the buffer. For example, 468 indicates the number of times the requested data was not available in the buffer. The valid format is a 8-byte integer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Name A text string identifier or name for the buffer or memory area. For example, Heap memory indicates the name of a memory area and IRBD Initial Records indicates the name of the buffer. The valid format is an alphanumeric string, with a maximum of 36 characters.

Objects In Buffer Number of objects in the buffer For example, 189 indicates the number of objects in the buffer. The valid format is a 8-byte integer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Objects Swapped Number of objects swapped in the buffer For example, 3 indicates the number of objects swapped in the buffer. The valid format is a 8-byte integer. Valid fixed values are:

-1 = N/A. Data for this attribute is not applicable at this time.
-9223372036854775808 = Value_Exceeds_Minimum
9223372036854775807 = Value_Exceeds_Maximum

Requests Number of buffer requests. For example, 17417 indicates the amount of buffer requests The valid format is a 8-byte integer. The following values are also possible

-1 = N/A. Data for this attribute is not applicable at this time.
-9223372036854775808 = Value_Exceeds_Minimum
9223372036854775807 = Value_Exceeds_Maximum

Sample Time Time stamp for the date and time the agent collected data from SAP. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Size Allocated Number of space in KB allocated to the buffer The valid format is a 8-byte integer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Size Free Number of buffer space or memory area available, in KB. For example, 4836 indicates the amount of buffer space available. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Size Free Percent Free percentage for buffers and memory areas such as roll, page, extended memory. The valid format is a 4-byte integer. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Size In Memory A memory size metric specific to roll area, page area, and extended memory. The valid format is a 8-byte integer. A disk-size metric specific to roll area and page area

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Size On Disk A disk-size metric specific to roll area and page area. The valid format is a 8-byte integer.

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Size Reserved (kb) Size reserved by SAP for internal buffer management. The value is Size Allocated minus Size Used and Size Free. The valid format is a 8-byte integer. Valid fixed values are:

-1 = N/A. Data for this attribute is not applicable at this time.

-9223372036854775808 = Value_Exceeds_Minimum

9223372036854775807 = Value_Exceeds_Maximum

Size Reserved (%) Percentage reserved by SAP for internal buffer management. The value is Size Reserved divided by Size Allocated. The valid format is a 4-byte integer. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Size Used Number of buffer space used, in KB. Use this attribute to specify the amount of buffer space used. For example, 629 indicates the amount of buffer space used. The valid format is a 8-byte integer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Size Used Percent Percentage used for buffers and memory areas such as roll and page. The valid format is a 4-byte integer. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the SAP system that you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log ABAP_Version_Mismatch = +AB +++ = No_applicable_data

Total Resets Total number of times that the buffer space was cleared out. Resets occur automatically during system initialization, as well as manually. For example, 9 indicates the number of times that the buffer space was cleared out. The valid format is a 8-byte integer. The following values are also possible:

-1 = N/A. Data for this attribute is not applicable at this time. -9223372036854775808 = Value_Exceeds_Minimum 9223372036854775807 = Value_Exceeds_Maximum

Business Process Engine Inbound Status Monitoring attributes

This attribute group provides information about the XML message packaging status in the business process engine.

Configuration Version The version of the configuration for the message packaging in the Business Process engine for inbound processing.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Maximum Memory per Message package Maximum Memory allocated per Message Package of an XI Message.

Maximum Number of Messages Maximum number of messages for each message package.

Maximum Wait Time Maximum Wait Time of the oldest message in the message package.

Message ID The ID associated with the message.

Message Packaging Mode Message packaging of the XI message mode. The following values are possible:

X=Message_Packaging_Active Y=Message_Packaging_Inactive

Number of Queues Number of queues per process type.

Quality of Service The quality of the service that runs the pipeline. The following values are possible:

BE=Best_Effort EO=Exactly_Once EOIO=Exactly_Once_In_Order

Queue Assignment Queue assignment in Inbound Processing. The following values are possible:

0=One_Queue 1=One_Configurable_Queue 2=Multiple_Queues_Random 3=Multiple_Queues_Content_Specific

Queue Name The name of the queue. The valid format is an alphanumeric string, with a maximum of 24 characters.

Received Timestamp The date and time stamp that the message was received in the Business Process Engine.

Relation between message and process instance Relation between the message and the process instance. The following values are possible:

N=No_Instance_Assignment S=Message_has_Started_Process D=Message_Delivered_to_Process_in_Progress

Retry Count The number of failed delivery attempts.

Sample Interval End The time stamp for the stopping time of the data that is supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the starting time of the data that is supplied by the SAP agent. This attribute is not for use in situations.

Sample Time The time stamp for the date and time that the agent collected data from SAP. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is time stamp.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Status of errors The status of the errors that occur. The following values are possible:

F=Error_in_Queue V=Temporary_Errors_in_Queue E=Error T=Temporarily_with_Errors C=Logically_Deleted U=Locked

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the SAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data (No data available for SAP)

Business Process Engine Status attributes

This attribute group shows the status of the business process engine component. This attribute group can be used in queries, reports, and workspace views.

Class Name The object type name. The valid format is an alphanumeric string, with a maximum of 30 characters.

Component Business Process Engine administration application name. The valid format is an alphanumeric string, with a maximum of 80 characters.

Engine Status Status of the engine, for example, processing, running, error, or stop. The valid format is an alphanumeric string, with a maximum of 1 characters. The following values are available:

- S = Stopped
- P = In_process
- R = Running
- E = Error

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is an alphanumeric string, with a maximum of 64 characters.

Process Type Business Process Engine administration type of process. The valid format is an alphanumeric string, with a maximum of 10 characters.

SAP Server Current Time Current Time of the application server. The valid format is time stamp.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID. DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log

+++ = No_applicable_data

User Name PI/XI User Name. The valid format is an alphanumeric string, with a maximum of 12 characters.

CCMS Current State attributes

CCMS Current State is an instance level attribute group that shows current state information from CCMS in the SAP system.

Current State Current status of MTE. This attribute group can be used in reports, queries, and workspace views. The valid format is a 4-byte integer. The following values are possible:

Unknown=0 Green=1 Yellow=2 Red=3

Customization Group Name Name of the customization group. The valid format is an alphanumeric string, with a maximum of 40 characters.

Instance Name Name of the application instance that you are monitoring, for example, DDRUM2_PRD_00. The valid format is an alphanumeric string, with a maximum of 20 characters.

Last Value Change Timestamp Last value change time stamp. The valid format is time stamp.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is an alphanumeric string, with a maximum of 200 characters.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Monitor Name CCMS Monitor to which this alert belongs. The valid format is an alphanumeric string, with a maximum of 180 characters.

Monitor Object Name Name of the monitoring object. The valid format is an alphanumeric string, with a maximum of 40 characters.

Monitoring Context Name Name of the monitoring context. The valid format is an alphanumeric string, with a maximum of 40 characters.

Monitoring Segment Name Name of the monitoring segment. The valid format is an alphanumeric string, with a maximum of 40 characters.

Monitoring Types Class Class for the monitoring type. The valid format is an alphanumeric string, with a maximum of 3 characters.

Monitoring Types Full Name Full name of the monitoring type. The valid format is an alphanumeric string, with a maximum of 256 characters.

Monitoring Types ID Unique Identifier for monitoring types. The valid format is an alphanumeric string, with a maximum of 10 characters.

Monitoring Types Number Monitoring type number range. The valid format is an alphanumeric string, with a maximum of 3 characters.

Monitoring Types Short Name Short name of monitoring type. The valid format is an alphanumeric string, with a maximum of 40 characters.

Monitor Set CCMS Monitor set to which this alert belongs. The valid format is an alphanumeric string, with a maximum of 180 characters.

MT Index Index of MT in Tree, used for the topology view. The valid format is a 4-byte integer.

Number Used for counting MTE state in chart view, or used as a flag in topology view. The valid format is a 4-byte integer.

Occurrence Time Alert time stamp. The valid format is time stamp.

Parent MT Index Index of Parent of MT in Tree, used for topology view. The valid format is a 4-byte integer.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the SAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

TID Internal Handle Internal handle for TID, used to link from the current state view to the alert view. The valid format is an alphanumeric string, with a maximum of 20 characters.

Central Instance Configuration attributes

The Central Instance Configuration is a system level attribute group that provides information about the SAP application instances and the central instance.

Active Users The number of GUI users that are currently active in the SAP Application Server.

Assigned Update Instance The name of the SAP Application Server that is assigned to a specific update server.

Batch Complete Percent The percentage of batch work processes that are in the complete state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Batch Job Queue The number of batch jobs that are in the ready state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Batch Processes The number of batch processes.

Batch Running Percent The percentage of batch work processes that are in the running state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Batch Service Configured A Boolean value that indicates whether the batch service is configured. The following values are possible:

• 0 = No. The batch service is not configured.

• 1 = Yes. The batch service is configured.

Batch Stopped Percent The percentage of batch work processes that are in the stopped state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Batch Waiting Percent The percentage of batch work processes that are in the waiting state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Central Instance A Boolean value that indicates whether the application server is a central instance. The following values are possible:

- 0 = No. The application server is not a central instance.
- 1 = Yes. The application server is a central instance.

Central Instance Name The name of a Central Instance that runs on the SAP Application Server.

Configuration String The service mask or string for the application server. For example, DVEBMGS where,

- D = Dialog
- V = Update (Verbucher in German)
- E = Enqueuer
- B = Background
- M = Message Server
- G = SNA Gateway
- S = Spool

Database Host IP Address The IP address of the host where the database instance is running. This value is the same for all instances of a SAP system. The valid format is an alphanumeric string with a maximum of 15 characters.

Database Host IP Address (v4/v6) The IPv4 or IPv6 address of the host where the database instance is running. The valid format is an alphanumeric string with a maximum of 64 characters.

Database Host Name The name of the host where the database instance of a system is running.

Database Name The name of the database that is connected to the SAP system. The database name can contain up to 3 characters. The database name value is the same for each instance of an R/3 system.

Database Release The release that is associated with the database. The valid format is an alphanumeric string with a maximum of 16 characters.

Database Type The type of database in the SAP system.

Description The dummy field for the description column in the portrait mode.

Dialog Complete Percent The percentage of dialog work processes that are in the completed state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Dialog Processes The number of dialog work processes.

Dialog Queue The number of tasks in the dispatcher queue that are waiting for the dialog work process. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Dialog Queue Percent The percentage of usage of the dispatcher queue for the dialog jobs. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Dialog Running Percent The percent of dialog work processes that are in the running state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Dialog Service Configured A Boolean value that indicate whether the dialog service is configured. The following values are possible:

0 = No. The dialog service is not configured.

1 = Yes. The dialog service is configured

Dialog Stopped Percent The percentage of dialog work processes that are in the stopped state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Dialog Waiting Percent The percentage of dialog work processes that are in the waiting state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Enqueue Complete Percent The percentage of enqueue work processes that are in the completed state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Enqueue Processes The number of enqueue processes.

Enqueue Queue The number of tasks in the dispatcher queue that are waiting for the enqueue work process. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Enqueue Queue Percent The percent of usage of the dispatcher queue for the enqueue jobs. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Enqueue Running Percent The percent of enqueue work processes that are in the running state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Enqueue Service Configured A Boolean value that indicate whether the enqueue service is configured. The following value is possible:

0 = No. The message enqueue is not configured.

1 = Yes. The message enqueue is configured.

Enqueue Stopped Percent The percent of enqueue work processes that are in the stopped state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Enqueue Waiting Percent The percent of enqueue work processes that are in the waiting state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Gateway Service Configured A Boolean value that indicate whether the gateway service is configured. The following values are possible:

0 = No. The gateway service is not configured.

1 = Yes. The gateway service is configured.

Instances ConnectionFailed The total number of instances that lost connection in the system.

Instance Down Duration The time in minutes for which the Instance was down. For example, a value of 12 indicates that an instance was down for 12 minutes. A value of -1 indicates that no data is available currently.

Instance Host IP Address The IP address of the SAP Application Instance host. The valid format is an alphanumeric string, with a maximum of 15 characters.

Instance Host IP Address (v4/v6) The IPv4 or IPv6 address of the SAP Application Instance host. The valid format is an alphanumeric string with a maximum of 64 characters.

Instance Host Name The name of the host where the application server is located.

Instance Name The name of a SAP instance that runs on the SAP Application Server.

Instance Op Mode State The state in which the instance is included in the current operation mode of the SAP Application Server. The following values are possible:

- 0 = Configured. The instance is included in the operation mode.
- 1 = Not configured. The instance is not included in the operation mode.
- 2 = Misconfigured. The instance was configured incorrectly.

? = Unknown

Instances Passive The total number of instances that are in passive state in the system.

Instance Start Time The time stamp for the date and time when the application instance was started.

Instance Status The status of the application server, such as not running, running, connection failed, unknown, or passive. The following values are possible:

0 = NotRunning. This value is only reported for instances that are defined in the operation mode profile.

- 1 = Running
- 2 = ConnectionFailed
- 3 = Unknown
- 4 = Passive

Instance Stop Time The time stamp for the date and time when the SAP application instance was stopped.

Instance Up Duration The time in minutes for which the instance was up and running. For example, a value of 12 indicates that an instance was up and running for 12 minutes. A value of -1 indicates that no data is available currently.

Instances Unknown The total number of instances that are in unknown state in the system.

Instances Down The total number of instances that are down in the SAP system.

Instances Running The total number on instances that are running in the SAP system.

Interactive Users The number of currently GUI users in the SAP Application Server.

Logon Parameters The parameters that are passed to ksar3 for the SAP transaction code to run Take Action commands. This attribute cannot be used for situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

Managed System The identifier for the mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Message Service Configured A Boolean value that indicates whether the message server is configured. The following values are possible:

0 = No. The message service is not configured.

1 = Yes. The message service is configured. This instance is the central instance.

NoWP Queue The number of tasks in the dispatcher queue that are waiting to be processed by the dispatcher or other system service, which is not a work process. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Operation ModeA text string identifier or name for the current operation mode of the system. For example, Private indicates the current operation mode of the system. This attribute provides single-byte character support only.

Operation Mode (Unicode) A text string identifier or name for the current operation mode of the system. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Registered Users The total number of users that are currently registered in the SAP system.

RFC Users The number of Remote Function Call (RFC) users that are currently available for the SAP Application Server.

Sample Time The time stamp for the date and time when the agent collected data from mySAP. This attribute is not used for situations.

SAPshcut Parameters The parameters that are passed to SAPshcut for any transaction launch definition.

Spool Complete Percent The percentage of spool work processes that are in the completed state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Spool Processes The number of spool processes that are running on the application instance.

Spool Queue The number of tasks in the dispatcher queue that are waiting for a spool work process. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Spool Queue Percent The percentage of usage of the dispatcher queue for the spool jobs. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Spool Running Percent The percentage of spool work processes that are in the running state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Spool Service Configured A Boolean value that indicates whether the output spooling service is configured. The following values are possible:

0 = No. The spool is not configured.

1 = Yes. The spool is configured.

Spool Stopped Percent The percentage of spool work processes that are in the stopped state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Spool Waiting Percent The percentage of spool work processes that are in the waiting state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

System Description The user - provided description of the SAP Application Server Instance that is defined in the R/3 system transport tables.

System Description (Unicode) The user - provided description of the Application Server Instance that is defined in the R/3 system transport tables.

System Label The system label that is generated from the SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server that is associated with the target SAP system.

System Name The three character SAP System Identifier (SID) or the system name for the mySAP system that is being monitored. For example, CAN. The following values for the system are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

System Number The number that is assigned to the SAP Application Server. The valid format is an alphanumeric string with a maximum of 2 characters.

System Release The release number for the SAP Application Server.

System Start Time The time stamp for the date and time when the system was started.

System Up Duration The total time in minutes for which the system is up. For example, 12 indicates that the system is up for 12 minutes. A value of -1 indicates that no data is available currently.

Total Active Users The number of currently active users (RFC and GUI) in the SAP Application server.

Total External Sessions The total number of user sessions (RFC and GUI). The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Total GUI Sessions The total number of non-APPC-TM GUI sessions. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Total RFC Sessions The total number of RFC sessions that occurred in the SAP system. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Update Complete Percent The percentage of update work processes that are in the completed state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Update Processes The number of update work processes.

Update Queue The number of tasks in the dispatcher queue that are waiting for the update work process. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Update Queue PercentThe percentage of usage of the dispatcher queue for the update jobs. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Update Running Percent The percentage of update work processes that are in the running state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Update Service Configured A Boolean value that indicates whether the update service is configured. The following values are possible:

0 = No. The update service is not configured.

1 = Yes. The update service is configured.

Update Stopped Percent The percentage of update work processes that are in the stopped state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Update Waiting Percent The percentage of update work processes that are in the waiting state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Update2 Complete Percent The percentage of update work processes that are in the completed state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Update2 Processes The number of update2 processes.

Update2 Queue The number of tasks in the dispatcher queue that are waiting to be processed by the update2 work process.

Update2 Queue Percent The percentage of usage of the dispatcher queue for the update2 jobs. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Update2 Running Percent The percentage of update2 work processes that are in the running state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Update2 Service Configured A Boolean value that indicates whether the update service is configured. The following values are possible:

0 = No. The Update2 service is not configured.

1 = Yes. The Update2 service is configured.

Update2 Stopped Percent The percentage of update2 work processes that are in the stopped state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Update2 Waiting Percent The percentage of update2 work processes that are in the waiting state. The following value is also possible:

-1 = N/A. The data for this attribute is not applicable currently.

Client Information attributes

The Client information attributes provides you with information on the client connected to the Solution Manager landscape. This attribute group can be used in queries, reports, and workspace views.

Client Number A three digit client number for the SAP system. The valid format is an alphanumeric string, with a maximum of 3 characters.

Client Name Name of the client in the SAP system. The valid format is an alphanumeric string, with a maximum of 25 characters.

Group Keys Group keys used by the clients to group users or customers logically in the SAP system. The valid format is an alphanumeric string, with a maximum of 10 characters.

Hostname Host name of the server where the SAP system is running. The valid format is an alphanumeric string, with a maximum of 20 characters.

IP Address IP Address of the SAP server. The valid format is an alphanumeric string, with a maximum of 31 characters.

Last Change User The user name of the person who last changed the client information. The valid format is an alphanumeric string, with a maximum of 12 characters.

Last Change Date The date when the client information was last changed. The valid format is time stamp.

Logical System Logical name of the SAP system. The valid format is an alphanumeric string, with a maximum of 10 characters.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is an alphanumeric string, with a maximum of 64 characters.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Name The name of the SAP system that is monitored by SAP. The valid format is an alphanumeric string, with a maximum of 8 characters.

System Label System label generated from the SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system that you are monitoring. For example, PRD. The valid format is an alphanumeric string with a maximum of 3 characters. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running = +RF = RFC_Error_Check_Agent_Lo g= No_applicable_data = +++ **Version** Version of the current SAP system and whether it is active or inactive. The valid format is an alphanumeric string, with a maximum of 10 characters.

Component Monitoring attributes

Component Monitoring is an instance level attribute group that provides an overview of the status of the different monitoring components in PI/XI. The component monitoring information is provided in Runtime Workbench. This attribute group can be used in queries, reports, and workspace views.

Component Monitoring URL Component Monitoring URL that redirects you to Runtime Workbench. The valid format is an alphanumeric string, with a maximum of 255 characters.

Managed System The identifier for this mySAP resource This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system that you are monitoring. The valid format is an alphanumeric string, with a maximum of 3 characters, for example, PRD. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data (No data available from SAP)

User Name User Name for login. The valid format is an alphanumeric string, with a maximum of 255 characters.

Connection Monitoring attributes

Connection Monitoring is a system level attribute group that provides an overview of the RFC connections of all RFC types.

Changed On The time when the RFC destination was last changed.

Count RFC Status The total count of the RFC connections. It is used to plot the graph in the Connection Monitoring workspace.

Created By Name of the user who created the RFC destination.

Created On The time when the RFC destination was created.

Description Description of the RFC connection.

Last Changed By Name of the user who last changed the RFC destination.

RFC Connection Name of the RFC destination that is specified in the function call.

RFC Status Status of the RFC connection. The following values are possible:

1 = Active

- 2 = Inactive
- 0 = Unknown

RFC Type Type of the RFC destination that is being monitored. The following values are possible:

- 3 = ABAP Connection
- G = HTTP Connections to External Server
- I = Internal Connections
- L = Logical Connections
- T = TCP IP Connections
- X = Connections via ABAP Driver
- 2 = Connection to R2 System
- S = Start External Program Using SNA or APPC
- M = CMC Connections
- H = HTTP Connections to ABAP Server

Sample Time The time stamp for the date and time the agent collected data from mySAP system. This attribute is not for use in situations.

SAPshcut_Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string with a maximum of 37 characters.

System Name System ID of the SAP System running on the server. The valid format is an alphanumeric string with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Connection Monitoring Details attributes

Connection Monitoring Details is the system level attribute group that provides connection details about the ABAP and HTTP type of RFC.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

RFC Connection Name of the RFC destination that is specified in the function call.

RFC Latency RFC or HTTP latency in milliseconds (ms).

RFC Logon The result of the RFC or the HTTP Logon. The following values are possible:

- 0= Unknown
- 1 = Ok
- 2 = Warning
- 3 = Not ok

RFC Logon Message The message that related to the RFC logon. If an errors occurs, a description of the error is provided.

RFC Ping The result of the RFC or the HTTP ping. The following values are possible:

- 0= Unknown
- 1 = Ok
- 2 = Warning
- 3 = Not_ok

RFC Ping Message The message that relates to the RFC ping. If an errors occurs, a description of the error is provided.

RFC Type Type of the RFC destination that is being monitored. The following values are possible:

- 3 = ABAP Connection
- G = HTTP Connections to External Server
- I = Internal Connections
- L = Logical Connections
- T = TCP IP Connections
- X = Connections via ABAP Driver
- 2 = Connection to R2 System
- S = Start External Program Using SNA or APPC
- M = CMC Connections
- H = HTTP Connections to ABAP Server

Sample Time The time stamp for the date and time the agent collected data from mySAP system. This attribute is not for use in situations.

SAPshcut_Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name System ID of the SAP System running on the server. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Data Base Detail attributes

Data Base Detail is a system level attribute group that provides detailed information about an Oracle database used in the mySAP system. This attribute group can be used in queries, situations, and workspace views. Data Base Detail information can be voluminous, so the number of situations written using this attribute group must be limited to only what is needed and the frequency must be very low. The majority of the database detail information is obtained from the MONI database in SAP. This information is usually updated only once or twice per day. Therefore, there is no benefit to running situations more than once or twice per day.

Analysis Time The time stamp for the date and time mySAP collected the sample based on a periodic sample schedule. This attribute is not for use in situations.

Extents The number of reserved blocks of continuous storage.

Extents (Superseded) The number of reserved blocks of continuous storage. For example, 43 indicates the number of reserved blocks of continuous storage.

Extents Change (per day) The number of changes in the reserved blocks of continuous storage per day.

Extents Change (per day) (Superseded) The number of changes in the reserved blocks of continuous storage per day. For example, 49 indicates the number of changes per day in the reserved blocks.

Files The number of files in tablespace.

Files (Superseded) The number of files in tablespace. For example, 236 indicates the number of files in tablespace. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

<Max> Next Extent (kb) The maximum size allowed for the next extent allocated. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Maximum Free (kb) The maximum amount of free space, in KB, in the database object.

Maximum Free (kb) (Superseded) The maximum amount of free space, in KB, in the database object. For example, 3267656 indicates the maximum amount of free space for the database object. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Minimum Free (kb) The minimum amount of free space, in KB, in the database object.

Minimum Free (kb) (Superseded) The minimum amount of free space, in KB, in the database object. For example, 3267656 indicates the minimum amount of free space for the database object. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Next Extent The maximum size allowed for the next extent allocated.

Object Name A text string identifier or name for the database object. For example, REFERENCE indicates the name of the database object.

Object Type The category of the database object, such as, table, index, tablespace, or database. For example, Database indicates the object type.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Size (kb) The defined space, in KB, of the database object.

Size (kb) (Superseded) The defined space, in KB, of the database object. For example, 52553 indicates the defined space of the database object.

Size Change (per day) The amount of change, in KB, in the space used by the database during the last 24 hours.

Size Change (per day) (Superseded) The amount of change, in KB, in the space used by the database during the last 24 hours. For example, 5893 indicates the amount of change in the space used by the database object.

Size Free (kb) The amount of space available, in KB, for the database object.

Size Free (kb) (Superseded) The amount of space available, in KB, for the database object. Use this attribute to specify the amount of space available for a database object. For example, 5255656 indicates the amount of space available for the database object. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Size Free Percent The percentage of free space available for the database object. For example, 48 indicates the percentage of free space available for the database object. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Size Used (kb) The amount of space, in KB, used by the database object. For example, 45986 indicates the amount of space used by the database object. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Size Used Percent The percentage of space used by the database object. For example, 13 indicates the percentage of space used by the database object. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Space Critical Indicates whether space for a database object has reached a critical stage during the last 24 hours. Space critical means that the object fails the next time it needs to extend space, either because of max-extents, tablespace full, or some other reason. The following values are possible:

- 0 = No
- 1 = Yes

Status The status of the database object, such as online, offline, or unknown. The following values are possible:

- Online = Online
- Offline = Offline
- Unknown = Unknown

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

- +AB = ABAP_Version_Mismatch
- +DB = No_support_for_this_database
- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +OR = Oracle_statistics_not_available
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

Tables & Indices The number of tables and indices in tablespace.

Tables & Indices (Superseded) The number of tables and indices in tablespace. For example, 523 indicates the number of tables and indices in tablespace. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Tables & Indices Change (per day) The number of tables and indices that have changed during the last 24 hours.

Tables & Indices Change (per day) (Superseded) The number of tables and indices that have changed during the last 24 hours. For example, 23 indicates the number of tables and indices in table space that have changed per day. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Used The amount of space, in KB, used by the database object.

Used Change (per day) The amount of change, in KB, in the space used by the database object during the last 24 hours.

Used Change (per day) (Superseded) The amount of change, in KB, in the space used by the database object during the last 24 hours. For example, 78533 indicates the amount of space used per day by the database object. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Database Logs attributes

Database Logs is a system level attribute group that provides information about database log files created in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

File Name The path and name of the database log file that you are monitoring. For example, K\oracle \PRD\saparch\aczabeqq.SVE specifies the path and name of the database log file that you are monitoring.

Log Data The text of the database log file that you are monitoring. For example, BRI01 Parameters is an example of text from the database log file.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Data Base Summary attributes

Data Base Summary is a system level attribute group that provides summary information about an Oracle database used in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Analysis Time The time stamp for the date and time mySAP collected the sample based on a periodic sample schedule. This attribute is not available for situations.

Database A text string identifier or name for the database server. Use this attribute to specify the name of the database server. For example, ORACLE indicates the name of the database server.

Freespace Problems The number of freespace problems. For example, 3 indicates the number of free space problems. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Minimum Free (kb) The minimum amount of free space, in KB, for the database object.

Minimum Free (kb) (Superseded) The minimum amount of free space, in KB, for the database object. For example, 1928 indicates the amount of free space for a database object. The following values are also possible:

-1 = No data available 2147483647 = Value Exceeds Maximum

-2147483647 = Value Exceeds Minimum

Minimum Free (mb) The minimum amount of free space, in MB, for the database object.

Minimum Free (mb) (Superseded) The minimum amount of free space, in MB, for the database object. For example, 1928 indicates the amount of free space for a database object. The following values are also possible:

-1 = No data available 2147483647 = Value Exceeds Maximum -2147483647 = Value Exceeds Minimum

Missing In Database The number of objects unaccounted for in the database. Use this attribute to identify the number of objects unaccounted for. For example, 3 indicates the number of objects unaccounted for in the database. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Missing In Dictionary The number of objects unaccounted for in the Oracle data dictionary. For example, 2 indicates the number of objects unaccounted for in the data dictionary. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Name A text string identifier or name for the database instance. For example, CN1 indicates the name of the database instance.

Object Type The category of the database object, such as, table, index, tablespace, or database. For example, Index indicates the type of database object.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DB = No_support_for_this_database +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +OR = Oracle_statistics_not_available +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Total Free (kb) The total amount of free space, in KB, for the database object.

Total Free (kb) (Superseded) The total amount of free space, in KB, for the database object. For example, 5090163 indicates the total amount of free space, in KB, for the database object. The following values are also possible:

-1 = No data available

2147483647 = Value Exceeds Maximum

-2147483647 = Value Exceeds Minimum

Total Free (mb) The total amount of free space for the database object, in MB.

Total Free (mb) (Superseded) The total amount of free space for the database object, in MB. For example, 5090163 indicates the total MB of free space for the database object. The following values are also possible:

-1 = No data available

2147483647 = Value Exceeds Maximum

-2147483647 = Value Exceeds Minimum

Total Free Percent The total amount of free space for the database object, expressed as a percentage. The following value is also possible:

-1 = No data available

Total Number The total number of database objects.

Total Size (kb) The total amount of space, in KB, for the database object.

Total Size (kb) (Superseded) The total amount of space, in KB, for the database object. For example, 1045883 indicates the total amount of space for the database object. The following values are also possible:

2147483647 = Value Exceeds Maximum -2147483647 = Value Exceeds Minimum

Total Size (mb) The total amount of space, in MB, for the database object.

Total Size (mb) (Superseded) The total amount of space, in MB, for the database object. For example, 1045883 indicates the total amount of space for the database object. The following values are also possible:

2147483647 = Value Exceeds Maximum -2147483647 = Value Exceeds Minimum

Total Used (kb) The total amount of space used, in KB, for the database object.

Total Used (kb) (Superseded) The total amount of space used, in KB, for the database object. For example, 5255653 indicates the amount of space used for the database object. The following values are also possible:

-1 = No data available 2147483647 = Value Exceeds Maximum -2147483647 = Value Exceeds Minimum

Total Used (mb) The total amount of space used, in MB, for the database object.

Total Used (mb) (Superseded) The total amount of space used, in MB, for the database object. For example, 5255653 indicates the amount of space used for the database object. The following values are also possible:

-1 = No data available 2147483647 = Value Exceeds Maximum -2147483647 = Value Exceeds Minimum

Total Used Percent The total amount of space used, expressed as a percentage, for the database object. For example, 51 indicates the percentage amount of space used for the database object. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

DB2 Configuration attributes

This attribute group shows details of the DB2 configuration. This attribute group can be used in queries, reports, and workspace views.

Application Control Heap Size (Pages) Specifies the maximum size for the application control shared memory. The valid format is a 4-byte integer. This parameter is used primarily for sharing information between agents working on the same request. The Unit of Measure is Pages. Each Page size is 4 KB.

Application Heap Size (Pages) Defines the number of private memory pages that are available for use by the database manager on behalf of a specific agent or subagent. This parameter is allocated when an agent or subagent is initialized for an application. The Unit of Measure is Pages. Each Page size is 4 KB.

Auto Restart Determines whether the database manager can, in the event of an abnormal termination of the database, automatically call the restart database utility when an application connects to a database. The default value is ON.

Average Number of Active Applications Used by the query optimizer to help estimate how much buffer pool space is available at run time for the access plan chosen.

Backup Pending Indicator Indicates that you must do a full backup of the database before accessing it. This parameter is on only if the database configuration is changed

Catalog Cache Size (Pages) The maximum space in pages that the catalog cache uses from the database heap. In a partitioned database system, there is one catalog cache for each database partition. The unit of measure is Pages (4 KB).

Database Heap Size (Pages) The maximum memory used by the database heap. There is one database heap per database and the database manager uses it for the applications that are connected to the database. The unit of measure is Pages (4 KB).

Database Release Level The release level of the database manager that uses the database. If a database upgrade doesn't complete or fails, this parameter shows the release level of the database before the upgrade. This release level can differ from the release parameter that is associated with the release level of the database configuration file.

Database Status Determines the status of your database Information on DB2 Connect applications.

Deadlocks Since First DB Connect The total number of deadlocks that have occurred since the first database connection. The valid format is a 4-byte integer.

Dynamic Query Management This parameter determines whether Query Patroller captures information about submitted queries. If this parameter is set to ENABLE, Query Patroller captures information about the query. If parameter is set to DISABLE, Query Patroller does not capture any information about submitted queries. The valid format is an alphanumeric string, with a maximum of 10 characters.

Locks Currently Held This parameter shows the number of locks currently held. The valid format is a 4byte integer. If the monitor information is at the database level, this is the total number of locks currently held by all applications in the database.

Lock List Before Escalation(%) This parameter defines a percentage of the lock list held by an application that must be filled before the database manager performs escalation. When the number of locks held by any one application reaches this percentage of the total lock list size, lock escalation occurs for the locks held by that application. Lock escalation also occurs if the lock list runs out of space. The valid format is a 4-byte integer.

Lock Timeout (microSec) The time taken in microseconds that a request to lock an object timed-out instead of being granted, since the first database connection.

Lock Waits Since First Connect (microSec) The time taken in microseconds that applications or connections waited for locks. The valid format is a 4-byte integer.

Log Buffer Size (Pages) Allows you to specify how much of the database heap (defined by the dbheap parameter) that you want to use as a buffer for log records before you write these records to disk. The unit of measure is Pages (4 KB)

Log File Size (Pages) Defines the size of each primary and secondary log file. The size of these log files determines and limits the number of log records that you can write to them before they become full and a new log file is required. The unit of measure is Pages (4 KB).

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Maximum Number of Active Applications Specifies the maximum number of concurrent applications that you connect, both local and remote, to a database. The valid format is a 4-byte integer.

Maximum Number of Database Files Open per Application Specifies the maximum number of file handles that you open per application. The valid format is a 4-byte integer.

Maximum Storage for Lock List (Pages) Indicates the amount of storage that is allocated to the lock list. There is one lock list per database and it contains the locks held by all applications concurrently connected to the database. The valid format is a 4-byte integer. The unit of measure is Pages (4 KB). **Number of Asynchronous Page Cleaners** Specifies the number of asynchronous page cleaners for a database. These page cleaners write changed pages from the buffer pool to disk before the space in the buffer pool is required by a database agent. The valid format is a 4-byte integer.

Number of Database Backups to Retain Specifies the number of database backups to retain for a database. After the specified number of backups is reached, old backups are marked as expired in the recovery history file. The valid format is a 4-byte integer.

Number of I/O Servers Specifies the number of I/O servers for a database. A database can not have any more than this number of I/O servers for prefetching and utilities in progress at any time. The valid format is a 4-byte integer.

Number of Lock Timeouts Number of Lock Timeouts Since First Connect number of I/O Servers.

Number of Primary Log Files Specifies the number of primary log files to be pre-allocated. The primary log files establish a fixed amount of storage allocated to the recovery log files. The valid format is a 4-byte integer.

Number of Secondary Log Files Specifies the number of secondary log files that are created and used for recovery log files. The valid format is a 4-byte integer.

Number of Sort Overflows Number of Sort Overflows additional overhead that is incurred because the sort requires a merge phase.

Number of Sorts Since First Connect Number of sorts since first connect. The valid format is a 4-byte integer.

Package Cache Size (Pages) Allocated out of the database shared memory, and is used for caching of sections for static and dynamic SQL and XQuery statements on a database. The valid format is a 4-byte integer. Unit of measure is Pages (4 KB).

Restore Pending States whether a RESTORE PENDING status exists in the database. The valid format is an alphanumeric string, with a maximum of 25 characters.

Rollforward Pending Indicator Informs you whether or not a roll forward recovery is required, and where it is required. The recovery (using ROLLFORWARD DATABASE) must complete before you can access the database or table space. The valid format is an alphanumeric string, with a maximum of 25 characters.

Sample Time The sample time. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is time stamp.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Operating System Information Retrieves operating system information about the database management system.

Sort Heap Size (Pages) Defines the maximum number of private memory pages used for private sorts, or the maximum number of shared memory pages used for shared sorts. The valid format is a 4-byte integer. Unit of measure is Pages (4 KB).

Statement Heap Size (Pages) Specifies the size of the statement heap that is used as a work space for the SQL or XQuery compiler during compilation of an SQL or XQuery statement. The valid format is a 4-byte integer. Unit of measure is Pages (4 KB)

Statistics Heap Size (Pages) Indicates the maximum size of the heap that is used in collecting statistics by using the RUNSTATS command. The valid format is a 4-byte integer. Unit of measure is Pages (4 KB).

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System ID The SAP System Identifier (SID) for the SAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch

- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data (No data available on SAP)

Temporary Table Sort Heaps Includes heaps for sorts of temporary tables that were created during relational operations.

Territory of the Database Shows the territory used to create the database. Territory is used by the database manager when processing data that is sensitive to territory. The valid format is an alphanumeric string, with a maximum of 33 characters.

Total Amount of Active Log Space currently used The total amount of active log space currently used (in bytes) in the database.

Total Amount of Active Log Space not used The amount of active log space in the database that is not being used by uncommitted transactions (in bytes).

Total Elapsed Time The total elapsed time for all sorts that have been executed.

Total Sort Heap Allocated The total number of allocated pages of sort heap space for all sorts at the level chosen and at the time the snapshot was taken.

Total Time Database Waited for Locks (microSec) The total amount of time that the database waited for locks. The valid format is a 4-byte integer.

Utility Heap Size (Pages) Indicates the maximum amount of memory that is be used simultaneously by the BACKUP, RESTORE, and LOAD (including load recovery) utilities. The valid format is a 4-byte integer.

DB2 Performance History attributes

Database performance history is system level attribute group that provides information about DB2 database performance history occurring in a SAP system. This attribute group can be used in queries, reports, and workspace views.

Average Physical Read Time(ms) Average Physical Read Time in milliseconds. The valid format is a 8-byte integer.

Average Physical Write Time(ms) Average Physical Write Time in milliseconds. The valid format is a 8-byte integer.

Commit Statements The total number of SQL COMMIT statements that have been attempted. The valid format is a 8-byte integer.

Data Logical Reads Number of data Logical Reads. The valid format is a 8-byte integer.

Data Physical Reads Number of data Physical Reads. The valid format is a 8-byte integer.

Data Physical Writes Number of data Physical Writes. The valid format is a 8-byte integer.

Deadlocks The total number of deadlocks that have occurred since the first database connection. The valid format is a 8-byte integer.

Index Logical Reads Number of Index Logical Reads. The valid format is a 8-byte integer.

Index Physical Reads Number of Index Physical Reads. The valid format is a 8-byte integer.

Index Physical Writes Number of Index Physical Writes. The valid format is a 8-byte integer.

Lock Escalations The number of times that locks have been escalated from several row locks to a table lock. The valid format is a 8-byte integer.

Lock Waits The total amount of time that applications or connections waited for locks. The valid format is a 8-byte integer.

Lock Wait Time (ms) The total elapsed time waited for a lock. Elapsed time is given in milliseconds. The valid format is a 8-byte integer.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Rollback Statements The total number of SQL ROLLBACK statements that have been attempted. The valid format is a 8-byte integer.

Row Insert Timestamp The date and time when the row is inserted. The valid format is time stamp.

Sample Time The time stamp for the date and time when the agent collected data from SAP. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is time stamp.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Id System Name. The valid format is an alphanumeric string, with a maximum of 3 characters. Valid fixed values are:

+++ = No_applicable_data +NR = Instance_not_running +DB = No_support_for_this_database +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +RF = RFC_Error_Check_Agent_Log +AB = ABAP_Version_Mismatch /stem Label System label generated from SI

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

Workload Type of workload. The valid format is an alphanumeric string, with a maximum of 1 characters. The following values are possible:

T = Total_Day P = Peak

Exclusive Lock Escalations The number of times that locks have been escalated from several row locks to one exclusive table lock, or the number of times an exclusive lock on a row caused the table lock to become an exclusive lock. The valid format is a 8-byte integer.

Developer Traces attributes

Developer Traces is an instance level attribute group that provides information about trace files created by a mySAP instance. This attribute group can be used in queries, situations, and workspace views.

File Name The name of the trace file or the error file that you are monitoring. For example, dev_w0 is the name of the trace file that you are monitoring.

Instance Name The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Log Data The text of the error message or the warning message from the trace file or the error file that you are monitoring. For example, ***enqueue Log File Process-Id=450*** is sample text of the error message from the error file.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Component The code from the first character in each line, if applicable.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No applicable data

EDI Files attributes

EDI Files is a system level attribute group that provides information about electronic document interchange files used in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Delete File An indicator of whether the EDI file must be deleted after processing. The following values are possible:

- 0 = No
- 1 = Yes

File Name The path and file name of the EDI file being processed. This attribute provides single-byte character support only.

File Name (Unicode) The path and file name of the EDI file being processed. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Last IDOC The number of the IDOC within the file that was last processed successfully.

Last IDOC (Superseded) The number of the IDOC within the file that was last processed successfully. For example, 4083 indicates the number of the IDOC within the file that was last processed.

Last Record The number of the record within the file that was last processed successfully. For example, 108 indicates the number of the record within the file that was last processed.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Sample Time The time stamp for the date and time that the agent collected data from mySAP system. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

File Systems attributes

File Systems is an instance level attribute group that provides information about file systems and directory structures used in a mySAP instance. This attribute group can be used in queries, situations, and workspace views.

Capacity (mb) The allocated size, in megabytes, of the file system.

Capacity (mb) (Superseded) The allocated size, in megabytes, of the file system. For example, 4083 indicates the allocated size of the file system. The following values are also possible:

2147483647 = Value Exceeds Maximum

-2147483647 = Value Exceeds Minimum

Full Forecast (days) The number of days the system estimates that it will take for the file system to become full based on calculations for increased usage during the last 24 hours. A value of -1 indicates that there is no data at this time.

Note: This field only displays data when there is an increase in file system usage during the last 24 hours.

INodes The Total number of Filesystem INodes.

INodes (Superseded) Total number of Filesystem INodes. For UNIX only. The following values are also possible:

-1 = No data available 2147483647 = Value Exceeds Maximum -2147483647 = Value Exceeds Minimum

INodes used The number of Filesystem INodes used.

INodes Used (Superseded) Filesystem INodes used. For UNIX only. The following values are also possible:

-1 = No data available 2147483647 = Value Exceeds Maximum -2147483647 = Value Exceeds Minimum

INodes Used Percent Percentage of Filesystem INodes used. For UNIX only. The following value is also possible:

-1 = No data available

Instance Name The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Message Descriptive text indicating the status of the file system. This attribute provides single-byte character support only. For example, Static indicates the status of the file system. The following values are possible:

empty emptying rapidly emptying slowly filling rapidly filling slowly full static

Message (Unicode) Descriptive text indicating the status of the file system. This attribute provides multibyte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment. The following values are possible:

empty emptying rapidly emptying slowly filling rapidly filling slowly full static

Name A text string identifier or name for the file system. This attribute provides single-byte character support only. For example, L indicates the name of the file system.

Name (Unicode) A text string identifier or name for the file system. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Operating System Type of operating system.

Sample Time The time stamp for the date and time the agent collected data from mySAP system. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Size Free (mb) The amount of space, in megabytes, available in the file system.

Size Free (mb) (Superseded) The amount of space, in megabytes, available in the file system. For example, 108 indicates the amount of space available in the file system. The following values are also possible

2147483647 = Value Exceeds Maximum

-2147483647 = Value Exceeds Minimum

Size Used (mb) The amount of space, in megabytes, used in the file system.

Size Used (mb) (Superseded) The amount of space, in megabytes, used in the file system. For example, 3978 indicates the amount of space used in the file system. The following values are also possible

2147483647 = Value Exceeds Maximum -2147483647 = Value Exceeds Minimum

Size Used Percent The amount of space, expressed as a percentage, used in the file system. For example, 97 indicates the percentage of space used in the file system.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +OS = SAP_OS_collector_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Gateway Connections attributes

Gateway Connections is an instance level attribute group that provides information about the connections between a mySAP instance and external systems. This attribute group can be used in reports, queries, and workspace views.

Connection or Client Number The identifier for the connection number. For example, 6 specifies the connection number.

Connection or Client Type The type of the mySAP gateway client you are using. For example, LOCAL_R3 specifies the type of mySAP gateway client.

Connection Speed The speed of the connection on your mySAP Gateway. The following values are possible:

- SLOW = slow connection
 - FAST = fast connection

For example, SLOW might specify the speed of a telephone line. FAST might indicate that a LAN connection is being used.

Conversation Identifier The identifier for the connection conversation. For example, 862335 specifies the connection conversation number.

In Use Indicator of whether or not the connection is in use. The following values are possible:

- 0 = No
- 1 = Yes

Instance Name The name of the application instance that you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Local APPC Version The identifier for the local APPC version. For example, 6 specifies Version 6 of the local APPC.

Local Host The identifier for the name of the computer serving as the local host. For example, CAN2 is an example of a local host name.

Local IP Address The local TCP/IP address. For example, 195.0.2.3 is an example of a local TCP/IP address.

Local IP Address (v4/v6) The local TCP/IP address. This attribute is long enough to hold IPv4 or IPv6 addresses.

Local Logical Unit Name The identifier for the local logical unit. For example, drum2 is an example of a local logical unit name.

Local Transaction Prog. Name The name of the local transaction program. For example, ksaagent is an example of a local transaction program name.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Number of Connections The number of connections on your mySAP Gateway. For example, 14 specifies the number of connections. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Registration Status The registration status for the system connection. For example, UNUSED specifies the registration status for the system connection.

Remote APPC Version The version number for the remote APPC. For example, 6 specifies Version 6 of the remote APPC. The following value is also possible

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Remote Host The identifier for the name of the computer serving as the remote host. For example, agoura1 is an example of a remote host name.

Remote IP Address The identifier for the remote TCP/IP address. For example, 10.58.9.12 is an example of a remote TCP/IP address.

Remote IP Address (v4/v6) The identifier for the remote TCP/IP address. This attribute is long enough to hold IPv4 or IPv6 addresses.

Remote Logical Unit Name The identifier for the remote logical unit. For example, CAN2 is an example of a remote logical unit name.

Remote Transaction Prog. Name The name of the remote transaction program. For example, sapdp00 is an example of a remote transaction program name.

Request Time The time stamp for the time of the last request.

Sample Time The time stamp for the date and time the agent collected the data from mySAP. This attribute is not for use in situations.

SAP Return Code The last SAP return code from structure GWY_CONNAT, field SAPRC, using function GWY_READ_CONNECTION_ATTRIBUTES. For example, 0 indicates the identifier for the last SAP return code. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

SNA Return Code The identifier for the last SNA return code. For example, 0 indicates the identifier for the last return code. The last SNA return code from structure GWY_CONNAT, field APPCRC, using function GWY_READ_CONNECTION_ATTRIBUTES. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Status The status of the mySAP Gateway connection. For example, CONNECTED indicates the connection to the gateway is active.

Symbolic Destination Name The symbolic destination name. For example, sapgw00 indicates the symbolic destination name.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch

+DD = Data_collection_disabled

+GD = Gateway_Monitor_disabled

+NE = Instance_or_Group_does_not_exist

+NR = Instance_not_running

- +RF=RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

Trace Level The trace detail level. For example, 0 specifies the trace level. The following value is also possible

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Userid The name of the user making use of the connection. For example, RBROWN is the name of the user connected to the Gateway.

Gateway Statistics attributes (Superseded)

Gateway Statistics is an instance level attribute group that provides performance and status information about gateway connections used by a SAP instance. Gateway statistics are intended to be enabled for a short period of time during specific analysis. Enabling gateway statistics for a long period of time can result in the gateway statistics values becoming too large to report. This attribute group can be used in queries, situations, and workspace views.

Avg Reader Time (msecs/request) The average Gateway reader time, in milliseconds, per request. For example, 28514 indicates the average Gateway reader time, in milliseconds, per request. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Avg SNA Read Time (msecs/read) The average SNA read time, in milliseconds, per read. For example, 47667 indicates the average SNA read time, in milliseconds, per read. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Avg SNA Write Time (msecs/write) The average SNA write time, in milliseconds, per write. For example, 23854 indicates the average SNA write time, in milliseconds, per write. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Avg TCP Read Time (msecs/read) The average TCP read time, in milliseconds, per read. For example, 20482 indicates the average TCP read time, in milliseconds, per read. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Avg TCP Write Time (msecs/write) The average TCP write time, in milliseconds, per write. For example, 18476 indicates the average TCP write time, in milliseconds, per write. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Avg Work Process Time (msecs/request) The average mySAP Gateway work process time, in milliseconds, per request. For example, 18433 indicates the average mySAP Gateway work process time, in milliseconds, per request. The following value is also possible

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

CMINITs The total number of CMINITs. For example, 2608 indicates the total number of CMINITs. The following value is also possible

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Connect Accepts The number of accepted connections to the mySAP Gateway. For example, 52 indicates the total number of accepted connections. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Connection with Maximum Stack The number of the connection using the size of its maximum data stack. For example, 0 indicates the maximum data stack number of the connection.

Current Data Stack The size of the current data stack. For example, 0 indicates the size of the current data stack. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Current Overflow Usage The size of the current overflow usage. For example, 0 indicates the size of the current overflow usage. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Data Stack Limit The limit of the data stack size. For example, 30 indicates the limit of the data stack size. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Fragmented TCP Reads The total number of fragmented TCP reads. For example, 2329 indicates the total number of fragmented TCP reads. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Fragmented TCP Writes The total number of fragmented TCP writes. For example, 1 indicates the total number of fragmented TCP writes. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Instance Name The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Logon Parameters A reserved field for holding execution parameters for KSAR3. This attribute is not for use in situations.

Longest Reader Request The identifier for the longest reader request. For example, F_RECEIVE specifies the longest reader request.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Max Data Stack The maximum size of the data stack. For example, 3 indicates the limit of the data stack size. The following value is also possible

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Max Overflow Usage The maximum size of the overflow usage. For example, 5 indicates the maximum size of the overflow usage. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Max Reader Time (msecs/request) The maximum mySAP Gateway reader time, in milliseconds, per request. For example, 28589600 indicates the maximum mySAP Gateway reader time, in milliseconds, per request. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Max SNA Read Time (msecs/read) The maximum SNA read time, in milliseconds per read. The following value is also possible

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Max SNA Write Time (msecs/write) The maximum SNA write time, in milliseconds, per write. For example, 47624 indicates the maximum SNA write time, in milliseconds, per write. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Max TCP Read Time (msecs/read) The maximum TCP read time, in milliseconds, per read. For example, 346000 indicates the maximum TCP read time, in milliseconds per read.

Max TCP Write Time (msecs/write) The maximum TCP write time, in milliseconds, per write. For example, 353300 indicates the maximum TCP write time, in milliseconds, per write. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Max Work Process Time (msecs/request) The maximum mySAP Gateway work process time, in milliseconds, per request. For example, 2329 indicates the maximum mySAP Gateway work process time, in milliseconds, per request. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Min Reader Time (msecs/request) The minimum mySAP Gateway reader time, in milliseconds, per request. For example, 1600 indicates the minimum mySAP Gateway reader time, in milliseconds, per request. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Min SNA Read Time (msecs/read) The minimum SNA read time, in milliseconds, per read. For example, 1112 indicates the minimum SNA read time, in milliseconds, per read. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Min SNA Write Time (msecs/write) The minimum SNA write time, in milliseconds, per write. For example, 1374 indicates the minimum SNA write time, in milliseconds, per write. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Min TCP Read Time (msecs/read) The minimum TCP read time, in milliseconds, per read. For example, 346000 indicates the minimum TCP read time, in milliseconds, per read. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Min TCP Write Time (msecs/write) The minimum TCP write time, in milliseconds, per write. For example, 400 indicates the minimum TCP write time, in milliseconds, per write. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Min Work Process Time (msecs/request) The minimum mySAP Gateway work process time, in milliseconds, per request. For example, 478 indicates the minimum mySAP Gateway work process time, in milliseconds, per request. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Overflows The total number of overflows. For example, 47 indicates the total number of overflows. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Reader Requests The total number of mySAP Gateway reader requests. For example, 597844 indicates the total number of mySAP Gateway reader requests. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Sample Time The time stamp for the date and time the agent collected the data from mySAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

SNA Errors The total number of SNA errors. For example, 35 indicates the total number of SNA errors. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

SNA Read Rate (kb/sec) The SNA read rate, in KB, per second. For example, 13982 indicates the SNA read rate, in KB, per second. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

SNA Reads The total number of SNA reads. For example, 3675 indicates the total number of SNA reads. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

SNA Read Size (bytes) The SNA read size, in bytes. For example, 38947 indicates the SNA read size, in bytes. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

SNA Write Rate (kb/sec) The SNA write rate, in KB, per second. For example, 478 indicates the SNA rate, in KB, per second. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

SNA Writes The total number of SNA writes. For example, 3675 indicates the total number of SNA writes. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

SNA Write Size (bytes) The SNA write size, in bytes. For example, 38947 indicates the SNA write size, in bytes. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Statistics Active Indicator of whether gateway statistics are active or not active. If not active, they are not available. The following values are possible:

- 0 = No
- 1 = Yes

3 = Values_too_large._Reset_gateway_statistics

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +GD = Gateway_Monitor_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

TCP Errors The total number of TCP errors. For example, 4 indicates the total number of TCP errors. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

TCP Read Rate (kb/sec) The TCP read rate, in KB, per second. For example, 1112 indicates the TCP read rate, in KB, per second. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

TCP Reads The total number of TCP reads. For example, 124175 indicates the total number of TCP reads. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

TCP Read Size (bytes) The TCP read size, in bytes. For example, 28965243 indicates the TCP read size, in bytes. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

TCP Write Rate (kb/sec) The TCP write rate, in KB, per second. For example, 1374 indicates the TCP write rate, in KB, per second. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

TCP Writes The total number of TCP writes. For example, 111173 indicates the total number of TCP writes. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

TCP Write Size (bytes) The TCP write size, in bytes. For example, 28895498 indicates the TCP write size, in bytes. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Timeouts The total number of timeouts. For example, 3 indicates the total number of timeouts. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Total Reader Time (secs) The total reader time, in seconds. This attribute can also be one of the following values

-1 = NoData

-2 = NumberTooLarge

For example, 170468058 indicates the total reader time, in seconds.

Total SNA Read Time (secs) The total SNA read time, in seconds. This attribute can also be one of the following values

-1 = NoData

-2 = NumberTooLarge

For example, 13 indicates the total SNA read time, in seconds.

Total SNA Write Time (secs) The total SNA write time, in seconds. This attribute can also be one of the following values

-1 = NoData

-2 = NumberTooLarge

For example, 20 indicates the total SNA write time, in seconds.

Total TCP Read Time (secs) The total TCP read time, in seconds. This attribute can also be one of the following values

-1 = NoData

-2 = NumberTooLarge

For example, 25433236 indicates the total TCP read time, in seconds.

Total TCP Write Time (secs) The total TCP write time, in seconds. This attribute can also be one of the following values

-1 = NoData

-2 = NumberTooLarge

For example, 320489 indicates the total TCP write time, in seconds.

Total Work Process Time (secs) The total work process time, in seconds. This attribute can also be one of the following values

-1 = NoData

-2 = NumberTooLarge

For example, 170298487 indicates the total work process time, in seconds.

Work Process Requests The total number of mySAP Gateway work process requests. For example, 47 indicates the total number of mySAP Gateway work process requests. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Gateway Statistics attributes

Gateway Statistics is an instance level attribute group that provides performance and status information about gateway connections used by a mySAP instance. Gateway statistics are intended to be enabled for a short period of time during specific analysis. Enabling gateway statistics for a long period of time results in the gateway statistics values becoming too large to report. This attribute group can be used in queries, situations, and workspace views.

Avg SNA Read Time The average SNA read time, in milliseconds, per read. For example, 47667 indicates the average SNA read time, in milliseconds, per read. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Avg SNA Write Time The average SNA write time, in milliseconds, per write. For example, 23854 indicates the average SNA write time, in milliseconds, per write. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Avg Reader Time The average Gateway reader time, in milliseconds, per request. For example, 28514 indicates the average Gateway reader time, in milliseconds, per request. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Avg TCP Read Time The average TCP read time, in milliseconds, per read. For example, 20482 indicates the average TCP read time, in milliseconds, per read. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Avg TCP Write Time The average TCP write time, in milliseconds, per write. For example, 18476 indicates the average TCP write time, in milliseconds, per write. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Avg Work Process Time The average mySAP Gateway work process time, in milliseconds, per request. For example, 18433 indicates the average mySAP Gateway work process time, in milliseconds, per request. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

CMINITs The total number of CMINITs. For example, 2608 indicates the total number of CMINITs. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Connect Accepts The number of accepted connections to the mySAP Gateway. For example, 52 indicates the total number of accepted connections. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Connection with Maximum Stack The number of the connection using the size of its maximum data stack. For example, 0 indicates the maximum data stack number of the connection. The valid format is a 8-byte integer.

Current Data Stack The size of the current data stack. For example, 0 indicates the size of the current data stack. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Current Overflow Usage The size of the current overflow usage. For example, 0 indicates the size of the current overflow usage. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Data Stack Limit The limit of the data stack size. For example, 30 indicates the limit of the data stack size. The valid format is a 8-byte integer. The following value is also possible:

=-1

Fragmented TCP Reads The total number of fragmented TCP reads. For example, 2329 indicates the total number of fragmented TCP reads. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Fragmented TCP Writes The total number of fragmented TCP writes. For example, 1 indicates the total number of fragmented TCP writes The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Instance Name The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring. The valid format is an alphanumeric string, with a maximum of 20 characters.

Longest Reader Request The identifier for the longest reader request. For example, F_RECEIVE specifies the longest reader request. The valid format is an alphanumeric string, with a maximum of 16 characters.

Logon Parameters A reserved field for holding execution parameters for KSAR3. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is an alphanumeric string, with a maximum of 200 characters.

Managed System The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

Max Data Stack The maximum size of the data stack. For example, 3 indicates the limit of the data stack size. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Max Overflow Usage The maximum size of the overflow usage. For example, 5 indicates the maximum size of the overflow usage. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Max SNA Read Time The maximum SNA read time, in milliseconds per read. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Max SNA Write Time The maximum SNA write time, in milliseconds, per write. For example, 47624 indicates the maximum SNA write time, in milliseconds, per write. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Max Reader Time The maximum mySAP Gateway reader time, in milliseconds, per request. For example, 28589600 indicates the maximum mySAP Gateway reader time, in milliseconds, per request. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Max TCP Read Time The maximum TCP read time, in milliseconds, per read. For example, 346000 indicates the maximum TCP read time, in milliseconds per read. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Max TCP Write Time Maximum TCP writed time per write from structure GWY_STAT, field TW_TIMEMAX / 1000, using function GWY_READ_STATISTICS. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Max Work Process Time The maximum mySAP Gateway work process time, in milliseconds, per request. For example, 2329 indicates the maximum mySAP Gateway work process time, in milliseconds, per request. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Min Reader Time The minimum mySAP Gateway reader time, in milliseconds, per request. For example, 1600 indicates the minimum mySAP Gateway reader time, in milliseconds, per request. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Min SNA Read Time The minimum SNA read time, in milliseconds, per read. For example, 1112 indicates the minimum SNA read time, in milliseconds, per read. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Min SNA Write Time The minimum SNA write time, in milliseconds, per write. For example, 1374 indicates the minimum SNA write time, in milliseconds, per write. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Min TCP Read Time The minimum TCP read time, in milliseconds, per read. For example, 346000 indicates the minimum TCP read time, in milliseconds, per read. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Min TCP Write Time The minimum TCP write time, in milliseconds, per write. For example, 400 indicates the minimum TCP write time, in milliseconds, per write. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Min Work Process Time The minimum mySAP Gateway work process time, in milliseconds, per request. For example, 478 indicates the minimum mySAP Gateway work process time, in milliseconds, per request. The valid format is a 8-byte integer. The following values are possible:

=-1

Overflows The total number of overflows. For example, 47 indicates the total number of overflows. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Reader Requests The total number of mySAP Gateway reader requests. For example, 597844 indicates the total number of mySAP Gateway reader requests. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Sample Time The time stamp for the date and time the agent collected the data from mySAP. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is time stamp.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

SNA Errors The total number of SNA errors. For example, 35 indicates the total number of SNA errors. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

SNA Reads The total number of SNA reads. For example, 3675 indicates the total number of SNA reads. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

SNA Read Rate The SNA read rate, in KB, per second. For example, 13982 indicates the SNA read rate, in KB, per second. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

SNA Read Size The SNA read size, in bytes. For example, 38947 indicates the SNA read size, in bytes. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

SNA Write Rate The SNA write rate, in KB, per second. For example, 478 indicates the SNA rate, in KB, per second. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

SNA Writes The total number of SNA writes. For example, 3675 indicates the total number of SNA writes. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

SNA Write Size The SNA write size, in bytes. For example, 38947 indicates the SNA write size, in bytes. The valid format is a 8-byte integer. The following values are possible:

=-1 There is no relevant numeric data for this attribute at this time.

Statistics Active Are gateway statistics active, Yes or No, if No gateway statistics are not available. The valid format is an alphanumeric string, with a maximum of 1 characters. The following value is also possible:

0 = No

1 = Yes

3 = Values_too_large_Reset_gateway_statistics

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 3 characters. The following value is also possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +GD = Gateway_Monitor_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

TCP Errors The total number of TCP errors. For example, 4 indicates the total number of TCP errors. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

TCP Read Rate The TCP read rate, in KB, per second. For example, 1112 indicates the TCP read rate, in KB, per second. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

TCP Reads The total number of TCP reads. For example, 124175 indicates the total number of TCP reads. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

TCP Read Size The TCP read size, in bytes. For example, 28965243 indicates the TCP read size, in bytes. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

TCP Write Rate The TCP write rate, in KB, per second. For example, 1374 indicates the TCP write rate, in KB, per second. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

TCP Writes The total number of TCP writes. For example, 111173 indicates the total number of TCP writes. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

TCP Write Size The TCP write size, in bytes. For example, 28895498 indicates the TCP write size, in bytes. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Timeouts The total number of timeouts. For example, 3 indicates the total number of timeouts. The valid format is a 8-byte integer.

=-1 There is no relevant numeric data for this attribute at this time.

Total Reader Time The total reader time, in seconds. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Total SNA Read Time The total SNA read time, in seconds. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Total SNA Write Time The total SNA write time, in seconds. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Total TCP Read Time The total TCP read time, in seconds. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Total TCP Write Time The total TCP write time, in seconds. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Total Work Process Time The total work process time, in seconds. The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Work Process Requests The total number of mySAP Gateway work process requests. For example, 47 indicates the total number of mySAP Gateway work process requests The valid format is a 8-byte integer. The following value is also possible:

=-1 There is no relevant numeric data for this attribute at this time.

Historical Alerts attributes

Historical Alerts is an instance level attribute group that provides information about CCMS and the mySAP agent alerts history occurring in a mySAP instance. This attribute group can be used in queries, situations, and workspace views.

Alert Message Contains the reason for generating the alert. The valid format is an alphanumeric string, with a maximum of 255 characters.

Alert Unique Identifier The alert unique identifier that is used to close an alert in a SAP system. The valid format is a 4-byte integer.

Client Number A text string identifier or name for the source client. For example, 800 identifies the name of the client. The valid format is an alphanumeric string, with a maximum of 3 characters.

Managed System The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available

for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

MTE Name The Monitoring tree element name for which alerts are generated. The valid format is an alphanumeric string, with a maximum of 256 characters.

Occurrence Time Alert time stamp. The valid format is time stamp.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Severity Alert severity. The valid format is a 4-byte integer. The following values are possible:

- 1 = Green
- 2 = Yellow
- 3 = Red
- 4 = Unknown

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Userid Username. The valid format is an alphanumeric string, with a maximum of 12 characters.

HTTP Connection Monitoring attributes

HTTP Connection Monitoring is a system level attribute group that provides information about RFC connections of HTTP connections type to ABAP systems, and HTTP connections to External Server.

Assertion Ticket Client Client of the target system where the Assertion Ticket is sent.

Assertion Ticket Status Displays whether the option for sending the assertion ticket is selected while configuring RFC connection. The following values are possible:

```
X = Active
Y = Inactive
```

Assertion Ticket System System ID of the target system where the Assertion Ticket is sent.

Authorization for Destination Authorization to use a destination.

Category of RFC Connections Category of RFC connections specified during configuration.

Connection Type Path Path prefix for connection types of G and H. This path can be used to select and call the HTTP request handler.

Destination Lock Status Displays whether the RFC connection is modifiable. The following values are possible:

- Y = Modifiable
- X = Non-Modifiable

HTTP Timeout HTTP timeout value if specified. The following values are possible:

0 = ICM_Default_Timeout

-1 = No_Timeoout

Logon with User Logon procedure for HTTP connections. The following options are possible:

- A = Do not use user
- B = Basic Authentication

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Proxy Host Name of the proxy host that is configured for the RFC connection.

Proxy Service Proxy service that is configured for the RFC connection.

Proxy User Name of the proxy user that is configured for the RFC connection.

RFC ALIAS Alias name of the RFC connection.

RFC Connection Name of the RFC destination that is specified in the function call.

RFC Host Name of the target host that is configured for the RFC connection.

RFC SYSID SAP system number of target host used in configuration of RFC connection.

RFC Status Status of the RFC connection. The following values are possible:

- 1 = Active
- 2 = Inactive
- 0 = Unknown

RFC Type Type of the RFC destination that is being monitored. The following values are possible:

- 3 = ABAP Connection
- G = HTTP Connections to External Server
- I = Internal Connections
- L = Logical Connections
- T = TCP IP Connections
- X = Connections via ABAP Driver
- 2 = Connection to R2 System
- S = Start External Program Using SNA or APPC
- M = CMC Connections
- H = HTTP Connections to ABAP Server

Sample Time The time stamp for the date and time the agent collected data from mySAP. This attribute is not for use in situations.

SAP Authentication Ticket Displays whether the logon with SAP Authentication Ticket is selected. The following values are possible:

- X = Active
- Y = Inactive

SAPshcut_Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

SSL Client Identity SSL Client Identity that is configured for the RFC connection.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name System ID of the SAP System running on the server. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

- +AB = ABAP_Version_Mismatch
- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist

+NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

HTTP Services attributes

This attribute group shows HTTP Services details. This attribute group can be used in queries, reports, and workspace views.

Changed for Client Client for HTTP service changed. The valid format is an alphanumeric string, with a maximum of 3 characters.

Changed On The date on which the HTTP services were changed. The valid format is an alphanumeric string, with a maximum of 8 characters.

Changed On Timestamp The time and date when the HTTP services were changed. The valid format is time stamp.

Client The client that is used to connect to the SAP server. The valid format is an alphanumeric string, with a maximum of 3 characters.

Created By The HTTP Services that are created by default and also those HTTP services that are created by the user. The valid format is an alphanumeric string, with a maximum of 12 characters.

Created for Client The Internet Communication Framework (ICF) created for the client The valid format is an alphanumeric string, with a maximum of 3 characters.

Created on The date on which the HTTP services were created. The valid format is an alphanumeric string, with a maximum of 8 characters.

Created on Timestamp The date and time on which the HTTP services were created. The valid format is time stamp.

Description Description of the HTTP Service. The valid format is an alphanumeric string, with a maximum of 210 characters.

Host Name Host of the service. The valid format is an alphanumeric string, with a maximum of 15 characters.

Host Number Number of a Virtual Host. The valid format is a 4-byte integer.

Last Changed By The user name of the person who last changed the HTTP Service. The valid format is an alphanumeric string, with a maximum of 12 characters.

Managed System The identifier for this SAP resource. The valid format is a text string for a SAP system, instance, or group. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is an alphanumeric string, with a maximum of 64 characters.

Parent GUID GUID of the parent node. The valid format is an alphanumeric string, with a maximum of 25 characters.

Path Path of the HTTP service. The valid format is an alphanumeric string, with a maximum of 512 characters.

SAP Authority Authorization to use an ICF service. The valid format is an alphanumeric string, with a maximum of 8 characters.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Service Name Name of a Service in Internet Communication Framework. The valid format is an alphanumeric string, with a maximum of 15 characters.

Service Node GUID GUID of the ICF Service node. The valid format is an alphanumeric string, with a maximum of 25 characters.

Session Timeout Session Timeout for a stateful connection in time format. The valid format is an alphanumeric string, with a maximum of 8 characters.

Session Timeout (Sec.) Session Timeout for a stateful connection in seconds. The valid format is a 4-byte integer.

Status Status of the service, for example, Active or Inactive. The valid format is an alphanumeric string, with a maximum of 1 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the SAP system that you are monitoring. The valid format is an alphanumeric string, with a maximum of 3 characters. For example, PRD. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data = +++

User Logon name of the user. The valid format is an alphanumeric string, with a maximum of 12 characters.

ICM Monitor attributes

This ICM monitor attribute group provides various functions for monitoring the status of the ICM and for detecting any possible errors. ICM sends and receives requests through the internet. Worker threads handle the ICM requests and responses. This attribute group can be used in queries, reports, and workspace views.

Connection Identifier The connection identifier of the service. The valid format is a 4-byte integer.

Current Connections The number of connections that are being used currently. The valid format is a 4-byte integer.

Current Queue Entries Current number of queue entries found. The valid format is a 4-byte integer.

Current Thread Count Number of worker threads currently created. The valid format is a 4-byte integer.

GUID Connection Identifier The GUID for the Connection Identifier. The valid format is a 4-byte integer.

Instance Name The name of the application instance such as ddrum2_PRD_00 that is being monitored for ICM in a SAP system. The valid format is an alphanumeric string, with a maximum of 20 characters.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Maximum Connections The maximum connection that can be used. The valid format is a 4-byte integer.

Maximum Queue Entries The maximum number of Queue entries. The valid format is a 4-byte integer.

Maximum Thread Count The maximum amount of worker threads that you can create. The valid format is a 4-byte integer.

Number of Requests The number of requests that are processes by a thread. The valid format is a 4-byte integer.

Peak Connections The peak number of connections used. The valid format is a 4-byte integer.

Peak Queue Entries The peak number of queue entries. The valid format is a 4-byte integer.

Peak Thread Count The peak thread count of the worker threads created. The valid format is a 4-byte integer.

Request Type Request type of threads. The valid format is an alphanumeric string, with a maximum of 20 characters. The following values are possible:

- 01 = Read_Request
- 02 = Read_Response
- 03 = Write_Request
- 04 = Write_Response
- 10 = Wait_for_Response_(SERV)
- 11 = Wait_for_Request_(CLNT)
- 05 = Waiting_for_Data
- 40 = Accept_Connection
- 41 = Open_Connection
- 42 = Administration
- 43 = Shut_Down
- 44 = Close_Connection
- 45= Time-dependent_Action
- 46 = Java_Proxy_Action
- 47 = SSL_Init_(Client)
- 48 = SSL_Init_(Server)

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Status of ICMN Current status of the Internet Communication Manager (ICM). The valid format is a 4-byte integer. The following values are possible:

- 0 = Not running
- 1 = Initial
- 2 = Running
- 3 = Shutdown
- 4 = Completed
- 5 = Maintenance

Thread Status Status of the thread. The valid format is an alphanumeric string, with a maximum of 20 characters. The following values are possible:

- 0 = Unknown
- 1 = Available
- 2 = Running
- 3 = completed

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the SAP system that you are monitoring. The valid format is an alphanumeric string, with a maximum of 3 characters. Valid fixed values are:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist

- +NR = Instance_not_running
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

System Specific Thread ID System specific ID assigned by the operating system. This ID is similar to the PID for processes. The valid format is an alphanumeric string with a maximum of 16 characters.

Trace Level Current trace level. The valid format is a 4-byte integer. The following values are possible:

- 0 = No_Trace
- 1 = Error_Trace
- 2 = Complete_Prcess_Short_Data_Trace
- 3 = Complete_Prcess_Complete_Data_Trace

ICM Monitor Services attributes

This attribute group provides information on the services that are configured for Internet Communication Manager (ICM) This attribute group can be used in queries, reports, and workspace views.

Host Name The fully qualified host name to which the port is linked. The valid format is S, 32.

ICM Service Name or Port Number Port number or service name on which the ICMAN request accepts the corresponding protocol. The valid format is an alphanumeric string, with a maximum of 32 characters.

Instance Name The name of the application instance such as ddrum2_PRD_00 that is being monitored for ICM in a SAP system. The valid format is an alphanumeric string, with a maximum of 20 characters.

Internet Protocol ID The internet Protocol ID that is used. ICM currently supports HTTP, HTTPS and SMTP. The valid format is a 4-byte integer.

Managed System The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

Maximum Processing Time in Back End (Sec) Timeout in seconds for processing in the backend. The valid format is a 4-byte integer.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Service Status The status of the service and whether it is currently active. The ICM does not accept requests on an inactive port. The valid format is an alphanumeric string, with a maximum of 1 characters.

SSL Client Verification The SSL Client Verification number. The valid format is a 4-byte integer.

System ID The SAP System Identifier (SID) for the SAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

System Label System label that is generated from SID_DBhostname where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

Time Period for Keep Alive (Sec) Keep alive timeout in seconds. If no data is exchanged on an existing connection for this period of time, the network connection is terminated. The valid format is a 4-byte integer.

Virtual Host Index The index of the virtual host. The valid format is a 4-byte integer.

Instance Configuration attributes

Instance Configuration is both a system level and instance level attribute group. At the system level, it provides configuration information about the mySAP system and about each instance. At the instance level, it provides configuration information about one mySAP instance. This attribute group can be used in

queries, situations, and workspace views. See the historical data collection section for information about historical data collection for attributes in this attribute group, including attributes for which data is not collected.

Active Users The current number of users logged on to this application instance. For example, 47 indicates the number of users currently logged on to the instance you are monitoring.

Active Users (Server) Number of active users currently for this server. It includes RFC users and interactive users.

Assigned Update Instance The name of the application server assigned to a specific update server. For example, Updinst_SY1_00 is the instance configured with the mySAP update service for this application instance.

Batch Complete Percent Percent of Batch work processes in the Complete state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Batch Job Queue The number of batch jobs in Ready state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Batch Processes The number of batch processes running on this application instance.

Batch Running Percent Percent of Batch work processes in the Running state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Batch Service Configured A Yes/No switch to indicate if the batch service is configured. The following values are possible:

• 0 = No. The batch service is not configured.

1 = Yes. The batch service is configured.

Batch Stopped Percent Percent of Batch work processes in the Stopped state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Batch Waiting Percent Percent of Batch work processes in the Waiting state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Central Instance A Yes/No switch to indicate if the application server is the central instance. This attribute can be useful when tailoring a situation. The following values are possible:

• 0 = No. The application server is not the central instance.

1 = Yes. The application server is the central instance.

Central or Message Server Instance Name The name of a Central Instance or Message Server Instance Name that is configured for this SAP system.

Configuration String The services mask, or string, for this application server. For example, DVEBMGS indicates that the following mySAP services are configured for this instance:

- D = Dialog
- V = Update (stands for Verbucher in German)
- E = Enqueue
- B = Background
- M = Message server
- G = SNA gateway
- S = Spool

Database Host IP Address The IP address of the physical system on which the database instance resides. This value is the same for all instances of a mySAP system. For example, 170.106.1.1 is the IP address for the database host in the mySAP system you are monitoring.

Database Host IP Address (v4/v6) The IP address of the physical system on which the database instance resides. This attribute is long enough to hold IPv4 or IPv6 addresses.

Database Host Name The name of the host computer running the database instance of a system. For example, DBhost is the name of the database host in the mySAP system you are monitoring.

Database Name The name of the database instance defined for this mySAP system. This name is frequently the same as the mySAP SID, and is the same for each instance of a mySAP system. For example, DB4 is the name of the physical system on which the database server resides in the mySAP system you are monitoring.

Database Release Release associated with the database. The valid format is an alphanumeric string, with a maximum of 16 characters.

Database Type Type of database. The valid format is an alphanumeric string, with a maximum of 120 characters.

Dialog Complete Percent Percent of Dialog work processes in the Complete state. The following value is also possible

-1 = N/A. Data for this attribute is not applicable at this time.

Dialog Processes The number of dialog processes running on this application instance.

Dialog Queue The number of tasks in the dispatch queue waiting for a Dialog work process. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Dialog Queue Percent Percentage of the dispatcher queue allotted for Dialog that is being used by waiting tasks. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Dialog Running Percent Percent of Dialog work processes in the Running state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Dialog Service Configured A Yes/No switch to indicate if the dialog service is configured. The following values are possible:

0 = No. The dialog service is not configured.

1 = Yes. The dialog service is configured

Dialog Stopped Percent Percent of Dialog work processes in the Stopped state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Dialog Waiting Percent Percent of Dialog work processes in the Waiting state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Enqueue Complete Percent Percent of Enqueue work processes in the Complete state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Enqueue Processes Number of enqueue work processes running on this application instance.

Enqueue Queue The number of tasks in the dispatch queue waiting for an Enqueue work process. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Enqueue Queue Percent Percentage of the dispatcher queue allotted for Enqueue that is being used by waiting tasks. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Enqueue Running Percent Percent of Enqueue work processes in the Running state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Enqueue Service Configured A Yes/No switch to indicate if the enqueue service is configured. The following value is possible:

- 0 = No. The message enqueue is not configured.
 - 1 = Yes. The message enqueue is configured.

Enqueue Stopped Percent Percent of Enqueue work processes in the Stopped state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Enqueue Waiting Percent Percent of Enqueue work processes in the Waiting state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Gateway Service Configured A Yes/No switch to indicate if the gateway service is configured. The following values are possible:

0 = No. The gateway service is not configured.

1 = Yes. The gateway service is configured.

Instance Down Duration The amount of time, in minutes, an application instance has been down. For example, 12 indicates that a particular instance has been down for 12 minutes. A value of -1 indicates that there is no data at this time.

Instance Host IP Address The IP address of the physical system on which the application instance resides. For example, 170.106.1.11 is the IP address of the physical system on which the application instance you are monitoring resides.

Instance Host IP Address (v4/v6) The IP address of the physical system on which the application instance resides. This attribute is long enough to hold IPv4 or IPv6 addresses.

Instance Host Name The name of the physical system, without the domain, on which this application server resides. For example, Insthost is the name of the application instance you are monitoring.

Instance Name The name of the application server.

Instance Op Mode State The state in which the instance is included in the current operation mode of this application server. The following values are possible:

- 0 = Configured. The instance is included in an operation mode.
- 1 = Not configured. The instance is not included in an operation mode.
- 2 = Misconfigured. The instance was configured improperly.
- ? = Unknown

Instance Start Time The time stamp for the date and time the application instance started.

Instance Status The status of the application instance, such as not running, running, connection failed, unknown, or passive. The following values are possible:

0 = NotRunning. This value is only reported for instances defined in an operation mode profile.

- 1 = Running
- 2 = ConnectionFailed
- 3 = Unknown
- 4 = Passive

Instance Stop Time The time stamp for the date and time the application instance stopped.

Instance Up Duration The amount of time, in minutes, an application instance has been up in this system. For example, 12 indicates that a particular instance has been up for 12 minutes. A value of -1 indicates that there is no data at this time.

Instances Down The total number of application instances that are down in this system. This values are only reported for instances defined in an operation mode profile. For example, 3 indicates that 3 of the instances you are monitoring are not running.

Instances Running The total number of instances that are running in this system. For example, 15 indicates that 15 instances you are monitoring are running.

Interactive UsersNumber of interactive (GUI) users currently for this server.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Message Service Configured A Yes/No switch to indicate if the message server is configured. The following values are possible:

0 = No. The message service is not configured.

1 = Yes. The message service is configured. This instance is the central instance.

NoWP Queue The number of tasks in the dispatch queue waiting to be processed by the dispatcher itself or some other system service. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Operation ModeA text string identifier or name for the current operation mode of the system. For example, Private indicates the current operation mode of the system. This attribute provides single-byte character support only.

Operation Mode (Unicode) A text string identifier or name for the current operation mode of the system. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Registered Users Number of total registered users currently for this SAP system.

RFC Users Number of RFC users currently for this server.

Sample Time The time stamp for the date and time the agent collected the data from mySAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Spool Complete Percent Percent of Spool work processes in the Complete state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Spool Processes The number of spool processes running on this application instance.

Spool Queue The number of tasks in the dispatch queue waiting for a Spool work process. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Spool Queue Percent Percentage of the dispatcher queue allotted for Spool that is being used by waiting tasks. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Spool Running Percent Percent of Spool work processes in the Running state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Spool Service Configured A Yes/No switch to indicate if the spool service is configured. The following values are possible:

0 = No. The spool is not configured.

1 = Yes. The spool is configured.

Spool Stopped Percent Percent of Spool work processes in the Stopped state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Spool Waiting Percent Percent of Spool work processes in the Waiting state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

System Description A user-provided description of this application instance as defined in the mySAP system transport table. This attribute provides single-byte character support only.

System Description (Unicode) A user-provided description of this application server instance as defined in the mySAP system transport table. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.<

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

System Number The number assigned to this application server instance. For example, 01 is the number of the mySAP instance you are monitoring.

System Release The release number for the level of software installed on this application server. For example, 640 indicates the level of software installed in the SAP mySAP system you are monitoring.

System Start Time The time stamp for the date and time the system started.

System Up Duration The amount of time, in minutes, that the system has been up. For example, 12 indicates that the system has been up for 12 minutes. A value of -1 indicates that there is no data at this time.

Total External Sessions The total number of user sessions (GUI and RFC). The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Total GUI Sessions The total number of non-APPC-TM GUI sessions. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Total RFC Sessions The total number of RFC sessions. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Update Complete Percent Percent of Update work processes in the Complete state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Update Processes The number of update processes running on this application instance.

Update Queue The number of tasks in the dispatch queue waiting for an Update work process. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Update Queue PercentPercentage of the dispatcher queue allotted for Update that is being used by waiting tasks. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Update Running Percent Percent of Update work processes in the Running state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Update Service Configured A Yes/No switch to indicate if the update service is configured. The following values are possible:

0 = No. The update service is not configured.

1 = Yes. The update service is configured.

Update Stopped Percent Percent of Update work processes in the Stopped state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Update Waiting Percent Percent of Update work processes in the Waiting state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Update2 Complete Percent Percent of Update2 work processes in the Complete state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Update2 Processes Number of Update2 work processes running on this application instance.

Update2 Queue The number of tasks in the dispatch queue waiting for an Update2 work process. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Update2 Queue Percent Percentage of the dispatcher queue allotted for an Update2 that is being used by waiting tasks. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Update2 Running Percent Percent of Update2 work processes in the Running state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Update2 Service Configured A Yes/No switch to indicate if the Update2 service is configured. The following values are possible:

0 = No. The Update2 service is not configured.

1 = Yes. The Update2 service is configured.

Update2 Stopped Percent Percent of Update2 work processes in the Stopped state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Update2 Waiting Percent Percent of Update2 work processes in the Waiting state. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Integration Engine Job Overview attributes

Integration Engine Job Overview attributes provide information on the background jobs, such as the status of the jobs and if they are successful. This attribute group can be used in queries, reports, and workspace views.

Job Name Name of the background job. The valid format is an alphanumeric string, with a maximum of 32 characters.

Job Status Status of a job. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

105 = Successful 104 = Incorrect 117 = Active

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Sample Time The time stamp for the date and time that the agent collected data from SAP. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is time stamp.

Sample Interval End The time stamp for the stopping time of the data that is supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the starting time of the data that is supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the SAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No applicable data (No data available for SAP)

Timestamp The data and time that the job started. The valid format is time stamp.

Type Type of Job. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

I11 = Archiving I12 = Delete I13 = Extractor I14 = Copy IAS = Adapter Status Set W01 = No job information available

I18 = Refresh Adapter Status

Intermediate Documents attributes

Intermediate Documents is a system level attribute group that provides information about documents transferred between this mySAP system and external systems. This attribute group can be used in queries, situations, and workspace views.

Client Client ID of the SAP system.

Create Time The time stamp for the date and time the Intermediate Document (IDoc) was created.

Direction The direction in which the IDoc transmission is being transmitted. The following values are possible:

- 1 = Outbound
- 2 = Inbound

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Message Code The logical message code, derived from an EDI message. This code further defines the type of message being transmitted. For example, 220 indicates that the message being transmitted is a purchase order.

Message Function The logical message function in relation to its transmission. It contains a code derived from the message function of an EDI message. For example, TU indicates that the message transferred is a special invoice.

Message Type The logical message type. This identification further defines the type of message being transmitted. For example, ORDERS indicates that the message type is a purchase order (outbound) or a sales order (inbound).

Number (Superseded) The identifying number for the IDoc. For example, 546 specifies the identifying number for the IDoc.

Number The identifying number for the IDoc. For example, 546 specifies the identifying number for the IDoc.

Partner Function The function of the IDoc partner. For example, LF indicates that the partner is a vendor.

Partner Name The name of the IDoc partner (for example vendor, customer, or a logical system). For example, LSYSTEM010 indicates the name of the partner.

Partner Port The IDoc partner port, identifying the system that receives or sends IDocs. For example, RECEIVER indicates the port name of a receiver.

Partner Type The IDoc partner type of receiver or sender. For example, KU indicates that the IDOC partner is a customer.

Receiver Partner Port The IDoc receiver partner port.

Receiver Partner Type The type of IDoc receiver partner.

Receiver Partner Function The function of IDoc receiver partner.

Receiver Partner Number The name of IDoc receiver partner.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Sender Partner Port The IDoc sender partner port.

Sender Partner Type The type of IDoc sender partner.

Sender Partner Function The function of IDoc sender partner.

Sender Partner Number The name of IDoc sender partner.

Status Description The IDoc status description, for example Created or Translated. This attribute provides single-byte character support only.

Status Description (Unicode) The IDoc status description. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Status for Statistics The IDoc statistical information. For example, InExternalSystem is the name of the mySAP system you are monitoring.

- 1 = Generated
- 2 = ReadyForDispatch
- 3 = InExternalSystem
- 4 = Dispatched
- 5 = ErrorsInInterface
- 6 = ErrorsInExternalSystem
- 7 = WithDeleteFlag
- B = TransferredToApplication
- C = TransferredToDialog
- D = Posted
- ? = Unknown

Status Information The IDoc status information. This attribute provides single-byte character support only. For example, CREATED indicates that the IDoc has been created.

Status Information (Unicode) The IDoc status information. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Status Number The IDoc status number. For example, 02 indicates an error passing data to port.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Test Production Indicator of whether the message corresponding to the IDoc is a test message or a production message. The following values are possible:

1 = PROD 2 = TEST

For example, TEST specifies that the IDoc is a test message.

Type Defines the structure of the data associated with a message type. For example, DEBMAS02 for message type DEBMAS - customer master. This attribute provides single-byte character support only.

Type (Unicode) Defines the structure of the data associated with a message type. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Update Time The time stamp for the date and time the Intermediate Document (IDoc) was updated.

License Information attributes

The License Information is a system level attribute group that provides information about the currently valid SAP license that is installed on the system.

Hardware Key The hardware key that is required for SAP installation. The valid format is an alphanumeric string with a maximum of 11 characters.

Installation Number The installation number of the SAP system. The valid format is an alphanumeric string with a maximum of 10 characters.

License Begin Date The date from when the validity period of the license starts. The valid format is an alphanumeric string with a maximum of 10 characters.

License Date The last known date when the license was validated. The valid format is an alphanumeric string with a maximum of 10 characters.

License End Date The date when the validity period of the license expires. The valid format is an alphanumeric string with a maximum of 10 characters.

Logon Parameters The parameters that are passed to the KSA3 transaction code to run Take Action commands. This attribute cannot be used for situations.

Managed System The identifier for the monitored SAP resource. This attribute cannot be used for situations. The valid format is an alphanumeric string with a maximum of 64 characters.

Number of Days to Expiry The number of days that are remaining before the license expires. This attribute returns a value as Permanent Validity when the license is permanently valid and returns a value as N/A when the license expires.

SAPshcut Parameters The parameters that are passed to run the sapshcut command for opening the SAPGUI. The valid format is an alphanumeric string with a maximum of 120 characters.

System Number The system number of the SAP system. The valid format is an alphanumeric string with a maximum of 18 characters.

Software Product The name of the licensed software product. The valid format is an alphanumeric string with a maximum of 20 characters.

System Label The system label that is generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server that is associated with the target SAP system. The valid format is an alphanumeric string with a maximum of 37 characters.

System Name The system identifier (SID) for the SAP system that is being monitored, for example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data (No data available on SAP)

Validity The validity of the LIKEY license. This attribute returns value such as Valid, Unknown, Incorrect System ID, Temporary License Key Not Permitted, Expired, or Signature Invalid.

Lock Entries attributes

Lock Entries is a system level attribute group that provides information about locked objects in the mySAP system. This attribute group can be used in reports, queries, and workspace views.

Argument The argument value (key fields) of a lock entry. An entry locks the entries in a table that are specified by the argument value. For example, SAPLY210 is an example of an argument value.

Backup Flag The identifier for the backup flag. For example, Y indicates that the backup flag is set.

Client A text string identifier or number for the originating client. For example, 800 indicates the client.

Create Time The time stamp for the date and time the lock was created.

Elementary Lock The mode of lock for any lock entry in the SAP System, such as Shared, Exclusive, ExclusiveNonCumulative, and Optimistic.

Elementary Lock Count The total count of locks in the SAP System.

Group The name of the group associated with the lock. For example, RZLLITAB indicates the name of the lock group.

Hold Count The total number of locks held. For example, 1 indicates the total number of locks held.

Host A text string identifier or name for the computer serving as the host. For example, agoura1 indicates the identifier for the host.

Lock Age (mins) The amount of time, in minutes, elapsed since the lock was created.

Lock Age (mins) (Superseded) The amount of time, in minutes, elapsed since the lock was created. For example, 33 indicates the number of minutes elapsed since the lock was created.

Lock Argument Count The total count of arguments of locked objects in the SAP System.

Lock Object Name The name of the object being locked. For example, ES_RZL_LIP indicates the name of the object being locked.

Lock Owner Count The total count of owners of locked objects in the SAP System.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Owner The name of the person associated with the lock. For example, LGREEN indicates the name of the person generating the lock.

Owner Name Contains the ID of the Lock User of the Logical Unit of Work (LUW).

Sample Time The time stamp for the date and time the agent collected the data from mySAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch

- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +RF=RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

System Number The identifier for the mySAP system you are monitoring. For example, 06 is the name of the mySAP system you are monitoring.

Transaction Code The identifier for the transaction code. For example, SMLG is the identifier for the transaction code.

Update Hold Count The total number of locks held for update. For example, 2 indicates the total number of locks held for update.

Update Owner The identifier for the person who holds the locks for update. For example, ddrum2..0002199901041 is the identifier for the person who holds the locks for update.

Userid The name of the user who has set a lock. For example, RBROWN is the name of the user generating locks.

Update Owner Contains the ID of the Lock User of the Logical Unit of Work (LUW)-Update Task.

Work Process The numeric identifier for the work process. For example, 3 is the number of the work process.

Logon Groups attributes

Logon Groups is a system level attribute group that provides information about the logon groups and server groups used to connect users to the instances in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Alternate IP Address The alternate IP address for this instance. For example, 10.21.1.11 is the name of the alternate IP address.

Alternate IP Address (v4/v6) The alternate IP address for this instance. This attribute is long enough to hold IPv4 or IPv6 addresses.

Current Favorite The current favorite status for this instance in this logon group, which means this instance is picked for the next user that requests this logon group. For example, YES indicates that this instance is picked for the next user that requests this Logon group. The following values are possible:

0 = No

1 = Yes

Current Response Time The current response time, in milliseconds, for this instance. For example, 56 is the number of milliseconds it takes for responses. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Current Users The current number of users on this instance. For example, 9 is the current number of users on this instance. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Event Frequency (per/min) The number of events per minute on this instance. For example, 13 is the number of events per minute on this instance. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Instance Name The name of the mySAP instance that is a member of this Logon/Server group. For example, ddrum2 PRD 00 is the name of the mySAP instance you are monitoring.

Logon Parameters This attribute is reserved for internal use only. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Maximum Response Time (ms) The maximum allowed response time, in milliseconds, for this instance in this Logon group. For example, 0 is the maximum allowed response time for this instance in this group. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Maximum Users The maximum allowed number of users in this Logon group on this instance. For example, 52 is the maximum allowed number of users in this Logon group on this instance. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Name The name of the Logon/Server group that is assigned to a number of instances. Users are automatically logged on to the instance with the best response time. This attribute provides single-byte character support only. For example, ALL SERVERS is the name of the Server group you are monitoring.

Name (Unicode) The name of the Logon/Server group that is assigned to a number of instances. Users are automatically logged on to the instance with the best response time. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Sample Time The time stamp for the date and time the agent collected the data from mySAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Statistics Sample Time The time stamp for the date and time that the agent created these current statistics.

Status The current instance status for this Logon/Server group. The following values are possible:

- 0 = Active
- 1 = Not Active

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

```
+AB = ABAP_Version_Mismatch
+DD = Data_collection_disabled
+NE = Instance_or_Group_does_not_exist
+NR = Instance_not_running
+RF=RFC_Error_Check_Agent_Log
+++ = No_applicable_data
```

Type The type of group that is being monitored. The following values are possible:

L = Logon S = Server

Logon Information attributes

Logon Information is a system level attribute group that provides both current and historical information about users who have logged on to the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Changing Time The date and time when this user ID was locked or unlocked.

Changing UserID The user ID that locked or unlocked the user specified in the Userid attribute.

Client The name of the client to which you are logged on. For example, 800 is the name of the client to which you are logged on.

Instance Name The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Invalid Password Count The current number of invalid logons for this particular user ID. For example, 3 indicates the current number of invalid logons for this particular user ID. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

IP Address The IP address of the workstation being used. For example, 10.20.112.14 is the IP address for the workstation.

IP Address (v4/v6) The IP address of the workstation being used. This attribute is long enough to hold IPv4 or IPv6 addresses.

Logon Logoff The action presently occurring at the workstation. The following values are possible:

0 = Logon Pending

- 1 = Logged On
- 2 = Invalid Logon
- 3 = Logged Off
- 9 = Current State

For example, Logon Pending indicates that a user is presently logging on to the workstation.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Session Duration (mins) The duration of the logon session, in minutes, calculated from the logon time and the logoff time. For example, 22 indicates the duration of the logon session, in minutes. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Terminal A text string identifier or name for the computer terminal where the user logged on to the mySAP system. For example, LBROWN indicates the computer terminal.

Time The time stamp for the date and time of the logon, the logoff, or the failed logon.

Userid The name of the user logging on to the session. For example, RBROWN is the name of the user initiating the session.

Userid State The lock state of the user ID. The following values are possible:

0 = Not locked. User ID is currently not locked and there was no locking or unlocking activity on the user ID during the sample period. This user state is not reported by the ABAP unless the user ID has an invalid password count greater than 0.

1 = Locked. User ID is currently locked and there was no locking or unlocking activity on the user ID during the sample period. This user state is always reported.

2=Unlocked. User ID is currently not locked and was in a locked state at some time during the sample period. There was one or more unlocking activities on the user ID during the sample period with the last activity being an unlock. This user state is reported only during the sample period in which it is detected.

3=Relocked. User ID is currently locked and was in an unlocked state at some time during the sample period. There was one or more locking activities on the user ID during the sample period with the last activity being a lock. This user state is reported only during the sample period in which it is detected.

Userid Type The type of user ID. The following values are possible:

- A = Dialog
- B = System
- C = CPIC
- L = Reference
- S = Service
- ? = Unknown

MAI Alert Inbox attributes

Messaging and Alert Infrastructure (MAI) Alert Inbox attributes provide information on critical business problems that occur. This attribute group can be used in queries, situations, and workspace views.

Alert Description Description of the alert. If a description of the alert is not available, nothing is shown.

Alert Id A unique ID that contains 32 characters. This ID identifies the alert within the MAI. This ID is not displayed on a user interface, but it is used to call other operations in the alert.

Alert Name Name that is associated with the alert. The Alert Name is the short name that relates to the alert.

Alert Text Value Represents the text value of a metric if a metric contains a text value. Values are not returned for objects, such as alerts or events, or non-text values. This value is useful for metrics that contain some Error/Warning text without any numeric values.

Alert Timestamp Date and time that the alert occurred in the Solution Manager System. The format of the time stamp is the UTC time stamp in short form (YYYYMMDDhhmmss).

Alert Priority Defined by the severity that is assigned to the alert during configuration and the current rating of an alert. By default, alerts are sorted by priority.

Alert Rating A rating, for example, Unknown, Green, Yellow or Red that is associated with an alert. The following values are possible:

0=Unknown 1=Green 2=Yellow 3=Red

Alert Severity Severity of an alert.

Category A category, for example, Availability, that is associated with an alert. Each alert belongs to a category. The following values are possible:

AV=Availability CO=Configuration PE=Performance EX=Exception

Default Period Frequency that the alert collection mechanism runs.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed Object Name Name of the Managed Object (MO) that is associated with an alert.

Managed Object Type Type of Managed Object (MO), for example, Technical System. The following types of MO are available:

0=Blank/Space/Unspecified 1=Database 2=Host Server 3=Process Integration (PI/XI) Domain 4=Technical Instance 5=Technical Component 6=Technical System 7=Technical Scenario 8=Connection

Managed Object Type Enum Type of Managed Object, for example, Database. The following values are possible:

0=Blank/Space/Unspecified 1=Database 2=Host Server 3=Process Integration (PI/XI) Domain 4=Technical Instance 5=Technical Component 6=Technical System 7=Technical Scenario

Object Type Type of object, for example, Alert. The following values are possible:

A=Alert E=Event M=Metric

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Sample Time The time stamp for the date and time the agent collected the data. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Status Status of an alert, for example, Open. The following values are possible:

O=Open C=Close A=Auto_close I=In_process P=Postpone T=Transferred

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system:

- +AB = ABAP_Version_Mismatch
- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

Technical Name A technical ID that is associated with an alert. The technical ID is not guaranteed to be unique for a specific alert. However, two semantically different alerts usually have different technical names.

MAI PI Channel Monitoring Alerts attributes

Messaging and Alert Infrastructure (MAI) Process Integration (PI) Channel Monitoring Alerts is the Solution Level (SLM) level attribute group that provides information in relation to the PI channels in the PI domain that are configured in the Solution Manager work center.

Adapter Engine Name of the adapter engine that is configured for the communication channel.

Adapter Namespace Name Displays the namespace that contains the type of adapter.

Adapter Type Displays the type of adapter that is selected and configured for the communication channel.

Communication Component Name Displays the communication component to which the communication channel is assigned.

Count Count of the PI Channel processing status. This attribute is not available for situations and it is used only in the PI Channel Processing Status graph view.

Direction Specifies the direction of the communication channel, for example, the sender or receiver channel.

Include for Alerting Indicates if a message is valid for alerting purposes.

Log Detail Describes the status of the communication channel. If an error occurs, the type of error is displayed.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Party Displays the communication party that is specified in the communication channel, if it is available.

PI Channel Name Name of the communication channel

Processing Status Status of the communication channel. The following values are possible:

- 1 = Channel_Started_and_Functioning
- 2 = Channel_Started_but_Inactive
- 3 = Channel_Started_but_errors_occurred
- 4 = Channel_Stopped
- -1 = N/A

Sample Time The time stamp for the date and time the agent collected data from mySAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch

- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

Timestamp The time stamp on which the channel is processed. Include for Alerting indicates whether the channel is valid for alerting purposes.

MAI PI Component Monitoring attributes

Messaging and Alert Infrastructure (MAI) Process Integration (PI) Component Monitoring is a Solution Monitoring (SLM) level attribute group that provides information about the status of the PI components that are configured in PI domains in Solution Manager. This attribute group can be used in queries, situations, and workspace views.

Availability Rating Availability of the component to the PI domain. The following values are possible:

1=Available_and_working

2=Available_but_not_working 3=Not_available 0=N/A

Available Status Availability of the component for monitoring purposes. The following values are possible:

X=Available Z=N/A

Availability Time Availability time of the component.

Component Name Name of the component that is monitored by the PI domain.

Component Stack Determines if the component is related to the ABAP stack or the Java stack.

Component Type Type of component that is monitored by the PI domain.

Managed System The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

PI Domain Description Description of the PI domain that is configured in Solution Manager.

PI Domain Name Name of the PI domain that is configured in Solution Manager. You might have more than one PI domain that is configured in Solution Manager.

Sample Time The time stamp for the date and time the agent collected the data. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Self Test Rating Status of the self test of the component in relation to the PI domain. The following values are possible:

1=Available_and_working 2=Available_but_not_working 3=Not_available 0=N/A

Self Test Status Availability of the component for self test. The following values are possible:

X=Available Z=N/A

Self Test Time The self test time of the component.

System Label System label that is generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the database server that is associated with the target mySAP system. The valid format is an alphanumeric string with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system that you are monitoring. For example, PRD. The valid format is an alphanumeric string with a maximum of three characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

MAI Solution Overview attributes

The Messaging and Alert Infrastructure (MAI) attribute group provides solution overview information in Solution Manager. This attribute group can be used in queries, situations, and workspace views.

Managed System The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

Sample Time The time stamp for the date and time the agent collected data from mySAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Solution ID ID of the solution. The valid format is an alphanumeric string, with a maximum of 15 characters.

Solution Name Name of the solution. The valid format is an alphanumeric string, with a maximum of 128 characters.

Solution Status Status of the solution. The valid format is an alphanumeric string, with a maximum of 1 characters. The following values are possible:

A = Active I = Inactive

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch

- + DD = Data_collection_disabled
- + NE = Instance_or_Group_does_not_exist
- + NR = Instance_not_running
- + RF = RFC_Error_Check_Agent_Log
- +++ = No_Applicable _data

Message Server Configuration attributes

The Message Server Configuration is a system level attribute group that provides information about the Message Server.

Logon Parameters Parameters that are passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

Message Server Host IP Address The IP address of the Message Server host. The type is string.

Message Server Host Name The name of the host (without the domain part) where the Message Server or ASCS is present. The type is string.

Message Server Status Provides information about the status of Message Server either running or not running. If yes, then the instance is the central instance to trigger the situation. The following values provide information about the system:

- 0 = NotRunning
- 1 = Running

SAPshcut_Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the database server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system that you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

System Release The release version number for the application server. The type is string.

Message Server Monitor attributes

This attribute group shows the detailed information about the client Message Server Monitor for a given SAP System. This attribute group can be used in queries, reports, and workspace views.

Field Name Shows Message Server Monitor Information. The valid format is an alphanumeric string, with a maximum of 50 characters.

Field Value Shows the Message Server Monitor value. The valid format is s, 40.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the SAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch

+DD = Data_collection_disabled

+NE = Instance_or_Group_does_not_exist

+NR = Instance_not_running

+RF = RFC_Error_Check_Agent_Log

+++ = No_applicable_data (No data available on SAP)

MSSQL Database Detail attributes

The MSSQL Database Detail is a system level attribute group that provides information about whether the MSSQL database is on machine with 3GB switch, or PAE, or AWE, and clustered.

Database Name The name of the database instance.

Database Type The type of database. The valid format is an alphanumeric string with a maximum of 10 characters.

Hostname Host name of the server where the MSSQL database is installed. The valid format is an alphanumeric string, with a maximum of 30 characters.

SQL Server Version The version of the SQL Server.

SQL Server Edition The edition of the SQL Server. The following values are possible:

- Y = Enterprise Edition
- C = Cluster in use

SQL Server Start Time The date and time when the SQL server started.

Param Diff Flag A Boolean value that indicates whether parameter difference exists between the runtime parameter settings of the SQL Server and the currently set values of the same parameters. The following values are possible:

N = No Y = Yes

Disk Perf Flag The data for ST06/OS06 and RZ20 is collected by SAPOSCOL. SAPOSCOL can only collect the values for disk I/O and display them in the SAP system, if the corresponding performance counters were activated via the command diskperf -Y (Reference SAP NOTE 189072).

Clustered SQL Server A Boolean value that indicates whether the SQL Server is clustered. The following values are possible:

N = No Y = Yes

3GB Switch SQL Server A Boolean value that indicates whether the SQL Server is on machine with 3GB switch. The following values are possible:

N = No Y = Yes

PAE SQL Server A Boolean value that indicates whether the SQL Server is on machine with Physical Address Extension (PAE). The following values are possible:

N = No Y = Yes

AWE SQL Server A Boolean value that indicates whether the SQL Server is on machine with Address Windowing Extensions (AWE). The following values are possible:

N = No

Y = Yes

Windows Version The version of the operating system that is running on the SQL Server host. The valid format is an alphanumeric string, with a maximum of 80 characters.

CPUs Used By SQL Server (Superseded) The number of CPUs on the host which runs SQL Server. The valid format is a 4-byte integer.

CPUs Used By SQL Server The number of CPUs on the host which runs SQL Server. The valid format is an 8-byte integer.

Number Of CPUs Configured (Superseded) The number of CPUs on which SQL Server is configured. The valid format is a 4-byte integer.

Number Of CPUs Configured The number of CPUs on which SQL Server is configured. The valid format is an 8-byte integer.

Mask The bitmask representing the CPUs available to Windows.

Physical Memory (mb) (Superseded) The amount of RAM (in MB) on the server running SQL Server. The valid format is a 4-byte integer.

Physical Memory (mb) The amount of RAM (in MB) on the server running SQL Server. The valid format is an 8-byte integer.

Trace Flag The trace flags which are currently set for the SQL Server.

SQL Memory Setting The settings of the SQL Server memory parameters.

Logon Parameters The parameters that are passed to the ksar3 transaction code to run Take Action commands. This attribute cannot be used for situations. Otherwise, this attribute is available to use like any other attribute. For example, it is available for reports, queries, and workspaces.

Managed System The identifier for the mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

SAPshcut Parameters The parameters that are passed to SAPshcut for any transaction launch definition.

System Label The system label that is generated from the SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server that is associated with the target SAP system.

System Name The three character SAP System Identifier (SID) or the system name for the mySAP system that you monitor. For example, CAN. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DB = No_support_for_this_database +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +OR = SAP_MaxDB_statistics_not_available +RF = RFC_Error_Check_Agent_Log

+++ = No_applicable_data

MSSQL Database Summary attributes

The MSSQL Database Summary is a system level attribute group that provides information about the MSSQL database, such as database size, log size, allocated log size, and free log size.

Allocated Database Size (mb) (Superseded) The total size of database (in MB) that is allocated. The valid format is a 4-byte integer.

Allocated Database Size (mb) The total size of database (in MB) that is allocated. The valid format is an 8-byte integer.

Allocated Log Size (mb) (Superseded) The size of log files (in MB) that are allocated. The valid format is a 4-byte integer.

Allocated Log Size (mb) The size of log files (in MB) that are allocated. The valid format is an 8-byte integer.

Database Name The name of the database instance.

Database Release The release that is associated with the database. The valid format is an alphanumeric string with a maximum of 10 characters.

Database Size (mb) (Superseded) The total size of database (in MB) that is free. The valid format is a 4-byte integer.

Database Size (mb) The total size of database (in MB) that is free. The valid format is an 8-byte integer.

Database Type The type of database. The valid format is an alphanumeric string with a maximum of 10 characters.

Free Log Size (mb) (Superseded) The size of log files (in MB) that are free. The valid format is a 4-byte integer.

Free Log Size (mb) The size of log files (in MB) that are free. The valid format is an 8-byte integer.

Log Size (mb) (Superseded) The size of log files in MB. The valid format is a 4-byte integer.

Log Size (mb) The size of log files in MB. The valid format is an 8-byte integer.

Logon Parameters The parameters that are passed to the ksar3 transaction code to run Take Action commands. This attribute cannot be used for situations. Otherwise, this attribute is available to use like any other attribute. For example, it is available for reports, queries, and workspaces.

Managed System The identifier for the mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

SAPshcut Parameters The parameters that are passed to SAPshcut for any transaction launch definition.

System Label The system label that is generated from the SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server that is associated with the target SAP system.

System Name The three character SAP System Identifier (SID) or the system name for the mySAP system that you monitor. For example, CAN. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DB = No_support_for_this_database +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +OR = SAP_MaxDB_statistics_not_available +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Number Range Buffer Details attributes

Number Range Buffer Details is an instance level attribute group that provides information about the Number Range Buffer used in a mySAP instance. This attribute group can be used in queries, situations, and workspace views.

Client A text string identifier, or number, for the originating client to which the number object applies. For example, 800 indicates the client system.

External Range Indicator of whether a number range is externally assigned or internally assigned. The following values are possible:

0 = No. Internally assigned

1 = Yes. Externally assigned

For example, NO indicates that number ranges are automatically assigned by the system.

From Number The lowest number in this number range. For example, 00000000100 indicates the lowest number in this number range.

Instance Name The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Interval To Number The highest number in this interval of this number range. For example, 0000000007699 indicates the highest number in this number range.

Last Number The last number assigned in this number range. For example, 000000007631 indicates the last number assigned in this number range.

Logon Parameters A reserved field for holding execution parameters for KSAR3. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Object Name The name of this number object. For example, SPO_NUM is the name of this number object.

Range Number The number associated with the number range. For example, 01 indicates the number associated with the number range.

Sample Time The time stamp for the date and time the agent collected the data from mySAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Sub-object Name The name associated with the sub-object number. For example, NUM is the name of this sub-object.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

To Number The highest number in this number range. For example, 0000000032000 indicates the highest number in this number range.

Year The year to which the number range applies. For example, 1998 indicates the year that the number range applies to. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Number Range Buffer Summary attributes

Number Range Buffer Summary is an instance level attribute group that provides summary and statistical information about the Number Range Buffer used in a mySAP instance. This attribute group can be used in queries, situations, and workspace views.

Buffer Calls The total number of calls to the number range buffer. For example, 78 indicates the number of calls to the number range buffer.

Buffer Responses Less Than 50us The total number of buffer responses less than 50 microseconds. For example, 54 indicates the number of buffer responses that are less than 50 microseconds.

Buffer Responses Less Than 1ms The total number of buffer responses that are less than 1 millisecond and greater than 50 microseconds. For example, 26 indicates the number of buffer responses that are less than 1 millisecond and greater than 50 microseconds.

Buffer Responses 1ms or Greater The total number of buffer responses that are 1 millisecond or greater. For example, 43 indicates the number of buffer responses that are greater than 1 millisecond.

Buffer Size The allocated buffer size in KB. For example, 669354 indicates the number of KB allocated to the buffer.

Conflicts The total number of number range buffer conflicts. For example, 6 indicates the number of number range buffer conflicts.

Current Entries The current number of entries in the number range buffer. For example, 43 indicates the current number of entries in the number range buffer.

Current Indexes The current number of indexes in the number range buffer. For example, 12 indicates the current number of indexes in the number range buffer.

Database Calls The number of calls to the database for number ranges. For example, 32 indicates the number of calls to the database for number ranges.

Get Calls The number of get calls to the number range buffer. For example, 78 indicates the number of get calls to the number range buffer.

Instance Name The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Logon Parameters A reserved field for holding execution parameters for KSAR3. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Max Entries The maximum number of entries in the number range buffer. For example, 1000 indicates the maximum number of entries in the number range buffer.

Max Indexes The maximum number of indexes in the number range buffer. For example, 500 indicates the maximum number of indexes in the number range buffer.

Sample Time The time stamp for the date and time the agent collected the data from mySAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Server Calls The number of calls to the server for the number range buffer. For example, 3 indicates the number of calls to the number range server.

Server Responses Less Than 1 ms The total number of server responses less than 1 millisecond. For example, 26 indicates the number of buffer responses that are less than 1 millisecond.

Server Responses Less Than 50 ms The total number of server responses less than 50 milliseconds and greater than 1 millisecond. For example, 54 indicates the number of buffer responses that are less than 50 milliseconds and greater than 1 millisecond.

Server Responses 50 ms or Greater The number of server responses that are 50 milliseconds or greater. For example, 22 indicates the number of server responses that 50 milliseconds or greater.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Timeouts The number of timeouts to the number range buffer. For example, 3 indicates the number of timeouts to the number range buffer.

Operating System Performance attributes

Operating System Performance is an instance level attribute group that provides information about the operating system on which a mySAP instance is running. The SAP OS collector must be running on the mySAP instance for data to be returned for these attributes. This attribute group can be used in queries, situations, and workspace views.

Idle CPU Percent The amount of time the CPU is not processing instructions, expressed as a percentage. For example, 93 indicates that the CPU is idle 93 percent of the time it is available. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Instance Name (Superseded) The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

KB Paged In (sec) The number of KB paged in per second. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

KB Paged Out (sec) The number of KB paged out per second. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

LAN Collisions (sec) The number of times LAN packets could not be delivered because two nodes attempted to send data at the same time.

LAN Collisions (sec) (Superseded) The number of times LAN packets could not be delivered because two nodes attempted to send data at the same time. For example, 2 indicates the number of times LAN packets could not be delivered because two nodes attempted to send data at the same time during the last second. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

LAN Errors (sec) The total number of errors on the LAN during the last second.

LAN Errors (sec) (Superseded) The total number of errors on the LAN during the last second. For example, 2 indicates the total number of errors on the LAN. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

LAN Packets In (sec) The number of units, known as packets, that were transferred from the LAN to mySAP during the last second.

LAN Packets In (sec) (Superseded) The number of units, known as packets, that were transferred from the LAN to mySAP during the last second. For example, 2 indicates the number of packets transferred per second. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

LAN Packets Out (sec) The number of units, known as packets, that were transferred from mySAP to the LAN during the last second.

LAN Packets Out (sec) (Superseded) The number of units, known as packets, that were transferred from mySAP to the LAN during the last second. For example, 2 indicates the number of packets transferred out per second. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Load Average Last Minute The average computing burden the system carried during the last 60 seconds. For example, 0.08 indicates the average computing burden the system carried.

Load Average Last 5 Minutes The average computing burden the system carried during the last five minutes. For example, 0.09 indicates the average computing burden the system carried.

Load Average Last 15 Minutes The load average during the last 15 minutes.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Pages In (sec) The number of pages read from disk to update memory references to pages that were not previously referenced during the last second. For example, 0 indicates that no pages were read from disk to update memory references. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Pages Out (sec) The number of modified pages written to disk during the last second. For example, 3 indicates the number of pages written to disk per second. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Physical Memory (kb) The total amount of physical memory (RAM). For example, 131136 indicates the total amount of physical memory, in KB. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Physical Memory Free (kb) The amount of physical memory (RAM) available, in KB. For example, 68976 indicates that 67 MB of RAM are available on this instance. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Physical Memory Free Percent The percentage of physical memory (RAM) available. For example, 78 indicates that 78% of RAM is available on this instance. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Sample Time The time stamp for the date and time the agent collected the data from mySAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Swap Space (kb) The total amount of swap space configured, in KB. For example, 205224 indicates the total amount of swap space configured, in KB. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Swap Space Free (%) The percentage of swap space available. For example, 78 indicates that 78% of swap space is available on this instance. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Swap Space Free (kb) The amount of swap space available, in KB. For example, 411452 indicates that 411 MB of swap space are available on this instance. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

- +AB = ABAP_Version_Mismatch
- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +OS = SAP_OS_collector_not_running
- +RF=RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

System CPU Utilization Percent The percentage of CPU used by system services. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

User CPU Utilization PercentThe percentage of CPU used by user tasks. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Oracle Database Performance Overview attributes

This attribute group represents Oracle Database Performance Overview.

Buffer Wait Time This is time, in seconds, to indicate the data buffer waiting time.

CPU Time CPU time, calculated as sum of CPU time used by current session.

CPU Usage Percent This attribute indicated the percentage of CPU usage. It is percentage of CPU time or elapsed time x CPU count.

Data Buffer Physical Reads These are number data buffer physical read operations on database.

Data Buffer Quality Percent The data buffer quality of the database. It is based on number of physical reads to the total number of reads. Data buffer quality should be at least 97% to ensure good performance.

Data Buffer Physical Writes These are number of data buffer physical write operations on database.

Dictionary Data Cache Quality Percent The Dictionary Data Cache Quality of the database. It should be greater than 80%.

Long Table Scans The number that indicated the Long Table Scans of the database.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System This is the identifier for this mySAP resource. The valid format is text string for a mySAP system, instance or group. This attribute cannot be used in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Sorts on Disk The number that indicated the number of sorts on disk.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the database server associated with the target mySAP system.

System Name This is the 3 character system name or sys ID.

Ratio of reads to user calls Number of logical reads per user call.

Ratio of user to recursive calls This is the ratio of user to recursive calls in the Oracle 7 monitor.

Output Requests attributes

Output Requests is a system level attribute group that provides information about all output requests in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Client A text string identifier or name for the originating client. For example, A800 indicates the identifier for the originating client.

Copies The number of copies requested. For example, 31 indicates the number of copies requested.

Creator The user ID for the originator of the request. For example, RSMITH indicates the originator of the request.

Department A text string identifier or name for the current department receiving the request. This attribute provides single-byte character support only. For example, DEV indicates the current department receiving the request.

Department (Unicode) A text string identifier or name for the current department receiving the request. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Error Print Requests The number of print requests with errors. For example, 3 indicates the number of print requests with errors.

Failed Print RequestsThe number of print requests that did not complete. For example, 2 indicates the number of print requests that did not complete.

Host Spool Id A text string identifier for the print host spooler. For example, CAN2 indicates the identifier for the host spooler.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Output Device A text string identifier or name for the current output device. This attribute provides single-byte character support only. For example, LP01 indicates the name of the output device.

Output Device (Unicode) A text string identifier or name for the current output device. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Output Format A text string identifier for the current output format. This attribute provides single-byte character support only. For example, X_65_255 indicates the output format.

Output Format (Unicode) A text string identifier for the current output format. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Print Pending Time Time calculated for the pending output request.

Print Pending Time (Superseded) Time calculated for the pending output request. A value of -1 indicates that there is no data at this time.

Print Reason The reason for the print request. The following values are possible:

- M = Manual request
- G = Print immediately
- A = Archive request
- ? = Unknown

Print Request Time The time stamp for the date and time the print request was created.

Print Status The status of a print request. The following values are possible:

- 0 = Problem
- 1 = Scheduled
- 3 = Unknown_in_OMS
- 4 = Completed_(problem)
- 7 = Printing
- 9 = Complete
- A = Printer_is_disabled
- B = Waiting_for_output_formatter
- C = Being_processed
- D = On_hold_after_a_problem
- E = Printer_is_locked
- F = Waiting_for_suitable_layout_set
- G = Fatal_Error_during_Processing
- H = Output_device_unavailable
- I = Internal_error_when_printing
- J = Status_unknown
- K = Deleted
- L = Incorrect
- M = Frontend_unavailable
- N = Query_problems
- O = Transferred_by_Command_to_the_Host_Spool
- P = Sent_to_LPD
- Q = Sent_to_SAPlpd
- R = Sent_to_Host_Spool
- S = Sent_to_IPP_Through_Host_Spool
- T = Sent_via_Mail
- U = Sent_to_RFC_Through_Host_Spool
- V = Waiting_for_Transfer_from_Front_End
- W = Sent_to_Front_End

- X = Forwarded_by_host_spool
- Y = Being_sent_to_host_spooler
- Z = Waiting_in_host_spooler
- ? = Unknown

Processed Print Requests The number of processed print requests. For example, 2 indicates the number of processed print requests.

Recipient A text string identifier or name for the current recipient of the request. For example, RBROWN indicates the name of the recipient for the request.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Size The amount of disk space or memory to which the request can spool. For example, 4056 indicates that 4 MB of disk space is available for the request.

Spool Number A numeric identifier for the spool file. For example, 31806 indicates the numeric identifier for the spool file.

Spool Title A text identifier or name for the spool file. This attribute provides single-byte character support only. For example, PRINTA indicates the title of the spool file.

Spool Title (Unicode) A text identifier or name for the spool file. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Spooler Host Name A text string identifier or name for the host where the spooler is running. For example, DDRUM2 indicates the name of the spooler host.

Spooler System Name A text string identifier or name for the system where the spooler is running. For example, DDRUM2_PRD indicates the system where the spooler is running.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Output Requests Status Count attributes

The Output Requests Status Count is a system level attribute group that provides information about the total count and status of the output requests in the SAP system.

Logon Parameters The parameters that are passed to the KSA3 transaction code to run Take Action commands. This attribute cannot be used for situations.

Managed System The identifier for the monitored SAP resource. This attribute cannot be used for situations. The valid format is an alphanumeric string with a maximum of 64 characters.

SAPshcut Parameters The parameters that are passed to run the sapshcut command for opening the SAPGUI. The valid format is an alphanumeric string with a maximum of 120 characters.

System Label The system label that is generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server that is associated with the target SAP system. The valid format is an alphanumeric string with a maximum of 37 characters.

System Name The system identifier (SID) for the SAP system that is being monitored, for example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +IN = ICM_Not_Running +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data (No data available on SAP) --- = Not_Supported_for_this_SAP_version

Output Requests Status The status of output requests, such as completed, waiting, inprocess, printing, problem, error, archive, and time or scheduled. The valid format is an alphanumeric string with a maximum of 150 characters.

Output Requests Status Count The total count of output requests for each status that occurred in the SAP system.

Perform Requested Action attributes

Perform Requested Action attributes are reserved for internal use only.

Persistence Layer Analysis attributes

Persistence layer analysis is an attribute group that provides information about the current configuration of the switch procedure and number of messages present in the SAP instance. This attribute group can be used in queries, situations, and workspace views.

Archived and Logically Deleted Messages Number of archived and logically deleted messages in the client. The valid format is a 4-byte integer.

Current Container Name of the current container table. The valid format is an alphanumeric string, with a maximum of 11 characters.

Current Fill Level in % Current fill level specified in percentage format. The valid format is an alphanumeric string, with a maximum of 4 characters.

Current Master Table Name of the current master table. The valid format is an alphanumeric string, with a maximum of 30 characters.

Instance Name Name of the instance for which you complete the persistance layer configuration. The valid format is an alphanumeric string, with a maximum of 320 characters.

Logically Deleted Messages Number of logically deleted messages in the client. The valid format is a 4-byte integer.

Managed System The identifier for this SAP resource. The valid format is a text string for a SAP system, instance, or group. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is an alphanumeric string, with a maximum of 64 characters.

Maximum Entries Maximum number of table entries for the master table. The valid format is a 4-byte integer.

Messages for Reorganization Number of messages for reorganization in the client. The valid format is a 4-byte integer.

Messages in Client Number of messages in the client. The valid format is a 4-byte integer.

Messages in CLUP Number of messages in the CLUP table. The valid format is a 4-byte integer.

Messages in CLUR Number of messages in the CLURtable. The valid format is a 4-byte integer.

Messages in Database Number of messages in the database. The valid format is a 4-byte integer.

Messages in EMAST Number of messages in the EMAST table. The valid format is a 4-byte integer.

Messages in ERROR Number of messages in the ERROR table. The valid format is a 4-byte integer.

Messages in MAST Number of messages in the MAST table . The valid format is a 4-byte integer.

Messages in VERS Number of messages in the VERS table. The valid format is a 4-byte integer.

Messages to be Archived Number of messages to be archived in the client. The valid format is a 4-byte integer.

Number of Entries Number of table entries in the master table. The valid format is a 4-byte integer.

Reorganization Status Status of reorganization and if it required or not. The valid format is an alphanumeric string, with a maximum of 1 characters. The following values are possible:

- 0 = Reorganization_not_(yet)_required
- 1 = Delete_or_archive_processed_XML_messages
- 2 = Reorganization_required

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System ID The SAP System Identifier (SID) for the SAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

Switch Mode Current mode of the switch. The valid format is s,1. The following values are possible:

- 0 = Not Activated
- 1 = Activated
- 2 = Activated

PI/XI Runtime Cache Alerts attributes

The PI XI Runtime Cache alerts attributes monitor PI Runtime cache alerts.

Adapter Engine Name The name of the adapter engine that is used to connect from the Integration Engine to the RFC adapter in the SAP systems and to the external systems.

Adapter Engine Type Adapter engine consists of two types: Sender and Receiver. The following enumerations are used:

IS = Integration_Server AE = Adapter_Engine CA = Central_Adapter_Engine PE = Process_Engine **Alert Category** The alert category that is associated with standard alert objects that are defined in the Runtime Workbench or Integration Directory in the system.

Cache Category Determines the type of cache. The following values are possible:

- MP = Mapping
- SM = Slit Mapping
- SA = Sender Agreement
- AC = Alert Category
- AE = Adapter Engine Connection Data Cache

Container ID The ID that is assigned to a PI object and a container.

Description of Alert Category A description of an alert category.

Direction Direction of the mapping interface.

IFM Name The name of the Inbound Fault Message that is defined in Cache Monitoring.

IFM Namespace Inbound Fault Message is the namespace that is defined for any sender interface error occurrence.

Interface Name The interface name that determines the adapter engine configuration between the sender and the receiver.

Interface Namespace The XML language that is associated with an interface. You can assign a namespace to element names and attribute names to differentiate them from other elements and attributes that have the same name but come from other XML documents. The namespace determines the adapter engine configuration between the sender and the receiver.

Long Name of an Alert Category The long name that is defined for an alert category.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Mapping Message Container ID The ID that is associated with the mapping message that has a container that is defined in PI.

Mapping Name The name of the mapping interface adapter engine and other channels and software components.

Mapping Namespace The XML language that relates to an interface. You can assign a namespace to element names and attribute names to differentiate them from other elements and attributes that have the same name but come from other XML documents. Mapping is used as an interface between the adapter engine and other channels and software components.

Mapping Program The system displays runtime instances or programs that relate to message mappings from the Enterprise Services Repository.

Mapping Required A mapping requirement check. The following values are possible:

- 0: No_Mapping_Required
- 2: Mapping
- 3: Merge_or_Split_Mapping

Mapping Step Container ID The ID that is associated with the mapping step that has a container that is defined in the PI.

Mapping Type An interface, operation, or message type of mapping. The following values are possible:

R3_ABAP: ABAP_Mapping JAVA: Java_Mapping XI_TRAFO: General_Mapping XSLT: XSLT_Mapping_Java R3_XSLT: XSLT_Mapping_R3 **Message URL** The adapter engine URL that is used to get system information, for example, port information.

Name The name of the alert.

Namespace The namespace that relates to the PI scenario.

OFM Name The name of the Outbound Fault Message that is defined in Cache Monitoring.

OFM Namespace Outbound Fault Message is the namespace that is defined for any sender interface error occurrence.

Parameter ID The ID that is assigned to the PI Object.

Parameter Type Defines the Inbound or Outbound mapping.

Runtime ID An ID that is generated after an adapter is made available in the runtime cache.

Sample Time The time stamp for the date and time the agent collected the data. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Software Component ID An ID that is assigned to a software component version to group objects by namespaces.

Software Component Version The version of the software component.

Step The sequence of the mapping step.

Support The version of the software component that is installed for cache monitoring.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

User Name The user name that is associated with the adapter engine.

Version ID An ID that is assigned to a software component version that groups objects by namespaces.

PI/XI Runtime Cache Monitoring attributes

The PI/XI Runtime Cache Monitoring attributes monitor the PI runtime cache.

Adapter Engine Name The name of the adapter engine that is used to connect from the Integration Engine to the RFC adapter in the SAP systems and to the external systems.

Adapter Engine Type Type of adapter engine, for example, sender and receiver. The following values are possible:

IS = Integration_Server AE = Adapter_Engine CA= Central_Adapter_Engine PE = Process_Engine

Adapter Name The adapter name that is defined in the adapter metadata in the Enterprise Services Repository. The following values are possible:

IDOC = IDoc_Adapter

IE = Intergration_Engine_Adapter HTTP = HTTP_Adapter RFC = RFC_Adapter XI_CONN = XI_Connectivity_Adapter PE = Process_Engine_Adapter

Adapter Namespace The namespace that is defined in the adapter metadata in the Enterprise Services Repository.

Adapter Software Component The software component version that is used to group objects by namespaces.

Cache Category Determines the type of cache. The following values are possible:

- RD = Receiver Determination
- ID = Interface Determination
- SA = Sender Agreement
- RA = Receiver Agreement
- CC = Communication Channel

Call Direction The direction of the message processing, for example, the sender or the receiver channel. The following values are possible:

- I = Inbound
- O = Outbound
- D = Direct_Connection

Communication Channel Information that relates to the status of the channel and administration.

Communication Component Name of the communication component that communicates between different XI components.

Communication Party Represents a larger unit that is involved in a collaborative process. By using a communication party, you address a company within a business-to-business process.

Component The component that is used when you map the interface with the adapter engine.

Condition A scenario where you configure multiple interfaces.

From Action Name The name of the from action that is run when the receiver or the sender is not defined.

From Action Namespace The XML language that is associated with an interface. From action is run when the receiver or the sender is not defined. You can assign a Namespace to element names and attribute names to differentiate them from other elements and attributes that have the same name but come from other XML documents.

From Party The party from which communication is received. From Party represents a larger process that is involved in a cross-component process.

From Party Agency A communication sender who represents an organization unit or a technical unit.

From Party Schema A communication sender who specifies the identification schema.

From Service Services that are received from the service provider. These services allow you to leverage SAP solutions to include a wide range of composite applications that are provided by customers and partners.

Interface Name The interface name that determines the adapter engine configuration between the sender and the receiver.

Interface Namespace The XML language that is associated with an interface. The namespace determines the adapter engine configuration between the sender and the receiver. You can assign a namespace to element names and attribute names to differentiate them from other elements and attributes that have the same name but come from other XML documents.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Mapping Name The name of the mapping interface adapter engine and other channels and software components. Mapping is used as an interface between the adapter engine and the different channels and software components. You can assign a namespace to element names and attribute names to differentiate them from other elements and attributes that have the same name but come from other XML documents.

Mapping Namespace The XML language that is associated with an interface. Mapping is used as an interface between adapter engine and different channels and software components. You can assign a namespace to element names and attribute names to differentiate them from other elements and attributes that have the same name but come from other XML documents.

Message Protocol Describes the XI payload message type.

Message Protocol Version A version of the message protocol that is classified into Version Major and Version Minor.

Operation Mapping by name, namespace, and software component.

Parameter ID An operation mapping with a parameterized mapping program in an interface determination.

Processing Sequence Defines the inbound and outbound running of the sender or receive interface.

Required The mapping requirement in Cache Monitoring. The following values are possible:

0: No_Mapping_Required

- 2: Mapping
- 3: Merge_or_Split_Mapping

Sample Time The time stamp for the date and time the agent collected data from mySAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Sequence The sequence of sending messages.

Software Component ID An ID that is assigned to a software component version to group objects by namespaces.

Support Package The release level of the software component that is installed for cache monitoring.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

To Action Name The name of the to action that is run when the receiver or the sender is not defined.

To Action Namespace The XML language that is associated with an interface. To action is run when the receiver or the sender is not defined. You can assign a namespace to element names and attribute names to differentiate them from other elements and attributes that have the same name but come from other XML documents.

To Operation Mapping by name, namespace, and software component for the receiver.

To Party The party from which communication is sent. To party represents a larger process that is involved in a cross-component process.

To Party Agency A communication receiver who represents an organization unit or a technical unit.

To Party Schema A communication receiver that specifies the identification schema.

To Service Services that are sent to the communication party. These services allow you to leverage SAP solutions to include a wide range of composite applications that are provided by customers and partners.

Transport Protocol Provides information about messages, type of system, and security. This protocol is a network protocol that transfers some payload from one node to another. It provides a level of transparency from the underlying network.

Transport Protocol Version The version of the transport protocol, for example, HTTP.

Validation Allows you to check the structure of the PI message load. The following values are possible:

- 0: None
- 1: Backward
- 2: Forward

Version ID An ID that is assigned to a software component version that groups objects by namespaces.

PI/XI Runtime Cache Statistics attributes

The PI/XI Runtime Cache Statistics attributes monitor the PI Runtime cache.

Agency The name of the cache representation.

Basic Software Component The SAP Basis version id of the software component.

Cache Category Determines the type of cache. The following values are possible:

- ST = Status_of_Run_Time_Cache
- PT = Party
- SR = Service
- PC = Process_Component
- SC = Software_Component
- IP = Integration_Process

Communication Component The name of the communication component that communicated between the different XI components.

Component ID Specifies the ID of the component that communicates with other XI components by using a dedicated service user.

Description Detailed description of the cache status.

Flag The READ or WRITE status of the Cache Monitoring events. The following values are possible:

X: Fal_Set_Event_has_Occured SPACE: Flag_is_Not_Set

Integration Process Component Defines the runtime version of the Integration Process in Cache Monitoring.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Party The name of the communication party who is specified in the communication channel.

Party ID The communication party ID that is specified in the communication channel.

Party in Directory The name of the communication party that is specified in the communication channel.

Party Schema The name of the database table or any file in the application server directory where the party data is stored.

Priority The priority of assigning the software component.

Process Component Directory A detailed list of the XI Process Components.

Process Component Namespace Repository The namespace that is defined for the XI Process Components.

Process Component Repository The total number of XI Process Components that are used in Cache Monitoring.

Repository Name The name of the Integration Process.

Repository Namespace The namespace that is associated with the Integration Process.

Repository Software Component The version of the software component.

Return Code The return code for the creation of the runtime version.

Sample Time The time stamp for the date and time the agent collected data from mySAP. This attribute is not for use in situations.

SAP Release The SAP Web Application Server release that is used when the cache is updated.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Service Schema The name of the database table or any file in the application server directory where the services data is stored.

Service Type The type of service, for example, Business Process, Business System or Business to Business Service. The following values are possible:

BP: Business Process BS: Business System SR: Services (B2B)

Status Status of the runtime cache. The following values are possible:

U = UP_TO_DATE O = OUT_OF_DATE R = REFRESH_STARTED P=IN_PROCESS E=INCONSISTENT X=UNKNOWN N=INITIAL T=ERROR

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Task The runtime version of the integration process that is represented by a Workflow task.

TOP Software Component The ID that is associated with the software.

Process Statistics attributes

This attribute group contains information about the number of XML messages processed by the Integration Engine. The statistics provides information about average, minimum, and maximum number of XML messages processed each day by the Integration Engine. This attribute group can be used in queries, reports, and workspace views.

Category The Category shows process statistics status and workload information. The valid format is an alphanumeric string, with a maximum of 50 characters.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Sample Interval End The time stamp for the stopping time of the data that is supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the starting time of the data that is supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the SAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data (No data available on SAP)

Value Shows process statistics status and workload count. The valid format is a 4-byte integer.

qRFC Inbound Queues attributes

This attribute group provides information about the inbound queues, its destination status and error messages. This attribute group can be used in queries, reports, and workspace views.

Client Client ID of the current User. The valid format is an alphanumeric string, with a maximum of 3 characters.

First TID First transaction ID of the Logical Unit of Work (LUW) of the inbound queue The valid format is an alphanumeric string, with a maximum of 24 characters.

First Timestamp First Execution time stamp. The valid format is time stamp.

Last Timestamp Last Execution time stamp. The valid format is time stamp.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Queue Count Number of queues group by queue status. The valid format is a 4-byte integer.

Queue Destination qRFC inbound queue logical destination in function call. The valid format is an alphanumeric string, with a maximum of 32 characters.

Queue Entries Number of Logical Unit of Work (LUW) entries of qRFC inbound queue. The valid format is a 4-byte integer.

Queue Error Messages Inbound queue error message according to the status of the queue. The valid format is an alphanumeric string, with a maximum of 73 characters.

Queue LUW Counter Inbound queue Logical Unit of Work (LUW) counter within a transaction. The valid format is an alphanumeric string, with a maximum of 8 characters.

Queue Name Name of qRFC Inbound Queue. The valid format is an alphanumeric string, with a maximum of 24 characters.

Queue Status qRFC inbound queue status. The valid format is an alphanumeric string, with a maximum of 8 characters. Valid fixed values are:

READ = READ READY = READYRUNNING = RUNNING EXECUTED = EXECUTED SYSFAIL = SYSFAILCPICERR = CPICERR STOP = STOP WAITSTOP = WAITSTOP WAITING = WAITING NOSEND = NOSEND NOSENDS = NOSENDS WAITUPDA = WAITUPDA ARETRY = ARETRY ANORETRY = ANORETRYMODIFY = MODIFY FINISHED = FINISHED HOLD = HOLD HOLDDEL = HOLDDEL HOLDEXE = HOLDEXE WCONFIRM = WCONFIRM

Queue Supplement Current qRFC supplement number. The valid format is a 4-byte integer.

Queue Version Current qRFC version. The valid format is an alphanumeric string, with a maximum of 8 characters.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name System ID of the SAP System running on the server. The valid format is an alphanumeric string, with a maximum of 3 characters. Valid fixed values are:

- +AB = ABAP_Version_Mismatch
- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

tRFC First Count First counter for the serialized tRFC. The valid format is an alphanumeric string, with a maximum of 24 characters.

tRFC Last Count Last counter for the serialized tRFC. The valid format is an alphanumeric string, with a maximum of 24 characters.

qRFC Inbound Queues Logical Unit of Work (LUW) attributes

This attribute group describes the qRFC Inbound queue LUW details for each queue. This attribute group can be used in queries, situations, and workspace views.

Application Server Timestamp Current time stamp for the Application Server. The valid format is time stamp.

Client Client ID of the current user. The valid format is an alphanumeric string, with a maximum of 3 characters.

Current Transaction Code Current code for a transaction. The valid format is an alphanumeric string, with a maximum of 20 characters.

LUW Host ID Host IP address that is converted from hex. The valid format is an alphanumeric string, with a maximum of 64 characters.

LUW Host ID in HEX Logical Unit of Work Host IP in hex. The valid format is an alphanumeric string, with a maximum of 8 characters.

LUW Process ID The Logical Unit of Work aRFC process ID. The valid format is an alphanumeric string, with a maximum of 4 characters.

LUW Timestamp aRFC time stamp. The valid format is time stamp.

LUW Timestamp in HEX aRFC time stamp in hex format. The valid format is an alphanumeric string, with a maximum of 8 characters.

LUW Transaction ID aRFC transaction ID. The valid format is an alphanumeric string, with a maximum of 4 characters.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

No Send No send. The valid format is an alphanumeric string, with a maximum of 1 characters.

Number of Attempts Number of attempts allowed when trying to establish a connection to the SAP System specified. The valid format is a 4-byte integer.

Original Transaction ID aRFC transaction ID. It is the part of the Logical Unit of Work unique transaction ID for the queue. The valid format is an alphanumeric string, with a maximum of 24 characters.

qRFC Function Module Name of the function module for the qRFC inbound queue. The valid format is an alphanumeric string, with a maximum of 30 characters.

qRFC User Logon name of the user. The valid format is an alphanumeric string, with a maximum of 12 characters.

Queue aRFC Program In externally called procedures, this is the name of the calling program, otherwise it is the name of the current program. The valid format is an alphanumeric string, with a maximum of 40 characters.

Queue aRFC State Status of an aRFC call, for example, RECORDED, CPICERR, or MAILED, READ. The valid format is an alphanumeric string, with a maximum of 8 characters.

Queue Destination Inbound queue logical destination used in the function call. The valid format is an alphanumeric string, with a maximum of 32 characters.

Queue Error Message Inbound queue error message according to the status of the queue. The valid format is an alphanumeric string, with a maximum of 73 characters.

Queue LUW Counter Inbound queue Logical Unit of Work (LUW) counter within a transaction. The valid format is an alphanumeric string, with a maximum of 8 characters.

Queue Mailed Value for queue mailed. The valid format is an alphanumeric string, with a maximum of 1 characters.

Queue Name Name of qRFC Inbound Queue. The valid format is an alphanumeric string, with a maximum of 24 characters.

Queue Reply Expected Reply expected from the queue. The valid format is an alphanumeric string, with a maximum of 1 characters.

Queue Status qRFC inbound queue status. The valid format is an alphanumeric string, with a maximum of 8 characters. Valid fixed values are:

READ = READREADY = READYRUNNING = RUNNING EXECUTED = EXECUTED SYSFAIL = SYSFAIL CPICERR = CPICERR STOP = STOP WAITSTOP = WAITSTOP WAITING = WAITING NOSEND = NOSEND NOSENDS = NOSENDS WAITUPDA = WAITUPDA ARETRY = ARETRY ANORETRY = ANORETRY MODIFY = MODIFYFINISHED = FINISHED HOLD = HOLD HOLDDEL = HOLDDEL HOLDEXE = HOLDEXE WCONFIRM = WCONFIRM

Retry Timestamp Retry time stamp of the Application Server. The valid format is time stamp.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name R/3 system name. The valid format is an alphanumeric string, with a maximum of 3 characters. Valid fixed values are:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data **RFC Counter** Counter for serialized tRFC. The vertex

tRFC Counter Counter for serialized tRFC. The valid format is an alphanumeric string, with a maximum of 24 characters.

tRFC Lock Counter Counter for serialized tRFC. The valid format is an alphanumeric string, with a maximum of 24 characters.

qRFC Outbound Queues attributes

qRFC Outbound Queues provides information about the outbound queues, the destination status, and error messages associated with the queues. This attribute group can be used in queries, reports, and workspace views.

Client Client ID of the current User. The valid format is an alphanumeric string, with a maximum of 3 characters.

First Timestamp First execution time stamp. The valid format is time stamp.

First Transaction ID First Transaction ID of the Logical Unit of Work (LUW) of the Outbound queue. The valid format is an alphanumeric string, with a maximum of 24 characters.

Last Application Server Timestamp Last execution time stamp. The valid format is time stamp.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is an alphanumeric string, with a maximum of 64 characters.

Queue Count Number of queues grouped by queue status. This attribute is for internal use in query. The valid format is a 4-byte integer.

Queue Destination qRFC outbound queue logical destination in function call. The valid format is an alphanumeric string, with a maximum of 32 characters.

Queue Entries Number of queue Logical Unit of Work (LUW) entries. The valid format is a 4-byte integer.

Queue Name Name of the qRFC outbound Queue. The valid format is an alphanumeric string, with a maximum of 24 characters.

Queue Status Status of the qRFC outbound queue. The valid format is an alphanumeric string, with a maximum of 8 characters. The following values are possible:

READ = READ READY = READY RUNNING = RUNNING EXECUTED = EXECUTED SYSFAIL = SYSFAIL CPICERR = CPICERR STOP = STOP WAITSTOP = WAITSTOP WAITING = WAITING NOSEND = NOSEND NOSENDS = NOSENDS WAITUPDA = WAITUPDA ARETRY = ARETRY ANORETRY = ANORETRY MODIFY = MODIFY FINISHED = FINISHED HOLD = HOLDHOLDDEL = HOLDDEL HOLDEXE = HOLDEXE WCONFIRM = WCONFIRM

Queue Error Message Outbound queue error message according to status of the queue. The valid format is an alphanumeric string, with a maximum of 73 characters.

Queue Counter In LUW Outbound queue Logical Unit of Work (LUW) Counter within a transaction. The valid format is an alphanumeric string, with a maximum of 8 characters.

Queue Version Current qRFC version. The valid format is an alphanumeric string, with a maximum of 8 characters.

Queue Supplement number Current qRFC supplement number. The valid format is a 4-byte integer.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from the SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name System ID of the SAP System running on server. The valid format is an alphanumeric string, with a maximum of 3 characters. Valid fixed values are:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

tRFC First Counter First counter for the serialized tRFC. The valid format is an alphanumeric string, with a maximum of 24 characters.

tRFC Last Counter Last counter for the serialized tRFC. The valid format is an alphanumeric string, with a maximum of 24 characters.

Wait for Queue Name of the queue for which the current queue execution is waiting. The valid format is an alphanumeric string, with a maximum of 24 characters.

qRFC Outbound Queues Details attributes

This attribute group describes the qRFC outbound queue LUW details for each queue. This attribute group can be used in queries, reports, and workspace views.

Appserver Timestamp Current time stamp of the Application Server. The valid format is time stamp.

Client Client ID of the current user. The valid format is an alphanumeric string, with a maximum of 3 characters.

Queue Name Name of the qRFC outbound Queue. The valid format is an alphanumeric string, with a maximum of 24 characters.

LUW Host ID Host IP address converted from hex. The valid format is an alphanumeric string, with a maximum of 64 characters.

LUW Process ID Logical Unit of Work process ID. The valid format is an alphanumeric string, with a maximum of 4 characters.

LUW Host ID in HEX Logical Unit of Work host IP ID in hex format. The valid format is an alphanumeric string, with a maximum of 8 characters.

LUW Timestamp aRFC time stamp. The valid format is time stamp.

LUW Timestamp in HEX aRFC time stamp in hex. The valid format is an alphanumeric string, with a maximum of 8 characters.

LUW Transaction ID aRFC Transaction ID. The valid format is an alphanumeric string, with a maximum of 4 characters.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

No Send No send. The valid format is an alphanumeric string, with a maximum of 1 characters.

Number of attempts Number of attempts allowed when trying to establish a connection to the SAP System specified. The valid format is a 4-byte integer.

qRFC Function Module Name of the function module for the qRFC outbound queue. The valid format is an alphanumeric string, with a maximum of 30 characters.

qRFC User qRFC user logon name. The valid format is an alphanumeric string, with a maximum of 12 characters.

Queue aRFC Program In externally called procedures, this is the name of the calling program, otherwise it is the name of the current program. The valid format is an alphanumeric string, with a maximum of 40 characters.

Queue aRFC Reply Reply expected. The valid format is an alphanumeric string, with a maximum of 1 characters.

Queue aRFC State Status of an aRFC call, for example, RECORDED, CPICERR, or MAILED, READ. The valid format is an alphanumeric string, with a maximum of 8 characters.

Queue aRFC Tcode Reply expected. The valid format is an alphanumeric string, with a maximum of 20 characters.

Queue Destination Outbound queue logical destination used in a function call. The valid format is an alphanumeric string, with a maximum of 32 characters.

Queue Error Message Outbound queue error messages according to the status of the queue. The valid format is an alphanumeric string, with a maximum of 73 characters.

Queue Mailed Value of the queue mailed. The valid format is an alphanumeric string, with a maximum of 1 characters.

Queue Name Name of the qRFC outbound Queue. The valid format is an alphanumeric string, with a maximum of 24 characters.

Queue Status Status of the qRFC outbound queue. The valid format is an alphanumeric string, with a maximum of 8 characters. Valid fixed values are:

READ = READ READY = READYRUNNING = RUNNING EXECUTED = EXECUTED SYSFAIL = SYSFAIL CPICERR = CPICERR STOP = STOP WAITSTOP = WAITSTOP WAITING = WAITING NOSEND = NOSEND NOSENDS = NOSENDS WAITUPDA = WAITUPDA ARETRY = ARETRY ANORETRY = ANORETRY MODIFY = MODIFY FINISHED = FINISHED HOLD = HOLDHOLDDEL = HOLDDEL HOLDEXE = HOLDEXE WCONFIRM = WCONFIRM

SAPshcut_Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name System ID of the SAP System running on the server. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

qRFC Saved Inbound Queues attributes

This attribute group provides information about the saved inbound queues, destination status, and error messages. This attribute group can be used in queries, reports, and workspace views.

CLIENT Client ID of the current user. The valid format is an alphanumeric string with a maximum of 3 characters.

First time stamp First Execution time stamp. The valid format is time stamp.

Last Timestamp Last Execution time stamp The valid format is time stamp.

Managed System The identifier for this SAP resource. The valid format is a text string for a SAP system, instance, or group. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

Queue Count Number of queues grouped by queue status. The valid format is a 4-byte integer.

Queue Entries Number of the Logical Unit of Work (LUW) entries in the qRFC saved inbound queue. The valid format is a 4-byte integer.

Queue Error Messages Saved inbound queue error message according to the status of the queue. The valid format is an alphanumeric string, with a maximum of 73 characters.

Queue LUW Counter Inbound queue Logical Unit of Work (LUW) counter within a transaction. The valid format is an alphanumeric string, with a maximum of 8 characters.

Queue Name Name of the qRFC Saved Inbound Queue. The valid format is an alphanumeric string, with a maximum of 24 characters.

Queue Status Status of the QRFC saved inbound queue. The valid format is an alphanumeric string, with a maximum of 8 characters. The following values are possible:

READ = READREADY = READYRUNNING = RUNNING EXECUTED = EXECUTED SYSFAIL = SYSFAIL CPICERR = CPICERR STOP = STOPWAITSTOP = WAITSTOP WAITING = WAITINGNOSEND = NOSEND NOSENDS = NOSENDS WAITUPDA = WAITUPDA ARETRY = ARETRY ANORETRY = ANORETRYMODIFY = MODIFY FINISHED = FINISHED HOLD = HOLDHOLDDEL = HOLDDEL HOLDEXE = HOLDEXE WCONFIRM=WCONFIRM

Queue Supplement Current qRFC supplement number. The valid format is a 4-byte integer.

Queue Version Current QRFC version. The valid format is an alphanumeric string, with a maximum of 8 characters.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name System ID of the SAP System running on the server. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch

- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

tRFC First Count Counter for the serialized tRFC. The valid format is an alphanumeric string, with a maximum of 24 characters.

tRFC Last Count Counter for the serialized tRFC. The valid format is an alphanumeric string, with a maximum of 24 characters.

qRFC Saved Inbound Queues LUW attributes

This attribute group provides the detail Logical unit of work information for each queue. This attribute group can be used in queries, reports, and workspace views.

Application Server Timestamp Current time stamp of the Application Server. The valid format is time stamp.

Client Client ID of the current user. The valid format is an alphanumeric string, with a maximum of 3 characters.

Current Transaction Code Current transaction code. The valid format is an alphanumeric string, with a maximum of 20 characters.

LUW Host ID Host IP address. It is the part of the Logical Unit of Work unique transaction ID for the queue. The valid format is an alphanumeric string with a maximum of 64 characters.

LUW Host ID in HEX Host IP address in Hex format. It is the part of the unique transaction ID for the queue. The valid format is an alphanumeric string with a maximum of 8 characters.

LUW Process ID aRFC process ID. The valid format is an alphanumeric string with a maximum of 4 characters.

LUW Timestamp aRFC time stamp. The valid format is time stamp.

LUW Timestamp in HEX aRFC time stamp in Hex format. The valid format is an alphanumeric string with a maximum of 8 characters.

LUW Transaction ID aRFC transaction ID. The valid format is an alphanumeric string with a maximum of 4 characters.

Managed System The identifier for this SAP resource. The valid format is a text string for a SAP system, instance, or group. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

No Send No Send. The valid format is an alphanumeric string with a maximum of 1 character.

Number of attempts Number of attempts allowed to establish a connection to the SAP system that is specified. The valid format is a 4-byte integer.

Original Transaction ID TID for the LUW queue. The valid format is an alphanumeric string with a maximum of 24 characters.

qRFC Function Module Name of the function module for the qRFC saved inbound queue. The valid format is an alphanumeric string with a maximum of 30 characters.

qRFC User qRFC user name. The valid format is an alphanumeric string with a maximum of 12 characters.

Queue aRFC Program Name of the calling program in externally called procedures, otherwise the name of the current program. The valid format is an alphanumeric string, with a maximum of 40 characters.

Queue aRFC State Status of an aRFC call, for example, RECORDED, CPICERR, MAILED, or READ. The valid format is an alphanumeric string, with a maximum of 8 characters.

Queue Destination Logical destination specified in the function call. The valid format is an alphanumeric string, with a maximum of 32 characters.

Queue Error Message Saved inbound queue error messages according to the status of the queue. The valid format is an alphanumeric string, with a maximum of 73 characters.

Queue Logical unit of work Counter Counter within a transaction (LUW). The valid format is an alphanumeric string, with a maximum of 8 characters.

Queue Mailed Value for the queue mailed. The valid format is an alphanumeric string, with a maximum of 1 character.

Queue Name Name of the qRFC saved inbound queue. The valid format is an alphanumeric string, with a maximum of 24 characters.

Queue Status Status of the qRFC saved inbound queue. The valid format is an alphanumeric string, with a maximum of 8 characters. The following values are possible:

READ = READ READY = READYRUNNING = RUNNING EXECUTED = EXECUTED SYSFAIL = SYSFAIL CPICERR = CPICERR STOP = STOP WAITSTOP = WAITSTOP WAITING = WAITING NOSEND = NOSEND WAITUPDA = WAITUPDA ARETRY = ARETRYANORETRY = ANORETRY MODIFY = MODIFYFINISHED = FINISHED HOLD = HOLD HOLDDEL = HOLDDEL HOLDEXE = HOLDEXE WCONFIRM = WCONFIRM

Reply Expected Reply expected. The valid format is an alphanumeric string, with a maximum of 1 character.

Retry Timestamp Retry time stamp of the application server. The valid format is time stamp.

SAPshcut_Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name System ID of the SAP System running on the server. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

tRFC Counter Counter for the serialized tRFC. The valid format is an alphanumeric string, with a maximum of 24 characters.

tRFC Lock Counter Counter for the serialized tRFC. The valid format is an alphanumeric string, with a maximum of 24 characters.

Unique Transaction ID Unique TID for the LUW of the queue. The valid format is an alphanumeric string, with a maximum of 24 characters.

qRFC Scheduler Overview attributes

The qRFC QIN Scheduler Overview attribute group and the qRFC QOUT Scheduler Overview attribute group provides qRFC QIN and QOUT scheduler overview information in the qRFC message queue on the SAP server. These attribute groups can be used in queries and workspace views. The historical data collection is not applicable for these attribute groups.

Client Client ID of the current user. The valid format is an alphanumeric string with a maximum of 3 characters.

Host ID Application ID of the source system. The valid format is an alphanumeric string, with a maximum of 32 characters.

Last Update Last update time stamp. The valid format is time stamp.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Number of Active Connections Number of active dialog processes that manage tRFC and qRFC from the source system where the scheduler runs, when the destination is the SAP system. The valid format is a 4-byte integer.

Number of Entries Number of Entries that are displayed. The valid format is a 4-byte integer.

Sample Time The time stamp for the date and time the agent collected the data. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Scheduler Displays the type of scheduler, for example, qRFC QIN or qRFC QOUT. The valid format is an alphanumeric string, with a maximum of 1 character. The following values are possible:

I = qRFC_QIN_Scheduler O = qRFC_QOUT_Scheduler

Scheduler Status Status of an ARFC call. The valid format is an alphanumeric string, with a maximum of 8 characters. The following values are possible:

Inactive=INACTIVE Active=ACTIVE Waiting=WAITING Sysfail=SYSFAIL Cpicerr=CPICERR Starting=STARTING Rscfail=RSCFAIL

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name System ID of the SAP System running on the server. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled

+NE = Instance_or_Group_does_not_exist

+NR = Instance_not_running

+RF = RFC_Error_Check_Agent_Log

+++ = No_applicable_data

qRFC QINQOUT Scheduler Details attributes

This attribute group provides detailed information about the QINQOUT scheduler. This attribute group can be used in queries, reports, and workspace views. The historical data collection is not applicable for this attribute group.

Active Connection Number of active connections. The valid format is a 4-byte integer.

Attempts Number of retries if the LUW had a CPIC error error when it was first processed. The valid format is a 4-byte integer.

Client Client ID of the current user. The valid format is an alphanumeric string, with a maximum of 3 characters.

Destination Logical Destination that is specified in the function call. The valid format is an alphanumeric string, with a maximum of 32 characters.

Destination with LOGON Data RFC destination with LOGON details. The valid format is an alphanumeric string, with a maximum of 32 characters.

Host ID It is the logical destination. The valid format is an alphanumeric string, with a maximum of 32 characters.

Maximum Number of Connections Maximum number of connections for the destination. The valid format is a 4-byte integer.

Maximum Runtime Maximum runtime for the Queue and Destination scheduler. The time is displayed in seconds.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Pause Delay between two registration retries. The time is displayed in seconds.

Processing Without tRFC Displays whether processing without tRFC or with tRFC. The valid format is an alphanumeric string, with a maximum of 3 character. The following values are possible:

Y = YES N = NO

Registration Mode Execution of queue in a DIALOG Work Process or in a BATCH Work Process. Execution type is D for dialog and B for batch. The following values are possible:

- D = Registration in dialog
- B = Registration by background job
- L = ENUM: Local registration

Sample Time The time stamp for the date and time the agent collected data from mySAP. This attribute is not for use in situations.

SAPshcut_Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Scheduler Shows the scheduler type. For example, qRFC QIN or qRFC QOUT. By default, this attribute is not filtered out to do not show on view table. The following values are possible:

I = qRFC_QIN_Scheduler O = qRFC_QOUT_Scheduler

Status Status of an ARFC call. The valid format is an alphanumeric string, with a maximum of 8 characters. The following values are possible:

```
Inactive = INACTIVE
Active = ACTIVE
Waiting = WAITING
Sysfail = SYSFAIL
Cpicerr = CPICERR
Starting = STARTING
Rscfail = RSCFAIL
```

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name System ID of the SAP System running on the server. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Timestamp of Application Server time stamp of the application server. The valid format is time stamp.

Type Entry types of queue in table of qRFC Outbound Queues to be activated automatically. The valid format is an alphanumeric string, with a maximum of 1 character.

User Name User Name. The valid format is an alphanumeric string, with a maximum of 12 characters.

Queue Name Name of qRFC inbound queue. The valid format is an alphanumeric string, with a maximum of a 24 character user name.

SAP MaxDB Activity History attributes

The SAP MaxDB Activity History is a system level attribute group that provides historical data about the SAP MaxDB Database, such as rollbacks, commits, physical read, and physical writes.

Catalog Cache Hit (%) The percentage of catalog cache access attempts when the required data was available in the cache. The valid format is a 4-byte integer.

Converter Cache Hit (%) The percentage of converter cache hit. The valid format is a 4-byte integer.

Commits The number of SQL commit statements that were processed. The valid format is a 4-byte integer.

Data Cache Hit (%) The percentage of data cache access attempts when the required data was available in the cache. The valid format is a 4-byte integer.

Database Type The type of database. The valid format is an alphanumeric string with a maximum of 10 characters.

Log Pages Written The number of log pages that are written in the SAP MaxDB database. The valid format is a 4-byte integer.

Logon Parameters The parameters that are passed to the ksar3 transaction code to run Take Action commands. This attribute cannot be used for situations. Otherwise, this attribute is available to use like any other attribute. For example, it is available for reports, queries, and workspaces.

Managed System The identifier for the mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Physical Reads The number of physical read operations that occurred in the database. The valid format is a 4-byte integer.

Physical Writes The number of physical write operations that occurred in the database. The valid format is a 4-byte integer.

Prepares The number of prepare SQL statements that were processed. The valid format is a 4-byte integer.

Rollbacks The number of rollback SQL statements that were processed. The valid format is a 4-byte integer.

SAPshcut Parameters The parameters that are passed to SAPshcut for any transaction launch definition.

System Label The system label that is generated from the SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server that is associated with the target SAP system.

System Name The three character SAP System Identifier (SID) or the system name for the mySAP system that you monitor. For example, CAN. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DB = No_support_for_this_database +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +OR = SAP_MaxDB_statistics_not_available +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Timestamp The time stamp when the data was collected.

User Calls The number of user call SQL statements that were processed. The valid format is a 4-byte integer.

Week Day The day of the week. The valid format is an alphanumeric string with a maximum of 3 characters.

SAP MaxDB Details attributes

The SAP MaxDB Details is a system level attribute group that provides detailed information about the locks in the SAP MaxDB database.

Locks Available (Superseded) The number of available lock entries in the database. The valid format is a 4-byte integer.

Locks Available The number of available lock entries in the database. The valid format is an 8-byte integer.

Maximum Set (Superseded) The maximum set of locks in the database. The valid format is a 4-byte integer.

Maximum Set The maximum set of locks in the database. The valid format is an 8-byte integer.

Average Set (Superseded) The average set of locks in the database. The valid format is a 4-byte integer.

Average Set The average set of locks in the database. The valid format is an 8-byte integer.

Lock Owners (Superseded) The number of lock owners. The valid format is a 4-byte integer.

Lock Owners The number of lock owners. The valid format is an 8-byte integer.

Lock Requester (Superseded) The number of lock requesters. The valid format is a 4-byte integer.

Lock Requester The number of lock requesters. The valid format is an 8-byte integer.

Row Locks (Superseded) The number of row locks in the database. The valid format is a 4-byte integer.

Row Locks The number of row locks in the database. The valid format is an 8-byte integer.

Table Locks (Superseded) The number of table locks in the database. The valid format is a 4-byte integer.

Table Locks The number of table locks in the database. The valid format is an 8-byte integer.

Collisions (Superseded) The number of collisions that occurred in the database. The valid format is a 4-byte integer.

Collisions The number of collisions that occurred in the database. The valid format is an 8-byte integer.

Escalations (Superseded) The number of escalations that occurred in the database. The valid format is a 4-byte integer.

Escalations The number of escalations that occurred in the database. The valid format is an 8-byte integer.

Log Pages Written (Superseded) The number of log pages that are written in the SAP MaxDB database. The valid format is a 4-byte integer.

Log Pages Written The number of log pages that are written in the SAP MaxDB database. The valid format is an 8-byte integer.

Waiting For Log Writer (Superseded) The waiting time for the log writer in the SAP MaxDB database. The valid format is a 4-byte integer.

Waiting For Log Writer The waiting time for the log writer in the SAP MaxDB database. The valid format is an 8-byte integer.

Group Commits (Superseded) The group commits in SAP MaxDB database. The valid format is a 4-byte integer.

Group Commits The group commits in SAP MaxDB database. The valid format is an 8-byte integer.

I/O Queue Overflow (Superseded) The log I/O queue overflow in SAP MaxDB database. The valid format is a 4-byte integer.

I/O Queue Overflow The log I/O queue overflow in SAP MaxDB database. The valid format is an 8-byte integer.

SQL Statements (Superseded) The SQL statement. The valid format is a 4-byte integer.

SQL Statements The SQL statement. The valid format is an 8-byte integer.

SQL Rollbacks (Superseded) The number of SQL rollback statements that were processed. The valid format is a 4-byte integer.

SQL Rollbacks The number of SQL rollback statements that were processed. The valid format is an 8-byte integer.

SQL Commits (Superseded) The number of SQL commit statements that were processed. The valid format is a 4-byte integer.

SQL Commits The number of SQL commit statements that were processed. The valid format is an 8-byte integer.

SQL Prepares (Superseded) The number of SQL prepare statements that were processed. The valid format is a 4-byte integer.

SQL Prepares The number of SQL prepare statements that were processed. The valid format is an 8-byte integer.

SQL Executes (Superseded) The number of SQL execute statements that were processed. The valid format is a 4-byte integer.

SQL Executes The number of SQL execute statements that were processed. The valid format is an 8-byte integer.

SQL Creates (Superseded) The number of SQL create statements that were processed. The valid format is a 4-byte integer.

SQL Creates The number of SQL create statements that were processed. The valid format is an 8-byte integer.

SQL Alters (Superseded) The number of SQL alter statements that were processed. The valid format is a 4-byte integer.

SQL Alters The number of SQL alter statements that were processed. The valid format is an 8-byte integer.

SQL Drops (Superseded) The number of SQL drop statements that were processed. The valid format is a 4-byte integer.

SQL Drops The number of SQL drop statements that were processed. The valid format is an 8-byte integer.

SQL Inserts (Superseded) The number of SQL insert statements that were processed. The valid format is a 4-byte integer.

SQL Inserts The number of SQL insert statements that were processed. The valid format is an 8-byte integer.

SQL Select and Fetches (Superseded) The number of SQL select and fetch statements that were processed. The valid format is a 4-byte integer.

SQL Select and Fetches The number of SQL select and fetch statements that were processed. The valid format is an 8-byte integer.

SQL Updates (Superseded) The number of SQL update statements that were processed. The valid format is a 4-byte integer.

SQL Updates The number of SQL update statements that were processed. The valid format is an 8-byte integer.

SQL Deletes (Superseded) The number of SQL delete statements that were processed. The valid format is a 4-byte integer.

SQL Deletes The number of SQL delete statements that were processed. The valid format is an 8-byte integer.

DB Procedure Internal Calls (Superseded) The number of internal calls that are made to the database procedure. The valid format is a 4-byte integer.

DB Procedure Internal Calls The number of internal calls that are made to the database procedure. The valid format is an 8-byte integer.

DB Procedure External Calls (Superseded) The number of external calls that are made to the database procedure. The valid format is a 4-byte integer.

DB Procedure External Calls The number of external calls that are made to the database procedure. The valid format is an 8-byte integer.

I/O Physical Reads (Superseded) The number of I/O physical read operations that occurred in the database. The valid format is a 4-byte integer.

I/O Physical Reads The number of I/O physical read operations that occurred in the database. The valid format is an 8-byte integer.

I/O Physical Writes (Superseded) The number of I/O physical write operations that occurred in the database. The valid format is a 4-byte integer.

I/O Physical Writes The number of I/O physical write operations that occurred in the database. The valid format is an 8-byte integer.

I/O Logical Reads (Superseded) The number of I/O logical read operations that occurred in the database. The valid format is a 4-byte integer.

I/O Logical Reads The number of I/O logical read operations that occurred in the database. The valid format is an 8-byte integer.

I/O Logical Writes (Superseded) The number of I/O logical write operations that occurred in the database. The valid format is a 4-byte integer.

I/O Logical Writes The number of I/O logical write operations that occurred in the database. The valid format is an 8-byte integer.

Data Cache Size (Superseded) The size of the data cache in the SAP MaxDB database. The valid format is a 4-byte integer.

Data Cache Size The size of the data cache in the SAP MaxDB database. The valid format is an 8-byte integer.

Data Cache Access (Superseded) The data cache access in the SAP MaxDB database. The valid format is a 4-byte integer.

Data Cache Access The data cache access in the SAP MaxDB database. The valid format is an 8-byte integer.

Data Cache Hits (Superseded) The number of data cache access attempts when the required data was available in the cache. The valid format is a 4-byte integer.

Data Cache Hits The number of data cache access attempts when the required data was available in the cache. The valid format is an 8-byte integer.

Data Access Hitratio The hit rate in the SAP MaxDB database.

Cache Converter Size (Superseded) The cache converter size in the SAP MaxDB database. The valid format is a 4-byte integer.

Cache Converter Size The cache converter size in the SAP MaxDB database. The valid format is an 8-byte integer.

Catalog Cache Size (Superseded) The maximum space that the catalog cache uses from the database heap. The valid format is a 4-byte integer.

Catalog Cache Size The maximum space that the catalog cache uses from the database heap. The valid format is an 8-byte integer.

Catalog Cache Access (Superseded) The catalog cache access in the SAP MaxDB database. The valid format is a 4-byte integer.

Catalog Cache Access The catalog cache access in the SAP MaxDB database. The valid format is an 8-byte integer.

Catalog Cache Hits (Superseded) The number of catalog cache access attempts when the required data was available in the cache. The valid format is a 4-byte integer.

Catalog Cache Hits The number of catalog cache access attempts when the required data was available in the cache. The valid format is an 8-byte integer.

Catalog Cache Hitratio The percentage of catalog cache access attempts when the required data was available in the cache.

Database Server The ID or name of the database server.

Database Name The name of the database instance that is defined for the SAP system.

Restart Time The time that is taken by the database to restart.

Version The version of the database.

Logon Parameters The parameters that are passed to the ksar3 transaction code to run Take Action commands. This attribute cannot be used for situations. Otherwise, this attribute is available to use like any other attribute. For example, it is available for reports, queries, and workspaces.

System Name The three character SAP System Identifier (SID) or the system name for the mySAP system that you monitor. For example, CAN. The following values provide information about the system

- +AB = ABAP_Version_Mismatch
- +DB = No_support_for_this_database
- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +OR = SAP_MaxDB_statistics_not_available
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

SAPshcut Parameters The parameters that are passed to sapshcut for any transaction launch definition.

System Label The system label that is generated from the SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server that is associated with the target SAP system.

SAP MaxDB Fill History attributes

The SAP MaxDB Fill History is a system level attribute group that provides historical data about the SAP MaxDB database, such as free and used memory space, logon parameters, and SAPshcut parameters.

Database Type The type of database. The valid format is an alphanumeric string with a maximum of 10 characters.

Logon Parameters The parameters that are passed to the ksar3 transaction code to run Take Action commands. This attribute cannot be used for situations. Otherwise, this attribute is available to use like any other attribute. For example, it is available for reports, queries, and workspaces.

Managed System The identifier for the mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

SAPshcut Parameters The parameters that are passed to SAPshcut for any transaction launch definition.

System Label The system label that is generated from the SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server that is associated with the target SAP system.

System Name The three character SAP System Identifier (SID) or the system name for the mySAP system that you monitor. For example, CAN. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DB = No_support_for_this_database +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +OR = SAP_MaxDB_statistics_not_available +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Timestamp The time stamp when the data was collected.

Total Free (%) The percentage of total free space that is available for the database object. The valid format is an alphanumeric string with a maximum of 5 characters.

Total Free (kb) (Superseded) The total amount of free space, (in KB) that is available for the database object. The valid format is a 4-byte integer.

Total Free (kb) The total amount of free space, (in KB) that is available for the database object. The valid format is an 8-byte integer.

Total Used (%) The percentage of total space that the database object used. The valid format is an alphanumeric string with a maximum of 5 characters.

Total Used (kb) (Superseded) The total amount of space (in KB) that the database object used. The valid format is a 4-byte integer.

Total Used (kb) The total amount of space (in KB) that the database object used. The valid format is an 8-byte integer.

Week Day The day of the week. The valid format is an alphanumeric string with a maximum of 3 characters.

SAP MaxDB Log Details attributes

The SAP MaxDB Log Details is a system level attribute group that provides information about the SAP MaxDB database log files that are created in the SAP system.

Available Log Size (kb) (Superseded) The log area (in KB) that is available for use. The valid format is a 4-byte integer.

Available Log Size (kb) The log area (in KB) that is available for use. The valid format is an 8-byte integer.

Log Size (kb) (Capacity) (Superseded) The size of log files in KB. The valid format is a 4-byte integer.

Log Size (kb) (Capacity) The size of log files in KB. The valid format is an 8-byte integer.

Used Log Area (Superseded) The amount (in KB) of log area that is used by the SAPMaxDB Database. The valid format is a 4-byte integer.

Used Log Area The amount (in KB) of log area that is used by the SAPMaxDB Database. The valid format is an 8-byte integer.

Used Log Percent (%) The percentage of log area that is used by the SAPMaxDB Database. The valid format is a 4-byte integer.

Unsaved log pages (Superseded) The number of unsaved log pages. The valid format is a 4-byte integer.

Unsaved log pages The number of unsaved log pages. The valid format is an 8-byte integer.

Log pages since last backup (Superseded) The amount of log area (in pages) that is available for use since the last backup. The valid format is a 4-byte integer.

Log pages since last backup The amount of log area (in pages) that is available for use since the last backup. The valid format is an 8-byte integer.

Reserved log size for REDO (Superseded) The amount of log area that is reserved to redo log records. The valid format is a 4-byte integer.

Reserved log size for REDO The amount of log area that is reserved to redo log records. The valid format is an 8-byte integer.

Sequence Number (Superseded) The highest log number that is assigned to a log in the database. The valid format is a 4-byte integer.

Sequence Number The highest log number that is assigned to a log in the database. The valid format is an 8-byte integer.

Log Segment Size (Superseded) The size (in KB) of the log segment. The valid format is a 4-byte integer.

Log Segment Size The size (in KB) of the log segment. The valid format is an 8-byte integer.

Log Segment Full The full log segment in the SAP MaxDB database.

Automatic Backup The automatic log backup in the SAP MaxDB database.

Savepoints (Superseded) The number of savepoints. The valid format is a 4-byte integer.

Savepoints The number of savepoints. The valid format is an 8-byte integer.

Checkpoints (Superseded) The number of checkpoints that occurred in the database. The valid format is a 4-byte integer.

Checkpoints The number of checkpoints that occurred in the database. The valid format is an 8-byte integer.

Mode The log mode in the SAP MaxDB database.

Mirrored The mirroring log area in the SAP MaxDB database.

Auto Overwrite The automatic overwriting of log area in SAP MaxDB database.

Log Writer The log pages writer in the SAP MaxDB database.

Logon Parameters The parameters that are passed to the ksar3 transaction code to run Take Action commands. This attribute cannot be used for situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

System Name The three character SAP System Identifier (SID) or the system name for the mySAP system that you monitor. For example, CAN. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DB = No_support_for_this_database +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +OR = SAP_MaxDB_statistics_not_available +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

SAPshcut Parameters The parameters that are passed to SAPshcut for any transaction launch definition.

System Label The system label that is generated from the SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server that is associated with the target SAP system.

SAP MaxDB Summary attributes

The SAP MaxDB Summary is a system level attribute group that provides information about the SAP MaxDB database, such as free and used memory space, logon parameters, and SAPshcut parameters.

Database Name The name of the database instance.

Database Release The release that is associated with the database. The valid format is an alphanumeric string with a maximum of 10 characters.

Database Type The type of database. The valid format is an alphanumeric string with a maximum of 10 characters.

Total Used (%) The percentage of total space that the database object used. The valid format is an alphanumeric string with a maximum of 5 characters.

Total Free (%) The percentage of total free space that is available for the database object. The valid format is an alphanumeric string with a maximum of 5 characters.

Logon Parameters The parameters that are passed to the ksar3 transaction code to run Take Action commands. This attribute cannot be used for situations. Otherwise, this attribute is available to use like any other attribute. For example, it is available for reports, queries, and workspaces.

System Name The three character SAP System Identifier (SID) or the system name for the mySAP system that you monitor. For example, CAN. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DB = No_support_for_this_database +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +OR = SAP_MaxDB_statistics_not_available +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

SAPshcut Parameters The parameters that are passed to SAPshcut for any transaction launch definition.

System Label The system label that is generated from the SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server that is associated with the target SAP system.

Total Size (mb) The total amount of available space (in MB) for the database object. The valid format is an alphanumeric string with a maximum of 20 characters.

Total Used (mb) The total amount of space (in MB) that the database object used. The valid format is an alphanumeric string with a maximum of 20 characters.

Total Free (mb) The total amount of free space, (in MB) that is available for the database object. The valid format is an alphanumeric string with a maximum of 20 characters.

SAP Office Inbox attributes

SAP Office Inbox is a system level attribute group that provides information about SAP office resources and mail in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Action Name The name of the mySAP action specified in the mail item, such as program name, function module, or transaction name. This attribute provides single-byte character support only. For example, Y_210_NOTIFY indicates the name of the action in progress.

Action Name (Unicode) The name of the mySAP action specified in the mail item, such as program name, function module, or transaction name. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Action Type The type of mySAP action specified in the mail item, such as program, function module name, or transaction. This attribute provides single-byte character support only. For example, FUNCTION MODULE indicates the type of SAP Office action associated with the mail item.

Action Type (Unicode) The type of mySAP action specified in the mail item, such as program, function module name, or transaction. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Attachment Type The type of mail item as specified by its file extension. For example, DOC, XLS, TXT, and so on. DOC indicates the type of mail item is a document type.

Attachments The number of attachments included with the mail item. For example, 3 indicates the three attachments are included with the mail item.

Author The name of the user who created the mail item. For example, WBROWN indicates the name of the user.

Changeable An indicator of whether a mail item is modifiable. The following values are possible:

- 0 = No
- 1 = Yes
- 2 = Author (by author only)

Client A text string identifier, or number, for the execution client. For example, 800 indicates the client.

Expiration Time The time stamp for the expiration date and time of the mail item.

Express Indicator of whether the mail item is an Express mail type or not. The following values are possible:

0 = No 1 = Yes

Inbox Pending Time (mins) The amount of time, in minutes, that the mail item spent in the inbox prior to being opened.

Inbox Pending Time (mins) (Superseded) The amount of time, in minutes, that the mail item spent in the inbox prior to being opened. For example, 1171 indicates that the mail item spent 1,171 minutes in the inbox before being opened. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Mail Name The name of the mail item. This attribute provides single-byte character support only. For example, NOTE indicates the name of the mail item.

Mail Name (Unicode) The name of the mail item. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Mail Title The title of the mail item. This attribute provides single-byte character support only.

Mail Title (Unicode)The title of the mail item. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Mail Type The type of mail item in the inbox. For example, Office, Workflow, or Deadline. This attribute provides single-byte character support only. Workflow indicates the mail item is of the Workflow type.

Mail Type (Unicode) The type of mail item in the inbox. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Open Time The time stamp for the date and time when the mail item was opened and viewed.

Owner The user name of the person who currently owns the mail item. For example, LGREEN indicates the name of the person who owns the mail item.

Priority The priority of the mail item (the higher the number, the higher the priority). For example, 9 indicates that the mail item is of a high priority.

Received Time The time stamp for the date and time when the mail item was received.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Sensitivity The sensitivity of the mail item. The following values are possible:

- P = Private
- F = Functional
- S = Standard
- C = Company confidential
- ? = Unknown

Sent Time The time stamp for the date and time the mail item was sent.

Size (bytes) (Superseded) The size, in bytes, of the mail item. For example, 1785 indicates the size of the mail item.

Size (bytes) (Superseded) The size, in bytes, of the mail item. For example, 1785 indicates the size of the mail item.

Status The status of the mail item. The following values are possible:

- 1 = Opened
- 2 = Unopened

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

User Name The name of the user who owns the SAP Office inbox. For example, LEROY BROWN is the name of the user who owns the SAP Office inbox.

Userid The identifier for the user who owns the SAP Office inbox. For example, LGREEN is the name of the user who owns the SAP Office inbox.

Saprouter Log attributes

Saprouter Log is a system level attribute group that provides information about the SAP router service in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Date Time The time stamp for the date and time that is recorded in the SAP Router log file.

File Name The name of the SAP Router log file that you are monitoring. For example, SAPROUTER.LOG is the name of the SAP Router log file name.

Log Data The text from the SAP Router log file that you are monitoring. For example, CONNECT FROM CO, Host 127.0.0.1 (local host) is data from the SAP Router log file.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Servers Details attributes

The Servers details attribute group provides information about all the SAP systems that are running on the sever machine (host). The server must be configured with Solution Manager. This attribute group can be used in queries, reports, and workspace views.

Product Instance Product instance that is running on the SAP server. The valid format is an alphanumeric string, with a maximum of 30 characters.

Installation Number Installation number of the SAP server. The valid format is an alphanumeric string, with a maximum of 10 characters.

IP Address IP Address of the host computer on which SAP is running. The valid format is an alphanumeric string, with a maximum of 31 characters.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

System Description Description of the SAP system that is running on the server. The valid format is an alphanumeric string, with a maximum of 80 characters.

System Id ID of the SAP system that is running on the server. The valid format is an alphanumeric string, with a maximum of 3 characters.

System Label Label of the SAP system that is running on the server. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name Name of the SAP system that is running on the server. The valid format is an alphanumeric string, with a maximum of 8 characters.

Instance Number Instance number of the SAP system that is running on the server. The valid format is an alphanumeric string, with a maximum of 2 characters.

System Number System Number of the SAP server.

Version Status of the SAP system version if multiple versions are installed. The valid format is an alphanumeric string, with a maximum of 10 characters.

Servers Overview attributes

This attribute group shows information about SAP servers (hosts) that are configured with Solution Manager. This attribute group can be used in queries, reports, and workspace views.

Application Server Hardware Information Application Server Hardware information in relation to the server where SAP is running. The valid format is an alphanumeric string, with a maximum of 50 characters.

Central System Routing Information Host to Central System routing information. The valid format is an alphanumeric string, with a maximum of 100 characters.

Central System to Server Routing Information Central System to Server routing information. The valid format is an alphanumeric string, with a maximum of 100 characters.

CPU Details CPU details of the host computer on which SAP is running. The valid format is an alphanumeric string, with a maximum of 50 characters.

CPU Frequency(Mhz) CPU Frequency of the host computer on which SAP is running. The valid format is a 4-byte integer.

Hardware Manufacturer Name of the server's hardware manufacturer where the SAP system is running. The valid format is an alphanumeric string, with a maximum of 120 characters.

Hostname Host name of the server on which SAP is running. The server must be configured with Solution Manager. The valid format is an alphanumeric string, with a maximum of 20 characters.

Host OS Operating System of the host server on which SAP is running. The valid format is an alphanumeric string, with a maximum of 50 characters.

IP Address IP Address of the server on which SAP is running. The valid format is an alphanumeric string, with a maximum of 31 characters.

Managed System The identifier for this SAP resource. The valid format is a text string for a SAP system, instance, or group. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is an alphanumeric string, with a maximum of 64 characters.

Main Memory (RAM) Size (kb) Size of the main memory on the server on which SAP is running. The valid format is a 4-byte integer.

No Of CPUs Number of CPUs on the server on which SAP is running. The valid format is a 4-byte integer.

OS Version Operating System version of on the server on which SAP is running. The valid format is an alphanumeric string, with a maximum of 16 characters.

SAPS Measured The SAP Application Performance and Sustainability value that shows the performance of the SAP system running on the server. The valid format is an alphanumeric string, with a maximum of 20 characters.

SAPS Vendor Name of the SAP vendor. The valid format is an alphanumeric string, with a maximum of 20 characters.

System Id System Name. The valid format is an alphanumeric string, with a maximum of 3 characters.

System Label System Label. The valid format is an alphanumeric string, with a maximum of 37 characters.

Virtual Memory Virtual Memory size of the host computer on which SAP is running. The valid format is a 4-byte integer. Valid fixed values are:

N/A=-1

Service Response Time attributes

Service Response is an instance level attribute group that provides performance information about the services running in a mySAP instance. These services include batch, dialog, enqueue, gateway, message, spool, and update. This attribute group can be used in queries, situations, and workspace views.

Avg CPU Time (ms) The average amount of time, in milliseconds, the CPU processed instructions for this transaction.

Avg CPU Time (ms) (Superseded) The average amount of time, in milliseconds, the CPU processed instructions for this transaction. For example, 60 indicates that the amount of time the CPU processed instructions for this transaction averaged 60 milliseconds during the sampling period.

Avg Database Request Time (ms) The average amount of time, in milliseconds, the database processed this transaction.

Avg Database Request Time (ms) (Superseded) The average amount of time, in milliseconds, the database processed this transaction. For example, 12 indicates that the amount of time elapsed to complete database requests for this transaction averaged 12 milliseconds during the sampling period.

Avg Response Time (ms) The average amount of time, in milliseconds, elapsed to process a request for this mySAP service.

Avg Response Time (ms) (Superseded) The average amount of time, in milliseconds, elapsed to process a request for this mySAP service. For example, 121 indicates that the response time averaged 121 milliseconds during the sampling period.

Avg Wait Time (%) The average amount of time, expressed as a percentage, an unprocessed step waited in the queue for a free work process. For example, 10 indicates that the amount of time, expressed as a percentage, an unprocessed step waited in the queue for an available work process averaged ten percent during the sampling period.

Avg Wait Time (ms) The average amount of time, in milliseconds, an unprocessed step waited in the queue for a free work process.

Avg Wait Time (ms) (Superseded) The average amount of time, in milliseconds, an unprocessed step waited in the queue for a free work process. For example, 5 indicates that the amount of time, in milliseconds, an unprocessed step waited in the queue for a free work process averaged 5 milliseconds during the sampling period.

Dialog Steps Number of dialog steps.

Instance Name The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Max CPU Time (ms) The maximum amount of time, in milliseconds, the CPU processed instructions for this transaction.

Max CPU Time (ms) (Superseded) The maximum amount of time, in milliseconds, the CPU processed instructions for this transaction. For example, 180 indicates that the maximum amount of time, in milliseconds, the CPU processed instructions for this transaction was 180 milliseconds during the sampling period.

Max Database Request Time (ms) The maximum amount of time, in milliseconds, elapsed for the database to process this transaction.

Max Database Request Time (ms) (Superseded) The maximum amount of time, in milliseconds, elapsed for the database to process this transaction. For example, 54 indicates that the maximum amount of time elapsed to complete database requests for this transaction was 54 milliseconds during the sampling period.

Max Response Time (ms) The maximum amount of time, in milliseconds, elapsed to process a request for this mySAP service.

Max Response Time (ms) (Superseded) The maximum amount of time, in milliseconds, elapsed to process a request for this mySAP service. For example, 203 indicates that the maximum amount of time elapsed to process a request for this mySAP service was 203 milliseconds during the sampling period.

Max Wait Time (ms) The maximum amount of time, in milliseconds, an unprocessed step waited in the queue for a free work process.

Max Wait Time (ms) (Superseded) The maximum amount of time, in milliseconds, an unprocessed step waited in the queue for a free work process. For example, 7 indicates that the maximum amount of time an unprocessed step waited in the queue for an available work process was 7 milliseconds during the sampling period.

Min CPU Time (ms) The minimum amount of time, in milliseconds, the CPU processed instructions for this transaction.

Min CPU Time (ms) (Superseded) The minimum amount of time, in milliseconds, the CPU processed instructions for this transaction. For example, 30 indicates that the minimum amount of time, in milliseconds, the CPU processed instructions for this transaction was 30 milliseconds during the sampling period.

Min Database Request Time (ms) The minimum amount of time, in milliseconds, elapsed for the database to process this transaction.

Min Database Request Time (ms) (Superseded) The minimum amount of time, in milliseconds, elapsed for the database to process this transaction. For example, 6 indicates that the minimum amount of time elapsed to complete database requests for this transaction was 6 milliseconds during the sampling period.

Min Response Time (ms) The minimum amount of time, in milliseconds, elapsed to process a request for this mySAP service.

Min Response Time (ms) (Superseded) The minimum amount of time, in milliseconds, elapsed to process a request for this mySAP service. For example, 8 indicates that the minimum amount of time elapsed to process a request for this mySAP service was 8 milliseconds during the sampling period.

Min Wait Time (ms) The minimum amount of time, in milliseconds, an unprocessed step waited in the queue for a free work process.

Min Wait Time (ms) (Superseded) The minimum amount of time, in milliseconds, an unprocessed step waited in the queue for a free work process. For example, 1 indicates that the minimum amount of time an unprocessed step waited in the queue for a free work process was 1 millisecond during the sampling period.

Private Mode Entered A text string that indicates whether the private address mode was entered. The following values are possible

- 0 = No
- 1 = Yes

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The starting time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Service Frequency (Superseded) The number of times per minute this service was requested during the sample period. For example, 3 indicates that this service was requested three times per minute during the sampling period.

Service Frequency The number of times per minute this service was requested during the sample period. For example, 3 indicates that this service was requested three times per minute during the sampling period.

Service Request The number of times per minute this service was requested during the sample period.

Service Type The mySAP service category including batch, dialog, enqueue, gateway, message, spool, and update. For example, Dialog indicates that you are monitoring the mySAP dialog service.

Service Type Encoded The encoded SAP service type. The following values are possible

- A = AutoABAP
- B = Background
- C = CPI-C
- D = Dialog
- E = Enqueue
- F = FTP
- H = HTTP
- L = ALE
- N = NNTP
- M = SMTP
- P = Plugin
- R = RFC
- S = Spool
- T = HTTPS
- U = Update
- Y = BufferSync
- $2 = V2_Update$
- . = Others

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Set Default Sample Period attributes

Set Default Sample Period attributes are reserved for internal use only.

Solution Manager Business Process Alerts attributes

Solution Manager Business Process Alerts is an attribute group that provides information about the most important Business Processes in a SAP Solution Manager system.

Alert Message The message associated with the alert.

Alert Rating The rating of the alert. The following values are possible:

- 1 = Green
- 2 =Yellow
- 3 = Red
- 4 = Unknown
- -1 = N/A

Alert Timestamp The date and time associated with the alert.

Alert Type The type of alert, for example, start, delay, or duration.

Client The number of the client.

Managed System The identifier for this SAP resource.

Monitoring ID Monitoring ID of the business process alert.

Monitoring Type Monitoring type of business process alert.

SAP System Name of the SAP system.

Sample Interval End The time stamp for the stopping time of the data that is supplied by the SAP agent. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

Sample Interval Start The time stamp for the starting time of the data that is supplied by the SAP agent. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

Sample Time The timestamp for the date and time when the agent collected data from SAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Solution Id Solution Id of the solution defined in Solution Manager.

System ID The SAP System Identifier (SID) for the SAP system you are monitoring.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Solution Manager Business Process Monitoring attributes

Solution Manager Business Process Monitoring is an attribute group that provides information about the most important Business Processes in a SAP Solution Manager system.

Alert Message The message associated with the alert.

Alert Rating The rating of the alert. The following values are possible:

1 = Green 2 = Yellow 3 = Red 4 = Unknown

-1 = N/A

Alert Timestamp The date and time associated with the alert.

Alert Type The type of alert, for example, start, delay, or duration.

Client The number of the client.

Managed System The identifier for this SAP resource.

Monitoring ID Monitoring ID of the business process alert.

Monitoring Type Monitoring type of business process alert.

SAP System Name of the SAP system.

Sample Interval End The time stamp for the stopping time of the data that is supplied by the SAP agent. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

Sample Interval Start The time stamp for the starting time of the data that is supplied by the SAP agent. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

Sample Time The time stamp for the date and time when the agent collected data from SAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Solution ID Solution Id of the solution defined in Solution Manager.

System ID The SAP System Identifier (SID) for the SAP system you are monitoring.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running

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+RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Solution Manager Early Watch Alerts attributes

This attribute group contains information about early watch alerts. This attribute group can be used in queries, reports, and workspace views.

Installation Number Installation Number of the Early Watch alert. The valid format is an alphanumeric string, with a maximum of 10 characters.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Planned Date The time stamp for the planned date and time of the Early Watch Alert. The valid format is time stamp.

Rating Alert rating. The valid format is an alphanumeric string, with a maximum of 1 characters. The following values are possible:

- G = Not Critical
- Y = Critical
- R = Very Critical
- N = Undefined
- P = Planned
- W = Waiting for Download
- T = Download Transferred
- D = Session Delayed
- X = Session Deleted

Report URL The URL of the Early Watch Alert report. The valid format is an alphanumeric string, with a maximum of 255 characters.

Sample Interval End The time stamp for the stopping time of the data that is supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the start time of the data that is supplied by the SAP agent. This attribute is not for use in situations.

Sample Time The time stamp for the date and time that the agent collected the data from SAP. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is time stamp.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Session Number Number of the session. The valid format is an alphanumeric string, with a maximum of 13 characters.

Solution ID ID of the solution. The valid format is an alphanumeric string, with a maximum of 16 characters.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name This is the 3 character system name or sys ID. ie the one used during this products' development was 'can'. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

- +++ = No_applicable_data
- + NR = Instance_not_running
- + DD = Data_collection_disabled

- + NE = Instance_or_Group_does_not_exist
- + RF = RFC_Error_Check_Agent_Log
- + AB = ABAP_Version_Mismatch

Solution Manager Landscape Databases attributes

The Solution Manager landscape databases attributes provide information about the databases that are configured in Solution Manager. This attribute group can be used in queries, situations, and workspace views.

Database Name The name of the database that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 10 characters.

Database Hostname The host name of the server on which the database is running. The valid format is an alphanumeric string, with a maximum of 64 characters.

Database Patch Level The patch level of the database that is configured in Solution Manager. The valid format is an alphanumeric string, with a maximum of 32 characters.

Database Release Database release information. The valid format is an alphanumeric string, with a maximum of 16 characters.

Database Vendor The database Vendor that is configured in Solution Manager. The valid format is an alphanumeric string, with a maximum of 120 characters.

Managed System The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

SAPshcut_Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the database server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system that you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Database Version The version of the database that is configured in Solution Manager. The valid format is an alphanumeric string, with a maximum of 10 characters.

Solution Manager Landscape Databases And System attributes

The Solution Manager Landscape Databases And System attributes provide information about the databases and systems that are configured in Solution Manager 7.2. This attribute group can be used in queries, situations, and workspace views.

Database Name The name of the database that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 10 characters.

Database Release The database release information. The valid format is an alphanumeric string, with a maximum of 16 characters.

Database Vendor The database Vendor that is configured in Solution Manager. The valid format is an alphanumeric string, with a maximum of 120 characters.

Managed System The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

SAPshcut_Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the database server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system that you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data --- = Not_Supported_for_this_SAP_version

Global ID The global ID of the database that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 36 characters.

Caption The caption of the database that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 1024 characters.

Registration Source The registration source of the database that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 32 characters.

Landscape ID The landscape ID of the database that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 128 characters.

Database Creation Date The date when the database that is configured in solution manager was created. The valid format is an alphanumeric string, with a maximum of 14 characters.

Landscape Directory ID The landscape directory ID of the database and the system that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 512 characters.

Landscape Directory Key The landscape directory key of the database and the system that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 512 characters.

Database Description The description of the database that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 1024 characters.

Remote Connection The remote connection of the database that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 60 characters.

Database Type The type of the database that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 10 characters.

System Bits The system bits of the database that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 10 characters.

Connection Address The connection address of the database that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 255 characters.

Cluster Type The type of the database cluster that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 32 characters.

System Type The type of the system that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 16 characters.

Installation Number The installation number of the system that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 10 characters.

License Number The license number of the system that is configured in solution manager. The valid format is an alphanumeric string, with a maximum of 10 characters.

System Creation Date The date when the system that is configured in solution manager was created. The valid format is an alphanumeric string, with a maximum of 14 characters.

Product Flag Displays whether there is a dialog for product version. The following values are possible:

X = Contains dialog for product version

<blank> = Does not contain dialog for product version

Solution Manager Landscape Software Components attributes

This attribute group shows software component information in the solution manager landscape. This attribute group can be used in queries, reports, and workspace views.

Component Type Type of component installed on the SAP server. The valid format is an alphanumeric string, with a maximum of 10 characters.

Software Component Version A software component version is a shipment unit for design objects in the Integration Repository (also known as Repository Objects). A software component version can be used in different product versions.

Group Keys Group keys that are used by the software component. The valid format is an alphanumeric string, with a maximum of 10 characters.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is an alphanumeric string, with a maximum of 64 characters.

SAP Release SAP release. The valid format is an alphanumeric string, with a maximum of 10 characters.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Software Component Name of the software component installed on the SAP server. The valid format is an alphanumeric string, with a maximum of 30 characters.

Support Package Level Support Package Level of a Software Component. The valid format is an alphanumeric string, with a maximum of 10 characters.

System Name of the SAP system that is monitored by the mySAP agent. The valid format is an alphanumeric string, with a maximum of 8 characters.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system that you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data **Version** Version of the SAP product, which is ACTIVE. The valid format is an alphanumeric string, with a maximum of 10 characters.

Solution Manager MAI PI Message Flow Detail attributes

Messaging and Alert Infrastructure (MAI) Process Integration (PI) Message monitor is the Solution Monitoring (SLM) level attribute group that provides details of the PI component messages for a specific time range.

Cancelled Count Number of Cancelled messages that relate to the PI component that is monitored.

Error Count Number of error messages that relate to the PI component that is monitored.

Forwarded Count Number of forwarded messages that relate to the PI component that is monitored.

Managed System The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

PI Component Name Name of the PI component. Messages are related to this PI component.

PI Domain Description Description of the PI domain that is configured in Solution Manager.

PI Domain Name Name of the PI domain that is configured in Solution Manager. You might have more than one PI domain that is configured in Solution Manager.

Receiver Channel Name of the Receiver Channel in the PI.

Receiver Component Name of the Receiver component in the PI.

Receiver Interface Name of the Receiver Interface in PI.

Receiver Namespace Name of the Receiver Namespace in the PI.

Receiver Party Name of the Receiver Party in the PI.

Sample Interval End The time stamp for the stopping time of the data that is supplied by the SAP agent. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

Sample Interval Start The time stamp for the starting time of the data that is supplied by the SAP agent. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

Sample Time The time stamp for the date and time when the agent collected data from SAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Scheduled Count Number of scheduled messages that relate to the PI component that is monitored.

Sender Channel Name of the Sender Channel in the PI.

Sender Component Name of the sender component in the PI.

Sender Interface Name of the sender Interface in the PI.

Sender Namespace Name of the sender Namespace in the PI.

Sender Party Name of the Sender Party in the PI.

Success Count Number of messages with a successful status.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch

+ DD = Data_collection_disabled

+ NE = Instance_or_Group_does_not_exist

+ NR = Instance_not_running

+ RF = RFC_Error_Check_Agent_Log

+++ = No_Applicable _data

Time Range The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

Solution Manager MAI PI Message Monitoring attributes

Messaging and Alert Infrastructure (MAI) Process Integration (PI) Message Monitor is a Solution Monitoring (SLM) level attribute group that provides information in relation to time ranges. These time ranges are provided for viewing the message details on the Solution Manager system.

Description Description of the time range.

End Low A time stamp that is used internally to get data from the SAP system. This attribute is not available for use in situations. Otherwise, this attribute is available for use in reports, queries, and workspaces.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Sample Interval End The time stamp for the specific date and time that the collection period stopped. This attribute is not for use in situations.

Sample Interval Start The time stamp for the specific date and time that the collection period started. This attribute is not for use in situations.

Sample Time The time stamp for the date and time the agent collected the data. This attribute is not for use in situations.

Start High A time stamp that is used internally to get data from the SAP system. This attribute is not available for use in situations. Otherwise, this attribute is available for use in reports, queries, and workspaces.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Time Range This is the filter criteria that you use to view the message details that are associated with PI components in the PI domain. It shows all the time ranges that are configured in the Solution Manager SAP system, for example, Current Week, or Today.

Solution Manager System Instance attributes

This attribute group shows instance information in the solution manager landscape. This attribute group can be used in queries, reports, and workspace views.

Group Keys Group key that is used by the client to logically group users or customers in the SAP system. The valid format is an alphanumeric string, with a maximum of 10 characters.

Instance The instance of the SAP system that is running on the SAP server. The valid format is an alphanumeric string, with a maximum of 64 characters.

Logical System The logical name of the SAP system. The valid format is an alphanumeric string, with a maximum of 10 characters.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

PPMS Product PPMS product. The valid format is an alphanumeric string, with a maximum of 30 characters.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Server Name Name of the server in the SAP system. The valid format is an alphanumeric string, with a maximum of 20 characters.

System Host name on the system. The valid format is an alphanumeric string, with a maximum of 8 characters.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running

+RF = RFC_Error_Check_Agent_Log

+++ = No_applicable_data

Version Version of the current SAP system and whether it is active or inactive. The valid format is an alphanumeric string, with a maximum of 10 characters.

Solution Overview attributes

This attribute group provides solution overview information in Solution Manager. This attribute group can be used in queries, situations, and workspace views.

Managed System The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Solution ID ID of the solution. The valid format is an alphanumeric string, with a maximum of 15 characters.

Solution Name Name of the solution. The valid format is an alphanumeric string, with a maximum of 128 characters.

Solution Status Status of the solution. The valid format is an alphanumeric string, with a maximum of 1 characters. The following values are possible:

- A = Active
- I = Inactive

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

- +AB = ABAP_Version_Mismatch
- + DD = Data_collection_disabled
- + NE = Instance_or_Group_does_not_exist
- + NR = Instance_not_running
- + RF = RFC_Error_Check_Agent_Log
- +++ = No_Applicable _data

Spool Requests attributes

Spool Requests is a system level attribute group that provides information about all spool requests in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Authorization An authority object indicating permission to view a spool request. For example, RSMITH in the profile indicates that the user has permission to view a spool request.

Client The identifier or number for the originating client. For example, 800 indicates the client.

Copies The number of copies requested. For example, 3 indicates the number of copies requested.

Cover Page An indicator showing whether a cover page was requested. The following values are possible:

- N = NoCover
- D = PrinterDefault
- S = CoverPage
- ? = Unknown

Create Time The time stamp for the date and time the request was created.

Creator The user ID for the originator of the request. For example, RSMITH indicates the user ID for the originator of the request.

Delete After Print An indicator showing whether to delete or keep the spool file after printing. The following values are possible:

- K = Keep
- D = Delete
- ? = Unknown

Delete Time The time stamp for the date and time after which you can delete the spool file.

Department A text string identifier or name for the current department receiving the output of the request. This attribute provides single-byte character support only. For example, PAYROLL indicates the name of the department receiving the output.

Department (Unicode) A text string identifier or name for the current department receiving the output of the request. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Error Print Requests The total number of print requests with errors. For example, 1 indicates the number of print requests with errors.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Output Device A text string identifier or name for the output destination for the spool request. This attribute provides single-byte character support only. For example, LP01 indicates the output destination for the spool request.

Output Device (Unicode) A text string identifier or name for the output destination for the spool request. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Output Format A text string identifier for the current output format. This attribute provides single-byte character support only. For example, X_65_255 indicates the current output format.

Output Format (Unicode) A text string identifier for the current output format. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Processed Print Requests The total number of processed print requests. For example, 15 indicates the number of processed print requests.

Recipient A text string identifier or name for the current recipient of the request. For example, RSMITH indicates the name of the current recipient of the request.

Request Closed An indicator showing whether the spool file can be appended. The following values are possible:

- C = Closed
- 0 = Open

Sample Interval End The time stamp for the stopping time of the data supplied by the Monitoring Agent for mySAP. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the Monitoring Agent for mySAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Size The size in number of pages available for the spool request. For example, 14638 indicates the number of pages available for the request.

Spool Number A numeric identifier for the spool file. For example, 31808 indicates the numeric identifier for the spool file.

Spool Title A text identifier or name for the spool file. For example, LISTISLP01RSMITH indicates the textual identifier of the spool file.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data **Total Print Requests** The total number of print requests for this spool request. For example, 3 indicates the total number of print requests for this spool request.

Synchronous and Asynchronous communication alerts attributes

This attribute group monitors the communication between a sender capable of sending or receiving synchronous requests and a receiver capable of sending or receiving asynchronous responses.

Asynchronous Message ID The Message ID associated with the synchronous response.

BPE Status The business process engine status of the Synchronous and the Asynchronous bridge. The following values are possible:

W=WAIT A=Timeout E=Internal Error X=OK

Communication Timeout The time of the communication timeout in the Integration Engine pipeline.

Communication Timeout Sec The time of the communication timeout in the Integration Engine pipeline in seconds.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Pipeline Status The status of the pipeline.

Sample Time The time stamp for the date and time that the agent collected the data. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Server The SAP application server.

StatusOverall status of the Synchronous and the Asynchronous process. The following values are possible:

1=No_Error 2=Error_Possible 3=Error

Synchronous Message ID The Message ID associated with the synchronous request.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No applicable data

Transfer Date The transfer date and time of the request to the Business Process Engine.

System Log attributes

System Log is an instance level attribute group that provides information about all messages written to the system log in a mySAP instance. This attribute group can be used in queries, situations, and workspace views.

Client A text string identifier or number for the originating client. Use this attribute to specify an identifier for a client. For example, 800 indicates the identifier for the originating client.

Development Class The identifier for the development class. For example, STUW is the identifier for the development class.

Entry Time The time stamp for the date and time that the log entry was made.

Instance Name The name of the application instance that you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance that you are monitoring.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Message Class A text string identifier or name for the category of the message. The following values are possible:

- K = SAP_Web_AS_Problem
- S = Operation_Trace
- T = Transaction_Problem
- W = Warning
- X = Miscellaneous

Message Number A text string identifier or name for the system message. For example, S74 indicates the identifier for the system message.

Message Text Descriptive text associated with the system message. This attribute provides single-byte character support only. For example, CONVERSATION ID 53659 indicates the text of the system message.

Message Text (Unicode) Descriptive text associated with the system message. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Program Name A unique identifier or name for the ABAP program that was running. This attribute provides single-byte character support only. For example, SAPLY210 indicates the name of the ABAP program.

Program Name (Unicode) A unique identifier or name for the ABAP program that was running. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Record Count Count of system messages of a certain category. Reserved for use in queries to count messages by varying criteria.

Record Number The log record number. This attribute is not for use in situations.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Severity Severity of the system log.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system that you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch

+DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Task Type A text string identifier for the type of task associated with the entry. For example, RD indicates the type of task associated with the entry.

Terminal A text string identifier or name for the computer terminal where the user logged on to the mySAP system. For example, LBROWN indicates the computer terminal.

Transaction Code A unique identifier for the transaction whose processing resulted in the log entry. For example, A309 indicates the identifier for the transaction.

User A text string identifier or user ID for the user whose activities resulted in the log entry. For example, RSMITH indicates the user who generated the log entry.

System Logon Information attributes

System Logon Information is a system level attribute group that provides both current and historical information about users who have logged on to the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Changing Time The date and time when this user ID was locked or unlocked.

Changing UserID The user ID that locked or unlocked the user specified in the Userid attribute.

Client The name of the client to which you are logged on. For example, 800 is the name of the client to which you are logged on.

Instance Name The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Invalid Password Count The current number of invalid logons for this particular user ID. For example, 3 indicates the current number of invalid logons for this particular user ID. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

IP Address The IP address of the workstation being used. For example, 10.20.112.14 is the IP address for the workstation.

IP Address (v4/v6) The IP address of the workstation being used. This attribute is long enough to hold IPv4 or IPv6 addresses.

Logon Logoff The action presently occurring at the workstation. The following values are possible:

- 0 = Logon Pending
- 1 = Logged On
- 2 = Invalid Logon
- 3 = Logged Off
- 9 = Current State

For example, Logon Pending indicates that a user is presently logging on to the workstation.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Session Duration (mins) The duration of the logon session, in minutes, calculated from the logon time and the logoff time. For example, 22 indicates the duration of the logon session, in minutes. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Terminal A text string identifier or name for the computer terminal where the user logged on to the mySAP system. For example, LBROWN indicates the computer terminal.

Time The time stamp for the date and time of the logon, the logoff, or the failed logon.

Userid The name of the user logging on to the session. For example, RBROWN is the name of the user initiating the session.

Userid State The lock state of the user ID. The following values are possible:

0 = Not locked. User ID is currently not locked and there was no locking or unlocking activity on the user ID during the sample period. This user state is not reported by the ABAP unless the user ID has an invalid password count greater than 0.

1 = Locked. User ID is currently locked and there was no locking or unlocking activity on the user ID during the sample period. This user state is always reported.

2=Unlocked. User ID is currently not locked and was in a locked state at some time during the sample period. There was one or more unlocking activities on the user ID during the sample period with the last activity being an unlock. This user state is reported only during the sample period in which it is detected.

3=Relocked. User ID is currently locked and was in an unlocked state at some time during the sample period. There was one or more locking activities on the user ID during the sample period with the last activity being a lock. This user state is reported only during the sample period in which it is detected.

Userid Type The type of user ID. The following values are possible:

- A = Dialog
- B = System
- C = CPIC
- L = Reference
- S = Service
- ? = Unknown

System Log Details attributes

System Log Details is an instance level attribute group that provides detailed information about one message in the System Log attribute group. This attribute group can be used in queries and workspace views.

Entry Time The time stamp for the date and time that the log entry was made.

Instance Name The name of the application instance that you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance that you are monitoring.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Message Description Descriptive text providing information about the system activity that resulted in the message. This attribute provides single-byte character support only. For example, Problem Class indicates the text of the system message.

Message Description (Unicode) Descriptive text providing information about the system activity that resulted in the message. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Message Text Descriptive text associated with the system message. This attribute provides single-byte character support only. For example, CPIC return code 20 indicates a communication error.

Message Text (Unicode) Descriptive text associated with the system message. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Record Number The log record number.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

System Monitoring Alert View attributes

System Monitoring Alert view displays alerts that are generated in the satellite systems connected to SAP Solution Manager. The open alerts view shows alerts that have not yet been analyzed and alerts that are yet to complete. This view does not necessarily reflect the current status of the system. This attribute group can be used in queries, situations, and workspace views.

Alert Description An alert message from the System Monitoring that provides more details on the reason for the alert. The valid format is an alphanumeric string, with a maximum of 120 characters.

Alert Numeric Value The numeric value for the alert from System Monitoring. The valid format is a 4-byte integer.

Alert Object Number The object number associated with alerts. The valid format is an alphanumeric string, with a maximum of 10 characters.

Alert Rating An indicative number that represents the level of severity used to identify or exclude a category of alert. The valid format is a 4-byte integer. The following values are possible:

Green = 1 Unknown = 2 Yellow = 3 Red = 4 **Alert Unit** The unit of the alert. The valid format is an alphanumeric string, with a maximum of 10 characters.

Alert Value The severity value of the alert that comes from system monitoring. The valid format is an alphanumeric string, with a maximum of 250 characters.

Last But One Object Last but one object. The valid format is an alphanumeric string, with a maximum of 120 characters.

Managed System The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Monitored By Solution Solution name under which the alert is generated. The valid format is an alphanumeric string, with a maximum of 128 characters.

Monitoring Type The type of alerts. The valid format is an alphanumeric string, with a maximum of 2 characters. The following values are possible:

System Monitoring Current State = SC System Monitoring Open Alerts = SH

Monitor Object Represents a component of the IT environment that is monitored, such as the CPU of a server, the dialog system, or background processing. The valid format is an alphanumeric string, with a maximum of 120 characters.

MTE Name A text string for the monitoring tree element with which this alert is associated. The valid format is an alphanumeric string, with a maximum of 256 characters.

Number A unique identifier assigned by the SAP agent that represents the alert type and subtype. Use this numeric value or range of values to identify or exclude an alert. The valid format is a 4-byte integer.

Previous Object The previous object. The valid format is an alphanumeric string, with a maximum of 120 characters.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Server IP Address IP address of the server. The valid format is an alphanumeric string, with a maximum of 31 characters.

Solution ID Solution ID under which the alert is generated. The valid format is an alphanumeric string, with a maximum of 15 characters.

Status The alert status that indicates whether an alert is Open or Acknowledged. The valid format is an alphanumeric string, with a maximum of 20 characters. Data for this attribute is not applicable at this time. The following value is possible:

-1 = N/A

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled=+DD + NE = Instance_or_Group_does_not_exist + NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

System Monitoring attributes

System Monitoring is a Solution Monitoring (SLM) level attribute group that provides configuration status and availability status information about SAP systems.

Availability Availability of the system and instance. The following values are possible:

0=Not Applicable 1=Ok 2=Warnings 3=Not_Ok 4=Unknown

Configuration Configuration status of the system including results of configuration setting checks and updates to the configuration settings. The following values are possible:

0=Not Applicable 1=Ok 2=Warnings 3=Not_Ok 4=Unknown

Configuration Status Overall configuration status of the SAP system. The following values are possible:

0=Not Applicable 1=Ok 2=Warnings 3=Not_Ok 4=Unknown

Count Overall count of the SAP systems by availability and configuration status.

Exception Information about the error messages in the SAP system.

0=Not Applicable 1=Ok 2=Warnings 3=Not_Ok 4=Unknown

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Performance Status of the critical performance indicators in the SAP System.

Product Version Description of the product version that is installed on the SAP System.

Sample Time The time stamp for the date and time the agent collected the data. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data **System Type** Type of SAP system, for example, ABAP or JAVA.

Technical System Name Name of the technical SAP system.

System Overview attributes

This attribute group shows system overview information in the solution manager landscape. This attribute group can be used in queries, reports, and workspace views.

Database Hostname Database server host name used by the SAP server. The valid format is an alphanumeric string, with a maximum of 20 characters.

Database IP Address IP address of the database server The valid format is an alphanumeric string, with a maximum of 31 characters.

Database OS Release Number The operating system release number for the database server. The valid format is an alphanumeric string, with a maximum of 16 characters.

Database OS Type Type of operating system used by the database server The valid format is an alphanumeric string, with a maximum of 50 characters.

Database Release Release associated with the database. The valid format is an alphanumeric string, with a maximum of 16 characters.

Database Type Type of database. The valid format is an alphanumeric string, with a maximum of 120 characters.

Gateway Interface Port Number The SAP Gateway Interface Port Number carries out RFC services within the SAP systems which are based on TCP/IP. These services also enable SAP Systems and external programs to communicate with one another.

Hostname Host name of the SAP system. The valid format is an alphanumeric string, with a maximum of 20 characters.

Install Number Install number for the SAP system. The valid format is an alphanumeric string, with a maximum of 10 characters.

Instance Instance defined by the SAP system. The valid format is an alphanumeric string, with a maximum of 30 characters.

IP Address IP Address of the SAP server. The valid format is an alphanumeric string, with a maximum of 31 characters.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces.

Message Server host name Host name of the message server. The valid format is an alphanumeric string, with a maximum of 20 characters.

Message Server IP Address IP address of the message server. The valid format is an alphanumeric string, with a maximum of 31 characters.

Message Server OS Release OS release associated with the message server. The valid format is an alphanumeric string, with a maximum of 16 characters.

Message Server OS Type OS type associated with the message server. The valid format is an alphanumeric string, with a maximum of 50 characters.

Number Used to perform statistic calculations.

Product Type SAP server product type. The valid format is an alphanumeric string, with a maximum of 30 characters.

Product Version Version of the SAP product. The valid format is an alphanumeric string, with a maximum of 30 characters.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Name of the system that is monitored by the SAP agent. The valid format is an alphanumeric string, with a maximum of 8 characters.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values provide information about the system:

+AB = ABAP_Version_Mismatch

- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data

System Number System number of the SAP Server. The valid format is an alphanumeric string, with a maximum of 18 characters.

System Number Number associated with the SAP system. The valid format is an alphanumeric string, with a maximum of 2 characters.

Transport Domain Transport domain for the Sap System. The valid format is an alphanumeric string, with a maximum of 10 characters.

Type of database Database type of a SAP satellite system.

System Topology attributes

This attribute group provides information on the system topology view in the solution manager landscape. This attribute group can be used in queries, reports, and workspace views.

Context The value of this attribute is selected as the topology node display name. The valid format is an alphanumeric string, with a maximum of 64 characters.

Node Index Node index that displays the topology view. The valid format is a 4-byte integer.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries and workspaces.

Node Type Node type in the topology view. The valid format is a 4-byte integer. The following values are possible:

- 1= System
- 2 = Client
- 3 = Instance
- 4 = Software_Component

Parent Index Parent index of topology node. The valid format is a 4-byte integer.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

System Name of the SAP system that is monitored by the mySAP agent. The valid format is an alphanumeric string, with a maximum of 8 characters.

System Label System label generated from <SID>_<DBhostname>, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system that you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values provide information about the system:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

TCP/IP Connection Monitoring attributes

TCP/IP Connection Monitoring is a system level attribute group that provides information about RFC connections of type TCP/IP.

Assertion Ticket Client Client of the target system where the assertion ticket is sent.

Assertion Ticket Status Displays whether the option for sending the assertion ticket is selected while configuring RFC connection. The following values are possible:

X = Active Y = Inactive

Assertion Ticket System System ID of the target system where the assertion ticket is sent.

Authorization for Destination Authorization to use a destination.

Destination Lock Status Displays whether the RFC connection is modifiable. The following values are possible:

Y = Modifiable X = Non-Modifiable

Gateway Service Gateway service number for the RFC connection.

Gateway Host Gateway host for the RFC connection.

Identification of Program Identification of a registered RFC server program. The following values are possible:

- A = Start on Application Server
- E= Start on Explicit Host
- F= Start on Front End Server
- R= Registered Server Program

Keep Alive Timeout Keep Alive timeout value. The following values are possible:

- 2 = Default Gateway Value
- 0 = Timeout Inactive

Logon with User Logon procedure for HTTP connections. The following options are possible:

- A = Do not use user
- B = Basic Authentication

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

RFC Connection Name of the RFC destination specified in the function call.

RFC Host Name of the target host configured for the RFC connection.

RFC Server Program Name Name of the RFC server program. With a SAP gateway, an RFC server program can be registered under this ID, and then wait for RFC calls from different SAP systems.

RFC Status Status of the RFC connection. The following values are possible:

- 1 = Active
- 2 = Inactive
- 0 = Unknown

RFC Type Type of the RFC destination that is being monitored. The following values are possible:

- 3 = ABAP Connection
- G = HTTP Connections to External Server
- I = Internal Connections
- L = Logical Connections
- T = TCP IP Connections
- X = Connections via ABAP Driver
- 2 = Connection to R2 System
- S = Start External Program Using SNA or APPC
- M = CMC Connections
- H = HTTP Connections to ABAP Server

Sample Time The time stamp for the date and time the agent collected data from mySAP. This attribute is not for use in situations.

SAP Authentication Ticket Displays whether the logon with SAP Authentication Ticket is selected. The following values are possible:

- X = Active
- Y = Inactive

SAPshcut_Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Secure Network Communication Displays whether the option for SNC is checked for the RFC connection. The following values are possible:

- Y = Inactive
- X = Active

Start Type Start type of the external program. The following values are possible:

- 0 = Default gateway value
- 1 = Remote_shell
- 2 = Remote_execution
- 4 = Secure_shell

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the database server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name System ID of the SAP System running on the server. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Trace Status Displays whether the trace is active for the RFC connection. The following values are possible:

```
Y = Inactive
X = Active
```

Topology Information attributes

Topology Information attributes are reserved for internal use only.

Transactional RFC Activity attributes

Transactional RFC is a system level attribute group that provides information about documents exchanged between external systems and this mySAP system. This attribute group can be used in queries, situations, and workspace views.

Client A text string identifier or name for the source client session where the RFC executed. For example, 017 identifies the name of the client for this session.

Data Size (kb) The size of the data, in KB, to be transferred by the RFC.

Data Size (kb) (Superseded) The size of the data, in KB, to be transferred by the RFC. For example, 43278 specifies the size of the data to be transferred.

Function Module The name of the function module that processed the RFC. This attribute provides single-byte character support only. For example, INBOUND_IDOC_PROCESS is the name of the function module that processed the RFC.

Function Module (Unicode) The name of the function module that processed the RFC. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Hostname A text string identifier, or name, for the system that processed the RFC. For example, agoura1 indicates the name of the host where the RFC was processed.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Program The name for the main program that processed the RFC. This attribute provides single-byte character support only. For example, RDBSEMAT is the name of the main program that processed the RFC.

Program (Unicode) The name for the main program that processed the RFC. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Queue Name The name of the queue that processed the RFC, from table TRFCQOUT/TRFCQIN, field QNAME.

Retries The number of retries allowed in attempting to connect to a specified system. For example, 3 specifies the number of retries attempted to connect to a system.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Send Receive A choice to either send RFC information or receive RFC information. The following values are possible

- 1 = Send
- 2 = Receive

Status The current status of the RFC. This attribute provides single-byte character support only. For example, PROCESSED BY EXTERNAL SYSTEM is the current status of the RFC.

Status Code Status of the RFC transfer, represented as a short status code.

Status (Unicode) The current status of the RFC. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Target Name The name of the logical target of the RFC. This attribute provides single-byte character support only. For example, SYS1 is the name of the logical target system for the RFC.

Target Name (Unicode) The name of the logical target of the RFC. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Time The time stamp for the date and time of the RFC processing.

Transaction Code The identifier for the transaction code that called the RFC. This attribute provides single-byte character support only. For example, BD10 is the name of the transaction code that called the RFC.

Transaction Code (Unicode) The identifier for the transaction code that called the RFC. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Transaction Id The unique transaction identifier for the RFC. For example, OA150D025778678DFA989 is the name of the transaction identifier for the RFC.

Userid The identifier for the person creating the RFC. For example, LBROWN is the name of the person creating the RFC.

Transactional RFC Logs attributes

Transactional RFC is an instance level attribute group that provides information about tRFC Logs occurring in a SAP system. This attribute group can be used in queries, reports, and workspace views.

Caller Logon name of the user. The valid format is an alphanumeric string, with a maximum of 12 characters.

Function Module The unique name of a function module in the Function Builder. The valid format is an alphanumeric string, with a maximum of 30 characters.

Host Host name. The valid format is an alphanumeric string, with a maximum of 8 characters.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Message The tRFC Log message. The valid format is an alphanumeric string, with a maximum of 50 characters.

Sample Interval End The time stamp for the stopping time of the data that is supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the start time of the data that is supplied by the SAP agent. This attribute is not for use in situations.

Sample Time The time stamp for the date and time that the agent collected data from SAP. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is time stamp.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Server Timestamp Current time stamp of the application server. The valid format is time stamp.

Status of RFC call Status or error text of an asynchronous RFC call, for example, RECORDED, CPICERR, MAILED, or READ.. The valid format is a 4-byte integer. The following values are possible:

- 01 = CPICERR (Communication error or invalid ABAP command in the LUW)
- 02 = MAILED (CMC call started)
- 03 = READ (CMC call was successfully executed in the SAP target system)
- 04 = SYSFAIL (Runtime error or E message when you execute the LUW)
- 05 = EXECUTED (The LUW was executed and the entry was deleted)
- 06 = OTHER

07 = RECORDED (The LUW was recorded and should be executed)

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name This is the 3 character system name or sys ID that is used during this products' development was 'can'. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch

- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +RF = RFC_Error_Check_Agent_Log
- +++ = No_applicable_data (No data available on SAP)

Target System Standard name of an RFC destination. The valid format is an alphanumeric string, with a maximum of 32 characters.

Transaction Counter Counter within a transaction (LUW). The valid format is a 4-byte integer.

Transaction Performance attributes

Transaction Performance is an instance level attribute group that provides information about transaction response time and performance characteristics within a mySAP instance. This attribute group can be used in queries, situations, and workspace views.

Aggregation The aggregation level specifies how the transaction performance data is aggregated. This attribute is passed as input to the Transaction Performance data provider. The supports the following values:

ALL = Deliver transaction performance for all top level aggregations, including the following aggregation levels TCODE, APPL, SUB, USERID, and EXECIN

APPL = Report by Application name

DYNPRO = Report by Program and Dynpro number

EXECIN = Report by Executed In value that is the transaction or job that invoked the program.

HIST = Row was collected as a result of historical data collection. This value is for internal use only. Do not set aggregation for this value.

PEXEIN = Report by Transaction code or Program and Executed In value

SUB = Report by Sub-application name

TCODE = Report by Transaction code or program.

TCUSER = Report by Transaction code or Program and user ID UEXEIN = Report by user Id and Executed In value USERID = Report by user ID

All values except HIST are available for your use in workspace queries and situations. For workspace queries and situations, if no value is specified for the Aggregation attribute, the default value is ALL.

Application The name of the business application name or of the sub-application name. This attribute provides single-byte character support only. For example, FI01 is the name of the business application you are monitoring.

Application (Unicode) The name of the business application name or of the sub-application name. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Avg CPU Time (ms) The average amount of time, in milliseconds, the CPU processed instructions for this transaction.

Avg CPU Time (ms) (Superseded) The average amount of time, in milliseconds, the CPU processed instructions for this transaction. For example, 36 indicates that the amount of time the CPU processed instructions for this transaction averaged 36 milliseconds during the sampling period.

Avg Database Request Time (ms) The average amount of time, in milliseconds, elapsed for the database to process this transaction.

Avg Database Request Time (ms) (Superseded) The average amount of time, in milliseconds, elapsed for the database to process this transaction. For example, 2 indicates that the amount of time elapsed to complete database requests for this transaction averaged 2 milliseconds during the sampling period.

Avg Extended Memory (kb) The average amount of extended memory, in KB.

Avg Extended Memory (kb) (Superseded) The average amount of extended memory, in KB. For example, 132 indicates that the amount of extended memory averaged 132 KB during the sampling period.

Avg Private Memory (kb) The average amount of private memory, in KB.

Avg Private Memory (kb) (Superseded) The average amount of private memory, in KB. For example, 2612 indicates that the average amount of private memory is 2612 KB during the sampling period.

Avg Response Time (ms) The average amount of time, in milliseconds, elapsed to process this transaction.

Avg Response Time (ms) (Superseded) The average amount of time, in milliseconds, elapsed to process this transaction. For example, 177 indicates that the amount of time elapsed to process this transaction averaged 177 milliseconds during the sampling period.

Avg Total Memory (kb) The average total amount of memory, in KB.

Avg Total Memory (kb) (Superseded) The average total amount of memory, in KB. For example, 5632 indicates that the total amount of memory is 5632 KB during the sampling period.

Avg Wait Time (ms) The average amount of time, in milliseconds, an unprocessed transaction waited in the queue for a free work process.

Avg Wait Time (ms) (Superseded) The average amount of time, in milliseconds, an unprocessed transaction waited in the queue for a free work process. For example, 1 indicates that the amount of time an unprocessed transaction waited in the queue for a free work process averaged 1 millisecond during the sampling period.

Description The program name, transaction code, business application, or user ID description. This attribute provides single-byte character support only. Description is a language dependent description for the transaction code or program or how the unit of work was started. You control the type of reporting based on the value you set for the Aggregation attribute.

• Examples of transaction performance data aggregated using the EXECIN aggregation level

- Running the FB01 transaction creates a value of Standalone transaction for Description. (FB01 was
 executed as a transaction.)
- Running the RSPFPAR program through transaction SE38 creates a value of ABAP Editor for Description. (ABAP Editor is obtained from the SAP system and is the language dependent description of the SE38 transaction.)
- Running the RSPFPAR program in a batch job named RUN_PROGRAM_RSPFPAR creates a value of Job RUN_PROGRAM_RSPFPAR for Description. (This is the language dependent word for "Job" concatenated with the job name.)
- Examples of transaction performance data aggregated without using the EXECIN aggregation level
 - Running the FB01 transaction creates a value of Post document for Description. (Post document is
 obtained from the SAP system and is the language dependent description of the FB01 transaction.)
 - Running the RSPFPAR program through transaction SE38 creates a value of Display Profile Parameter for Description. (Display Profile Parameter is obtained from the SAP system and is the language dependent title for the RSPFPAR program.)
 - Running the RSPFPAR program in a batch job named RUN_PROGRAM_RSPFPAR creates a value of Display Profile Parameter for Description. (Display Profile Parameter is obtained from the SAP system and is the language dependent title for the RSPFPAR program.)

Description (Unicode) The program name, transaction code, business application, or user ID description. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment. Description is a language dependent description for the transaction code or program or how the unit of work was started. See the examples above for the Description attribute.

Dialog Step Response Threshold The response time threshold, in milliseconds, for dialog steps. A dialog step with a response time that exceeds this threshold is counted in the Dialog Steps Above Threshold attribute. This value is set by configuring the SAP agent ABAP code.

-1 = Not_Set -2 = N/A

Dialog Steps The number of dialog steps completed for this transaction.

Dialog Steps (Superseded) The number of dialog steps completed for this transaction. For example, 5 indicates that five dialog steps completed for this transaction during the sampling period.

Dialog Steps Above Threshold Number of dialog steps with a response time that exceeded the threshold in the Dialog Step Response Threshold attribute.

Dialog Steps Above Threshold (Superseded) Number of dialog steps with a response time that exceeded the threshold in the Dialog Step Response Threshold attribute.

-1 = N/A. Data for this attribute is not applicable at this time.

-2 = NumberTooLarge

Dialog Steps Above Threshold Percent Percentage of dialog steps with a response time that exceeds the threshold in the Dialog Step Response Threshold attribute. This attribute is calculated as Dialog Steps Above Threshold divided by Dialog Steps attribute.

-1 = N/A. Data for this attribute is not applicable at this time.

Dynpro Number The Dynpro number referenced in the SAPGUI session. The following value is also possible:

None = NONE

Encoded Service Type The encoded sap service type.

Executed in How the unit of work was started. For example

- Running the FB01 transaction results in a value for Executed in to indicate a standalone transaction.
- Running the RSPFPAR program through transaction SE38 creates a value of SE38 for Executed in.

• Running the RSPFPAR program in a batch job named RUN_PROGRAM_RSPFPAR creates a value of RUN_PROGRAM_RSPFPAR for Executed in.

Front End Network Time The number of milliseconds used in network communication.

Front End Network Time (Superseded) The number of milliseconds used in network communication. This is the GUI Time minus the application server processing time.

GUI Count The number of roundtrip requests from a user workstation to the SAP instance and back to the user workstation.

GUI Count (Superseded) The number of roundtrip requests from a user workstation to the mySAP instance and back to the user workstation.

GUI Time (ms) The number of milliseconds required to respond to a user SAPGUI request.

GUI Time (ms) (superseded) The number of milliseconds required to respond to a user SAPGUI request. This time is measured from when the user presses a key to send a request until the response is received.

Instance Name The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Logon Parameters This attribute is reserved for internal use only. This attribute is not for use in situations.

Managed System The identifier for this SAP resource. The valid format is a text string for a SAP system, instance, or group. This attribute is not for use in situations.

Max Extended Memory Per Session (kb) The maximum amount of extended memory, in KB, per session.

Max Extended Memory Per Session (kb) (Superseded) The maximum amount of extended memory, in KB, per session. For example, 132 indicates that the maximum amount of extended memory was 132 KB per session during the sampling period.

Max Extended Memory Per Transaction (kb) The maximum amount of extended memory, in KB, per transaction.

Max Extended Memory Per Transaction (kb) (Superseded) The maximum amount of extended memory, in KB, per transaction. For example, 2 indicates that the maximum amount of extended memory was 2 KB per transaction during the sampling period.

Program or Tran Code The unit of work that you started. It is determined by SAP code. For example

- Running the FB01 transaction creates a value of FB01 for Transaction Code or Program.
- Running the RSPFPAR program through transaction SE38 creates a value of RSPFPAR for Transaction code or Program.
- Running the RSPFPAR program in a batch job named RUN_PROGRAM_RSPFPAR creates a value of RSPFPAR for Transaction code or program.

Program or Tran Code (Unicode) The unit of work that you started. It is determined by SAP code. For example

- Running the FB01 transaction creates a value of FB01 for Transaction Code or Program.
- Running the RSPFPAR program through transaction SE38 creates a value of RSPFPAR for Transaction code or Program.
- Running the RSPFPAR program in a batch job named RUN_PROGRAM_RSPFPAR creates a value of RSPFPAR for Transaction code or program.

This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Row aggregation Identifies the aggregation level that was used to create the row of data. See the Aggregation attribute above for all possible values. This attribute is most useful when viewing historical data records in the warehouse.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

Service Type The sap service type including: Dialog, Update, Batch and Spool.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

- +AB = ABAP_Version_Mismatch
- +DD = Data_collection_disabled
- +NE = Instance_or_Group_does_not_exist
- +NR = Instance_not_running
- +RF=RFC_Error_Check_Agent_Log

+++ = No_applicable_data

Total CPU Time (ms) The total amount of time, in milliseconds, that the CPU processed instructions for this transaction.

Total CPU Time (ms) (Superseded) The total amount of time, in milliseconds, that the CPU processed instructions for this transaction. For example, 180 indicates that the CPU processed instructions for this transaction for 180 milliseconds during the sampling period.

Total Database Calls The total number of database calls completed for this transaction.

Total Database Calls (Superseded) The total number of database calls completed for this transaction. For example, 15 indicates that the application instance made a total of 15 requests to the database for this transaction during the sampling period.

Total Database Request Time (ms) The total amount of time, in milliseconds, elapsed for the database to process this transaction.

Total Database Request Time (ms) (Superseded) The total amount of time, in milliseconds, elapsed for the database to process this transaction. For example, 12 indicates that the amount of time elapsed to complete database requests for this transaction totaled 12 milliseconds during the sampling period.

Total DB Requested Bytes (kb) The total number of bytes, in KB, requested from the database for this transaction.

Total DB Requested Bytes (kb) (Superseded) The total number of bytes, in KB, requested from the database for this transaction. For example, 6144 indicates that a total of 6 MB were requested from the database for this transaction during the sampling period.

Total Response Time (ms) The total amount of time, in milliseconds, elapsed to process this transaction.

Total Response Time (ms) (Superseded) The total amount of time, in milliseconds, elapsed to process this transaction. For example, 333300 indicates that the amount of elapsed time, in milliseconds, to process this transaction totaled 3333300 milliseconds during the sampling period.

Total Wait Time (ms) The total amount of time, in milliseconds, an unprocessed transaction waited in the queue for a free work process.

Total Wait Time (ms) (Superseded) The total amount of time, in milliseconds, an unprocessed transaction waited in the queue for a free work process. For example, 2 indicates that the amount of time, in milliseconds, an unprocessed transaction waited in the queue for a free work process totaled 2 milliseconds during the sampling period.

Userid The name of the user performing the transaction. For example, RBROWN is the name of the user performing the transaction.

Transaction Performance Task Type attributes

Transaction performance task type attributes is an instance level attribute group that provides information about transaction response time and performance characteristics within a SAP instance. This attribute group can be used in queries, reports, and workspace views.

Aggregation The aggregation level specifies how the transaction performance data is aggregated. This attribute is passed as input to the Transaction Performance data provider. The valid format is an alphanumeric string, with a maximum of 6 characters. The supports the following values:

ALL = Deliver transaction performance for all top level aggregations, including the following aggregation levels TCODE, APPL, SUB, USERID, and EXECIN.

APPL = Report by Application name.

DYNPRO = Report by Program and Dynpro number.

EXECIN = Report by Executed In value that is the transaction or job that invoked the program. HIST = Row was collected as a result of historical data collection. This value is for internal use only. Do

not set aggregation for this value.

PEXEIN = Report by Transaction code or Program and Executed In value.

SUB = Report by Sub-application name.

TCODE = Report by Transaction code or program.

TCUSER = Report by Transaction code or Program and user ID.

UEXEIN = Report by user ID and Executed In value.

USERID = Report by user ID.

All values except HIST are available for your use in workspace queries and situations. For workspace queries and situations, if no value is specified for the Aggregation attribute, the default value is ALL.

Application The name of the business application name or of the sub-application name. This attribute provides single-byte character support only. For example, FI01 is the name of the business application you are monitoring. The valid format is an alphanumeric string, with a maximum of 8 characters.

Application (Unicode) The name of the business application name or of the sub-application name. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment. The valid format is an alphanumeric string, with a maximum of 24 characters.

Avg CPU Time (Superseded) The average amount of time, in milliseconds, the CPU processed instructions for this transaction. For example, 36 indicates that the amount of time the CPU processed instructions for this transaction averaged 36 milliseconds during the sampling period. The valid format is a 4-byte integer.

Avg CPU Time The average amount of time, in milliseconds, the CPU processed instructions for this transaction. For example, 36 indicates that the amount of time the CPU processed instructions for this transaction averaged 36 milliseconds during the sampling period. The valid format is a 4-byte integer.

Avg Database Request Time (Superseded) The average amount of time, in milliseconds, elapsed for the database to process this transaction. For example, 2 indicates that the amount of time elapsed to complete database requests for this transaction averaged 2 milliseconds during the sampling period. The valid format is a 4-byte integer.

Avg Database Request Time The average amount of time, in milliseconds, elapsed for the database to process this transaction. For example, 2 indicates that the amount of time elapsed to complete database requests for this transaction averaged 2 milliseconds during the sampling period. The valid format is a 4-byte integer.

Avg Extended Memory (Superseded) The average amount of extended memory, in KB. For example, 132 indicates that the amount of extended memory averaged 132 KB during the sampling period. The valid format is a 4-byte integer.

Avg Extended Memory The average amount of extended memory, in KB. For example, 132 indicates that the amount of extended memory averaged 132 KB during the sampling period. The valid format is a 4-byte integer.

Avg Private Memory The average amount of private memory, in KB. For example, 2612 indicates that the average amount of private memory is 2612 KB during the sampling period. The valid format is a 4-byte integer.

Avg Private Memory (Superseded) The average amount of private memory, in KB. For example, 2612 indicates that the average amount of private memory is 2612 KB during the sampling period. The valid format is a 4-byte integer.

Avg Response Time (Superseded) The average amount of time, in milliseconds, elapsed to process this transaction. For example, 177 indicates that the amount of time elapsed to process this transaction averaged 177 milliseconds during the sampling period. The valid format is a 4-byte integer.

Avg Response Time The average amount of time, in milliseconds, elapsed to process this transaction. For example, 177 indicates that the amount of time elapsed to process this transaction averaged 177 milliseconds during the sampling period. The valid format is a 4-byte integer.

Avg Total Memory (Superseded) The average total amount of memory, in KB. For example, 5632 indicates that the total amount of memory is 5632 KB during the sampling period. The valid format is a 4-byte integer.

Avg Total Memory The average total amount of memory, in KB. For example, 5632 indicates that the total amount of memory is 5632 KB during the sampling period. The valid format is a 4-byte integer.

Avg Wait Time The average amount of time, in milliseconds, an unprocessed transaction waited in the queue for a free work process. For example, 1 indicates that the amount of time an unprocessed transaction waited in the queue for a free work process averaged 1 millisecond during the sampling period. The valid format is a 4-byte integer.

Avg Wait Time (Superseded) The average amount of time, in milliseconds, an unprocessed transaction waited in the queue for a free work process. For example, 1 indicates that the amount of time an unprocessed transaction waited in the queue for a free work process averaged 1 millisecond during the sampling period. The valid format is a 4-byte integer.

Description The program name, transaction code, business application, or user ID description. This attribute provides single-byte character support only. Description is a language dependent description for the transaction code or program or how the unit of work was started. You control the type of reporting based on the value you set for the Aggregation attribute. The valid format is an alphanumeric string, with a maximum of 36 characters.

The following examples show transaction performance data aggregated using the EXECIN aggregation level:

Running the FB01 transaction creates a value of Standalone transaction for Description. (FB01 was executed as a transaction.)

Running the RSPFPAR program through transaction SE38 creates a value of ABAP Editor for Description. (ABAP Editor is obtained from the SAP system and is the language dependent description of the SE38 transaction.)

Running the RSPFPAR program in a batch job named RUN_PROGRAM_RSPFPAR creates a value of Job RUN_PROGRAM_RSPFPAR for Description. (This is the language dependent word for "Job" concatenated with the job name.)

The following examples show transaction performance data aggregated without using the EXECIN aggregation level:

Running the FB01 transaction creates a value of Post document for Description. (Post document is obtained from the SAP system and is the language dependent description of the FB01 transaction.) Running the RSPFPAR program through transaction SE38 creates a value of Display Profile Parameter for Description. (Display Profile Parameter is obtained from the SAP system and is the language dependent title for the RSPFPAR program)

Running the RSPFPAR program in a batch job named RUN_PROGRAM_RSPFPAR creates a value of Display Profile Parameter for Description. (Display Profile Parameter is obtained from the SAP system and is the language dependent title for the RSPFPAR program.)

Description (Unicode) The program name, transaction code, business application, or user ID description. This attribute provides multibyte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment. Description is a language dependent description for the transaction code or program or how the unit of work was started. See the examples for the Description attribute. The valid format is an alphanumeric string, with a maximum of 108 characters.

Dialog Step Response Threshold The response time threshold, in milliseconds, for dialog steps. A dialog step whose response time exceeds this threshold is counted in the Dialog Steps Above Threshold attribute. This value is set by configuring the mySAP agent ABAP code. The valid format is a 4-byte integer. The following values are possible:

-1 = Not_Set

-2 = N/A

Dialog Steps (Superseded) The number of dialog steps completed for this transaction. For example, 5 indicates that five dialog steps completed for this transaction during the sampling period. The valid format is a 4-byte integer.

Dialog Steps The number of dialog steps completed for this transaction. For example, 5 indicates that five dialog steps completed for this transaction during the sampling period. The valid format is a 4-byte integer.

Dialog Steps Above Threshold (Superseded) Number of dialog steps whose response time exceeded Dialog Step Response Threshold. The valid format is a 4-byte integer. The following values are possible:

-1 = N/A -2 = NumberTooLarge

Dialog Steps Above Threshold Number of dialog steps whose response time exceeded Dialog Step Response Threshold. The valid format is a 4-byte integer. The following values are possible:

-1 = N/A -2 = NumberTooLarge

Dialog Steps Above Threshold Percent Percentage of dialog steps whose response time exceeds the Dialog Step Response Threshold attribute. This attribute is calculated as Dialog Steps Above Threshold divided by the Dialog Steps attribute. The valid format is a 4-byte integer. The following value is possible:

-1 = N/A Data for this attribute is not applicable at this time.

Dynpro Number Dynpro number referenced in the user's SAPGUI session. The valid format is an alphanumeric string, with a maximum of 4 characters. The following value is possible:

None = NONE

Executed in The procedure to start the unit of work. The valid format is an alphanumeric string, with a maximum of 120 characters.

The following examples show how you start the unit of work:

Run the FB01 transaction that results in a value for Executed in to indicate a standalone transaction. Run the RSPFPAR program through transaction SE38 to create a value of SE38 for Executed in. Run the RSPFPAR program in a batch job named RUN_PROGRAM_RSPFPAR to create a value of RUN_PROGRAM_RSPFPAR for Executed in.

Front End Network Time (ms) (Superseded) Number of milliseconds used in network communication. This is the GUI Time minus the application server processing time.

Front End Network Time (ms) Number of milliseconds used in network communication. This is the GUI Time minus the application server processing time.

GUI Count (superseded) Number of roundtrip requests from a user workstation to the mySAP system and back to the user workstation. The valid format is a 4-byte integer.

GUI Count Number of roundtrip requests from a user workstation to the mySAP system and back to the user workstation. The valid format is a 4-byte integer.

GUI Time (ms) Number of milliseconds required to respond to a user SAPGUI request. This time is measured from when the user presses a key to send a request until the response is received. This is total response time from the user perspective. The valid format is a 4-byte integer.

Instance Name The name of the application instance that you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance that you are monitoring. The valid format is an alphanumeric string, with a maximum of 20 characters.

Logon Parameters This attribute is reserved for internal use only. This attribute is not for use in situations.

Managed System The identifier for this SAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a SAP system, instance, or group.

Max Extended Memory Per Session (Superseded) The maximum amount of extended memory, in KB, per session. For example, 132 indicates that the maximum amount of extended memory was 132 KB per session during the sampling period. The valid format is a 4-byte integer.

Max Extended Memory Per Session The maximum amount of extended memory, in KB, per session. For example, 132 indicates that the maximum amount of extended memory was 132 KB per session during the sampling period. The valid format is a 4-byte integer

Max Extended Memory Per Transaction (Superseded) The maximum amount of extended memory, in KB, per transaction. For example, 2 indicates that the maximum amount of extended memory was 2 KB per transaction during the sampling period The valid format is a 4-byte integer.

Max Extended Memory Per Transaction The maximum amount of extended memory, in KB, per transaction. For example, 2 indicates that the maximum amount of extended memory was 2 KB per transaction during the sampling period The valid format is a 4-byte integer.

Program or Tran Code The unit of work that you started and it is determined by SAP code.

The following examples show how to determine the Program or Tran code:

Run the FB01 transaction to create a value of FB01 for Transaction Code or Program.

Run the RSPFPAR program through transaction SE38 to create a value of RSPFPAR for Transaction code or Program.

Run the RSPFPAR program in a batch job named RUN_PROGRAM_RSPFPAR to create a value of RSPFPAR for Transaction code or program.

The valid format is an alphanumeric string, with a maximum of 8 characters.

Program or Tran Code (Unicode) The unit of work that you started and it is determined by SAP code.

The following examples show how to determine the Program or Tran code:

Run the FB01 transaction to create a value of FB01 for Transaction Code or Program.

Run the RSPFPAR program through transaction SE38 to create a value of RSPFPAR for Transaction code or Program.

Run the RSPFPAR program in a batch job named RUN_PROGRAM_RSPFPAR to create a value of RSPFPAR for Transaction code or program.

This attribute provides multibyte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment. The valid format is an alphanumeric string, with a maximum of 120 characters.

Row Aggregation Identifies the aggregation level that was used to create the row of data. See the Aggregation attribute for all possible values. This attribute is most useful when viewing historical data records in the warehouse. The valid format is an alphanumeric string, with a maximum of 6 characters.

Sample Interval End The time stamp for the stopping time of the data supplied by the Monitoring Agent for SAP. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is time stamp.

Sample Interval Start The time stamp for the beginning time of the data supplied by the Monitoring Agent for SAP. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is time stamp.

SAPGUI Hostname Host name of the SAPGUI logon terminal. The valid format is an alphanumeric string, with a maximum of 12 characters.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Service Type The sap service type including: Dialog, Update, Batch and Spool. The valid format is an alphanumeric string, with a maximum of 12 characters.

Service Type Encoded The encoded sap service type. The valid format is an alphanumeric string, with a maximum of 1 characters. The following values are possible:

A = AutoABAPB = Background C = CPI-CD = DialogE= Enqueue F = FTPG = DDLOG_Clean H = HTTP $I = RFC_In_VMC$ J = AutoJava K = Delay_THC L = Virtual_ALE M = SMTPN = NNTPO = ATaskHandler P = Plugin $R = Virtual_RFC$ S = Spool T = HTTPSU = Update W = Dial_NoGUI_T $X = RPC_TH$ Y = BufferSync) = ALL1 = BatchInput 2 = Update2 $3 = Raw_RFC$ 4 = LCOM_FastRFC 5 = HTTP/JSP6 = HTTPS/JSP 7 = UnsignedByte

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the SAP system you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

```
+AB = ABAP_Version_Mismatch
```

+DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +++ = No_applicable_data

Total CPU Time (superseded) The total amount of time, in milliseconds, that the CPU processed instructions for this transaction. For example, 180 indicates that the CPU processed instructions for this transaction for 180 milliseconds during the sampling period. The valid format is a 4-byte integer.

Total CPU Time The total amount of time, in milliseconds, that the CPU processed instructions for this transaction. For example, 180 indicates that the CPU processed instructions for this transaction for 180 milliseconds during the sampling period. The valid format is a 4-byte integer.

Total Database Calls (superseded) The total number of database calls completed for this transaction. For example, 15 indicates that the application instance made a total of 15 requests to the database for this transaction during the sampling period. The valid format is a 4-byte integer.

Total Database Calls The total number of database calls completed for this transaction. For example, 15 indicates that the application instance made a total of 15 requests to the database for this transaction during the sampling period. The valid format is a 4-byte integer.

Total Database Request Time (superseded) The total amount of time, in milliseconds, elapsed for the database to process this transaction. For example, 12 indicates that the amount of time elapsed to complete database requests for this transaction totaled 12 milliseconds during the sampling period. The valid format is a 4-byte integer.

Total Database Request Time The total amount of time, in milliseconds, elapsed for the database to process this transaction. For example, 12 indicates that the amount of time elapsed to complete database requests for this transaction totaled 12 milliseconds during the sampling period. The valid format is a 4-byte integer.

Total DB Requested Bytes (superseded) The total number of bytes, in KB, requested from the database for this transaction. For example, 6144 indicates that a total of 6 MB were requested from the database for this transaction during the sampling period. The valid format is a 4-byte integer.

Total DB Requested Bytes The total number of bytes, in KB, requested from the database for this transaction. For example, 6144 indicates that a total of 6 MB were requested from the database for this transaction during the sampling period. The valid format is a 4-byte integer.

Total Response Time (superseded) The total amount of time, in milliseconds, elapsed to process this transaction. For example, 333300 indicates that the amount of elapsed time, in milliseconds, to process this transaction totaled 3333300 milliseconds during the sampling period. The valid format is a 4-byte integer.

Total Response Time The total amount of time, in milliseconds, elapsed to process this transaction. For example, 333300 indicates that the amount of elapsed time, in milliseconds, to process this transaction totaled 3333300 milliseconds during the sampling period. The valid format is a 4-byte integer.

Total Wait Time (Superseded) The total amount of time, in milliseconds, an unprocessed transaction waited in the queue for a free work process. For example, 2 indicates that the amount of time, in milliseconds, an unprocessed transaction waited in the queue for a free work process totaled 2 milliseconds during the sampling period. The valid format is a 4-byte integer.

Total Wait Time The total amount of time, in milliseconds, an unprocessed transaction waited in the queue for a free work process. For example, 2 indicates that the amount of time, in milliseconds, an unprocessed transaction waited in the queue for a free work process totaled 2 milliseconds during the sampling period. The valid format is a 4-byte integer.

Userid The name of the user performing the transaction. For example, RBROWN is the name of the user completing the transaction. The valid format is an alphanumeric string, with a maximum of 12 characters.

Transport Logs attributes

Transport Logs is a system level attribute group that provides detailed log information about one step in a completed transport request in the mySAP system. This attribute group can be used in workspace views only.

Display Level The display level from the step log. This attribute is not for use in situations.

Error Level Error level from the step log. This attribute is not for use in situations. The following values are possible:

- E = Error W = Warning
- ? = Unknown

Logfile Name The name of the log file, which is created from the transport directory and step name.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Message Number Message number from step log.

Message Text Message text from the step log. This attribute provides single-byte character support only.

Message Text (Unicode) Message text from the step log. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Number The request number from E070-TRKORR.

Number (610) The request number from E070-TRKORR.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Transport Objects attributes

Transport Objects is a system level attribute group that provides information about the objects in a particular transport request in the mySAP system. This attribute group can be used in queries, reports, and workspace views.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Number A numeric identifier for the transport request. For example, CANK9002 indicates an identifier for the transport request.

Number (610) A numeric identifier for the transport request.

Object Function An activity to occur on the transported object. The following values are possible:

- D = Delete
- M = Recreate
- K = TableKeys
- ? = Unknown

Object Name The name of the transported object. For example, SAPLY210 indicates an identifier for the name of the object.

Object Type The type of the transported object, as defined by the Transport System. For example, REPO indicates the type of transported object.

Program Id The transport process tool associated with this transported object. For example, R3TR indicates the transport process tool.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Transport Requests attributes

Transport Requests is a system level attribute group that provides information about all transport requests the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Category A text string identifier for the Workbench or Customizing category. The Workbench category of requests is associated with changes to planning and business rules. Customizing requests includes modifications to ABAP code or function modules. This attribute provides single-byte character support only. For example, Workbench indicates the workbench category of request.

Category (Unicode) A text string identifier for the Workbench or Customizing category. The Workbench category of requests is associated with changes to planning and business rules. Customizing requests includes modifications to ABAP code or function modules. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Description Descriptive text associated with the request. This attribute provides single-byte character support only. For example, Initial Test Transport describes the request.

Description (Unicode) Descriptive text associated with the request. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Highest Return Code The highest step return code. Possible values include the following

- -1 = blank
- 0 = Perfect
- 4 = Warning
- 8 = Error
- 12 = Severe error

Import Clients A text string identifier for the target client to which the request has been imported. For example, 012 indicates an identifier for the target client.

Import Count The count associated with the import.

Import Systems A text string identifier for the target systems, or the systems to which the request has been imported. For example, CN1 indicates an identifier for the target system.

Last Changed Time The time stamp for the date and time the request was most recently changed.

Logon Parameters This attribute is reserved for internal use only. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Number A text string identifier for the transport request. For example, CANKSAV300 indicates an identifier for the transport request.

Number (610) A text string identifier for the transport request.

Owner A text string identifier or user ID for the owner of the request. For example, RSMITH indicates the user ID for the owner of the request.

Parent Number A text string identifier for the parent request. For example, CANKSAV300 indicates an identifier for the parent request.

Parent Number (610) A text string identifier for the parent request.

Sample Interval End The time stamp for the stopping time of the data supplied by the Monitoring Agent for mySAP. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the Monitoring Agent for mySAP. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Source Client A text string identifier for the source client where the request was created. For example, 800 indicates an identifier for the source client.

Source System A text string identifier for the source system, or the system where the request was created. For example, PRD indicates an identifier for the source system.

Status The status of the request. The following values are possible

- A = LockedAll
- D = Modifiable
- L = Modifiable_Protected
- N = Released_with_Import_Protection_for_Repaired_Objects
- O = Release_Started
- R = Released
- ? = Unknown

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system that you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log

+++ = No_applicable_data

Type The category of the request. The following values are possible

- C = Relocation_of_Objects_Without_Package_Change
- D = Piece_List_for_Support_Package
- E = Relocation_of_Complete_Package
- F = Piece_List
- G = Piece_List_for_CTS_Project
- K = Workbench_Request
- M = Client_Transport_Request
- O = Relocation_of_Objects_with_Package_Change
- P = Piece_List_for_Upgrade
- Q = Customizing_Task
- R = Repair
- S = Development_Correction
- T = Transport_of_Copies
- W = Customizing_Request
- X = Unclassified_Task
- ? = Unknown

Transport Steps attributes

Transport Steps is a system level attribute group that provides details about completed transport steps for a particular transport request in the mySAP system. This attribute group can be used in queries, situations, and workspace views.

Execution Time The time stamp for the time the transport step executed.

Logfile Name The logfile name created from the transport number and from the step name. For example, CANE9000010.PRD indicates an identifier for the logfile.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Number A numeric identifier for the transport request. For example, CANE9000010.PRD indicates an identifier for the transport request.

Number (610) A numeric identifier for the transport request.

Return Code The identifier for the return code. For example, 3672 indicates an identifier for the return code. A value of -1 indicates that there is no data at this time.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Step Name The name of the step. For example, EXPORT indicates an identifier for the step. The following values are possible:

- A = ABAP_Dictionary_Activation
- B = Inactive_Import
- C = C_Correction_Release
- D = Import_Application_Defined_Objects
- E = Export
- e = Export_pre_processing
- F = C_Transport_Release
- f = Checks_at_Operating_System_Level
- G = Generation_of_Programs_and_Screens
- H = Import_ABAP_Dictionary_Objects
- I = Import
- K = R3trans_Shadow_Import

```
L = Import_Request_Piece_List
```

- M = Matchcode_and_Enqueue_Activation
- m = Generate_Transport_Information_File
- O = Trace_SPAM
- P = Test_Import
- p = Request_waiting_for_QA_approval
- q = QA_approval_given
- R = Method_Execution
- r = Copy_File_Between_Transport_Groups
- T = Import_Table_Contents
- V = Check_Versions
- v = Create_Versions_After_Import
- W = Routing
- w = Create_Versions_Before_Import
- X = Export_application_defined_objects
- Y = Transport_Again_with_Merge_Request
- > = Deleted_from_buffer
- < = Selection_for_Import
- | = Import_not_approved
-) = Transferring_System
- (= Continue_Other_Transport_Group
- = Other_Domain
- # = Change_ADO_Code_Page
- ? = Unknown_Step

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

```
+AB = ABAP_Version_Mismatch
+DD = Data_collection_disabled
+NE = Instance_or_Group_does_not_exist
+NR = Instance_not_running
+RF=RFC_Error_Check_Agent_Log
+++ = No_applicable_data
```

Target System The name of the mySAP system for which the transport is destined. For example, SY1 is the name of the mySAP system that the transport is destined for.

Updates Information attributes

Updates Information is a system level attribute group that provides information about updates to the database in the mySAP system. This attribute group can be used in reports, queries, and workspace views.

Client A text string identifier or name, for the source client session. For example, 017 identifies the name of the client for this session.

Error The type of error that occurred during an update. This attribute provides single-byte character support only. For example, 00671ABAP/4 processor POSTING_ILLEGAL_STATEMENT indicates that an error occurred during the execution of a particular mySAP process.

Error (Unicode) The type of error that occurred during an update. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Function Module The name of the function module associated with the update. For example, 03 indicates the name of the function module being used.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Program A text string identifier or name for the program that is performing the update. This attribute provides single-byte character support only. For example, SAPLY210 identifies the name of the program associated with this process.

Program (Unicode) A text string identifier or name for the program that is performing the update. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Sample Interval End The time stamp for the stopping time of the data supplied by the SAP agent. This attribute is not for use in situations.

Sample Interval Start The time stamp for the beginning time of the data supplied by the SAP agent. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

State Code The current state of the update. The following values are possible

- 0 = OK
- 1 = V1
- 2 = V2
- 3 = Run
- 4 = Del
- 5 = Auto
- 6 = Init
- 7 = Err

State Description The description of the current state of the update. For example, Update is active indicates that an update is occurring. This attribute provides single-byte character support only.

State Description (Unicode) The description of the current state of the update. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Status The current status of the update. The following values are possible

- 0 = OK
- 1 = Initial
- 3 = Error

Status Description Text describing the status of the update request. For example, Update is active indicates that the current update request is active. This attribute provides single-byte character support only.

Status Description (Unicode) Text describing the status of the update request. For example, Update is active indicates that the current update request is active. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Status Number The identifier for the status. For example, 9 indicates the number of the update status.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Time The time stamp for the time the update was attempted.

Transaction Code The identifier for the transaction code. For example, FB01 is the identifier for the transaction code you are using.

Update Key The identifier for the update key. For example, 19991102131415000ddrum2...002 is the identifier of the update key.

Update Server The name of the server being used for record updates. For example, ddrum2_PRD_00 is the identifier for the server you are using.

Userid The name of the user performing the transaction. For example, RBROWN is the name of the user performing the transaction.

User Information attributes

User Information is an instance level attribute group that provides detailed information about a particular user in the mySAP system. This attribute group can be used in queries and workspace views.

Building The number of the building in which the user works. For example, 1634 is the number of the building in which the user is located. This attribute provides single-byte character support only.

Building (Unicode) The number of the building in which the user works. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Client The client identifier. For example, 800 is the name of the client.

Cost Center The identifier for the cost center. This attribute provides single-byte character support only. For example, 5154 is the name of the cost center.

Cost Center (Unicode) The identifier for the cost center. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Country The name of the country in which the user is located. This attribute provides single-byte character support only. For example, FRANCE

Country (Unicode) The name of the country in which the user is located. This attribute provides multibyte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Department The name of the department associated with the user. This attribute provides single-byte character support only. For example, Apps.Dev. is the name of the department associated with this user.

Department (Unicode) The name of the department associated with the user. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Fax Number The complete number (excluding the country code) of the Fax machine nearest to the user, including the extension of the number. For example, 8185551212 is the number of the Fax machine.

Full Name The full name of the user, in local format. This attribute provides single-byte character support only. For example, Mike Brown is the full name of the user.

Full Name (Unicode) The full name of the user, in local format. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Function The job function of the user. This attribute provides single-byte character support only. For example, SOFTWAREDEVELOPER is the job function of the user.

Function (Unicode) The job function of the user. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Room The identifier for the room in which the user is located. This attribute provides single-byte character support only. For example, 106A is the number of the room in which the user is located.

Room (Unicode) The identifier for the room in which the user is located. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Telephone Number The complete number of the telephone assigned to the user (excluding the country code), but including the extension of the number. For example, 8185853382 is the telephone number of the user.

Userid The name of the user performing the transaction. For example, RBROWN is the name of the user performing the transaction.

Workflow Trace Logs attributes

Workflow trace logs is application level attribute group that provides information about workflow trace logs that occur in a mySAP PI/XI system. The workflow trace logs the important internal process flow information. This attribute group can be used in queries, reports, and workspace views.

Activated Timestamp Date and time when the trace for the workflow was activated. The valid format is time stamp.

Activation End Timestamp Date and time when the trace for the workflow ends. The valid format is time stamp.

Creation Timestamp Date and time when the trace for the workflow was created. The valid format is time stamp.

Creator Name Name of the user who created the trace for the workflow. The valid format is an alphanumeric string, with a maximum of 15 characters.

Description Trace header descriptive text. The valid format is an alphanumeric string, with a maximum of 132 characters.

Expiry Timestamp Date and time when the trace for the workflow expires. The valid format is time stamp.

Index The sequence number of the trace. The valid format is a 4-byte integer.

Locally Visible This confirms if the instances of the workflow trace object have been created. The valid format is an alphanumeric string, with a maximum of 7 characters.

Managed System The identifier for this mySAP resource. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is a text string for a mySAP system, instance, or group.

Parent Trace ID Trace ID of the parent workflow trace. A workflow might have sub-work and as a result a workflow trace might have a sub-workflow trace. The valid format is an alphanumeric string, with a maximum of 32 characters.

Status Shows the status of the workflow trace. The valid format is an alphanumeric string, with a maximum of 1 characters. The following values are possible:

- 0 = Inactive
- 1 = Active

System Trace created by the system. The valid format is an alphanumeric string, with a maximum of 10 characters.

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system that you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF = RFC_Error_Check_Agent_Log +++ = No_applicable_data

Trace Component Component to be traced. The valid format is an alphanumeric string, with a maximum of 30 characters.

Trace ID Unique ID of the trace. The valid format is an alphanumeric string, with a maximum of 32 characters.

Trace Level Level of detail determining which trace entries are written. This show the numeric value for the trace. The valid format is an alphanumeric string, with a maximum of 1 character.

Trace Level Description The description of the trace. The valid format is an alphanumeric string, with a maximum of 1 character. The following values are possible:

- 1 = Restricted
- 2 = Standard
- 3 = All

Work Processes attributes

Work Processes is an instance level attribute group that provides information about all work processes running within a mySAP instance. This attribute group can be used in queries, situations, and workspace views.

Action The current activity of the mySAP work process. The following values are possible:

- 5 = Rolln
- 6 = RollOut
- 7 = TXXX-Access
- 8 = TableLoad

- 10 = DirectRead
- 11 = SequentialRead
- 12 = PhysicalRead
- 13 = Insert
- 14 = Update
- 15 = Delete
- 16 = Commit
- 17 = Generate
- 18 = ReportLoad
- 19 = CUALoad
- 20 = DynPro
- 28 = QueueAPI
- 29 = DictionaryRead
- 31 = MatchcodeRead
- 32 = MatchcodeUpdate
- 33 = MatchcodeInsert
- 34 = PhysicalRead
- 35 = PhysicalUpdate
- 36 = PhysicalDelete
- 39 = MatchcodeDelete

Client A text string identifier or name for the client in which the session is running. For example, 800 identifies the name of the client for this session.

CPU Time (secs) The amount of time, in seconds, the CPU spent processing instructions for this mySAP process.

CPU Time (secs) (Superseded) The amount of time, in seconds, the CPU spent processing instructions for this mySAP process. For example, 10 indicates that the amount of time the CPU processed instructions for this mySAP process was 10 seconds during the sampling period.

Database Changes The number of database changes, such as deletes, inserts, or updates, that occurred during the execution of a mySAP process.

Database Changes (Superseded) The number of database changes, such as deletes, inserts, or updates, that occurred during the execution of a mySAP process. For example, 126 indicates that 126 database changes occurred during the execution of a particular process.

Database Changes Time (ms) The amount of time it took, in milliseconds, to process database changes, such as deletes, inserts, or updates, during the execution of a mySAP process. For example, 374103 indicates that it took 374,103 milliseconds to process certain database changes during the execution of a particular mySAP process.

Database Reads The number of database reads that occurred during the execution of an mySAP process. For example, 479 indicates that 479 database reads occurred during the execution of a particular process.

Database Reads Time (ms) The amount of time it took, in milliseconds, to perform database reads during the execution of a mySAP process.

Database Reads Time (ms) (Superseded) The amount of time it took, in milliseconds, to perform database reads during the execution of a mySAP process. For example, 1087655 indicates that it took 1,087,655 milliseconds to perform database reads during the execution of a particular mySAP process.

Elapsed Time (secs) The amount of time, in seconds, that elapsed during the execution of the current request. For example, 59 indicates that 59 seconds elapsed during the execution of the current request. The following value is also possible:

-1 = **blank**. There is no relevant numeric data for this attribute at this time.

Errors The number of errors that occurred during the execution of a mySAP process. For example, 03 indicates that 3 errors occurred during the execution of a particular mySAP process.

Instance Name The name of the application instance you are monitoring. For example, ddrum2_PRD_00 is the name of the application instance you are monitoring.

Logon Parameters Parameters passed to ksar3 for any Take Action definition. This attribute is not for use in situations.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not for use in situations.

Number The identifier for the mySAP process. For example, 6 is the identifier for a particular mySAP work process.

OS Process Id The identifier for the operating system process. For example, 5032 is the number of the operating system process.

Process Page Size (kb) The page size, in KB, consumed by the process. For example, 3 is the page size, in KB, consumed by the mySAP process.

Process Private Memory (kb) The private memory, in KB, allocated to the process.

Process Private Memory (kb) (Superseded) The private memory, in KB, allocated to the process. For example, 42178 is the private memory, in KB, allocated to the mySAP process.

Process Roll Size (kb) The roll size, in KB, consumed by the process. For example, 114688 is the roll size, in KB, consumed by the mySAP work process.

Process Total Memory (kb) The total amount of private memory, in KB, allocated to the process.

Process Total Memory (kb) (Superseded) The total amount of private memory, in KB, allocated to the process. For example, 1011913 is the total amount of private memory, in KB, allocated to the mySAP work process.

Program A text string identifier or name for the program that is currently executing in a work process. This attribute provides single-byte character support only. For example, SAPETHFB identifies the name of the program associated with this process.

Program (Unicode) A text string identifier or name for the program that is currently executing in a work process. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Restart After Error A Yes/No switch that indicates whether a process must be restarted automatically after an abnormal termination during its execution. The following values are possible:

0 = No 1 = Yes

Roll In-Out Count The number of roll in actions (where memory is retrieved from roll space), and roll out actions (where memory is temporarily saved to roll space) associated with this current user ID.

Roll In-Out Count (Superseded) The number of roll in actions (where memory is retrieved from roll space), and roll out actions (where memory is temporarily saved to roll space) associated with this current user ID. For example, 127 is the number of roll ins and roll outs associated with this user.

Roll In-Out Time (ms) The amount of time, in milliseconds, spent processing roll ins and roll outs for this mySAP process. For example, 261636 is the amount of time in milliseconds it took to process roll ins and roll outs for this mySAP process.

Sample Time The time stamp for the date and time the agent collected the data. This attribute is not for use in situations.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition.

Status The current state of the work process. The following values are possible:

1 = Free

- 2 = Waiting Waiting to execute a request
- 4 = Running Executing a request
- 8 = Stopped Waiting for an action to complete
- C = Complete
- ? = Unknown

Status Reason The reason the process stopped. The following values are possible:

- 1 = Debug
- 2 = CPIC
- 3 = ENQ
- 4 = UPD
- 5 = SPO
- 6 = ADM
- 7 = NUM
- 8 = PRIV
- ? = Unknown

System Label System label generated from SID_DBhostname, where SID is the target mySAP system ID and DBhostname is the host name of the data base server associated with the target mySAP system.

System Name The SAP System Identifier (SID) for the mySAP system you are monitoring. For example, PRD. The following values provide information about the system

+AB = ABAP_Version_Mismatch +DD = Data_collection_disabled +NE = Instance_or_Group_does_not_exist +NR = Instance_not_running +RF=RFC_Error_Check_Agent_Log +++ = No_applicable_data

Table Name The name of the table currently being used by the work process. For example, TADIR is the name of the table currently being used.

Transaction Code The identifier for the transaction code. This attribute provides single-byte character support only. For example, FB01 is a transaction code.

Transaction Code (Unicode) The identifier for the transaction code. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Type The type of work process, such as dialog or batch. For example, UPD specifies a work process that executes dialog steps. The following values are possible:

- 0 = NWP
- 1 = DIA
- 2 = UPD
- 3 = ENQ
- 4 = BTC
- 5 = SPO
- 6 = UP2
- 7 = Unknown

Userid The name of the person whose request is being processed. For example, LBROWN is the name of the person using this work process. The following value is also possible:

-1 = N/A. Data for this attribute is not applicable at this time.

Wait Information Information supplied by the mySAP system that explains why a process had to wait before executing. This attribute provides single-byte character support only. For example, CMRCV/ 6066760 is an example of wait information.

Wait Information (Unicode) Information supplied by the mySAP system that explains why a process had to wait before executing. This attribute provides multi-byte character support. Use this attribute for new queries and situations to obtain worldwide language support in your environment.

Wait Start Time The time stamp for the date and time the process started waiting to execute.

Work Process Status The status of the work process, such as Free, Waiting, Running, Stopped, Complete, Ended, Shutdown, and Standby.

XML Message Logs attributes

This attribute group shows details of the XML message This attribute group can be used in queries, reports, and workspace views.

Error ID The ID of the error.

Error Category The category of the error.

Execution From Time stamp that represent the execution date of XML message The valid format is time stamp.

Inbound Interface Name The name of the receiver who accepts the XML Message The valid format is an alphanumeric string, with a maximum of 120 characters.

Inbound Interface Namespace This contains the inbound interface. The valid format is an alphanumeric string, with a maximum of 255 characters.

Initial Time The initial time of the XML Message. The valid format is time stamp.

Managed System The identifier for this mySAP resource. The valid format is a text string for a mySAP system, instance, or group. This attribute is not available for use in situations. Otherwise, this attribute is available to use like any other attribute, for example it is available for reports, queries, and workspaces. The valid format is an alphanumeric string, with a maximum of 64 characters.

Message ID GUID for the Integration Engine objects. The valid format is an alphanumeric string, with a maximum of 32 characters.

Message Status Description The message status description of the exchange infrastructure.

Message Type Integration Engine Message type. The valid format is an alphanumeric string, with a maximum of 1 characters. The following values are possible:

- A = Asynchronous
- S = Synchronous

Outbound Interface Namespace Contains the Outbound Interface. The valid format is an alphanumeric string, with a maximum of 255 characters.

Outbound Interface Name The name of the sender who sends the XML message. The valid format is an alphanumeric string, with a maximum of 120 characters.

Period End Date and time that shows the end of the period. The valid format is time stamp.

Period Start Date and time that shows the start of the period. The valid format is time stamp.

Pipeline ID Integration Engine Pipeline ID. The valid format is an alphanumeric string, with a maximum of 40 characters.

Receiving System Defines how an adapter transforms a message so that it is processed by the receiver during outbound processing. The valid format is an alphanumeric string, with a maximum of 60 characters.

SAPshcut Parameters Parameters passed to sapshcut for any transaction launch definition. The valid format is an alphanumeric string, with a maximum of 120 characters.

Sending System Defines how an adapter transforms a message so that it is processed by the Integration Engine during inbound processing. The valid format is an alphanumeric string, with a maximum of 60 characters.

Send Timestamp Date and time that the XML message was sent. The valid format is time stamp.

System Label System label generated from SID_DBhostname, where SID is the target SAP system ID and DBhostname is the host name of the data base server associated with the target SAP system. The valid format is an alphanumeric string, with a maximum of 37 characters.

System Name The SAP System Identifier (SID) for the mySAP system that you are monitoring. For example, PRD. The valid format is an alphanumeric string, with a maximum of 3 characters. The following values are possible:

+AB = ABAP_Version_Mismatch

+DD = Data_collection_disabled

+NE = Instance_or_Group_does_not_exist

+NR = Instance_not_running

+RF = RFC_Error_Check_Agent_Log

+++ = No_applicable_data

User Name User name of the SAP system. The valid format is an alphanumeric string, with a maximum of 12 characters.

Chapter 3. Situations reference

A situation is a logical expression involving one or more system conditions. Situations are used to monitor the condition of systems in your network. You can manage situations from the Tivoli Enterprise Portal by using the Situation Editor or from the command-line interface using the tacmd commands for situations. You can manage private situations in the private configuration XML file.

About situations

The monitoring agents that you use to monitor your system environment include a set of predefined situations that you can use as-is. You can also create new situations to meet your requirements.

Predefined situations contain attributes that check for system conditions common to many enterprises. Using predefined situations can improve the speed with which you can begin using the SAP agent. You can change the conditions or values being monitored by a predefined situation to the conditions or values best suited to your enterprise.

You can display predefined situations and create your own situations using the Situation editor. The left panel of the Situation editor initially lists the situations associated with the Navigator item that you selected. When you click a situation name or create a situation, the right panel opens with the following tabs:

Formula

Formula describing the condition being tested.

Distribution

List of managed systems (operating systems, subsystems, or applications) to which the situation can be distributed. All the SAP agent managed systems are assigned by default.

Expert advice

Comments and instructions to be read in the event workspace.

Action

Command to be sent to the system.

EIF

Customize forwarding of the event to an Event Integration Facility receiver. (Available when the Tivoli Enterprise Monitoring Server has been configured to forward events.)

Until

Options to close the event after a period of time, or when another situation becomes true.

Additional information about situations

The *Tivoli Enterprise Portal User's Guide* contains more information about predefined and custom situations and how to use them to respond to alerts.

For a list of the predefined situations and information about each individual situation for this monitoring agent, see "Predefined situations" on page 265.

Predefined situations

The SAP agent contains predefined situations that monitor problems related to different functions, such as alerts, users, and batch jobs.

The following alerts do not include any situations but you can create situations for them. The situation formula must contain the solution id that you use to monitor the specific alerts.

- Early Watch
 - The solution ID is included in the Solution Overview workspace.
- System Monitoring

- The situation formula must also contain the type of monitoring and the Monitored by Solution information. For example, use the System Monitoring Current State for the Current State alert and the System Monitoring Open Alerts for open alerts. The solution ID is included in the Solution Overview workspace.
- Business Process Monitoring
 - The solution ID is included in the Solution Overview workspace.

This monitoring agent contains the following predefined situations:

- ABAP Dump
 - R3_ABAP_Dump
 - R3_ABAP_Dump_Excessive
- Active Users
 - R3_USR_Echoed_Session
 - R3_USR_Priv_Mode
 - R3_USR_SAP_DDIC_online
 - R3_USR_Security_Leak
- Alert
 - R3_Alert_Abort_Update_Crit
 - R3_Alert_Crit
 - R3_Alert_DB_Warn
 - R3_Alert_No_Update_Crit
 - R3_Alert_Output_Pending
 - R3_Alert_Pend_Update_Crit
 - R/3_Alert_System_Down
 - R/3_Alert_Warn
 - SAP_Alert_Crit
 - SAP_Alert_Warn
 - R/3_Alert_System_Up
 - SAP_MTE_State_Crit
 - SAP_MTE_State_War
- Batch Data Create
 - R3_BDC_Problem
- Batch Jobs
 - R3_Batch_Job_Warn
 - R3_Batch_Too_Long
 - R3_Batch_Too_Long_Crit
 - R3_Batch_Too_Long_Warn
 - R3_Delete_RunLong_Jobs
- Buffer
 - R3_Buffer_Directory_Crit
 - R3_Buffer_Hitratio_Crit
 - R3_Buffer_Hitratio_Warn
 - R3_Buffer_Reset_Warn
 - R3_Buffer_Swap_Crit

- SAP_Buffer_Hitratio_Crit
- SAP_Buffer_Hitratio_Warn
- SAP_Buffer_Reset_Warn
- SAP_Buffer_Swap_Crit
- SAP_Buffer_Sync_Warn
- SAP_Buffer_Quality_Crit
- SAP_Buffer_Quality_Warn
- SAP_Ext_Mem_Perc_Used_Crit
- SAP_Ext_Mem_Perc_Used_Warn
- SAP_Ext_Mem_Max_Perc_Used_Crit
- SAP_Ext_Mem_Max_Perc_Used_Warn
- SAP_Page_Max_Perc_Used_Crit
- SAP_Page_Max_Perc_Used_Warn
- SAP_Roll_Max_Perc_Used_Crit
- SAP_Roll_Max_Perc_Used_Warn
- Business Process Engine
 - SAP_BPE_Failed_Delivery_Attempt
 - SAP_BusinessProcessEng_Stopped
 - SAP_Error_In_BusinessProcessEng
- Connection Monitoring
 - SAP_RFC_Connection_Inactive
- Database
 - R3_DB_Extents_Change_Warn
 - R3_DB_Freespace_Problem
 - R3_DB_Full_Crit
 - R3_DB_Full_Warn
 - R3_DB_Missing_Index_Problem
 - R3_DB_Object_Space
 - R3_DB_Objects_Freesize_Crit
 - R3_DB_Objects_Freesize_Warn
- DB2 Database
 - SAP_DB2_Backup_Pending
 - SAP_DB2_Restore
 - SAP_DB2_Rollforward
 - SAP_DB2_Status
 - SAP_DB2_History_Deadlock
 - SAP_DB2_History_Lock_Escalations
 - SAP_DB2_History_Lock_Waits
 - SAP_DB2_History_XLock_Escalations
- Delete
 - R3_Delete_Old_BDC_Sessions
 - R3_Delete_Old_Job_Logs
 - R3_Delete_Old_Spool_Files

- Dialog
 - R3_Dialog_Resp_Time_Crit
 - R3_Dialog_Resp_Time_Warn
 - R3_Dialog_Wait_Time_Crit
 - R3_Dialog_Wait_Time_Warn
 - SAP_Dialog_Resp_Time_Crit
 - SAP_Dialog_Resp_Time_Warn
- Excess Memory
 - R3_Excess_Memory_Warning
 - SAP_Excess_Memory_Warning
- File Systems
 - R3_Filesystem_Fill_Fast_Crit
 - R3_Filesystem_Fill_Fast_Warn
 - R3_Filesystem_Full_Crit
 - R3_Filesystem_Full_Warn
 - R3_Filesystem_Too_Full
- Gateway Connections
 - R3_GWY_Connection_with_error
- HTTP Service
 - SAP_HTTPSRV_Inactive
- ICM Service
 - SAP_ICM_Service_Status
- Instance Configuration
 - R3_Inst_Down_PrimeTime
 - R3_Instance_Down_Crit
 - R3_Instance_Down2_Crit
 - R3_Instance_Started
- Job Monitoring
 - SAP_Background_Job_Canceled
 - SAP_IntEngine_Job_Incorrect
- License
 - R3_License_Expiry_Crit
 - R3_License_Expiry_Warn
- Locks
 - R3_Locks_Excessive
 - R3_Locks_Long_Period
- Login and Logoff
 - R3_LGN_Excessive_login_period
 - R3_LGN_Invalid
 - R3_LGRP_Inactive_Instance
- MAI Alert Inbox
 - SAP_Alert_Inbox_Crit

- SAP_Alert_Inbox_Warn
- SAP_Alert_Inbox_High_Severity
- Message Server Monitor
 - SAP_Message_Monitor_Status
- Number Range
 - R3_NBUF_Performance_Crit
- OS and LAN
 - R3_OS_CPU_Crit
 - R3_OS_CPU_Warn
 - R3_OS_LAN_Crit
 - R3_OS_LAN_Warn
 - R3_OS_Memory_Crit
 - R3_OS_Memory_Warn
 - R3_OS_Paging_Problem
 - R3_OS_Swap_Space_Crit
 - R3_OS_Swap_Space_Warn
 - SAP_OS_LAN_Crit
 - SAP_OS_LAN_Warn
- Output
 - R3_Output_Pending_Problem
 - R3_Printer_Locked
 - R3_Printer_Problem
 - R3_Printer_Unreachable_Warn
 - SAP_OUTPUT_Pending_Problem
- PI Channel Monitoring
 - SAP_Processing_Status_Error
 - SAP_Processing_Status_Stopped
- PI Monitoring
 - SAP_SOLMAN_PI_Mon_Avartg_Crit
 - SAP_SOLMAN_PI_Mon_Avartg_Warn
 - SAP_SOLMAN_PI_Mon_Slfrtg_Crit
 - SAP_SOLMAN_PI_Mon_Slfrtg_Warn
- Private Memory
 - R3_Private_Memory_Critical
- Private Mode
 - R3_Private_Mode_Crit
- qRFC
 - SAP_Inbound_Queue_Waiting
 - SAP_Inbound_Queue_Failed
 - SAP_Outbound_Queue_Waiting
 - SAP_Outbound_Queue_Failed
- Response Time

- R3_Average_Response_Time
- SAP_Buffer_Directory_Crit
- SAPGUI
 - R3_Login_Slow
 - R3_Main_Menue_Slow
 - SAP_Login_Slow
 - SAP_Main_Menu_Slow
- SAP Office
 - R3_OFCE_Huge_msg
 - SAP_OFCE_Huhe_msg
- SAP Router
 - R3_ROUT_Problems
- Service Response
 - R3_Buffer_Sync_Warn
 - R3_Update_Resp_Time_Crit
 - R3_Update_Resp_Time_Warn
 - R3_Update_Wait_Time_Crit
 - R3_Update_Wait_Time_Warn
 - SAP_Batch_Resp_Time_Crit
 - SAP_Batch_Resp_Time_Warn
 - SAP_Spool_Resp_Time_Crit
 - SAP_Spool_Resp_Time_Warn
- Spool
 - R3_Spool_Aborted
 - R3_Spool_Size_Crit
 - R3_Spool_Size_Warn
- System Log
 - R3_SYS_Abap_Dump
 - R3_SYS_CPIC_Warn
 - R3_SYS_DB_Warn
 - R3_SYS_Trans_Rollback_Warn
 - R3_SYS_Transaction_Warn
 - SAP_Syslog_Crit
 - SAP_Syslog_Warn
- System Monitoring
 - SAP_SOLMAN_SYSMON_SysCrit
 - SAP_SOLMAN_SYSMON_ConfCrit
- Transaction RFC
 - R3_TRFC_problems
- Transaction RFC Logs
 - SAP_tRFC_Sysfail
 - SAP_tRFC_Cpicerr

- Transport
 - R3_Transport_Crit
 - R3_Transport_Repair_to_Prod
 - R3_Transport_Repair_Warn
 - R3_Transport_Warn
- Updates
 - R3_update_failure
 - R3_update_failure_excessive
- Workflow Trace Logs
 - SAP_Workflow_Trace_Inactive
 - SAP_Workflow_Trace_Validity_End
 - SAP_Workflow_Trace_Activated
- Work Processes
 - R3_WP_CPU_High (deprecated)
 - R3_WP_Error
 - R3_WP_priv_mode
 - R3_WP_Problem_Critical
 - R3_WP_Restart
- XML Messages
 - SAP_Asynchronous_XML_Msg_Recd
 - SAP_Persist_Reorg_Req
 - SAP_Persist_Reorg_Warning
 - SAP_Syn_Asyn_Communication_Err
 - SAP_Syn_Asyn_Comm_Err_possible
 - SAP_WP_CPU_High

Situations activated at startup

At startup, situations are either automatically started for you or you must activate them manually.

The SAP agent includes two types of predefined situations:

- Autostart situations that are automatically installed, distributed to managed objects, and started for you
- Situations that are automatically installed; however, you must start them manually

Situation values

Some values that are assigned to the predefined situations are examples only.

Review the assigned values, and then edit the situations to reflect the conditions that you want to monitor on your mySAP managed systems.

ABAP Dump situations

ABAP Dump situations notify you of ABAP dumps and they also monitor for dumping problems.

R3_ABAP_Dump notifies whether an ABAP dump was generated. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_ABAP_Dumps.Dump_Title NE ''
```

R3_ABAP_Dump_Excessive monitors for general excessive dumping problems. This situation is not activated at startup. This situation has the following formula:

IF COUNT R/3_ABAP_Dumps.Dump_Title GT 100

Active Users situations

Active Users situations monitor user sessions in the mySAP system.

R3_USR_Echoed_Session monitors for echoed sessions. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Active_Users.Echoed_To_Session NE ''

R3_USR_Priv_Mode monitors user interactions that force work processes into private mode. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Active_Users.User_Private_Memory GT 0
```

R3_USR_SAP_DDIC_Online monitors to see if SAP* or DDIC super users are online in the system. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Active_Users.Userid EQ SAP*
OR
R/3_Active_Users.Userid EQ DDIC
```

R3_USR_Security_Leak monitors for potential security leaks. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Active_Users.Terminal EQ APPC-TM
AND
(VALUE R/3_Active_Users.Userid EQ SAP*
OR
VALUE R/3_Active_Users.Userid EQ DDIC)
```

Alert situations

Alert situations monitor database alerts, requests, and updates, and some alert situations are activated at startup.

R3_Alert_Abort_Update_Crit monitors terminated updates. This situation is activated at startup. This situation has the following formula:

IF VALUE R3_Alerts.Number EQ 9902

R3_Alert_Crit monitors SAP critical alerts. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Alerts.Severity EQ Critical

R3_Alert_DB_Warn monitors database alerts. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Alerts.Class EQ Database

R3_Alert_No_Update_Crit monitors inactive updates. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Alerts.Number EQ 9901

R3_Alert_Output_Pending monitors pending output requests. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Alerts.Number EQ 9904

R3_Alert_Pend_Update_Crit monitors pending updates. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3__Alerts.Number EQ 9903

R/3_Alert_System_Down monitors SAP system down. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Alerts.Number EQ 9900

R/3_Alert_System_Up monitors SAP system up. This situation has the following formula:

IF VALUE R/3_Alerts.Number EQ 9915

R/3_Alert_Warn monitors SAP warning alerts. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Alerts.Severity EQ Warning

SAP_Alert_Crit monitors SAP critical alerts. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Alerts.MTE_Class EQ SAP_SI_StartProfile OR VALUE R/3_Alerts.MTE_Class EQ R3EnqeueQueueLength OR VALUE R/3_Alerts.MTE_Class EQ ALEClass OR VALUE R/3_Alerts.MTE_Class EQ SAP_SI_InstanceProfile

SAP_Alert_Warn monitors SAP warning alerts. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Alerts.MTE_Class EQ R3SystemTrace OR VALUE R/3_Alerts.MTE_Class EQ 'SAP CTS Configuration' OR VALUE R/3_Alerts.MTE_Class EQ R3TraceSwitches

SAP_MTE_State_Crit monitors the CCMS current state. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_CCMS_Current_State.Current_State EQ Red

SAP_MTE_State_Warn monitors the CCMS current state. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_CCMS_Current_State.Current_State EQ Yellow

Batch Data Create situations

Batch Data Create situations monitor batch data create sessions.

R3_BDC_Problem monitors Batch Data Create sessions that finished with errors. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Batch_Data_Create.Status EQ Errored

Batch Jobs situations

Batch Jobs situations monitor batch jobs that are cancelled or that run for too long.

R3_Batch_Job_Warn monitors cancelled batch jobs. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Batch_Jobs.Status EQ Cancelled

R3_Batch_Too_Long monitors batch jobs running too long and cancels them if an error exists. This situation is associated with policy R3_Monitor_Batch_Jobs, and is not activated at startup. This situation has the following formula:

```
IF SIT (R3_Batch_Too_Long_Warn) EQ TRUE OR
```

SIT (R3_Batch_Too_Long_Crit) EQ TRUE

R3_Batch_Too_Long_Crit monitors batch jobs running more than 5 hours. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Batch_Jobs.Duration GT 300

R3_Batch_Too_Long_Warn monitors batch jobs running more than 3 hours and less than 5 hours. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Batch_Jobs.Duration GT 180 AND VALUE R/3_Batch_Jobs.Duration LE 300

R3_Delete_RunLong_Jobs cancels long running jobs after 60 minutes. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Batch_Jobs.Status EQ Active
AND
VALUE R/3_Batch_Jobs.Duration GT 60
```

Buffer situations

Buffer situations monitor the buffer, for example, the buffer hit ratios and the amount of extended memory that is in use.

R3_Buffer_Directory_Crit monitors no more free directory entries available. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Buffer_Performance.Directory_Allocated NE 0
AND
VALUE R/3 Buffer Performance.Directory Free EQ 0
```

R3_Buffer_Hitratio_Crit monitors buffer hit ratios below 90%. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Buffer_Performance.Hitratio LT 90
AND
IF VALUE R/3_Buffer_Performance.Hitratio GE 0
```

R3_Buffer_Hitratio_Warn monitors buffer hit ratios that are above 90% and below 95%. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Buffer_Performance.Hitratio LT 95 AND VALUE R/3_Buffer_Performance.Hitratio GE 90

R3_Buffer_Reset_Warn monitors for reset buffers. This situation is activated at startup. This situation has the following formula:

```
IF VALUE R/3_Buffer_Performance.Total_Resets GT 0
```

R3_Buffer_Swap_Crit monitors buffer objects that are swapped because of space problems. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Buffer_Performance.Objects_Swapped GT 0

SAP_Buffer_Quality_Crit The database access quality for one of the buffers has fallen below the critical threshold. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Buffer_Performance.DB_Access_Quality LT 70.0
AND
VALUE R/3 Buffer_Performance.DB_Access_Quality GE 0.0
```

SAP_Buffer_Hitratio_Crit monitors buffer hit ratios below 90%. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Buffer_Performance.Hitratio LT 90
AND
IF VALUE R/3_Buffer_Performance.Hitratio GE 0
```

SAP_Buffer_Hitratio_Warn monitors buffer hit ratios that are above 90% and below 95%. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Buffer_Performance.Hitratio LT 95 AND VALUE R/3_Buffer_Performance.Hitratio GE 90

SAP_Buffer_Reset_Warn monitors for reset buffers. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Buffer_Performance.Total_Resets GT 0
```

SAP_Buffer_Quality_Warn The database access quality for one of the buffers has fallen below the warning threshold. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Buffer_Performance.DB_Access_Quality LT 90.0
AND
VALUE R/3_Buffer_Performance.DB_Access_Quality GE 70.0
```

SAP_Buffer_Swap_Crit monitors buffer objects that are swapped because of space problems. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Buffer_Performance.Objects_Swapped GT 0

SAP_Buffer_Sync_Warn monitors Buffer synchronization. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Buffer_Performance.Service_Type EQ BufferSync AND Avg_Response_Time(ms) GT 200
```

SAP_Ext_Mem_Perc_Used_Crit The percentage of extended memory in use has risen above the critical threshold. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Buffer_Performance.Encoded_Name EQ ExtendedMemory
AND
VALUE R/3_Buffer_Performance.Size_Used_Percent GT 95
```

SAP_Ext_Mem_Perc_Used_Warn The percentage of extended memory in use has risen above the warning threshold. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Buffer_Performance.Encoded_Name EQ ExtendedMemory
AND
VALUE R/3_Buffer_Performance.Size_Used_Percent LE 95
AND
VALUE R/3_Buffer_Performance.Size_Used_Percent GT 75
```

SAP_Ext_Mem_Max_Perc_Used_Crit The maximum used percentage of extended memory has risen above the critical threshold. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Buffer_Performance.Encoded_Name EQ ExtendedMemory
AND
VALUE R/3_Buffer_Performance.Max_Used_Percent GT 95
```

SAP_Ext_Mem_Max_Perc_Used_Warn The maximum used percentage of extended memory has risen above the warning threshold. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Buffer_Performance.Encoded_Name EQ ExtendedMemory AND VALUE R/3_Buffer_Performance.Max_Used_Percent LE 95 AND VALUE R/3_Buffer_Performance.Max_Used_Percent GT 75

SAP_Page_Max_Perc_Used_Crit The maximum percentage of page memory in use has exceeded the critical threshold. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Buffer_Performance.Encoded_Name EQ PageArea
AND
VALUE R/3_Buffer_Performance.Max_Used_Percent GT 90
```

SAP_Page_Max_Perc_Used_Warn The maximum percentage of page memory in use has exceeded the warning threshold. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Buffer_Performance.Encoded_Name EQ PageArea AND VALUE R/3_Buffer_Performance.Max_Used_Percent LE 90 AND VALUE R/3_Buffer_Performance.Max_Used_Percent GT 70

SAP_Roll_Max_Perc_Used_Crit The maximum percentage of roll area memory in use has risen above the critical threshold. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Buffer_Performance.Encoded_Name EQ RollArea AND VALUE R/3_Buffer_Performance.Max_Used_Percent GT 95

SAP_Roll_Max_Perc_Used_Warn The maximum percentage of roll area memory in use has risen above the warning threshold. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Buffer_Performance.Encoded_Name EQ RollArea AND VALUE R/3_Buffer_Performance.Max_Used_Percent LE 95 AND VALUE R/3_Buffer_Performance.Max_Used_Percent GT 90

Business Process Engine situations

Business Process Engine situations monitor the status of the business process engine and the persistence layer.

SAP_BPE_Failed_Delivery_Attempt monitors the number of failed attempts of the XML message. This situation is triggered if the retry count is greater than five. This situation is not activated at startup. This situation has the following formula:

IF VALUE PI_BPE_Monitoring.Retry_Count GE 5

SAP_BusinessProcessEng_Stopped monitors the status of the Business Process Engine. This situation is triggered if the BPE status is equal to Stopped. This situation is not activated at startup. This situation has the following formula:

IF VALUE PI_BP_ENGINE_STATUS.Engine_Status EQ Stopped

SAP_Error_In_BusinessProcessEng monitors the reorganization status of the persistence layer. This situation is triggered if the BPE status is equal to Error. This situation is not activated at startup. This situation has the following formula:

IF VALUE PI_BP_ENGINE_STATUS.Engine_Status EQ Error

Connection Monitoring situation

The Connection Monitoring situation monitors the RFC status.

SAP_RFC_Connection_Inactive monitors the RFC status and the Inactive status. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_Connection_Monitoring.RFC_STATUS EQ Inactive

Database situations

Database situations monitor the space used by database objects and the free space that is available.

R3_DB_Extents_Change_Warn monitors for changes in the number of extents. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Data_Base_Detail.Extents_Change_Per_Day GT 0

R3_DB_Freespace_Problem monitors for free space database problems. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Data_Base_Summary.Freespace_Problems GT 0

R3_DB_Full_Crit monitors space usage of database objects. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Data_Base_Summary.Total_Used_Percent GT 90

R3_DB_Full_Warn monitors space usage of database objects. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Data_Base_Summary.Total_Used_Percent GT 80 AND VALUE R/3_Data_Base_Summary.Total_Used_Percent LE 90

R3_DB_Missing_Index_Problem monitors for missing indexes. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Data_Base_Summary.Missing_In_Database GT 0 OR VALUE R/3_Data_Base_Summary.Missing_In_DDIC GT 0

R3_DB_Object_Space monitors critical space usage of database objects. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Data_Base_Detail.Space_Critical EQ YES

R3_DB_Objects_Freesize_Crit monitors free space of database objects. This situation is activated at startup. This situation has the following formula:

```
IF VALUE R/3_Data_Base_Detail.Size_Free_Percent GE 0
AND
VALUE R/3_Data_Base_Detail.Size_Free_Percent LT 8
```

R3_DB_Objects_Freesize_Warn monitors free space of database objects. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Data_Base_Detail.Size_Free_Percent GE 8
AND
VALUE R/3_Data_Base_Detail.Size_Free_Percent LT 15
```

DB2 Database situations

DB2 Database situations monitor the DB2 databases for backups, deadlocks, and lock waits.

SAP_DB2_Backup_Pending monitors the number of backups that are pending for the DB2 database. This situation is not activated at startup. This situation has the following formula:

IF VALUE DB2_CON_INFO.Backup_pending NE 0

SAP_DB2_Restore monitors for restore pending. This situation is not activated at startup. This situation has the following formula:

IF VALUE DB2_CON_INFO.Restore_Pending NE 0

SAP_DB2_Rollforward monitors for rollforward. This situation is not activated at startup. This situation has the following formula:

IF VALUE DB2_CON_INFO.Rollforward NE 0

SAP_DB2_Status monitors the status of the DB2 database. This situation is not activated at startup. This situation has the following formula:

IF VALUE DB2_CON_INFO.Status NE Active

SAP_DB2_History_Deadlock monitors the number of the deadlock. This situation is not activated at startup. This situation has the following formula:

IF VALUE DB2_DB12_BACKUPHIST.Deadlock GE 10

SAP_DB2_History_Lock_Escalations monitors the number of the lock escalation. This situation is not activated at startup. This situation has the following formula:

IF VALUE DB2_DB12_BACKUPHIST.Lock_Escalation GE 10

SAP_DB2_History_Lock_Waits monitors the number of the lock waits. This situation is not activated at startup. This situation has the following formula:

IF VALUE DB2_DB12_BACKUPHIST.Lock_Wait GE 10

SAP_DB2_History_XLock_Escalations monitors the number of the XLock escalation. This situation is not activated at startup. This situation has the following formula:

IF VALUE DB2_DB12_BACKUPHIST.XLock_Escalation GE 10

Delete Product-provided situations

Delete Product-provided situations delete obsolete job logs after specific times.

R3_Delete_Old_BDC_Sessions Run RSBDCREO to delete obsolete BDC sessions/logs after 23:00. This situation is not activated at startup. This situation has the following formula:

IF VALUE Local_Time.Hours EQ 23

R3_Delete_Old_Job_Logs Run RSBTCDEL to delete obsolete job logs after 23:00. This situation is not activated at startup. This situation has the following formula:

IF VALUE Local_Time.Hours EQ 23

R3_Delete_Old_Spool_Files Run RSPO0041 to delete obsolete spool files after 23:00. This situation is not activated at startup. This situation has the following formula:

IF VALUE Local_Time.Hours EQ 23

Dialog situations

Dialog situations monitor dialog work processes, such as the response time and the dialog wait time for the CPU.

R3_Dialog_Resp_Time_Crit monitors response time of dialog work process. This situation is activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ Dialog
AND
VALUE R/3 Service Response Time.Avg Response Time GT 1500
```

R3_Dialog_Resp_Time_Warn monitors response time of dialog work process. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Service_Response_Time.Service_Type EQ Dialog AND VALUE R/3_Service_Response_Time.Avg_Response_Time GT 1000 and VALUE R/3_Service_Response_Time.Avg_Response_Time LE 1500

R3_Dialog_Wait_Time_Crit monitors dialog wait time for CPU. This situation is activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ Dialog
AND
VALUE R/3_Service_Response_Time.Avg_Wait_Percent GT 3
```

R3_Dialog_Wait_Time_Warn monitors dialog wait time for CPU. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Service_Response_Time.Service_Type EQ Dialog AND VALUE R/3_Service_Response_Time.Avg_Wait_Percent GT 1 AND VALUE R/3_Service_Response_Time.Avg_Wait_Percent LE 3

SAP_Dialog_Resp_Time_Crit monitors response time of dialog work process. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ Dialog
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time GT 1500
```

SAP_Dialog_Resp_Time_Warn monitors response time of dialog work process. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ Dialog
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time GT 1000
and
VALUE R/3_Service_Response_Time.Avg_Response_Time LE 1500
```

Excess Memory situations

The Excess Memory situation monitors the average total memory available.

R3_Excess_Memory_Warning monitors for average total memory of more than 10 MB. This situation is not activated at startup. This situation has the following formula:

IF VALUE R3_Transaction_Performance.Avg_Total_Memory GE 10000

SAP_Excess_Memory_Warning monitors for average total memory exceeds 10 MB. This situation is not activated at startup. This situation has the following formula:

IF VALUE R3_Transaction_Performance.Avg_Total_Memory GE 10000

File System situations

File System situations monitor the file systems that are close to reaching capacity.

R3_Filesystem_Fill_Fast_Crit monitors for file systems that are projected to reach capacity in less than one day. This situation is activated at startup. This situation has the following formula:

```
IF VALUE R/3_File_Systems.Full_Forecast GT 0
AND
VALUE R/3_File_Systems.Full_Forecast LE 1
```

R3_Filesystem_Fill_Fast_Warn monitors for file systems that are projected to reach capacity in one to three days. This situation is not activated at startup.

```
IF VALUE R/3_File_Systems.Full_Forecast GT 1
AND
VALUE R/3_File_Systems.Full_Forecast LE 3
```

R3_Filesystem_Full_Crit monitors for mySAP file system more than 90% full. This situation is activated at startup. This situation has the following formula:

```
IF VALUE R/3_File_Systems.Size_Used_Percent GT 90
```

R3_Filesystem_Full_Warn monitors for mySAP file system more than 80% full. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_File_Systems.Size_Used_Percent GT 80
AND
VALUE R/3_File_Systems.Size_Used_Percent LE 90
```

R3_Filesystem_Too_Full monitors filling file system and takes action. This situation is associated with policy R3_Monitor_File_Systems, and is not activated at startup. This situation has the following formula:

```
IF SIT (R/3_Filesystem_Full_Warn) EQ TRUE
OR
SIT (R/3_Filesystem_Full_Crit) EQ TRUE
```

Gateway Connection situation

The Gateway Connection situation monitors gateway connections with CPIC/SAP errors.

R3_GWY_Connection_with_error monitors for gateway connections that have CPIC/SAP errors. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Gateway_Connections.CPIC_Return_Code GT 0
OR
VALUE R/3_Gateway_Connections.SAP_Return_Code GT 0
```

HTTP Service situations

HTTP Service situations monitor HTTP services.

SAP_HTTPSRV_Inactive monitors the status of the HTTP services. This situation is triggered if the status is equal to Inactive. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_HTTP_SRVS.Status EQ Inactive

ICM Service situations

ICM Service situations monitor the status of the ICM Services.

SAP_ICM_Service_Status is triggered if the service status is not equal to Active. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_ICM_SER_INFO.Service_Status NE Active

Instance Configuration situations

Instance Configuration situations monitor instances that are down or may not have started.

R3_Inst_Down_PrimeTime monitors for a mySAP instance down during prime time. This situation is activated at startup. This situation has the following formula:

```
IF VALUE R/3_Instance_Configuration.Instance_Status NE Running
AND
VALUE Local_Time.Hours GE 08
AND
VALUE Local_Time.Hours LE 18
```

R3_Instance_Down_Crit monitors for one instance down in a distributed (multi-instance) system. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Instance_Configuration.Instances_Running GT 0 AND VALUE R/3_Instance_Configuration.Instances_Down GT 0

R3_Instance_Down2_Crit monitors for one instance down in a multiple-instance system. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Instance_Configuration.Instance_Status EQ NotRunning

R3_Instance_Started monitors to see if an instance has started. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Instance_Configuration.Instance_Status EQ Running

Job Monitoring situations

Job Monitoring situations monitor the status of background jobs and integration engine jobs.

SAP_Background_Job_Canceled monitors the status of background jobs. This situation is triggered if the job status is equal to Canceled. This situation is not activated at startup. This situation has the following formula:

IF VALUE PI_IntEng_Background_Job.Job_Status EQ Canceled

SAP_IntEngine_Job_Incorrect monitors the status of integration engine jobs. This situation is triggered if the job status is equal to Incorrect. This situation is not activated at startup. This situation has the following formula:

IF VALUE PI_IntEng_Job_Overview.Job_Status EQ Incorrect

License situations

License situations monitor the number of days that are remaining for the license to expire.

R3_License_Expiry_Crit monitors the number of days that are remaining for the license to expire are 0 through 5. This situation is activated at startup. This situation has the following formula:

```
*IF *VALUE R/3_License_Information.Days_to_Expiry *LE 5 *AND *VALUE R/3_License_Information.Days_to_Expiry *GE 0
```

R3_License_Expiry_Warn monitors the number of days that are remaining for the license to expire are less than equal to 15 and greater than 5. This situation is activated at startup. This situation has the following formula:

```
*IF *VALUE R/3_License_Information.Days_to_Expiry *LE 15 *AND
*VALUE R/3_License_Information.Days_to_Expiry *GT 5
```

Locks situations

Locks situations monitor locks in the system.

R3_Locks_Excessive monitors for an excessive number of locks. This situation is not activated at startup. This situation has the following formula:

IF COUNT R/3_Lock_Entries.Lock_Object_Name GT 25

R3_Locks_Long_Period monitors for locks that have been on the system for a long time. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Lock_Entries.Lock_Age GT 60

Login and Logoff situations

Login and Logoff situations monitor users, invalid password entries, and inactive instances in the Logon group.

R3_LGN_Excessive_login_period monitors to see if users are logged on too long. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Logon_Information.Terminal NE APPC-TM AND VALUE R/3_Logon_Information.Session_Duration GT 720

R3_LGN_Invalid monitors for invalid password entries. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Logon_Information.Invalid_Password_Count GE 1

R3_LGRP_Inactive_Instance monitors for inactive instances in a Logon Group. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Logon_Groups.Type EQ Logon AND VALUE R/3_Logon_Groups.Status EQ NotActive

MAI Alert Inbox situation

The Messaging and Alerts Infrastructure (MAI) Inbox situation monitors alerts.

SAP_Alert_Inbox_Crit monitors the rating of the alert. This situation is triggered if the alert rating is equal to red. This situation is activated at startup. This situation has the following formula:

*IF *VALUE SAP_MAI_ALERTS.Alert_Rating *EQ Red

SAP_Alert_Inbox_Warn monitors the rating of the alert. This situation is triggered if the alert rating is equal to yellow. This situation is activated at startup. This situation has the following formula:

*IF *VALUE SAP_MAI_ALERTS.Alert_Rating *EQ Yellow

SAP_Alert_Inbox_High_Severity monitors the severity of the alert. This situation is triggered if the alert rating is greater than or equal to 8. This situation is activated at startup. This situation has the following formula:

```
*IF *VALUE SAP_MAI_ALERTS.Alert_Severity *GE 8
```

Message Server situations

Message Server situations monitor the message server.

SAP_Message_Monitor_Status monitors the status of the message server. This situation is triggered if the Field Name is equal to status and the Field Value is not equal to ACTIVE. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE SAP_Message_Server_Monitor.Field_Name EQ status AND VALUE SAP_Message_Server_Monitor.Field_Value NE ACTIVE
```

Number Range situation

The Number Range situation monitors for buffer performance related problems.

R3_NBUF_Performance_Crit monitors for number range buffer performance problems. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Number_Range_Buffer_Summary.Buffer_Responses_1ms_or_Greater GT 0
```

OS and LAN situations

OS and LAN situations monitor the CPU usage in the operating system.

R3_OS_CPU_Crit monitors for CPU usage over 85%. This situation is activated at startup. This situation has the following formula:

```
IF VALUE R/3_Operating_System_Performance.Idle_CPU_Percent GE 0
AND
VALUE R/3_Operating_System_Performance.Idle_CPU_Percent LT 15
```

R3_OS_CPU_Warn monitors for CPU usage over 70%. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Operating_System_Performance.Idle_CPU_Percent GE 15 AND

VALUE R/3_Operating_System_Performance.Idle_CPU_Percent LT 30

R3_OS_LAN_Crit monitors for more than 5 LAN errors per second. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Operating_System_Performance.LAN_Errors GT 5

R3_OS_LAN_Warn monitors for between 1 and 5 LAN errors per second. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Operating_System_Performance.LAN_Errors GT 0
AND
VALUE R/3_Operating_System_Performance.LAN_Errors LE 5
```

R3_OS_Memory_Crit monitors for free physical memory below 5%. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Operating_System_Performance.Physical_Memory_Free_Percent GE 0 AND VALUE R/3_Operating_System_Performance.Physical_Memory_Free_Percent LT 5

R3_OS_Memory_Warn monitors for free physical memory below 10%. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Operating_System_Performance.Physical_Memory_Free_Percent LT 10 AND VALUE R/3_Operating_System_Performance.Physical_Memory_Free_Percent GE 5

R3_OS_Paging_Problem monitors for more than 10 pages per second paged out/in. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Operating_System_Performance.Pages_Out GT 10 OR

VALUE R/3_Operating_System_Performance.Pages_In GT 10

R3_OS_Swap_Space_Crit monitors for free swap space below 5%. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Operating_System_Performance.Swap_Space_Free_Percent GE 0 AND VALUE R/3_Operating_System_Performance.Swap_Space_Free_Percent LE 5

R3_OS_Swap_Space_Warn monitors for swap space below 15%. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Operating_System_Performance.Swap_Space_Free_Percent LT 15 AND VALUE R/3_Operating_System_Performance.Swap_Space_Free_Percent GT 5

SAP_OS_LAN_Crit monitors for more than 5 LAN errors per second. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Operating_System_Performance.LAN_Errors GT 5

SAP_OS_LAN_Warn monitors for between 1 and 5 LAN errors per second. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Operating_System_Performance.LAN_Errors GT 0
AND
VALUE R/3_Operating_System_Performance.LAN_Errors LE 5
```

Output situations

Output situations monitor for problems in relation to printers and print output requests. For example, a printer may be unreachable or there may be an output request pending for a long time.

R3_Output_Pending_Problem monitors for an output request pending for more than 60 minutes. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Output_Requests.Print_Status NE Complete AND VALUE R/3_Output_Requests.Print_Pending_Time GT 60

R3_Printer_Locked monitors for locked or disabled printer. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Output_Requests.Print_Status EQ PrinterLocked OR

VALUE R/3_Output_Requests.Print_Status EQ PrinterDisabled

R3_Printer_Problem monitors for general output device errors. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Output_Requests.Print_Status EQ OutputDeviceError

R3_Printer_Unreachable_Warn monitors for printer destinations that are not reachable. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Output_Requests.Print_Status EQ ProblemWithConnection

SAP_Output_Pending_Problem monitors for an output request pending for more than 60 minutes. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Output_Requests.Print_Status NE Complete AND VALUE R/3_Output_Requests.Print_Pending_Time GT 60

PI Monitoring situations

PI Monitoring situations monitor the available status and self-test status of the component. Both the available and self-test status represent the overall status of the component.

SAP_SOLMAN_PI_Mon_Avartg_Crit monitors the **Not_available** Availability status of the component. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_MAI_PI_MON.Availability_Rating EQ Not_available

SAP_SOLMAN_PI_Mon_Avartg_Warn monitors the **Available_but_not _working** Availability status of the component. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_MAI_PI_MON.Availability__Rating EQ Available_but_not_working

SAP_SOLMAN_PI_Mon_Slfrtg_Crit monitors the **Not_available** self-test of the component. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_MAI_PI_MON.Self_test__Rating EQ Not_available

SAP_SOLMAN_PI_Mon_Slfrtg_Warn monitors the **Available_but_not_working** self-test of the component. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_MAI_PI_MON.Self_test__Rating EQ Available_but_not_working

PI Channel Monitoring situation

The PI Channel Monitoring Situation monitors the processing status of the channel.

SAP_Processing_Status_Error monitors the processing status of the channel. This situation is triggered when an error occurs in the processing status. This situation is not activated at startup. This situation has the following formula:

*IF *VALUE SAP_MAI_PICHN_MON.Processing_Status *EQ Channel_Started_but_errors_occurred

SAP_Processing_Status_Stopped monitors the processing status of the channel. This situation is triggered when the processing status stops. This situation is not activated at startup. This situation has the following formula:

*IF *VALUE SAP_MAI_PICHN_MON.Processing_Status *EQ Channel_Stopped

PI/XI Runtime Cache situations

The PI/XI Runtime Cache Monitoring Situation monitors the status of the runtime cache.

SAP_Runtimecache_Status_Cric monitors the status of the runtime cache. This situation is triggered if error occurred in cache status.

This situation has the following formula:

*IF *VALUE *EQ SAP_RNTCHE_STAT Status Error_Occured.

SAP_Runtimecache_Status_Cric monitors the status of the runtime cache. This situation is triggered if the cache status is not refreshed. This situation has the following formula:

*IF *VALUE *EQ SAP_RNTCHE_STAT Status Not_Refreshed.

SAP_Runtimecache_Status_Cric monitors the status of the runtime cache. This situation is triggered if the cache status is unknown. This situation has the following formula:

*IF *VALUE *EQ SAP_RNTCHE_STAT Status Unknown

Private Memory situation

The Private Memory situation monitors the performance of the private memory.

R3_Private_Memory_Critical monitors for when the average private memory reaches a critical level. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Transaction_Performance.Avg_Private_Memory GT 0

SAP_Private_Memory_Critical monitors response time of update work process. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ Update
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time GT 1000
```

SAP_Update_Resp_Time_Warn monitors response time of update work process. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ 'Update'
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time GT 700
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time LE 1000
```

Private Mode situation

The Private Mode situation monitors a work process that is in private mode.

R3_Private_Mode_Crit monitors for when the work process enters private mode. This situation is activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Private_Mode_Entered EQ Yes
```

qRFC situations

qRFC situations monitor the status of the inbound and outbound queues.

SAP_Inbound_Queue_Waiting monitors the status of the Inbound queue. This situation is triggered if the Queue Status is equal to waiting. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_qRFC_Inbound_Queues_Overview.Queue_Status EQ WAITING

SAP_Inbound_Queue_Failed monitors the status of the Inbound queue. This situation is triggered if the Queue Status is equal to sysfail. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_qRFC_Inbound_Queues_Overview.Queue_Status EQ SYSFAIL

SAP_Outbound_Queue_Waiting monitors the status of the Outbound queue. This situation is triggered if the Queue Status is equal to waiting. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_qRFC_Outbound_Queue_overview.Queue_Status EQ WAITING

SAP_Outbound_Queue_Failed monitors the status of the Outbound queue. This situation is triggered if the Queue Status is equal to sysfail. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_qRFC_Outbound_Queue_overview.Queue_Status EQ SYSFAIL

Response Time situation

The Response Time situation monitors the average response time of a transaction.

R3_Average_Response_Time monitors for an average response time of greater than 15 milliseconds. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Transaction_Performance.Avg_Response_Time GT 1000

SAP_Average_Response_Time monitors the average response time. This situation has the following formula:

IF VALUE R/3_Transaction_Performance.Avg Response Time (ms) GT 1000

SAP_Buffer_Directory_Crit monitors that no more free directory entries are available. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE
R/3_Buffer_Performance.Directory_Allocated NQ 0 AND VALUE R/3_Buffer_Performance.
Directory_Free EQ 0
```

SAPGUI situations

SAPGUI situations monitor the response time of the SAPGUI.

R3_Login_Slow monitors SAPGUI login screen response time. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Transaction_Performance.Program_or_Tran_Code EQ Login_Pw AND VALUE R/3_Transaction_Performance.Avg_Response_Time GT 50
```

R3_Main_Menu_Slow monitors SAPGUI main menu response time. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Transaction_Performance.Program_or_Tran_Code EQ MainMenu
AND
VALUE R/3_Transaction_Performance.Avg_Response_Time GT 100
```

SAP_Login_Slow monitors SAPGUI login screen response time. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Transaction_Performance.Program_or_Tran_Code EQ Login_Pw
AND
VALUE R/3_Transaction_Performance.Avg_Response_Time GT 50
```

SAP_Main_Menu_Slow monitors SAPGUI main menu response time. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Transaction_Performance.Program_or_Tran_Code EQ MainMenu
AND
VALUE R/3_Transaction_Performance.Avg_Response_Time GT 100
```

SAP MaxDB Database situations

The SAP MaxDB Database situations monitor the SAP MaxDB database for log area, data cache hits, and catalog cache hits.

SAP_MaxDB_Log_Crit: The percentage of log area that is used by the SAP MaxDB database has exceeded the critical threshold of 90. This situation is activated at startup. This situation has the following formula:

```
*IF *VALUE SAP_MaxDB_Log_Detail.Used_Log_Percent *GT 90
```

SAP_MaxDB_Log_Warn: The percentage of log area that is used by the SAP MaxDB database has reached the threshold of 81 through 90. This situation is activated at startup. This situation has the following formula:

*IF *VALUE SAP_MaxDB_Log_Detail.Used_Log_Percent *GT 80 *
AND
*VALUE SAP_MaxDB_Log_Detail.Used_Log_Percent *LE 90

SAP_MaxDB_Data_CacheHit_Crit: The percentage of data cache hit ratio of the SAP MaxDB database has reduced to 60 or lower value. This situation is activated at startup. This situation has the following formula:

```
*IF *VALUE SAP_MaxDB_Detail.Data_Access_Hitratio *LE 60
```

SAP_MaxDB_Data_CacheHit_Warn: The percentage of data cache hit ratio of the SAP MaxDB database is in the warning state, which is from 60 through 80. This situation is activated at startup. This situation has the following formula:

```
*IF *VALUE SAP_MaxDB_Detail.Data_Access_Hitratio *GT 60 *
AND
*VALUE SAP_MaxDB_Detail.Data_Access_Hitratio *LE 80
```

SAP_MaxDB_Catalog_CacheHit_Crit: The percentage of catalog cache hit ratio of the SAP MaxDB database has reduced to 60 or lower value. This situation is activated at startup. This situation has the following formula:

```
*IF *VALUE SAP_MaxDB_Detail.Catalog_Cache_Hitratio *LE 60
```

SAP_MaxDB_Catalog_CacheHit_Warn: The percentage of data catalog cache hit ratio of the SAP MaxDB database is in the warning state, which is from 60 through 80. This situation is activated at startup. This situation has the following formula:

```
*IF *VALUE SAP_MaxDB_Detail.Catalog_Cache_Hitratio *GT 60 *
AND
*VALUE SAP_MaxDB_Detail.Catalog_Cache_Hitratio *LE 80
```

SAP Router situation

The SAP Router situation monitors for problems in relation to the SAP router.

R3_ROUT_Problems monitors for SAPROUTER problems. This situation is not activated at startup. This situation has the following formula:

```
IF SCAN R/3_Saprouter_Log.Log_Data EQ 'Connection denied'
```

SAP System Down situation

The SAP System Down situation monitors whether the message server is running.

SAP_System_Down monitors whether the message server is running. This situation is activated at startup. This situation has the following formula:

IF *VALUE R/3_MessageServer_Configuration.Message_Server_Status *EQ NotRunning

SAP Office situation

The SAP Office situation monitors for large messages in the system.

R3_OFCE_Huge_Msg monitors for messages that are larger than 10 MB. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_SAP_Office_Inbox.Size GT 10000000
```

SAP_OFCE_Huge_msg monitors for messages that are larger than 10 MB. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_SAP_Office_Inbox.Size GT 10000000
```

Service Response situations

Service Response situations monitor the response time of service requests. These situations also monitor the response time of update work processes.

R3_Buffer_Sync_Warn monitors buffer synchronization. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ BufferSync
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time GT 200
```

R3_Update_Resp_Time_Crit monitors response time of update work process. This situation is activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ Update
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time GT 1000
```

R3_Update_Resp_Time_Warn monitors response time of update work process. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ 'Update'
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time GT 700
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time LE 1000
```

R3_Update_Wait_Time_Crit monitors update wait time for CPU. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Service_Response_Time.Service_Type EQ Update AND VALUE R/3_Service_Response_Time.Avg_Wait_Percent GT 3

R3_Update_Wait_Time_Warn monitors update wait time for CPU. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ Update
AND
VALUE R/3_Service_Response_Time.Avg_Wait_Percent GT 1
AND
VALUE R/3_Service_Response_Time.Avg_Wait_Percent LE 3
```

SAP_Batch_Resp_Time_Crit The average amount of time, in milliseconds, elapsed to process a request for this service has exceeded the critical threshold. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ 'Batch'
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time GT 3000
```

SAP_Batch_Resp_Time_Warn The average amount of time, in milliseconds, to process a request for this service has exceeded the warning threshold. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ 'Batch'
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time GT 1000
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time LE 3000
```

SAP_Spool_Resp_Time_Crit The average amount of time elapsed to process a request for this service has exceeded the critical threshold, in milliseconds. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ 'Spool'
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time GT 3000
```

SAP_Spool_Resp_Time_Warn The average amount of time, in milliseconds, elapsed to process a request for this service has exceeded the warning threshold. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Service_Response_Time.Service_Type EQ 'Spool'
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time GT 1000
AND
VALUE R/3_Service_Response_Time.Avg_Response_Time LE 3000
```

Spool situations

Spool situations monitor for spool requests and spool size.

R3_Spool_Aborted monitors for spool requests that finish with an error. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Spool_Requests.Error_Print_Requests GT 0

R3_Spool_Size_Crit monitors for spool size that exceeds 1000 pages. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Spool_Requests.Size GT 1000
```

R3_Spool_Size_Warn monitors for spool size that exceeds 500 pages. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Spool_Requests.Size GT 500 AND VALUE R/3_Spool_Requests.Size LE 1000

System Log situations

System Log situations monitor the mySAP system log for errors, such as communication errors, runtime errors, critical messages, and database problems.

R3_SYS_Abap_Dump monitors the mySAP system log for messages that an ABAP dump has been created. This situation is associated with policy R3_Monitor_ABAP_Dumps, and is activated at startup. This situation has the following formula:

```
IF VALUE R/3_System_Log.Message_Number EQ AB1
```

R3_SYS_CPIC_Warn monitors for a CPIC communications errors (R49, SA5). This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_System_Log.Message_Number EQ R49 OR VALUE R/3_System_Log.Message_Number EQ SA5 **R3_SYS_DB_Warn** monitors for Syslog database problems (BY*). This situation is not activated at startup. This situation has the following formula:

IF STR R/3_System_Log.Message_Number EQ 1,BY

R3_SYS_Trans_Rollback_Warn monitors for transaction rollbacks. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_System_Log.Message_Number EQ R68

R3_SYS_Transaction_Warn monitors for transaction runtime errors (AB0). This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_System_Log.Message_Number EQ AB0

SAP_Syslog_Crit monitors the mySAP system log for critical messages. Critical messages are specified by including the ID for the message in the situation formula. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_System_Log.Message_Number EQ A08
OR
VALUE R/3_System_Log.Message_Number EQ GEG
OR
VALUE R/3_System_Log.Message_Number EQ R45
```

SAP_Syslog_Warn monitors the mySAP system log for warning messages. Warning messages are specified by including the ID for the message in the situation formula. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_System_Log.Message_Number EQ BZ7
OR
VALUE R/3_System_Log.Message_Number EQ EAS
OR
VALUE R/3_System_Log.Message_Number EQ F7Y
OR
VALUE R/3_System_Log.Message_Number EQ GI0
OR
VALUE R/3_System_Log.Message_Number EQ R0R
OR
VALUE R/3_System_Log.Message_Number EQ R20
OR
VALUE R/3_System_Log.Message_Number EQ US4
```

System Monitoring situation

The System Monitoring situation monitors the Availability and Configuration status of the SAP System.

SAP_SOLMAN_SYSMON_SysCrit monitors the Availability status of the SAP System. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_System_Monitoring.Availability *EQ Not_Ok

SAP_SOLMAN_SYSMON_ConfCrit monitors the Configuration status of the SAP system. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_System_Monitoring.Configuration__Status *EQ Not_Ok

Transport situations

Transport situations monitor for transports, such as repair transports that are in the production system.

R3_Transport_Crit monitors for transports with return codes greater than or equal to 12 (environmental problems). This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Transport_Requests.Highest_Return_Code GE 12

R3_Transport_Repair_ to_Prod monitors for repair transports imported into the production system. This situation is associated with policy R3_Production_Repairs and is not activated at startup. This situation has the following formula:

IF VALUE R/3_Transport_Requests.Import Systems EQ PRD AND VALUE R/3_Transport_Requests.Type EQ Repair

R3_Transport_Repair_Warn monitors for repair transports. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Transport_Requests.Type EQ Repair

R3_Transport_Warn monitors for transports with return codes 5 to 11. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE R/3_Transport_Requests.Highest_Return_Code GT 4
AND
VALUE R/3_Transport_Requests.Highest_Return_Code LT 12
```

Transaction RFC situation

The Transaction RFC situation monitors specifically for Transactional RFC problems.

R3_TRFC_problems monitors for Transactional RFC problems. This situation is not activated at startup. This situation has the following formula:

```
IF SCAN R/3_Transactional_RFC.Status EQ Error
```

Transactional RFC Logs situations

Transactional RFC Logs situations monitor the tRFC Logs.

SAP_tRFC_Sysfail monitors the status of the tRFC Logs. This situation is triggered if the status of the RFC call is equal to sysfail. This situation is not activated at startup. This situation has the following formula:

IF VALUE SAP_TRFC_Monitoring.Status_of_RFC_call EQ SYSFAIL

SAP_tRFC_Cpicerr monitors the status of the tRFC Logs. This situation is triggered if the status of the RFC call is equal to cpicerr. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE SAP_TRFC_Monitoring.Status_of_RFC_call EQ CPICERR
```

Updates situations

Updates situations monitor for update failures and problems.

R3_update_failure monitors for general update failures. This situation is activated at startup. This situation has the following formula:

```
IF VALUE R/3_Updates_Information.Error NE ''
```

R3_update_failure_excessive monitors for excessive update problems. This situation is activated at startup. This situation has the following formula:

```
IF COUNT R/3_Updates_Information.Error GT 7
```

Workflow Trace Logs situations

Workflow Trace Logs situations monitor the workflow trace logs.

SAP_Workflow_Trace_Inactive monitors the status of the workflow trace logs. This situation is triggered if the status of the trace is equal to inactive. This situation is not activated at startup. This situation has the following formula:

IF VALUE PI/XI_WF_Trace.Status EQ Inactive

SAP_Workflow_Trace_Validity_End monitors the validity timestamp of the workflow trace logs. This situation is triggered if the current timestamp is equal to Activation end timestamp. This situation is not activated at startup. This situation has the following formula:

IF TIME PI/XI_WF_Trace.Activation_End_Timestamp EQ Local_Time.Timestamp + 1S

SAP_Workflow_Trace_Activated monitors the activation timestamp of the workflow trace logs. This situation is triggered if the current timestamp is equal to Activated timestamp. This situation is not activated at startup. This situation has the following formula:

```
IF TIME PI/XI_WF_Trace.Activated_Timestamp EQ Local_Time.Timestamp + 1S
```

Work Processes situations

Work Processes situations monitor work processes for errors. For example, these situations monitor work processes that do not restart or have high CPU usage.

R3_WP_CPU_High monitors for high CPU usage by work process. (Deprecated) This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Work_Processes.CPU_Time GT 10

R3_WP_Error monitors for work process errors. This situation is activated at startup. This situation has the following formula:

IF VALUE R/3_Work_Processes.Errors GT 0

R3_WP_priv_mode monitors for work processes that are in private mode for reasons other than performance problems. This situation is activated at startup.

```
IF VALUE R/3_Work_Processes.Process_Private_Memory GT 0
```

R3_WP_Problem_Critical monitors the status of single work processes. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Work_Processes.Status EQ waiting OR $% \end{tabular}$

VALUE R/3_Work_Processes.Status EQ stopped

R3_WP_Restart monitors for work processes that do not restart. This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Work_Processes.Restart_After_Error EQ No

SAP_WP_CPU_High monitors for high CPU usage by work process. (Deprecated) This situation is not activated at startup. This situation has the following formula:

IF VALUE R/3_Work_Processes.CPU_Time GT 10

XML Message situations

XML Message situations monitor XML messages and the status of the persistence layer.

SAP_Asynchronous_XML_Msg_Recd monitors the XML message type. This situation is not activated at startup. This situation has the following formula:

IF VALUE PI_XI_XML_Log.Message_Type EQ Asynchronous

SAP_Persist_Reorg_Req monitors the Reorganization Status of the persistence layer. This situation is not activated at startup. This situation has the following formula:

IF VALUE PI_XI_Persist_layer.Reorganization_Status EQ Reorganization required

SAP_Persist_Reorg_Warning monitors the Reorganization Status of the persistence layer. This situation is not activated at startup. This situation has the following formula:

```
IF VALUE PI_XI_Persist_layer.Reorganization_Status EQ Delete or archive processed XML messages
```

SAP_Syn_Asyn_Communication_Err monitors the state of the communication message. This situation triggers if any error state occurs in communication. This situation is not activated at startup. This situation has the following formula:

```
IF PI_XI_SYN_ASYN_COMM.Status EQ Error
```

SAP_Syn_Asyn_Comm_Err_possible monitors the state of the communication message. This situation triggers if any error possible state occurs in communication. This situation is not activated at startup. This situation has the following formula:

IF PI_XI_SYN_ASYN_COMM.Status EQ Error Possible

Chapter 4. Take Action commands reference

Take Action commands can be run from the portal client or included in a situation or a policy.

About Take Action commands

When included in a situation, the command runs when the situation becomes true. A Take Action command in a situation is also referred to as *reflex automation*. When you enable a Take Action command in a situation, you automate a response to system conditions. For example, you can use a Take Action command to send a command to restart a process on the managed system or to send a text message to a cell phone.

In advanced automation, policies are used to take actions, schedule work, and automate manual tasks. A policy comprises a series of automated steps called activities that are connected to create a workflow. After an activity is completed, the Tivoli Enterprise Portal receives return-code feedback, and advanced automation logic responds with subsequent activities that are prescribed by the feedback.

A basic Take Action command shows the return code of the operation in a message box that is displayed after the action is completed or in a log file. After you close this window, no further information is available for this action.

Additional information about Take Action commands

For more information about working with Take Action commands, see the *IBM Tivoli Enterprise Portal User's Guide*.

For a list of the Take Action commands for this monitoring agent and a description of each command, see "Predefined Take Action commands" on page 295 and the information for each individual command.

Predefined Take Action commands

Predefined Take Action commands for the SAP agent consist of Alert, Batch Jobs, File Systems, and Output Request Take Action commands.

This monitoring agent contains the following Take Action commands:

- Alert Inbox Take Actions
 - Close Alert
- Alert Take Actions
 - Close Alert
- Batch Jobs Take Actions
 - Cancel Job
 - Delete Job
 - Start Job
- File Systems Take Actions
 - Execute brarchive
- Output Request Take Actions
 - Output Request

Alert Inbox Take Action command

By using the Alert Inbox Take Action command, you can close the MAI alerts in the SAP system. When you view the Alert Inbox workspace, you can use the following action: MAI Alerts~Close Alert **MAI Alerts~Close Alert** closes an MAI alert in the SAP system. This action requires arguments to identify an alert to be closed, and to log on to the SAP system. This take action command invokes ksar3 on the monitoring agent to perform the action. This take action requires the following arguments, which are attributes from the MAI Alert Inbox attribute group, to identify the alert to be closed and to log on to the mySAP system:

- Alert ID
- Logon Parameters

This action can take a couple of minutes to complete. You receive one of the following return codes when you run this Take Action command:

0

Successful

non-zero

Not successful. Check the task log for the given Take Action, or contact IBM Software Support.

Alert Take Action command

The Alert Take Action command uses the Action argument to identify the alert to close in the SAP system. This command uses the Logon Parameters argument to logon to the SAP system.

While viewing the Alerts workspace, you can use the following action: Close Alert.

Close Alert Closes the CCMS alert within a SAP system. This action requires arguments to identify the alert to be closed and to log on to the SAP system. This take action command invokes ksar3 on the monitoring agent to perform the close. This Take Action requires the following arguments, which are attributes from the R3_Alerts attribute group, to identify the alert to be closed and to log on to the SAP system:

- Action
- Logon Parameters

This action can take a couple of minutes to complete. You receive one of the following return codes when you run this Take Action command:

0

Successful

non-zero

Not successful. Check the task log for the given Take Action, or contact IBM Software Support.

Batch Jobs Take Action command

The Batch Jobs Take Action command enables you to use actions to, for example, cancel, delete, or start jobs.

While viewing the Batch Jobs workspace, you can use the following actions:

- Cancel Job
- Delete Job
- Start Job

Cancel Job cancels an active job in a SAP system. This action requires arguments to identify the job to be canceled and to log on to the SAP system. This Take Action requires the following arguments, which are attributes from the R3_Batch_Jobs attribute group, to identify the job to be canceled and to log on to the SAP system:

- Job Name (Unicode)
- Job Number
- Logon Parameters

This action can take a couple of minutes to complete. You receive one of the following return codes when you run this Take Action command:

0

Successful

non-zero

Not successful. Check the task log for the given Take Action, or contact IBM Software Support.

Delete Job deletes a stopped job (Defined, Scheduled, Finished, Cancelled, and so on) within a SAP system. This action requires arguments to identify the job to be deleted and to log on to the SAP system. This Take Action command invokes ksar3 on the monitoring agent to perform the action. This Take Action requires the following arguments, which are attributes from the R3_Batch_Jobs attribute group, to identify the job to be cancelled and to log on to the SAP system:

- Job Name (Unicode)
- Job Number
- Logon Parameters

This action can take a couple of minutes to complete. You receive one of the following return codes when you run this Take Action command:

0

Successful

non-zero

Not successful. Check the task log for the given Take Action, or contact IBM Software Support.

Start Job starts a scheduled job within a SAP system. This action creates a copy of the job and immediately starts execution of the copy within SAP. This action requires arguments to identify the job to be started and to log on to the SAP system. This Take Action command invokes ksar3 on the monitoring agent to perform the action. This Take Action requires the following arguments, which are attributes from the R3_Batch_Jobs attribute group, to identify the job to be cancelled and to log on to the SAP system:

- Job Name (Unicode)
- Job Number
- Logon Parameters

This action can take a couple of minutes to complete. You receive one of the following return codes when you run this Take Action command:

0

Successful

non-zero

Not successful. Check the task log for the given Take Action, or contact IBM Software Support.

File Systems Take Action command

The File Systems Take Action command enables you to archive the Database archive logs to tape.

You can run the following action while viewing any workspace: Execute brarchive.

Execute brarchive causes the branchive utility in a SAP system to offload the Database archive logs to tape. You select the managed system on which to archive the logs to tape. There are no arguments for this Take Action command. This action takes a couple of minutes to complete. You receive one of the following return codes when you run this Take Action command:

0

Successful

non-zero

Not successful. Check the task log for the given Take Action, or contact IBM Software Support.

Output Request Take Action command

While viewing the Spool Requests, Spool Output, or Output Requests workspaces, you can take the following action: Output Request.

While viewing the Spool Requests, Spool Output, or Output Requests workspaces, you can take the following action: Output Request.

Output Request causes an output request to be created for a specific spool within the SAP system. This Take Action command invokes ksar3 on the monitoring agent to perform the action. This action requires the following arguments from the R/3_Spool_Requests attribute group to identify the spool request for which an output request is to be created and to log on to the SAP system:

- Spool Number
- Logon Parameters

This action can take a couple of minutes to complete. You receive one of the following return codes when you run this Take Action command:

0

Successful

non-zero

Not successful. Check the task log for the given Take Action, or contact IBM Software Support.

Chapter 5. Tivoli Common Reporting for the SAP monitoring agent

Use the agent-specific information with the Tivoli Common Reporting information in the *IBM Tivoli Monitoring Administrator's Guide V6.2.3* for complete information about prerequisites, importing reports, and running reports.

IBM Tivoli Monitoring V6.2.2 Fix Pack 2 introduced the Cognos data model and reports to be used in Tivoli Common Reporting.

The reports in this package are historical reports, reporting against summarized data collected in Tivoli Data Warehouse V6.2.2. These reports are built to run against only the IBM Tivoli Monitoring VIOS Premium, CEC Base, and AIX Premium agents.

The DB2, Oracle, and SQL Server databases are supported for running all reports.

The Cognos reports can be administered, run, and edited by Tivoli Common Reporting V2.1 software included with IBM Tivoli Monitoring V6.2.2 Fix Pack 2 or later. For more information about Tivoli Common Reporting, see the Tivoli Common Reporting Community (www.ibm.com/developerworks/spaces/tcr).

This version of Tivoli Common Reporting includes Cognos Business Intelligence and Reporting V8.4.

More information about Tivoli Common Reporting

You can find information about Tivoli Common Reporting at the Tivoli Common Reporting documentation Information Center and the Tivoli Common Reporting website.

For complete documentation for the Tivoli Common Reporting tool, see the <u>Tivoli Common Reporting</u> <u>documentation Information Center</u> (http://publib.boulder.ibm.com/infocenter/tivihelp/v3r1/topic/com.ibm.tivoli.tcr.doc/tcr_welcome.html).

The Tivoli Common Reporting website contains information and how-to videos about subjects such as how to create IBM Tivoli Monitoring reports by dragging, import Tivoli Common Reporting and Cognos reports, and set up Cognos and Tivoli Common Reporting data connections. You can find a report catalog and information about reporting across Tivoli products at the <u>Tivoli Common Reporting Community</u> (www.ibm.com/developerworks/spaces/tcr).

Prerequisites

The Cognos reports require the completion of prerequisite steps for the reports to run.

All of the following prerequisite steps must be completed or the reports cannot run:

- 1. Install Tivoli Common Reporting V2.1 or later.
- 2. Obtain the reports from the product media.
- 3. Configure historical collection for the SAP agent and the Summarization and Pruning agent.
- 4. Connect to Tivoli Data Warehouse by using the database client over ODBC.

Installing Tivoli Common Reporting V2.1 or later

Tivoli Common Reporting V2.1 or later must be installed and running.

Procedure

- 1. To install and configure Tivoli Common Reporting, see the documentation in the IBM Tivoli Common Reporting Information Center (http://publib.boulder.ibm.com/infocenter/tivihelp/v3r1/index.jsp? topic=/com.ibm.tivoli.tcr_cog.doc/tcr_welcome.html).
- 2. To ensure that Tivoli Common Reporting is running, go to https://machine_name:16311/ibm/ console/.

Obtain the reports from the product media

The reports must be on the same computer as the Tivoli Common Reporting server.

Procedure

- 1. Locate the Cognos reports in the following directory: *Product Media root*/ ITCAM_for_SAP_Agent_V711_Reports.zip
- 2. Copy these files to any location on the same computer where the Tivoli Common Reporting server is installed.

Configure historical collection

Historical collection must be configured for the SAP agent and the Summarization and Pruning agent.

Before you begin

Install and configure IBM Tivoli Monitoring V6.2.3 and install and configure the SAP agent, then configure historical collection.

Also, configure the Warehouse Summarization and Pruning agent with or without shifts enabled.

For more information about how to enable historical collection and configure the Warehouse Summarization and Pruning agent in IBM Tivoli Monitoring, see "Managing historical data" in the *IBM Tivoli Monitoring Administrator's Guide*.

Procedure

1. Enable daily summarization for the following tables:

Table 3. Daily summarization			
SAP agent predefined Tivoli Common Reporting reports	Attribute Group Name entered into Historical Data Collection (HDC)	Tables	Views in Database
Server Performance report	Solution Manager Servers	SolMan_Servers_Overview_D	SolMan_Servers_Overview_DV
ICM Monitoring Performance	SAP ICM Monitor	SAP_ICM_MON_INFO_D	SAP_ICM_MON_INFO_DV
Instance Performance	Instance Configuration	R/3_Instance_Configuration_D	R/3_Instance_Configuration_DV
qRFC Inbound Queue Performance	SAP qRFC Inbound Queues	SAP_qRFC_Inbound_Queues_Overview_D	SAP_qRFC_Inbound_Queues_Overview_DV
DB2 Database Performance	DB2 Configuration Information	DB2_CON_INFO_D	DB2_CON_INFO_DV
System Monitoring performance	MAI System Monitoring	SAP_MAI_SYS_MON_H SAP_MAI_SYS_MON_D SAP_MAI_SYS_MON_W SAP_MAI_SYS_MON_M SAP_MAI_SYS_MON_Q SAP_MAI_SYS_MON_Y	SAP_MAI_SYS_MON_HV SAP_MAI_SYS_MON_DV SAP_MAI_SYS_MON_WV SAP_MAI_SYS_MON_MV SAP_MAI_SYS_MON_QV SAP_MAI_SYS_MON_VV
PI Monitoring performance	MAI PI Component Monitoring	SAP_MAI_PI_MON_H SAP_MAI_PI_MON_D SAP_MAI_PI_MON_W SAP_MAI_PI_MON_M SAP_MAI_PI_MON_Q SAP_MAI_PI_MON_Y	SAP_MAI_PI_MON_HV SAP_MAI_PI_MON_DV SAP_MAI_PI_MON_WV SAP_MAI_PI_MON_MV SAP_MAI_PI_MON_QV SAP_MAI_PI_MON_VV

Table 3. Daily summarization (continued)			
SAP agent predefined Tivoli Common Reporting reports	Attribute Group Name entered into Historical Data Collection (HDC)	Tables	Views in Database
Alert Inbox performance	MAI Alert Inbox	SAP_MAI_ALERTS_H SAP_MAI_ALERTS_D SAP_MAI_ALERTS_W SAP_MAI_ALERTS_M SAP_MAI_ALERTS_Q SAP_MAI_ALERTS_Y	SAP_MAI_ALERTS_HV SAP_MAI_ALERTS_DV SAP_MAI_ALERTS_WV SAP_MAI_ALERTS_MV SAP_MAI_ALERTS_QV SAP_MAI_ALERTS_VV
Connection Monitoring status availability	Connection Monitoring	SAP_Connection_Monitoring_H SAP_Connection_Monitoring_D SAP_Connection_Monitoring_W SAP_Connection_Monitoring_M SAP_Connection_Monitoring_Q SAP_Connection_Monitoring_Y	SAP_Connection_Monitoring_HV SAP_Connection_Monitoring_DV SAP_Connection_Monitoring_WV SAP_Connection_Monitoring_MV SAP_Connection_Monitoring_QV SAP_Connection_Monitoring_YV

For more information about Historical data collection attributes, see <u>"Historical data collection</u> attributes" on page 77.

2. To ensure that the required views are present, run the following query against Tivoli Data Warehouse:

Database	Query	
DB2	select distinct "VIEWNAME" from SYSCAT.VIEWS where "VIEWNAME" like '%V'	
Oracle	select distinct "VIEW_NAME" from USER_VIEWS where "VIEW_NAME" like '%V'	
MS SQL Server	select distinct "NAME" from SYS.VIEWS where "NAME" like '%V'	

Connect to the Tivoli Data Warehouse

Connect to Tivoli Data Warehouse by using the database client over ODBC.

About this task

Cognos uses ODBC to connect to the database. Therefore, it is important to first install a database client on the Tivoli Common Reporting server and connect the database client to Tivoli Data Warehouse.

Procedure

1. Make sure that you deployed a DB2, Oracle, or MS SQL Server database client on the computer where the Cognos-based Tivoli Common Reporting engine is installed.

For DB2, the client must be the same version as the database that Tivoli Data Warehouse is using.

2. Connect the DB2, Oracle, or MS SQL Server database client to the database server:

Database	How to connect
DB2	Connect by running the Configuration Assistant, configuring the local net service name configuration, and restarting your system.
Oracle	Connect by running the Oracle Net Configuration Assistant, configuring the local net service name configuration, and restarting your system.
MS SQL Server	Connect by running the MS SQL Management Studio Express, configuring the local net service name configuration, and restarting your system.

Important: Note the name of the connection you created, because it is used in Tivoli Common Reporting by the report installer as described in "Importing and running Cognos reports" on page 302.

See "Connecting to the Tivoli Data Warehouse using the database client over ODBC" in the *IBM Tivoli Monitoring Administrator's Guide* V6.2.3.

Importing and running Cognos reports

You must import the IBM Tivoli Monitoring for SAP Application Cognos reports to run any report from the SAP Reports package.

Before you begin

All prerequisites must be met before importing and running the reports, or the reports cannot run. See "Prerequisites" on page 299 for the steps.

About this task

The IBM Tivoli Monitoring for SAP Reports package contains an installer that performs the following tasks:

- · Importing the reports and data model into Tivoli Common Reporting
- · Configuring a data source to connect to Tivoli Data Warehouse
- Running scripts to create and populate the common dimensions in Tivoli Data Warehouse

After completing the steps for importing and running Cognos reports, you can run any report from the IBM Tivoli Monitoring for SAP Reports package.

Procedure

- 1. On operating systems other than Windows, you might need to point to Java 1.6+ through your system PATH. Make sure that your system PATH contains a valid path to a Java virtual machine, for example: # PATH=\$PATH:/ibmjre60/ibm-java-i386-60/jre/bin
- 2. From the directory where you extracted the reports package, run the following file depending on your operating system:

Operating system	File
AIX	setup_aix.bin
Linux	setup_linux.bin
Solaris	setup_solaris.bin
Windows	setup_windows.exe

- 3. Select the language that you want.
- 4. Accept the license agreement.
- 5. Select the location where the Tivoli Common Reporting server is installed (*not* the location where the reports are to be installed).

The path must end with /tcr folder. By default, the path is C:\IBM\tivoli \tipv2Components\TCRComponent or /IBM/tivoli/tipv2Components/TCRComponent.

Note: If Tivoli Common Reporting installation is distributed, reports must be installed on the dispatcher site only.

- 6. Select the report sets for installation by selecting the **IBM Tivoli Monitoring for SAP Cognos Reports** check box.
- 7. Provide Tivoli Common Reporting credentials: user name and password.
- 8. Configure Cognos data sources to connect to Tivoli Data Warehouse.

Note: If you have a Tivoli Data Warehouse connection already defined in Tivoli Common Reporting(from a previous installation of reports), skip this step. To test whether you have Tivoli Data Warehouse defined, go to **TCR** > **Launch Administration** > **Configuration** > **Data Source Connections** and see whether there is an entry called **TDW**. If yes, then skip this step in the installation. You must manually configure the data source in Tivoli Common Reporting through this administration panel as described in <u>Configuring database connection</u> (http:// publib.boulder.ibm.com/infocenter/tivihelp/v3r1/topic/com.ibm.tivoli.tcr.doc_21/ ttcr_config_db.html). If you did not define a data source in Tivoli Common Reporting, do not skip this option. You must enter the database alias name or the ODBC name for the database name input field.

9. In the next panel, enter the JDBC credentials.

The JDBC connection is used to run the Common Dimensions scripts against Tivoli Data Warehouse. Provide the database admin (db2admin, system, and so on) user name and password in the **Configure data script** window for JDBC User Credentials. Admin privileges are required in this step to create the IBM_TRAM schema and required tables. If you are using an Oracle database and you do not have the USERS and TEMP tablespaces in your database, you must create them in your Tivoli Data Warehouse before you can run these scripts.

Note: If you already have these common dimensions (Time Dimension, Weekday Lookup, Month Lookup, and Computer System under IBM_TRAM schema) in your Tivoli Data Warehouse from a previous installation and you want to modify those dimensions to define time granularity that is different from what is in the Tivoli Data Warehouse, you can skip this step and run the scripts manually as described in "Creating shared dimension tables and populating the time dimensions table" in the IBM Tivoli Monitoring Administrator's Guide V6.2.2 Fix Pack 2.

10. Select the **JDBC Database Credentials** tab, and select **database type**. Edit the JDBC URL, JDBC driver file names, and JDBC driver class for the selected database type.

Database	Required driver file name	
DB2	db2jcc.jaranddb2jcc_license_cu.jar	
	Note: JDBC credentials must have db2admin privileges.	
Oracle	oraclethin.jar	
SQL Server	sqljdbc.jar	

11. On the pre-installation summary panel, all reports selected for installation are displayed.

12. Click **Install**, and wait for the installer to finish.

The Installation results panel shows the status of all installation actions for every item or report.

One log file and one trace file are included. Both files are in the user home directory, with the following names:

- Report_Installer_for_Tivoli_Common_Reporting_InstallLog.log(Log)
- Report_Installer_For_TCR_Output.txt(Trace)

On Windows systems in the **Run** window, type %USERPROFILE% to open the file explorer to the directory where the log and trace files are created. If you skipped running the database scripts or a script failed, you can run the script manually by using the instructions in "Creating shared dimension tables and populating the time dimensions table" in the IBM Tivoli Monitoring Administrator's Guide V6.2.2 Fix Pack 2.

Results

At the end of the installation, you see 3 messages. One for the status of importing reports, one for the status of defining the data source, and one for the status of running database scripts. If any of these messages indicate a failure, look at the Report_Installer_For_TCR_Output.txt and Report_Installer_InstallLog.log file. On Windows systems, this file is located in C:\Documents and Settings\Administrator.

What to do next

Use the following steps to make sure that your installation was successful:

- 1. Go to Tivoli Common Reportingand see whether **IBM Tivoli Monitoring for System P Reports v6.2.2 IF2** is displayed in the Public Folders.
- 2. Go to **TCR** > Launch Administration > Configuration > Data Source Connections and see whether Tivoli Data Warehouse was defined. Click **Tivoli Data Warehouse**.

- 3. On the next page, Tivoli Data Warehouse has a **Test Connection** icon next to it. Click the **Test connection** icon to make sure that you are connected to the database.
- 4. Go to **TCR** > **Launch Query Studio**. Select **IBM Tivoli Monitoring for System P Reports v6.2.2 IF2**. In the left navigation, all the data is displayed.
- 5. Browse to IBM Tivoli Monitoring for System P Reports v6.2.2 IF2 > ITM for System P Agents (Query) > TCR Shared Dimensions (Query) > Time.
- 6. Drag **Date** into the space on the left. If no data is displayed, Time Dimension was not defined correctly.

Predefined Cognos reports

You can verify whether the reporting functionality is installed and configured correctly by running the Predefined Cognos[®] report for the SAP agent.

The SAP agent reporting package that you imported into Tivoli Common Reporting includes predefined Cognos reports. By using these reports, you can monitor the reporting activity and see what a typical Cognos report includes.

The following reports are available in the Common Reporting windows in Tivoli Common Reporting:

- SAP agent DB2 Database Performance Report
- SAP agent Server Performance Report
- SAP agent ICM Monitoring Performance Report
- SAP agent Instance Performance Report
- SAP agent qRFC Inbound Queue Performance Report
- SAP agent System Monitoring performance report
- · SAP agent PI Monitoring performance report
- SAP agent Alert Inbox performance report
- SAP agent Connection Monitoring status availability report

Performance trends reports

You can forecast performance trends and resources for the SAP agents using predefined reports.

The following reports are available for performance trends and resource forecasts:

- SAP Agent DB2 Database Performance
- SAP Agent Server Performance Report
- SAP Agent ICM Monitoring Performance Report
- SAP Agent Instance Performance Report
- SAP Agent qRFC Inbound Queue Performance Report
- SAP agent System Monitoring performance report
- SAP agent PI Monitoring performance report
- SAP agent Alert Inbox performance report
- SAP agent Connection Monitoring status availability report

SAP Agent Server Performance report

This report describes the server performance for a specific time duration, for example, a predefined date range, such as the Last 30 days.

Table 4. SAP agent Server Performance report		
Report structure Description		

Table 4. SAP agent Server Performance report (continued)	
Report structure	Description
	Report period
	Date Range Select the report period from a predefined date range, such as Last Week, Current Month, or Last 30 Days. You can also enter a start date, an end date, and the time for the reporting period.
	Start Date Select a start date from the calendar and a start time from the time widget. You must select both a date and a time.
	End Date Select an end date from the calendar and an end time from the time widget. You must select both a date and a time.
	Summarization Type Select the summarization types, such as Hourly, Daily, Weekly, Monthly, Quarterly, Yearly, or Default from the list. If you select the Default option, the summarization type is computed based on the number of days for the date range.
	This report shows the. Data is shown in host-wide IP address,ascending order of the number of processorshost name. that are used, processor frequency, and memory size

SAP Agent ICM Monitoring Performance report

This report describes the ICM monitoring performance for a specific time duration, for example, a predefined date range, such as Last Week.

Table 5. SAP agent ICM monitoring performance report		
Report structure Description		

Table 5. SAP agent ICM monitoring performance report (continued)		
Report structure	Description	
	Report Period	
	Date Range Select the report period from a predefined date range, such as Last Week, Current Month, or Last 30 Days. You can also enter a start date, an end date, and the time for the reporting period.	
	Start Date Select a start date from the calendar and the start time from the time widget. You must select both a date and a time.	
	End Date Select an end date from the calendar and the end time from the time widget. You must select both a date and a time.	
	Summarization Type Select the summarization types, such as Hourly, Daily, Weekly, Monthly, Quarterly, Yearly, or Default from the list. If you select the Default option, the summarization type is computed based on the number of days for the date range.	
	Depending on the filter. data provided, this report shows the Thread ID, Maximum Thread, Peak Thread, Current Thread, Maximum Queue, Peak Queue, and Current Queue	

SAP Agent Instance Performance report

This report shows the performance of the SAP agent instance over a specific time duration. It provides useful process information about the host, for example, the Instance Name that is associated with the host.

Table 6. SAP Agent Instance Performance report		
Report structure Description		

Table 6. SAP Agent Instance Performance report (continued)		
Report structure	Description	
	Report Period	
	Date Range Select the report period from a predefined date range such as Last Week, Current Month, or Last 30 Days; or, you can enter a start and end date and time for the reporting period.	
	Start Date Select a start date from a calendar and the start time from the time widget. You must select both a date and a time.	
	End Date Select an end date from the calendar and an end time from the time widget. You must select both a date and a time.	
	Summarization Type Select the summarization types, such as Hourly, Daily, Weekly, Monthly, Quarterly, Yearly, or Default from the list. If you select the Default option, the summarization type is computed based on the number of days for the date range.	
	Depending on the filter. data that is provided, this report shows the Instance Name, Dialog Processes(Sum), Update Processes(Sum), Batch Processes(Sum), and Spool Processes(Sum) of the host	

SAP Agent qRFC Inbound Queue performance report

This report shows qRFC Inbound Queue performance over a specific time duration, for example, a predefined date range, such as Current Month.

Table 7. SAP agent qRFC Inbound Queue performance report	
Report structure Description	

Table 7. SAP agent qRFC Inbound Queue performance report (continued)	
Report structure	Description
	Report period
	Date Range Select the report period from a predefined date range, such as Last Week, Current Month, or Last 30 Days. You can also enter a start date, an end date, and the time for the reporting period.
	Start Date Select a start date from the calendar and the start time from the time widget. You must select both a date and a time.
	End Date Select an end date from the calendar and an end time from the time widget. You must select both a date and a time.
	Summarization Type Select the summarization types, such as Hourly, Daily, Weekly, Monthly, Quarterly, Yearly, or Default from the list. If you select the Default option, the summarization type is computed based on the number of days for the date range.
	Depending on the filter. data that is provided, this report shows the Managed System, System name, Queue Name, and Queue Entries

SAP Agent DB2 Database Performance report

This report shows DB2 Database Performance over a specific time duration, for example, a predefined date range, such as Last 30 Days.

Table 8. SAP Agent DB2 Database Performance report	
Report structure Description	

Table 8. SAP Agent DB2 Database Performance report (continued)	
Report structure	Description
	Report period
	Date Range Select the report period from a predefined date range, such as Last Week, Current Month, or Last 30 Days. You can also enter a start date, an end date, and the time for the reporting period.
	Start Date Select a start date from the calendar and the start time from the time widget. You must select both a date and a time.
	End Date Select an end date from the calendar and an end time from the time widget. You must select both a date and a time.
	Summarization Type Select the summarization types, such as Hourly, Daily, Weekly, Monthly, Quarterly, Yearly, or Default from the list. If you select the Default option, the summarization type is computed based on the number of days for the date range.
	Depending on the filter. data that is provided, this report shows the system name, application control heap size, application heap size, and log buffer size

SAP agent System Monitoring performance report

This report shows the availability and performance of System Monitoring over a specific period of time.

Table 9. SAP agent System Monitoring performance report	
Report structure Description	

Table 9. SAP agent System Monitoring performance report (continued)	
Report structure	Description
	Report Period
	Date Range Select the report period from a predefined date range such as Last Week, Current Month, or Last 30 Days; or, you can enter a start and end date and time for the reporting period.
	Start Date Select a start date from a calendar and the start time from the time widget. You must select both a date and a time.
	End Date Select an end date from the calendar and an end time from the time widget. You must select both a date and a time.
	Summarization Type Select the summarization types, such as Hourly, Daily, Weekly, Monthly, Quarterly, Yearly, or Default from the list. If you select the Default option, the summarization type is computed based on the number of days for the date range.
	This report shows the. name, availability status, and performance of a Managed System based on the filter data that is provided

SAP agent PI Monitoring performance report

This report shows the availability of PI Monitoring over a specific period of time.

Table 10. SAP agent PI Monitoring performance report	
Report structure Description	

Table 10. SAP agent PI Monitoring performance report (continued)	
Report structure	Description
	Report Period
	Date Range Select the report period from a predefined date range such as Last Week, Current Month, or Last 30 Days; or, you can enter a start and end date and time for the reporting period.
	Start Date Select a start date from a calendar and the start time from the time widget. You must select both a date and a time.
	End Date Select an end date from the calendar and an end time from the time widget. You must select both a date and a time.
	Summarization Type Select the summarization types, such as Hourly, Daily, Weekly, Monthly, Quarterly, Yearly, or Default from the list. If you select the Default option, the summarization type is computed based on the number of days for the date range.
	This report shows the. availability status and rating of a Managed System based on the filter data that is provided

SAP agent Alert Inbox performance report

This report shows the performance of the Alert Inbox over a specific period of time.

Table 11. SAP agent Alert Inbox performance report	
Report structure Description	
s	

Table 11. SAP agent Alert Inbox performance report (continued)	
Report structure	Description
	Report Period
	Date Range Select the report period from a predefined date range such as Last Week, Current Month, or Last 30 Days; or, you can enter a start and end date and time for the reporting period.
	Start Date Select a start date from a calendar and the start time from the time widget. You must select both a date and a time.
	End Date Select an end date from the calendar and an end time from the time widget. You must select both a date and a time.
	Summarization Type Select the summarization types, such as Hourly, Daily, Weekly, Monthly, Quarterly, Yearly, or Default from the list. If you select the Default option, the summarization type is computed based on the number of days for the date range.
	This report shows the. alert category, alert severity, and alert rating of a managed object based on the filter data that is provided

SAP agent Connection Monitoring status availability report

This report shows the type, and status of the RFC Connection over a specific period of time.

Table 12. SAP agent Connection Monitoring status availability report		
Report structure Description		

Table 12. SAP agent Connection Monitoring status availability report (continued)	
Report structure	Description
	Report Period
	Date Range Select the report period from a predefined date range such as Last Week, Current Month, or Last 30 Days; or, you can enter a start and end date and time for the reporting period.
	Start Date Select a start date from a calendar and the start time from the time widget. You must select both a date and a time.
	End Date Select an end date from the calendar and an end time from the time widget. You must select both a date and a time.
	Summarization Type Select the summarization types, such as Hourly, Daily, Weekly, Monthly, Quarterly, Yearly, or Default from the list. If you select the Default option, then, the summarization type is computed based on the number of days for the date range.
	Managed System Select the SAP Managed System, for which you want the report to display data. By default, all available systems are selected.
	RFC Type Select the RFC Type for the RFC Connection. By default, all RFC Types are selected.
	This report shows the. shows the RFC Connection status of a Managed System based on the filter data that is provided

IBM Tivoli Composite Application Manager Agent for SAP Applications: SAP agent Reference

Chapter 6. Policies reference

Policies are used as an advanced automation technique for implementing more complex workflow strategies than you can create through simple automation. All agents do not provide predefined policies, but you can create policies for any agent.

A *policy* is a set of automated system processes that can perform actions, schedule work for users, or automate manual tasks. You use the Workflow Editor to design policies. You control the order in which the policy runs a series of automated steps, which are also called *activities*. Policies are connected to create a workflow. After an activity is completed, the Tivoli Enterprise Portal receives return code feedback and advanced automation logic responds with subsequent activities prescribed by the feedback.

Note: For monitoring agents that provide predefined policies, predefined policies are not read-only. Do not edit these policies and save over them. Software updates write over any of the changes that you make to these policies. Instead, copy the policies that you want to change to suit your organization.

For additional information about working with policies, see "Automation with policies" in the *IBM Tivoli Enterprise Portal User's Guide*.

For information about using the Workflow Editor, see the *IBM Tivoli Monitoring Administrator's Guide* or the Tivoli Enterprise Portal online help.

Predefined policies

The SAP agent contains a selection of predefined policies.

This monitoring agent contains the following predefined policies:

- R3_Monitor_ABAP_Dumps
- R3_Monitor_Batch_Jobs
- R3_Monitor_File_Systems
- R3_Monitor_Production_Repairs
- <u>R3_Start_Buffer_Monitoring</u>

The remaining sections contain descriptions of each of these policies, which are listed alphabetically.

R3 Monitor ABAP dumps policy

The R3 monitor ABAP Dumps policy tracks messages in the mySAP system log to check if an ABAP dump occurred and gives you different options to reorganize the ABAP Short Dumps before you resume monitoring again.

This policy monitors the mySAP system log for messages that an ABAP dump has been created. If these messages are issued each hour for 3 hours, you are offered a choice to run the RSSNAPDL ABAP program to delete and reorganize the ABAP Short Dumps, or wait 5 seconds and start monitoring again.

Action: You must create a variant for the RSSNAPDL program and replace the *CUST_VAR* value in the policy action with this variant name.

R3 Monitor Batch Jobs policy

The R3 Monitor Batch Jobs policy monitors batch jobs so that you can cancel the job if, for example, it runs for too long.

This policy monitors executing batch jobs.

Action: When a job is running too long, you can either cancel the job, wait until the job run time is critically long, or wait 30 minutes and start monitoring again. If you choose to wait until the job run time is critically long, you can cancel the job at that time or wait 5 seconds and start monitoring again.

R3 Monitor File Systems policy

The R3 Monitor File Systems policy monitors the file system so you can run a cleanup script if the file system becomes too full.

This policy monitors file system utilization.

Action: When a file system becomes too full, you can do one of the following:

- Wait until the file system becomes critically full
- · Wait 5 seconds and start monitoring again
- Run a cleanup script or . bat file
- Run brarchive

If you choose to wait until the file system is critically full, you are offered these same choices again.

If you choose to run a cleanup script, you must provide the cleanup script. On Windows, the policy invokes a.bat file called customer_cleanup.bat. On UNIX, the policy invokes a script file called customer_cleanup.ksh.

R3 Monitor Production Repairs policy

The R3 Monitor Production Repairs policy informs you of Repair Transports in the production system.

This policy notifies you when a Repair Transport is imported into or created on the production system during Prime Shift.

Action: You must update the R3 Transport Repair to Prod situation to replace the PRD value with the system identifier of your production system.

R3 Start Buffer Monitoring policy

The R3 Start Buffer Monitoring policy starts and stops the buffer monitoring situations to enable the buffer monitoring to perform steadily.

This policy stops all buffer monitoring situations immediately after the mySAP instance has started. It restarts them 30 minutes later. The 30 minute delay is provided to allow the mySAP buffers time to reach a steady state, at which time buffer monitoring becomes meaningful.

Chapter 7. Upgrading for warehouse summarization

The SAP agent changed the warehouse collection and summarization characteristics for some agent attribute groups. These changes correct and improve the way warehouse data is summarized, producing more meaningful historical reports. This appendix explains those changes and the implications to your warehouse collection and reporting.

Warehouse summarization is controlled on a per-table basis. How the rows in each table are summarized is determined by a set of attributes in each table that are designated as primary keys. One primary key represents the monitored resource. Data is minimally summarized based on this value. For all agents, this primary key is represented internally by the column name, ORIGINNODE; however, the external attribute name varies with each monitoring agent.

One or more additional primary keys are provided for each attribute group to further refine the level of summarization for that attribute group. For example, in an OS agent disk attribute group, a primary key might be specified for the logical disk name. Use the key to report historical information for each logical disk in a computer.

Tables in the warehouse

For a monitoring agent, you have the following two main types of warehouse tables:

• Raw tables:

These tables contain the raw information reported by a monitoring agent and written to the warehouse by the Warehouse Proxy agent. Raw tables are named for the attribute group that they represent, for example, R/3_ABAP_Dumps.

• Summary tables:

These tables contain summarized information based on the raw tables and written to the warehouse by the Summarization and Pruning agent. Summarization provides aggregation results over various reporting intervals, for example, hours and days. Summary table names are based on the raw table name with an appended suffix, for example, R/3_ABAP_Dumps_H, R/3_ABAP_Dumps_D.

Effects on summarized attributes

When tables are summarized in the warehouse, the summary tables and summary views are created to include additional columns to report summarization information. <u>Table 13 on page 317</u> contains a list of the time periods and the suffixes for the summary tables and views.

Table 13. Time periods and suffixes for summary tables and views			
Data collection time period	Summary table suffixes	Summary view suffixes	
Hourly	_H	_HV	
Daily	_D	_DV	
Weekly	_W	_wv	
Monthly	_M	_MV	
Quarterly	_Q	_QV	
Yearly	_Y	_YV	

Table 14 on page 318 shows the expansion to summary columns of some of the most commonly used attribute types.

Table 14. Additional colu	mns to report summarization informa	ation		
Attribute name	Aggregation type	Additional summarization columns		
MyGauge	GAUGE	MIN_MyGauge MAX_MyGauge SUM_MyGauge AVG_MyGauge		
MyCounter	COUNTER	TOT_MyCounter HI_MyCounter LO_MyCounter LAT_MyCounter		
MyProperty	PROPERTY	LAT_Property		

These additional columns are provided only for attributes that are not primary keys. When an existing attribute is changed to be a primary key, the Summarization and Pruning agent no longer creates summarization values for the attributes. The previously created column names remain in the table with any values already provided for those columns. These columns cannot be deleted from the warehouse database, but as new data is collected, these columns contain no values. Similarly, when the primary key designation is removed for an existing attribute, new summarization columns are automatically added. As new data is collected, it is used to populate these new column values. Any existing summarization records contain no values for these new columns.

The overall effect of these primary key changes is that summarization information is changing. If these changes result in the old summarization records no longer making sense, you can delete them. As a part of warehouse upgrade, summary views are dropped. The views are recreated by the Summarization and Pruning agent the next time it runs. Dropping and recreating the views ensure that they reflect the current table structure.

Upgrading your warehouse with limited user permissions

The IBM Tivoli Monitoring warehouse agents (Warehouse Proxy and Summarization and Pruning agents) can dynamically adjust warehouse table definitions. These definitions are based on attribute group and attribute information that is loaded into the warehouse. These types of table changes must be done for this monitoring agent for one or both of the following conditions:

- The monitoring agent added new attributes to an existing attribute group and that attribute group is included in the warehouse.
- The monitoring agent added a new attribute group and that attribute group is included in the warehouse.

For the warehouse agents to automatically modify the warehouse table definitions, they must have permission to alter warehouse tables. You might not grant permissions to these agents. You might choose instead to manually define the raw tables and summary tables needed for the monitoring agents. Or, you might grant these permissions initially, and then revoke them after the tables are created.

You have two options to effect the required warehouse table changes during the upgrade process:

· Grant the warehouse agents temporary permission to alter tables

If using this option, grant the permissions, start historical collection for all the required tables, allow the Warehouse Proxy agent to add the new data to the raw tables, and allow the Summarization and Pruning agent to summarize data for all affected tables. Then, remove the permission to alter tables.

· Make the warehouse table updates manually

If you want to use this option, you must determine the table structures for the raw and summary tables. If you manually created the tables in the earlier warehouse definition, you already have a methodology

and tools to assist you in this effort. You can use a similar technique to update and add new tables for this warehouse migration.

For a method of obtaining raw table schema, see the IBM Redbooks, *Tivoli Management Services Warehouse and Reporting*, January 2007, SG24-7290. The chapter that explains warehouse tuning includes a section on creating data tables manually.

Types of table changes

The following types of table changes affect warehouse summarization:

Case 1: New attribute added to an attribute group and defined as a primary key. Case 2: Existing attribute defined as a primary key or had primary key designation removed. Case 3: Moving some tables from 4K table spaces to 8K table spaces when using DB2[®] as the warehouse database. Case 3 does not apply to the SAP agent.

Case 1 and Case 2 are primary key changes. In both cases, new summarization records do not match existing summarized data:

• A new attribute is added to an attribute group and that attribute is defined as a primary key:

New summarization records provide more accurate summarization or greater granularity than previous records. Existing summarization records are still available but contain less granular detail if default values are not assigned for the new primary keys.

• An existing attribute is defined as a primary key or the primary key designation is removed:

If a new key was added, then the new summarization records provide more accurate summarization or greater granularity than previous records. If a key was removed, then the new summarization records provide less granularity than previous records, but with the intent of providing more meaningful summarization. Existing summarization records are still available.

Case 3 requires that you move some tables from 4K table spaces to 8K table spaces when using DB2 as the warehouse database. In this way, you avoid errors during summarization and pruning processing. Case 3 does not apply to the SAP agent.

Table summary

Table 23 provides information to help you determine the effects of primary key and warehouse changes for this monitoring agent. The table shows each attribute group, the current primary keys (in addition to ORIGINNODE) for the attribute group. The table also shows the primary keys that were removed, and whether this table is being included in warehouse reporting.

Table 15. Primary key and w	arehouse changes for the SAP age	nt	
Attribute group	Current primary keys	Removed primary keys	Warehouse d
R/3_ABAP_Dumps	Mode_Number user ID Create_Time	None	Yes
R/3_Active_Users	User ID	Time	Yes
R/3_Alerts	Number Occurrence_Time	None	Yes
R/3_Archive_Monitor	None	None	Yes
R/ 3_Batch_Data_Create_Log	Session_Name_U Created	None	No
R/3_Batch_Data_Create	Session_Name_U Creator	Created	Yes
R/3_Batch_Job_Logs	Job_ID Job_Name_U Job_Number	None	No

Attribute group	Current primary keys	Removed primary keys	Warehouse d	
R/3_Batch_Jobs	Job_Name_U Status	Job_Number	Yes	
R/3_Buffer_Performance	Name	None	Yes	
R/3_Data_Base_Detail	Object_Type	None	No	
R/3_Data_Base_Summary	Object_Type	None	Yes	
R/3_Database_Logs	Log_Data File_Name	None	No	
R/3_Developer_Traces	Log_Data File_Name	None	No	
R/3_EDI_Files	File_Name_U	File_Name	Yes	
R/3_File_Systems	Name_U	None	Yes	
R/3_Gateway_Connections	Local_Logical_Unit_Name	Connection_Number	Yes	
R/3_Gateway_Statistics	Instance_Name	None	No	
R/ 3_Instance_Configuration	Instance_Name	None	Yes	
R/3_Intermediate _Documents	Status_Description_U Number	Create_Time	Yes	
R/3_Lock_Entries	Lock_Object_Name	Create_Time	Yes	
R/3_Logon_Groups	Name_U	None	Yes	
R/3_Logon_Information	User ID	Time	Yes	
R/3_Number_Range _Buffer_Details	Object_Name Instance_Name	None	Yes	
R/3_Number_Range _Buffer_Summary	Instance_Name	None	Yes	
R/3_Operating_System _Performance	Instance_Name	None	Yes	
R/3_Output_Requests	Output_Device_U	Print_Request_Time	Yes	
R/3_Perform_Requested _Action	None	None	No	
R/3_SAP_Office_Inbox	User ID	Received_Time	Yes	
R/3_Saprouter_Log	Date_Time File_Name	None	No	
R/ 3_Service_Response_Time	Service_Type	None	Yes	
R/3_Set_Default_Sample _Period	RFC_Function Message	None	No	
R/3_Spool_Requests	Output_Device_U	Spool_Number	Yes	
R/3_System_Log_details	Message_Text_U Entry_Time Instance_Name	Message_Text No		
R/3_System_Log	Entry_Time	None	No	
R/3_Topology_Information	Instance_Name	None	No	

Table 15. Primary key and w	rarehouse changes for the SAP ager	nt (continued)		
Attribute group	Current primary keys	Removed primary keys	Warehouse d	
R/3_Transaction _Performance	Executed_in Dynpro_Number Application_U Program_or_Tran_Code_U user ID	None	Yes	
R/3_Transactional_RFC	Target_Name_U	Transaction_Id	Yes	
R/3_Transport_Logs	Number_L Logfile_Name	Number	No	
R/3_Transport_Objects	Number_L Object_Name	Number	No	
R/3_Transport_Requests	Number_L	Number	Yes	
R/3_Transport_Steps	Number_L Step_Name Target_System	Number	No	
R/3_Updates_Information	Update_Key Time	None	Yes	
R/3_User_Information	User ID	None	No	
R/3_Work_Processes	Туре	Number	Yes	

Warehouse upgrade

You can upgrade your warehouse for primary key and table space changes.

Upgrading your warehouse includes making the following types of changes:

- Case 1: New attribute is added and is designated as a primary key
 - New attribute and a default value must be added to the raw table and the summarization tables.

If the attribute group name is not too long for the underlying database, the table name corresponds to the attribute group name. If the attribute group name is too long, a short name is used. The mapping of attribute group names to table names is stored in the WAREHOUSEID table.

- Case-1 scripts that complete the following actions are provided to assist in this change:
 - Alter existing raw tables
 - Alter existing summary tables
 - Drop existing summary views
- These changes must be done before the monitoring agent is started and begins exporting data to the Warehouse Proxy agent.
- Case 2: Existing attributes are changed to either add or remove primary key designation.
 - Existing data is of limited value and must be deleted.
 - Case-2_Truncate scripts that complete the following actions are provided to assist in this change:
 - Remove all records from existing summary tables, preserving existing table definitions
 - Delete the raw data marker that allows raw data to be resummarized
 - Case 2_Drop scripts that complete the following actions are provided to assist in this change:
 - Drop existing summary views
 - Drop existing summary tables
 - Delete the raw data marker that allows raw data to be resummarized
 - These changes are optional, but result in more accurate summarized information.
- Case 3 Move tables from 4K table space to 8K table space for selected agents

- Special processing for selected agents to move tables from a 4K table space to an 8K table space.
- Individual scripts are provided for each summary table that is changed.

Affected attribute groups and supporting scripts

Specific attribute groups and summary tables are affected when you upgrade the warehouse database.

Table 26 shows the attribute groups and summary tables affected for this monitoring agent. The table shows the names of the SQL scripts provided to assist in the upgrade process. The table also shows the types of warehouse databases for which the scripts must be run, and the types of changes (cases) to which the scripts apply.

Table 16. Scripts and	summary tables for affected attribute group	os for th	e SAP ag	gent	•		
Attribute group or summary table	File	DB2	Oracl e	MS SQL Serve r	Case 1	Case 2	Case 3
R/3_ABAP_Dumps	emptyfile.sql	х				Х	
R/3_ABAP_Dumps	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	x		X	
R/3_ABAP_Dumps	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	Х	Х	X		X	
R/3_Active_Users	emptyfile.sql	Х				Х	
R/3_Active_Users	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	X		X	
R/3_Active_Users	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	Х	Х	Х		X	
R/3_Batch_Data _Create	emptyfile.sql	Х				X	
R/3_Batch_Data _Create	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	X		Х	
R/3_Batch_Data _Create	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	х	Х	х		Х	
R/3_Batch_Jobs	emptyfile.sql	Х				Х	
R/3_Batch_Jobs	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	х		X	
R/3_Batch_Jobs	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	Х	Х	Х		X	
R/3_EDI_Files	emptyfile.sql	Х				Х	
R/3_EDI_Files	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	Х	Х	X		X	
R/3_EDI_Files	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	Х	Х	X		X	
R/3_Gateway _Connections	emptyfile.sql	х				х	
R/3_Gateway _Connections	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	х		х	

Attribute group or summary table	File	DB2	Oracl e	MS SQL Serve r	Case 1	Case 2	Case 3
R/3_Gateway _Connections	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	Х	Х	х		x	
R/3_Instance _Configuration	emptyfile.sql	х				X	
R/3_Instance _Configuration	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	Х		X	
R/3_Instance _Configuration	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	х	Х	Х		X	
R/3_Intermediate _Documents	emptyfile.sql	х				X	
R/3_Intermediate _Documents	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	Х	Х	Х		Х	
R/3_Intermediate _Documents	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	Х	Х	х		Х	
R/3_Lock_Entries	emptyfile.sql	Х				Х	
R/3_Lock_Entries	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	Х		X	
R/3_Lock_Entries	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	х	Х	Х		X	
R/3_Logon_ Information	emptyfile.sql	х				X	
R/3_Logon_ Information	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	Х		X	
R/3_Logon_ Information	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	х	Х	Х		X	
R/3_Number_Range _Buffer_Details	emptyfile.sql	х	Х	х		X	
R/3_Number_Range _Buffer_Details	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	Х		X	
R/3_Number_Range _Buffer_Details	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	Х	Х	х		x	
R/3_Number_Range _Buffer_Summary	emptyfile.sql	х	Х	х		x	
R/3_Number_Range _Buffer_Summary	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	Х		X	
R/3_Number_Range _Buffer_Summary	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	Х	х	х		x	
R/3_Operating _System_Performance	emptyfile.sql	х				Х	

Attribute group or summary table	File	DB2	Oracl e	MS SQL Serve r	Case 1	Case 2	Case 3
R/3_Operating_System _Performance	em ksa_61migr_mySAP_Agent_Case-2_D rop.sql		Х	х		x	
R/3_Operating_System _Performance	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	х	Х	Х		x	
R/3_Output_Requests	emptyfile.sql	Х				Х	
R/3_Output_Requests	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	х		Х	
R/3_Output_Requests	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql		Х	Х		Х	
R/3_SAP_Office_Inbox	emptyfile.sql	Х				Х	
R/3_SAP_Office_Inbox	_Office_Inbox ksa_61migr_mySAP_Agent_Case-2_D rop.sql		Х	Х		X	
R/3_SAP_Office_Inbox ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql		x	Х	Х		X	
R/3_Spool_Requests emptyfile.sql		Х				Х	
R/3_Spool_Requests	3_Spool_Requests ksa_61migr_mySAP_Agent_Case-2_D rop.sql		Х	х		Х	
R/3_Spool_Requests	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	х	Х	Х		X	
R/3_Transaction _Performance	emptyfile.sql	х				X	
R/3_Transaction _Performance	ksa_61migr_mySAP_Agent_Case-1.sq l	х	Х	Х	Х		
R/3_Transaction _Performance	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	x	Х	Х		X	
R/3_Transaction _Performance	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	х	Х	X			
R/ 3_Transactional_RFC	emptyfile.sql	х				X	
R/ ksa_61migr_mySAP_Agent_Case-2_D 3_Transactional_RFC rop.sql		х	Х	х		x	
R/ 3_Transactional_RFC	ksa_61migr_mySAP_Agent_Case-2_Tr onal_RFC uncate.sql		Х	Х		Х	
R/3_Transport _Requests	emptyfile.sql	х				Х	
R/3_Transport _Requests	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	х		Х	
R/3_Transport _Requests	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	х	Х	Х		Х	

Attribute group or summary table	File	DB2	Oracl e	MS SQL Serve r	Case 1	Case 2	Case 3
R/3_Work_Processes	emptyfile.sql	Х				Х	
R/3_Work_Processes	ksa_61migr_mySAP_Agent_Case-2_D rop.sql	х	Х	х		X	
R/3_Work_Processes	ksa_61migr_mySAP_Agent_Case-2_Tr uncate.sql	х	Х	Х		X	

The following types of warehouse objects are affected by these scripts. Review the scripts before running them:

• Case-1.sql

These scripts affect raw tables, summary tables, and summary views.

• Case-2_Drop.sql

These scripts affect the summary tables, summary views, and the Summarization and Pruning agent WAREHOUSEMARKER table.

Case-2_Truncate.sql

These scripts affect the summary tables and the Summarization and Pruning agent WAREHOUSEMARKER table.

Database script files

The warehouse can be hosted on any of three databases: DB2, Oracle, or Microsoft SQL Server. Different sets of script files are included for each type of database. These scripts are provided as part of the monitoring agent Tivoli Enterprise Portal Server support file installation. After you install the Tivoli Enterprise Portal Server support files for the monitoring agent, the files are stored on the Tivoli Enterprise Portal Server computer in the install_dir/CNPS/SQLLIB/WAREHOUSE directory. There is a subdirectory for each type of database: DB2 for DB2, Oracle for Oracle, and SQLServer for Microsoft SQL Server.

The scripts provide commands for all affected tables and views. If no summarization is enabled for some periods, for example, quarterly or yearly, you have no corresponding summary tables (_Q, _Y) and summary views (_QV, _YV) in your warehouse database. If you run the scripts that are provided, the database reports errors for these missing objects. The scripts continue to run the remaining commands. Similarly, if you rerun the scripts, all commands are attempted. If the objects do not exist, or the command cannot be run (especially for the ALTER commands), the scripts continue processing the remaining commands.

Upgrading the warehouse database by using the DB2 database

You can upgrade the warehouse database by using the DB2 database.

Procedure

- 1. Stop **all** running Warehouse Proxy agent instances and the Summarization and Pruning agent.
- 2. Back up your warehouse database.
- ^{3.} Copy the scripts from the Tivoli Enterprise Portal Server in one of the following directories to a temporary directory on the system where the warehouse database is located:

• Windows:

```
install_dir\CNPS\SQLLIB\WAREHOUSE\DB2
```

• UNIX and Linux[®]:

install_dir/arch/cq/sqllib/WAREHOUSE/DB2

4. On the system where the warehouse database is located, change to the directory where you placed the script files in Step 3 and connect to the warehouse database through the DB2 command line.

You must supply a user ID that has the authorization to alter and load tables and drop views. Run commands based on the following example to connect, set the schema, and save the script to an output file:

```
db2 connect to WAREHOUS user ITMUSER using ITMPASS
db2 set current schema="ITMUSER"
db2 -tv -z log/script.sql.log -f script.sql
```

where:

- WAREHOUS is the database name.
- ITMUSER is the user name used by the Warehouse Proxy agent.
- ITMPASS is the password used by the Warehouse Proxy agent.
- *script.sql* is the name of the script file. See Table 16 on page 322 for the script file names.
- script.sql.log is the name of the output file.

Notes: You might receive error messages, such as the following DB2 error messages:

• SQL0204N "schema name.table name" is an undefined name. SQLSTATE=42704

This message indicates that **table name** table does not exist and cannot be altered or dropped. This error happens if you do not have warehousing or summarization enabled for the specific table. For example, if you have only hourly and daily summarization enabled, you see this message for the weekly, monthly, quarterly, and yearly summarization tables because these tables do not exist.

• SQL3304N The table does not exist.

This message indicates that the table does not exist and cannot be loaded. This error happens if you do not have warehousing or summarization enabled for the specific table. For example, if you have hourly and daily summarization enabled only, you see this message for the weekly, monthly, quarterly, and yearly summarization tables because these tables do not exist.

Upgrade the warehouse database by using the Oracle database

You can upgrade the warehouse database by using the Oracle database.

Procedure

- 1. Stop **all** running Warehouse Proxy agent instances and the Summarization and Pruning agent.
- 2. Back up your warehouse database.
- 3. Copy the scripts from the Tivoli Enterprise Portal Server in one of the following directories to a temporary directory on the system where the warehouse database is located:
 - Windows

install_dir\CNPS\SQLLIB\WAREHOUSE\Oracle

• UNIX and Linux

install_dir/arch/cq/sqllib/WAREHOUSE/Oracle

4. On the system where the warehouse database is located, change to the directory where you placed the script files in Step <u>"3" on page 326</u> and connect to the warehouse database through the Oracle command line.

You connect with the same user that the Warehouse Proxy agent uses to connect to the warehouse, and run the script. To run the script, the user ID must have authorization to alter tables and drop views. Also, the user ID must be able to drop tables when using Case 2 Drop, or truncate tables when using Case 2 Truncate. The output is saved to script name.log file. Run the following command: **sqlplus ITMUSER/ITMPASS@WAREHOUS @ script.sql** These parameters are used in the example:

- WAREHOUS is the connect identifier.
- ITMUSER is the user name used by the Warehouse Proxy agent.
- ITMPASS is the password used by the Warehouse Proxy agent.
- script.sql is the name of this script file. See Table 16 on page 322 for the script file names.

Note: You might receive error messages, such as the following Oracle error messages: ORA-00942: table or view does not exist

This message indicates that the table does not exist and cannot be altered, dropped, or truncated. This error happens if you do not have warehousing or summarization enabled for the specific table. For example, if you have only hourly and daily summarization enabled, you see this message for the weekly, monthly, quarterly, and yearly summarization tables. This message shows because these tables do not exist.

Upgrade the database by using the MS SQL database

You can upgrade the database by using the MS SQL database.

Procedure

- 1. Stop all running Warehouse Proxy agent instances and the Summarization and Pruning agent.
- 2. Back up your warehouse database.
- 3. Copy the scripts from the Tivoli Enterprise Portal Server in the one of the following directories to a temporary directory on the system where the warehouse database is located:
 - Windows:

install_dir\CNPS\SQLLIB\WAREHOUSE\SQLServer

• UNIX and Linux:

install_dir/arch/cq/sqllib/WAREHOUSE/SQLServer

4. On the system where the warehouse database is located, change to the directory where you placed the script files in Step <u>"3" on page 327</u> and connect to the warehouse database through the SQL Server command line.

Use the same user that the Warehouse Proxy agent uses to connect to the warehouse, and run the script. To run the script, the user ID must have authorization to alter tables and drop views. The user ID must also drop tables when using Case 2 Drop, or truncate tables when using Case 2 Truncate. The output is saved to a file named script name.log. Run the following command: osql -I -S SQLHOST[\SQLINST] -U ITMUSER -P ITMPASS -d WAREHOUS -m-1 -n -o log/ script.sql.log -i script.sql These parameters are used in the example:

- WAREHOUS is the database name.
- ITMUSER is the user name used by the Warehouse Proxy agent.
- **ITMPASS** is the password used by the Warehouse Proxy agent.
- **script.sql** is the name of this script file.
- SQLHOST is the SQL server name.
- **SQLINST** is the optional SQL instance name.

Note: You might receive the following error messages from the SQL Server: Msg 4902, Level 16, State 1, Server ENTERPRISE, Line 1 Cannot find the object "table name" because it does not exist or you do not have permissions.

This message indicates that the table named **table name** does not exist and cannot be dropped or truncated. This error happens if you do not have warehousing or summarization enabled for the specific table. For example, if you have hourly and daily summarization enabled only, you see this message for the weekly, monthly, quarterly, and yearly summarization tables. You see this message for these tables only because these tables do not exist.

Chapter 8. IBM Tivoli Enterprise Console event mapping

Tivoli Enterprise Console event mapping enables the IBM Tivoli Monitoring Event Integration Facility to generate a Tivoli Enterprise Console event. The event is triggered for a situation that matches the Tivoli Enterprise Console event that was generated in IBM Tivoli Monitoring V5.1.

The following three types of event mapping are included for IBM Tivoli Monitoring V6.2:

- Generic event mapping provides event class and attribute information for situations that do not have
 specific event mapping defined
- Resource model event mapping provides Tivoli Enterprise Console events that look like the Tivoli Enterprise Console events both in name and slot content. You receive these events from IBM Tivoli Monitoring V5.1 resource models, See *IBM Tivoli Monitoring: Upgrading to V5.1.2* for more information.
- Event mapping that provides Tivoli Enterprise Console events that look like the Tivoli Enterprise Console events both in name and slot content. You receive these events from IBM Tivoli Monitoring V5.1 mySAP CCMS and Syslog Tivoli Enterprise Console adapters.

Event mapping

The Tivoli Event Integration Facility (EIF) interface is used to forward situation events to IBM Tivoli Netcool/OMNIbus or Tivoli Enterprise Console.

EIF events specify an event class and the event data is specified as name value pairs that identify the name of an event slot and the value for the slot. An event class can have subclasses. IBM Tivoli Monitoring provides the base event class definitions and a set of base slots that are included in all monitoring events. Agents extend the base event classes to define subclasses that include agent-specific slots. For SAP agent events, the event classes correspond to the agent attribute groups, and the agent-specific slots correspond to the attributes in the attribute group.

A description of the event slots for each event class is provided in this topic. The situation editor in the Tivoli Enterprise Portal can be used to perform custom mapping of data to EIF slots instead of using the default mapping described in this topic. For more information about EIF slot customization, see the *Tivoli Enterprise Portal User's Guide*.

Tivoli Enterprise Console requires that event classes and their slots are defined in BAROC (Basic Recorder of Objects in C) files. Each agent provides a BAROC file that contains event class definitions for the agent and is installed on the Tivoli Enterprise Monitoring Server in the TECLIB directory (install_dir/cms/ TECLIB for Windows systems and install_dir/tables/TEMS_hostname/TECLIB for UNIX systems) when application support for the agent is installed. The BAROC file for the agent and the base BAROC files provided with Tivoli Monitoring must also be installed onto the Tivoli Enterprise Console. For details, see "Setting up event forwarding to Tivoli Enterprise Console" in the *IBM Tivoli Monitoring Installation and Setup Guide*.

Each of the event classes is a child of KSA_Base or Omegamon_Base event classes. The KSA_Base event class can be used for generic rules processing for any event from the SAP agent.

Table 17. Overview of attribute groups to event classes and slots	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Instance_Configuration attribute group	ITM_R3_Instance_Configuration
 managed_system: STRING; 	
 instance_host_name: STRING; 	
 system_release: STRING; 	
 central_instance_name: STRING; 	
 central_instance: STRING; 	
 central_instance_enum: STRING; 	
 database_name: STRING; 	
 database_host_name: STRING; 	
 message_service_configured: STRING; 	
 message_service_configured_enum: STRING; 	
 update_service_configured: STRING; 	
 update_service_configured_enum: STRING; 	
 dialog_service_configured: STRING; 	
 dialog_service_configured_enum: STRING; 	
 batch_service_configured: STRING; 	
 batch_service_configured_enum: STRING; 	
 enqueue_service_configured: STRING; 	
 enqueue_service_configured_enum: STRING; 	
 gateway_service_configured: STRING; 	
 gateway_service_configured_enum: STRING; 	
 spool_service_configured: STRING; 	
 spool_service_configured_enum: STRING; 	
 system_number: STRING; 	
 instance_status: STRING; 	
 instance_status_enum: STRING; 	
 sample_time: STRING; 	
 configuration_string: STRING; 	
 instance_start_time: STRING; 	
 system_start_time: STRING; 	
 instance_stop_time: STRING; 	
 active_users: INTEGER; 	
 assigned_update_instance: STRING; 	
 system_description: STRING; 	
 database_host_ip_address: STRING; 	
 instance_op_mode_state: STRING; 	
 instance_op_mode_state_enum: STRING; 	
 operation_mode: STRING; 	
 dialog_processes: INTEGER; 	
 update_processes: INTEGER; 	
 batch_processes: INTEGER; 	
 spool_processes: INTEGER; 	
 database_type: STRING; 	
 database_release: STRING; 	
(Continued on the next page)	

Event slots		IBM Tivoli Enterprise Console event class
 instance_host_ip_address: STRING; 		ITM_R3_Instance_Configuration (continued)
instances_running: INTEGER; instances_down: INTEGER;		
instances_down: INTEGER;		
description: STRING;		
 ksa_value: STRING; 		
 logon_parameters: STRING; 		
• system_name: STRING;		
• system_name_enum: STRING;		
instance_name: STRING;		
system_up_duration: INTEGER;		
 system_up_duration_enum: STRING; 		
 instance_up_duration: INTEGER; 		
 instance_up_duration_enum: STRING; 		
 instance_down_duration: INTEGER; 		
 instance_down_duration_enum: STRING; 		
• total_external_sessions: INTEGER;		
 total_external_sessions_enum: STRING; 		
• total_gui_sessions: INTEGER;		
 total_gui_sessions_enum: STRING; 		
 total_rfc_sessions: INTEGER; 		
 total_rfc_sessions_enum: STRING; 		
 nowp_queue: INTEGER; 		
 nowp_queue_enum: STRING; 		
 dialog_queue: INTEGER; 		
 dialog_queue_enum: STRING; 		
 update_queue: INTEGER; 		
 update_queue_enum: STRING; 		
 enqueue_queue: INTEGER; 		
 enqueue_queue_enum: STRING; 		
 batch_queue: INTEGER; 		
 batch_queue_enum: STRING; 		
 spool_queue: INTEGER; 		
 spool_queue_enum: STRING; 		
 update2_queue: INTEGER; 		
 update2_queue_enum: STRING; 		
 system_description_u: STRING; 		
 operation_mode_u: STRING; 		
 sapshcut_parameters: STRING; 		
 system_label: STRING; 		
 batch_stopped_percent: INTEGER; 		
 batch_stopped_percent_enum: STRING; 		
 batch_running_percent: INTEGER; 		
 batch_running_percent_enum: STRING; 		
 batch_waiting_percent: INTEGER; 		
 batch_waiting_percent_enum: STRING; 		
 batch_complete_percent: INTEGER; 		
 batch_complete_percent_enum: STRING; 		
 dialog_stopped_percent: INTEGER; 		
 dialog_stopped_percent_enum: STRING; 		
 dialog_running_percent: INTEGER; 		
 dialog_running_percent_enum: STRING; 	Chapter 8. 1	BM Tivoli Enterprise Console event mapping 3:
 dialog_waiting_percent: INTEGER; 	·	

Event slots	IBM Tivoli Enterprise Console event class
enqueue_stopped_percent: INTEGER;	ITM_R3_Instance_Configuration (continued)
enqueue_stopped_percent_enum: STRING;	
enqueue_running_percent: INTEGER;	
enqueue_running_percent_enum: STRING;	
enqueue_waiting_percent: INTEGER;	
enqueue_waiting_percent_enum: STRING;	
enqueue_complete_percent: INTEGER;	
enqueue_complete_percent_enum: STRING;	
enqueue_processes: INTEGER;	
spool_stopped_percent: INTEGER;	
spool_stopped_percent_enum: STRING;	
spool_running_percent: INTEGER;	
spool running percent enum: STRING;	
spool_waiting_percent: INTEGER;	
spool_waiting_percent_enum: STRING;	
spool_complete_percent: INTEGER;	
spool complete percent enum: STRING;	
update_stopped_percent: INTEGER;	
update_stopped_percent_enum: STRING;	
update_running_percent: INTEGER;	
update_running_percent_enum: STRING;	
update_waiting_percent: INTEGER;	
update_waiting_percent_enum: STRING;	
update_complete_percent: INTEGER;	
update_complete_percent_enum: STRING;	
update2_stopped_percent: INTEGER;	
update2_stopped_percent_enum: STRING;	
update2_running_percent: INTEGER;	
update2_running_percent_enum: STRING;	
update2_waiting_percent: INTEGER;	
update2_waiting_percent_enum: STRING;	
update2_complete_percent: INTEGER;	
update2_complete_percent_enum: STRING;	
update2_processes: INTEGER;	
update2_service_configured: STRING;	
update2_service_configured_enum: STRING;	
dialog_queue_percent: INTEGER;	
dialog_queue_percent_enum: STRING;	
enqueue_queue_percent: INTEGER;	
enqueue_queue_percent_enum: STRING;	
spool_queue_percent: INTEGER;	
spool_queue_percent_enum: STRING;	
update_queue_percent: INTEGER;	
update_queue_percent_enum: STRING;	
update2_queue_percent: INTEGER;	
update2_queue_percent_enum: STRING;	
database_host_ip_address_v6: STRING;	
<pre>instance_host_ip_address_v6: STRING;</pre>	
total_active_users: INTEGER;	
rfc_users: INTEGER;	for SAP Applications: SAP agent Reference

• registered_users: INTEGER;

Event slots	IBM Tivoli Enterprise Console event class
R/3_Service_Response_Time attribute group	ITM_R3_Service_Response_Time
• managed_system: STRING;	
service_type: STRING;	
 service_frequency: REAL; 	
<pre>private_mode_entered: STRING;</pre>	
 private_mode_entered_enum: STRING; 	
• avg_wait_time: INTEGER;	
• avg_wait_time_enum: STRING;	
<pre>avg_wait_percent: INTEGER;</pre>	
 avg_response_time: INTEGER; 	
avg_response_time_enum: STRING;	
max_response_time: INTEGER;	
max_response_time_enum: STRING;	
• max_wait_time: INTEGER;	
max_wait_time_enum: STRING;	
min_response_time: INTEGER;	
 min_response_time_enum: STRING 	
min_wait_time: INTEGER;	
min_wait_time_enum: STRING;	
avg_cpu_time: INTEGER;	
• avg_cpu_time_enum: STRING;	
max_cpu_time: INTEGER;	
max_cpu_time_enum: STRING;	
 min_cpu_time: INTEGER; 	
 min_cpu_time_enum: STRING; 	
 avg_database_request_time: INTEGER; 	
• avg_database_request_time_enum: STRING;	
 max_database_request_time: INTEGER; 	
 max_database_request_time_enum: STRING; 	
 min_database_request_time: INTEGER; 	
 min_database_request_time_enum: STRING; 	
 sample_interval_start: STRING; 	
• sample_interval_end: STRING;	
logon_parameters: STRING;	
• system_name: STRING;	
system_name_enum: STRING;	
instance_name: STRING;	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
 service_type_encoded: STRING 	
service_type_encoded_enum: STRING	
dialog_steps: REAL;	
dialog_steps_enum: STRING;	
service_frequency_64: REAL;	
service_frequency_64_enum: STRING;	
avg_wait_time_64: REAL;	
avg_wait_time_64_enum: STRING;	
avg_response_time_64: REAL;	
avg_response_time_64_enum: STRING;	
 max_response_time_64: REAL; (Continued on the next page) 	Chapter 8. IBM Tivoli Enterprise Console event mapping

Table 17. Overview of attribute groups to event classes and slots (continued)			
Event slots	IBM Tivoli Enterprise Console event class		
 max_response_time_64_enum: STRING; 	ITM_R3_Service_Response_Time (continued)		
 max_wait_time_64: REAL; 			
 max_wait_time_64_enum: STRING; 			
 min_response_time_64: REAL; 			
 min_response_time_64_enum: STRING; 			
 min_wait_time_64: REAL; 			
 min_wait_time_64_enum: STRING; 			
 avg_cpu_time_64: REAL; 			
 avg_cpu_time_64_enum: STRING; 			
 max_cpu_time_64: REAL; 			
 max_cpu_time_64_enum: STRING; 			
 min_cpu_time_64: REAL; 			
 min_cpu_time_64_enum: STRING; 			
 avg_database_request_time_64: REAL; 			
 avg_database_request_time_64_enum: STRING; 			
 max_database_request_time_64: REAL; 			
 max_database_request_time_64_enum: STRING; 			
 min_database_request_time_64: REAL; 			
 min_database_request_time_64_enum: STRING; 			

Table 17. Overview of attribute groups to event classes and slots (continued)
Event slots	IBM Tivoli Enterprise Console event class
R/3_Alerts attribute group	ITM_R3_Alerts
• managed_system: STRING;	
• ksa_class: STRING;	
 ksa_severity: INTEGER; 	
 ksa_severity_enum: STRING; 	
occurrence_time: STRING;	
• message: STRING;	
• raised_by: STRING;	
 raised_by_enum: STRING; 	
• sample_time: STRING;	
• number: INTEGER;	
• default_period: INTEGER;	
 logon_parameters: STRING; 	
 logon_parameters_1: STRING; 	
 logon_parameters_2: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
• instance_name: STRING;	
• action: STRING;	
• mte_class: STRING;	
• alert_msg: STRING;	
• alert_object_name: STRING;	
• alert_field_name: STRING;	
• alert_value: INTEGER;	
• alert_value_enum: STRING;	
• alert_status: INTEGER;	
• alert_status_enum: STRING;	
• alert_unique_identifier: INTEGER;	
 alert_unique_identifier_enum: STRING; 	
monitor_set: STRING;	
• ksa_monitor: STRING;	
 occurrence_time_gmt: STRING; 	
• action_l: STRING;	
• message_u: STRING;	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 tid_internal_handle: STRING; 	
 monitoring_segment_name: STRING; 	
• alert_index: STRING;	
 alert_severity: INTEGER; 	

Event slots	IBM Tivoli Enterprise Console event class
R/3_Operating_System_Performance attribute group	ITM_R3_Operating_System_Performance
 managed_system: STRING; 	
 idle_cpu_percent: INTEGER; 	
 idle_cpu_percent_enum: STRING; 	
 physical_memory_free: INTEGER; 	
 physical_memory_free_enum: STRING; 	
physical_memory_free_percent: INTEGER;	
physical_memory_free_percent_enum: STRING;	
<pre>swap_space_free: INTEGER;</pre>	
swap_space_free_enum: STRING;	
swap_space_free_percent: INTEGER;	
swap_space_free_percent_enum: STRING;	
load_average_last_minute: REAL;	
load_average_last_minute_enum: STRING;	
load_average_last_5_minutes: REAL;	
load_average_last_5_minutes_enum: STRING;	
physical_memory: INTEGER;	
physical_memory_enum: STRING;	
swap_space: INTEGER;	
swap_space_enum: STRING;	
pages_in: INTEGER;	
pages_in_enum: STRING;	
pages_out: INTEGER;	
pages_out_enum: STRING;	
lan_packets_in: INTEGER;	
lan_packets_in_enum: STRING;	
lan_packets_out: INTEGER;	
<pre>lan_packets_out_enum: STRING;</pre>	
lan_collisions: INTEGER;	
lan_collisions_enum: STRING;	
lan_errors: INTEGER;	
lan_errors_enum: STRING;	
sample_time: STRING;	
description: STRING;	
ksa_value: STRING;	
logon_parameters: STRING;	
system_name: STRING;	
system_name_enum: STRING;	
instance_name: STRING;	
load_average_last_15_minutes: REAL;	
load_average_last_15_minutes_enum: STRING;	
kb_paged_in: INTEGER;	
kb_paged_in_enum: STRING;	
kb_paged_out: INTEGER;	
kb_paged_out_enum: STRING;	
user_cpu_percent: INTEGER;	
user_cpu_percent_enum: STRING;	
system_cpu_percent: INTEGER;	
• system_cpu_percent_enum: STRING;	
sapshcut_parameters: STRING; 36ystBM_[ந்ழந்ஜில் என்றை and a strain and a strain a st	t for SAP Applications: SAP agent Reference
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• lan_packets_in_64: REAL;

Table 17. Overview of attribute groups to event classes and slots (continued)			
Event slots	IBM Tivoli Enterprise Console event class		
• lan_packets_out_64_enum: STRING;	ITM_R3_Operating_System_Performance (continued)		
• lan_collisions_64: REAL;			
 lan_collisions_64_enum: STRING; 			
• lan_errors_64: REAL;			
• lan_errors_64_enum: STRING;			

Table 17. Overview of attribute groups to event classes and slots (continu	ied)
Event slots	IBM Tivoli Enterprise Console event class
R/3_Transaction_Performance attribute group	ITM_R3_Transaction_Performance
 managed_system: STRING; 	
 program_or_tran_code: STRING; 	
• application: STRING;	
• userid: STRING;	
description: STRING;	
• dialog_steps: INTEGER;	
 dialog_steps_enum: STRING; 	
 total_response_time: INTEGER; 	
 total_response_time_enum: STRING; 	
 avg_response_time: INTEGER; 	
 avg_response_time_enum: STRING; 	
 total_cpu_time: INTEGER; 	
 total_cpu_time_enum: STRING; 	
 avg_cpu_time: INTEGER; 	
 avg_cpu_time_enum: STRING; 	
 total_wait_time: INTEGER; 	
 total_wait_time_enum: STRING; 	
 avg_wait_time: INTEGER; 	
 avg_wait_time_enum: STRING; 	
 total_database_request_time: INTEGER; 	
 total_database_request_time_enum: STRING; 	
 avg_database_request_time: INTEGER; 	
 avg_database_request_time_enum: STRING; 	
 total_db_requested_bytes: INTEGER; 	
 total_db_requested_bytes_enum: STRING; 	
 total_database_calls: INTEGER; 	
 total_database_calls_enum: STRING; 	
• sample_interval_start: STRING;	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
• aggregation: STRING;	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 instance_name: STRING; 	
 sapgui_hostname: STRING; 	
 avg_total_memory: INTEGER; 	
 avg_total_memory_enum: STRING; 	
 avg_extended_memory: INTEGER; 	
 avg_extended_memory_enum: STRING; 	
 max_extended_memory_per_session: INTEGER; 	
 max_extended_memory_per_session_enum: STRING; 	
 max_extended_memory_per_transaction: INTEGER; 	
 max_extended_memory_per_transaction_enum: STRING; 	
 avg_private_memory: INTEGER; 	
(Continued on the next page)	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
• gui_count: INTEGER;	ITM_R3_Transaction_Performance (continued)
• gui_count_enum: STRING;	
• gui_time: INTEGER;	
• gui_time_enum: STRING;	
 front_end_network_time: INTEGER; 	
 front_end_network_time_enum: STRING; 	
 executed_in: STRING; 	
 row_aggregation: STRING; 	
 dialog_step_response_threshold: INTEGER; 	
 dialog_step_response_threshold_enum: STRING; 	
 dialog_steps_above_threshold: INTEGER; 	
 dialog_steps_above_threshold_enum: STRING; 	
 dialog_steps_above_threshold_percent: INTEGER; 	
 dialog_steps_above_threshold_percent_enum: STRING; 	
 system_label: STRING; 	
 service_type: STRING; 	
 service_type_encoded: STRING; 	
 service_type: STRING; 	
 service_type_encoded: STRING; 	
 service_type_encoded_enum: STRING; 	
 dialog_steps_64: REAL; 	
 dialog_steps_64_enum: STRING; 	
 total_response_time_64: REAL; 	
 total_response_time_64_enum: STRING; 	
 avg_response_time_64: REAL; 	
 avg_response_time_64_enum: STRING; 	
 total_cpu_time_64: REAL; 	
 total_cpu_time_64_enum: STRING; 	
 avg_cpu_time_64: REAL; 	
 avg_cpu_time_64_enum: STRING; 	
 total_wait_time_64: REAL; 	
 total_wait_time_64_enum: STRING; 	
 avg_wait_time_64: REAL; 	
 avg_wait_time_64_enum: STRING; 	
 total_database_request_time_64: REAL; 	
 total_database_request_time_64_enum: STRING; 	
 avg_database_request_time_64: REAL; 	
 avg_database_request_time_64_enum: STRING; 	
 total_db_requested_bytes_64: REAL; 	
(Continued on the next page)	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
 total_db_requested_bytes_64_enum: STRING; total_database_calls_64: REAL; total_database_calls_64_enum: STRING; avg_total_memory_64: REAL; avg_total_memory_64: REAL; avg_extended_memory_64_enum: STRING; max_extended_memory_per_session_64: REAL; max_extended_memory_per_session_64: REAL; max_extended_memory_per_transaction_64: REAL; max_extended_memory_per_transaction_64: REAL; avg_private_memory_64: REAL; avg_private_memory_64: REAL; gui_count_64: REAL; gui_count_64: REAL; gui_time_64: REAL; gui_time_64_enum: STRING; front_end_network_time_64: REAL; 	IBM Tivoli Enterprise Console event class ITM_R3_Transaction_Performance (continued)
 front_end_network_time_64_enum: STRING; dialog_steps_above_threshold_64: REAL; dialog_steps_above_threshold_64_enum: STRING; 	
R/3_Topology_Information attribute group managed_system: STRING; child_node: STRING; parent_node: STRING; instance_host_name: STRING configuration_string: STRING; active_users: INTEGER; server_type_enum: STRING; icon_label: STRING; logon_parameters: STRING; system_name_enum: STRING; instance_name: STRING; icon_label_u: STRING; icon_label_u: STRING; sapshcut_parameters: STRING; system_label: STRING; 	ITM_R3_Topology_Information

Table 17. Overview of attribute groups to event classes and slots (continued) Event class IPM Tiveli Enterprice Concele event classes	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Batch_Jobs attribute group	ITM_R3_Batch_Jobs
 managed_system: STRING; 	
 job_name: STRING; 	
 job_number: INTEGER; 	
 job_class: STRING; 	
 job_class_enum: STRING; 	
client: STRING;	
 ksa_status: STRING; 	
 ksa_status_enum: STRING; 	
 target_host: STRING; 	
 number_of_steps: INTEGER; 	
• start_time: STRING;	
 end_time: STRING; 	
 ksa_duration: INTEGER; 	
 ksa_duration_enum: STRING; 	
 definition_time: STRING; 	
 defined_by: STRING; 	
 last_changed_time: STRING; 	
 last_changed_by: STRING; 	
 scheduled_start_time: STRING; 	
 scheduled_latest_time: STRING; 	
• periodic: STRING;	
 other_scheduling_type: STRING; 	
 other_scheduling_type_enum: STRING; 	
 other_scheduling_value: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 execution_host: STRING; 	
• job_name_u: STRING;	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 execution_instance: STRING; 	
 target_instance: STRING; 	
job_id: STRING;	
 delayed_seconds: REAL; 	
 delayed_seconds. REAL; delayed_seconds_enum: STRING; 	
variant: STRING;	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Batch_Job_Logs attribute group	ITM_R3_Batch_Job_Logs
 managed_system: STRING; 	
• job_name: STRING;	
 job_number: INTEGER; 	
 job_number:_enum: STRING; 	
• message_time: STRING;	
 message_number: STRING; 	
• message_text: STRING;	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 message_text_u: STRING; 	
 job_name_u: STRING; 	
 sapshcut_parameters: STRING; 	
 message_number_l: STRING; 	
 system_label: STRING; 	
• job_id: STRING;	

Event slots	IBM Tivoli Enterprise Console event class
R/3_Transport_Requests attribute group	ITM_R3_Transport_Requests
 managed_system: STRING; 	
 number: STRING; 	
 type: STRING; 	
 type enum: STRING; 	
 description: STRING; 	
 owner: STRING; 	
 last_changed_time: STRING; 	
category: STRING;	
 ksa_status: STRING; 	
 ksa_status_enum: STRING; 	
 parent_number: STRING; 	
 source_system: STRING; 	
 source_client: STRING; 	
 import systems: STRING; 	
 import_clients: STRING; 	
 highest_return_code: INTEGER; 	
 highest_return_code_enum: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 number_l: STRING; 	
 parent_number_l: STRING; 	
 description_u: STRING; 	
 category_u: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 import_count: INTEGER; 	
 import_count_enum: STRING; 	
R/3_Transport_Objects attribute group	ITM_R3_Transport_Objects
 managed_system: STRING; 	
 number: STRING; 	
program_id: STRING;	
 object_type: STRING; 	
object_type: office,object_name: STRING;	
 object_function: STRING; 	
 object_function_enum: STRING; 	
 logon_parameters: STRING; 	
 system_name: STRING; 	
system_name_enum: STRING;	
number_l: STRING;	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Event slots	IBM Tivoli Enterprise Console event class
R/3_Transport_Steps attribute group	ITM_R3_Transport_Steps
 managed_system: STRING; 	
• number: STRING;	
 target_system: STRING; 	
• step_name: STRING;	
 step_name_enum: STRING; 	
 return_code: INTEGER; 	
 logfile_name: STRING; 	
 execution_time: STRING; 	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 number_l: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
R/3_Transport_Logs attribute group	ITM_R3_Transport_Logs
 managed_system: STRING; 	
number: STRING;	
 display_level: STRING; 	
 error_level: STRING; 	
 error_level_enum: STRING; 	
 message_number: STRING; 	
 message_text: STRING; 	
 logfile_name: STRING; 	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
• number_l: STRING;	
 message_text_u: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Event slots	IBM Tivoli Enterprise Console event class
R/3_System_Log attribute group	ITM_R3_System_Log
 managed_system: STRING; 	
 entry_time: STRING; 	
instance_name: STRING;	
task_type: STRING;	
client: STRING;	
• user: STRING;	
 transaction_code: STRING; 	
program_name: STRING;	
development_class: STRING;	
• terminal: STRING;	
 message_number: STRING; 	
 message_class: STRING; 	
 message_class_enum: STRING; 	
 message_text: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 record_number: STRING; 	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 message_text_u: STRING; 	
 program_name_u: STRING; 	
 sapshcut_parameters: STRING; 	
 record_count: INTEGER; 	
 system_label: STRING; 	
 ksa_severity: INTEGER; 	
 ksa_severity_enum: STRING; 	
R/3_System_Log_details attribute group	ITM_R3_System_Log_details
 managed_system: STRING; 	
 message_number: STRING; 	
 message_class: STRING; 	
 message_class.string, message_class_enum: STRING; 	
 message_class_enum. sTRING; message_description: STRING; 	
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logon_parameters: STRING;sample_interval_start: STRING;	
sample_interval_end: STRING; record_number: STRINC;	
record_number: STRING;	
system_name: STRING;	
• system_name_enum: STRING;	
instance_name: STRING;	
entry_time: STRING;	
 message_description_u: STRING; 	
message_text_u: STRING;	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Spool_Requests attribute group	ITM_R3_Spool_Requests
 managed_system: STRING; 	
 spool_number: INTEGER; 	
 spool_title: STRING; 	
client: STRING;	
creator: STRING;	
 create_time: STRING; 	
 output_device: STRING; 	
 output_format: STRING; 	
recipient: STRING;	
• department: STRING;	
copies: INTEGER;	
• size: INTEGER;	
authorization: STRING;	
 delete_time: STRING; 	
 cover_page: STRING; 	
 cover_page_enum: STRING; 	
 delete_after_print: STRING; 	
 delete_after_print_enum: STRING; 	
 request_closed: STRING; 	
 request_closed_enum: STRING; 	
 total_print_requests: INTEGER; 	
 processed_print_requests: INTEGER; 	
 error_print_requests: INTEGER; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 output_device_u: STRING; 	
 output_format_u: STRING; 	
 department_u: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Output_Requests attribute group	ITM_R3_Output_Requests
 managed_system: STRING; 	
 spool_number: INTEGER; 	
 spool_title: STRING; 	
client: STRING;	
creator: STRING;	
 print_request_time: STRING; 	
 print_pending_time: INTEGER; 	
 print_pending_time_enum: STRING; 	
 output_device: STRING; 	
 output_format: STRING; 	
recipient: STRING;	
department: STRING;	
copies: INTEGER;	
• size: INTEGER;	
 processed_print_requests: INTEGER; 	
 error_print_requests: INTEGER; 	
 failed_print_requests: INTEGER; 	
 print_status: STRING; 	
 print_status_enum: STRING; 	
 print_reason: STRING; 	
 print_reason_enum: STRING; 	
 host_spool_id: STRING; 	
 spooler_host_name: STRING; 	
 spooler_system_name: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 spool_title_u: STRING; 	
 output_device_u: STRING; 	
 output_format_u: STRING; 	
 department_u: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 print_pending_time_64: REAL; 	
 print_pending_time_64_enum: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_File_Systems attribute group	ITM_R3_File_Systems
 managed_system: STRING; 	
• name: STRING;	
• capacity: INTEGER;	
• size_free: INTEGER;	
• size_used: INTEGER;	
 size_used_percent: INTEGER; 	
• message: STRING;	
 full_forecast: INTEGER; 	
 full_forecast_enum: STRING; 	
• relative_hour: STRING;	
• sample_time: STRING;	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
• instance_name: STRING;	
• name_u: STRING;	
• message_u: STRING;	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
• inodes: INTEGER;	
 inodes_enum: STRING; 	
 inodes_used: INTEGER; 	
 inodes_used_enum: STRING; 	
 inodes_used_percent: INTEGER; 	
 inodes_used_percent_enum: STRING; 	
 operating_system: STRING; 	
• capacity_64: REAL;	
 capacity_64_enum: STRING; 	
• size_free_64: REAL;	
 size_free_64_enum: STRING; 	
 size_used_64: REAL; 	
 size_used_64_enum: STRING; 	
• inodes_64: REAL;	
 inodes_64_enum: STRING; 	
 inodes_used_64: REAL; 	
 inodes_used_64_enum: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Buffer_Performance attribute group	ITM_R3_Buffer_Performance
 managed_system: STRING; 	
• name: STRING;	
hitratio: REAL;	
requests: INTEGER;	
 requests_enum: STRING; 	
hits: INTEGER;	
 hits_enum: STRING; 	
misses: INTEGER;	
misses_enum: STRING;	
 db_access_quality: REAL; 	
 db_accesses: INTEGER; 	
 db_accesses_enum: STRING; 	
 db_accesses_saved: INTEGER; 	
 db_accesses_saved_enum: STRING; 	
 size_allocated: INTEGER; 	
 size_allocated_enum: STRING; 	
 size_used: INTEGER; 	
 size_used_enum: STRING; 	
• size_free: INTEGER;	
 size_free_enum: STRING; 	
 directory_allocated: INTEGER; 	
 directory_allocated_enum: STRING; 	
 directory_used: INTEGER; 	
 directory_used_enum: STRING; 	
 directory_free: INTEGER; 	
 directory_free_enum: STRING; 	
 objects_swapped: INTEGER; 	
 objects_swapped_enum: STRING; 	
 frames_swapped: INTEGER; 	
 frames_swapped_enum: STRING; 	
 total_resets: INTEGER; 	
 total_resets_enum: STRING; 	
last_reset: STRING;	
 objects_in_buffer: INTEGER; 	
 objects_in_buffer_enum: STRING; 	
inserts: INTEGER;	
 inserts_enum: STRING; 	
changes: INTEGER;	
 changes_enum: STRING; 	
deletes: INTEGER;	
deletes_enum: STRING;	
 sample_time: STRING; 	
 logon_parameters: STRING; 	
(Continued on the next page)	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Buffer_Performance attribute group	ITM_R3_Buffer_Performance (continued)
 system_name: STRING; 	
 system_name_enum: STRING; 	
 instance_name: STRING; 	
 size_free_percent: INTEGER; 	
 size_free_percent_enum: STRING; 	
 size_used_percent: INTEGER; 	
 size_used_percent_enum: STRING; 	
 size_in_memory: INTEGER; 	
 size_in_memory_enum: STRING; 	
 size_on_disk: INTEGER; 	
 size_on_disk_enum: STRING; 	
 max_used: INTEGER; 	
 max_used_enum: STRING; 	
 max_used_percent: INTEGER; 	
 max_used_percent_enum: STRING; 	
 directory_used_percent: INTEGER; 	
 directory_used_percent_enum: STRING; 	
 directory_free_percent: INTEGER; 	
 directory_free_percent_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 size_reserved: INTEGER; 	
 size_reserved_enum: STRING; 	
 size_reserved_percent: INTEGER; 	
 size_reserved_percent_enum: STRING; 	
 encoded_name: STRING; 	
 encoded_name_enum: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Batch_Data_Create attribute group	ITM_R3_Batch_Data_Create
 managed_system: STRING; 	
 session_name: STRING; 	
 ksa_status: STRING; 	
 ksa_status_enum: STRING; 	
created: STRING;	
 locked_until: STRING; 	
creator: STRING;	
authorization: STRING;	
• client: STRING;	
 last_changed: STRING; 	
• start_mode: STRING;	
 start_mode_enum: STRING; 	
 total_transactions: INTEGER; 	
 total_screens: INTEGER; 	
 error_transactions: INTEGER; 	
 error_screens: INTEGER; 	
 pending_transactions: INTEGER; 	
 pending_screens: INTEGER; 	
 completed_transactions: INTEGER; 	
 completed_screens: INTEGER; 	
 deleted_transactions: INTEGER; 	
 deleted_screens: INTEGER; 	
• queue_id: STRING;	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 session_name_u: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Batch_Data_Create_Log attribute group	ITM_R3_Batch_Data_Create_Log
 managed_system: STRING; 	
 session_name: STRING; 	
created: STRING;	
 message_time: STRING; 	
transaction: STRING;	
 screen_number: STRING; 	
 message_number: STRING; 	
 message_text: STRING; 	
• queue_id: STRING;	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 execution_host: STRING; 	
 session_name_u: STRING; 	
 transaction_u: STRING; 	
 message_text_u: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Event slots		IBM Tivoli Enterprise Console event class
		-
R/3_Data_Base_Summary attribute group		ITM_R3_Data_Base_Summary
• managed_system: STRING;		
name: STRING;		
• database: STRING;		
object_type: STRING;		
• total_number: INTEGER;		
 total_size: INTEGER; 		
 total_size_enum: STRING; 		
 total_used: INTEGER; 		
 total_used_enum: STRING; 		
 total_used_percent: INTEGER; 		
 total_used_percent_enum: STRING; 		
 total_free: INTEGER; 		
 total_free_enum: STRING; 		
 total_free_percent: INTEGER; 		
 total_free_percent_enum: STRING; 		
 minimum_free: INTEGER; 		
 minimum_free_enum: STRING; 		
 freespace_problems: INTEGER; 		
 freespace_problems_enum: STRING; 		
 missing_in_database: INTEGER; 		
 missing_in_database_enum: STRING; 		
 missing_in_ddic: INTEGER; 		
 missing_in_ddic_enum: STRING; 		
 analysis_time: STRING; 		
 logon_parameters: STRING; 		
 system_name: STRING; 		
 system_name_enum: STRING; 		
 sapshcut_parameters: STRING; 		
 system_label: STRING; 		
 total_size_mb: INTEGER; 		
 total_size_mb_enum: STRING; 		
 total_used_mb: INTEGER; 		
 total_used_mb_enum: STRING; 		
• total_free_mb: INTEGER;		
 total_free_mb_enum: STRING; 		
 minimum_free_mb: INTEGER; 		
 minimum_free_mb_enum: STRING; 		
 total_size_64: REAL; 		
 total_size_64_enum: STRING; 		
 total_used_64: REAL; 		
 total_used_64_enum: STRING; 		
• total_free_64: REAL;		
• total_free_64_enum: STRING;		
 minimum_free_64: REAL; 		
 minimum_free_64_enum: STRING; 		
 total_size_mb_64: REAL; 		
total_size_mb_64_enum: STRING; total_used_mb_64: PEAL;		
• total_used_mb-64: REAL;		
• total_used_mb-64_enum: STRING;	Chapter 8] IBM Tivoli Enterprise Console event mapping 3
total_free_mb_64: REAL;total_free_mb_64_enum: STRING;	chapter 0.	

vent slots	IBM Tivoli Enterprise Console event class
'3_Data_Base_Detail attribute group	ITM_R3_Data_Base_Detail
managed_system: STRING;	
object_name: STRING;	
object_type: STRING;	
ksa_status: STRING;	
ksa_status_enum: STRING;	
space_critical: STRING;	
space_critical_enum: STRING;	
size: INTEGER;	
size_enum: STRING;	
size_change_per_day: INTEGER;	
size_change_per_day_enum: STRING;	
size_used: INTEGER;	
size_used_enum: STRING;	
size_used_percent: INTEGER;	
size_used_percent_enum: STRING;	
used_change_per_day: INTEGER;	
used_change_per_day_enum: STRING;	
size_free: INTEGER;	
size_free_enum: STRING;	
size_free_percent: INTEGER;	
ize_free_percent_enum: STRING;	
ninimum_free: INTEGER;	
ninimum_free_enum: STRING;	
naximum_free: INTEGER;	
naximum_free_enum: STRING;	
extents: INTEGER;	
extents_enum: STRING;	
extents_change_per_day: INTEGER;	
extents_change_per_day_enum: STRING;	
naxnext_extent: INTEGER;	
naxnext_extent_enum: STRING;	
ablesandindices: INTEGER;	
tablesandindices_enum: STRING;	
ablesandindices_change_per_day: INTEGER;	
ablesandindices_change_per_day_enum: STRING;	
iles: INTEGER;	
iles_enum: STRING;	
analysis_time: STRING;	
logon_parameters: STRING;	
system_name: STRING;	
system_name_enum: STRING;	
sapshcut_parameters: STRING;	
system_label: STRING;	
size_64: REAL;	
size_64_enum: STRING;	
size_change_per_day_64: REAL;	
size_change_per_day_64_enum: STRING;	
size_used_64: REAL;	
ize_used_64_enum: STRING; န႕၉၉႔ နားစပြဲ ေလ့က္လာစုအျပန္႔စုplication Manager Agent fo	or SAP Applications: SAP agent Reference

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Table 17. Overview of attribute groups to event classes and slots (cont	inued)
Event slots	IBM Tivoli Enterprise Console event class
 used_change_per_day_64_enum: STRING; 	ITM_R3_Data_Base_Detail (continued)
• size_free_64: REAL;	
 size_free_64_enum: STRING; 	
• minimum_free_64: REAL;	
 minimum_free_64_enum: STRING; 	
• maximum_free_64: REAL;	
 maximum_free_64_enum: STRING; 	
• extents_64: REAL;	
 extents_64_enum: STRING; 	
 extents_change_per_day_64: REAL; 	
 extents_change_per_day_64_enum: STRING; 	
 maxnext_extent_64: REAL; 	
 maxnext_extent_64_enum: STRING; 	
 tablesandindices_64: REAL; 	
 tablesandindices_64_enum: STRING; 	
 tablesandindices_change_per_day_64: REAL; 	
 tablesandindices_change_per_day_64_enum: STRING; 	
• files_64: REAL;	
• files_64_enum: STRING;	
R/3_Set_Default_Sample_Period attribute group	ITM_R3_Set_Default_Sample_Period
 managed_system: STRING; 	
• message: STRING;	
 rfc_function: STRING; 	
 default_period: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
R/3_Perform_Requested_Action attribute group	ITM_R3_Perform_Requested_Action
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
action: STRING;	
• message: STRING;	
 message_u: STRING; 	
 sapshcut_parameters: STRING; 	
 return_code: INTEGER; 	
 return_value: STRING; 	
 system_label: STRING; 	

Event slots	IBM Tivoli Enterprise Console event class
R/3_Active_Users attribute group	ITM_R3_Active_Users
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 instance_name: STRING; 	
client: STRING;	
• userid: STRING;	
• terminal: STRING;	
 ip_address: STRING; 	
 transaction_code: STRING; 	
• time: STRING;	
 external_sessions: INTEGER; 	
 external_sessions_enum: INTEGER; 	
 internal_sessions: INTEGER; 	
 internal_sessions_enum: INTEGER; 	
 echoed_to_session: STRING; 	
 session_number: INTEGER; 	
 session_title: STRING; 	
 session_time: STRING; 	
 user_key: INTEGER; 	
 user_roll_size: INTEGER; 	
 user_roll_size_enum: INTEGER; 	
 user_page_size: INTEGER; 	
 user_page_size_enum: INTEGER; 	
 user_total_memory: INTEGER; 	
 user_total_memory_enum: INTEGER; 	
 user_private_memory: INTEGER; 	
 user_private_memory_enum: INTEGER; 	
 sample_time: STRING; 	
 logon_parameters: STRING; 	
 session_title_u: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 ip_address_v6: STRING; 	
type: INTEGER;	
 type_enum: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_User_Information attribute group	ITM_R3_User_Information
 managed_system: STRING; 	
 system_name_enum: STRING; 	
• userid: STRING;	
client: STRING;	
• full_name: STRING;	
 telephone_number: STRING; 	
 fax_number: STRING; 	
function: STRING;	
• department: STRING;	
 cost_center: STRING; 	
country: STRING;	
 building: STRING; 	
room: STRING;	
 logon_parameters: STRING; 	
description: STRING;	
 ksa_value: STRING; 	
 full_name_u: STRING; 	
 function_u: STRING; 	
 department_u: STRING; 	
 cost_center_u: STRING; 	
country_u: STRING;	
 building_u: STRING; 	
 room_u: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	

Table 17. Overview of attribute groups to event classes and slots (continued) Event slots	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Work_Processes attribute group	ITM_R3_Work_Processes
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 instance_name: STRING; 	
• number: INTEGER;	
 number_enum: STRING; 	
• type: STRING;	
 type_enum: STRING; 	
 os_process_id: INTEGER; 	
 os_process_id_enum: STRING; 	
 ksa_status: STRING; 	
 ksa_status_enum: STRING; 	
 status_reason: STRING; 	
 status_reason_enum: STRING; 	
 restart_after_error: STRING; 	
 restart_after_error_enum: STRING; 	
errors: INTEGER;	
 errors_enum: STRING; 	
 cpu_time: INTEGER; 	
 cpu_time_enum: STRING; 	
 elapsed_time: INTEGER; 	
 elapsed_time_enum: STRING; 	
 client: STRING; 	
 userid: STRING; 	
 userid_enum: STRING; 	
 transaction_code: STRING; 	
 program: STRING; 	
 filler: STRING; 	
action: STRING;	
 action_enum: STRING; 	
 table_name: STRING; 	
 wait_information: STRING; 	
wait_information: STRING;wait_start_time: STRING;	
database_reads: INTEGER;database_reads_time: INTEGER;	
 database_reads_time_enum: STRING; database_changes: INTEGER; 	
_	
database_changes_enum: STRING; database_changes_time: INTEGEP;	
database_changes_time:INTEGER; database_changes_time_enum:STEING;	
 database_changes_time_enum: STRING; roll_in_out_count_INTECED; 	
 roll_in-out_count: INTEGER; roll_in_out_count_count_STRING; 	
 roll_in-out_count_enum: STRING; roll_in_out_times_INTECED; 	
 roll_in-out_time: INTEGER; 	
roll_in-out_time_enum: STRING;	
process_roll_size: INTEGER;	
 process_roll_size_enum: STRING; 	
 process_page_size: INTEGER; 	
 process_page_size_enum: STRING; 	
• process_total_memory: INTEGER; SB ro <u>EBM_TotalinGamp_csita Applica</u> tion Manager Ager	nt for SAP Applications: SAP agent Reference

• process_private_memory: INTEGER;

Event slots	IBM Tivoli Enterprise Console event class
 transaction_code_u: STRING; 	ITM_R3_Work_Processes (continued)
 program_u: STRING; 	
 wait_information_u: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
• cpu_time_64: REAL;	
 cpu_time_64_enum: STRING; 	
 database_reads_time_64: REAL; 	
 database_reads_time_64_enum: STRING; 	
 database_changes_64: REAL; 	
 database_changes_64_enum: STRING; 	
 roll_in-out_count_64: REAL; 	
 roll_in-out_count_64_enum: STRING; 	
 process_total_memory_64: REAL; 	
 process_total_memory_64_enum: STRING; 	
 process_private_memory_64: REAL; 	
 process_private_memory_64_enum: STRING; 	
R/3_ABAP_Dumps attribute group	ITM_R3_ABAP_Dumps
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 dump_title: STRING; 	
 program_name: STRING; 	
 include_name: STRING; 	
 line_number: INTEGER; 	
 line_number_enum: STRING; 	
 create_time: STRING; 	
• userid: STRING;	
 client: STRING; 	
• host: STRING;	
 hold_status: STRING; 	
 hold_status_enum: STRING; 	
 mode_number: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
 program_name_u: STRING; 	
 include_name_u: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
line_number_64: REAL;	
 line_number_64_enum: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Lock_Entries attribute group	ITM_R3_Lock_Entries
 managed_system: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
client: STRING;	
• userid: STRING;	
• host: STRING;	
 system_number: STRING; 	
 work_process: INTEGER; 	
create_time: STRING;	
 lock_age: INTEGER; 	
 lock_age_enum: STRING; 	
 transaction_code: STRING; 	
 lock_object_name: STRING; 	
• group: STRING;	
• argument: STRING;	
• owner: STRING;	
 update_owner: STRING; 	
 hold_count: INTEGER; 	
 update_hold_count: INTEGER; 	
 backup_flag: STRING; 	
• sample_time: STRING;	
 logon_parameters: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 lock_age_64: REAL; 	
 lock_age_64_enum: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Updates_Information attribute group	ITM_R3_Updates_Information
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
• client: STRING;	
• userid: STRING;	
• time: STRING;	
 transaction_code: STRING; 	
• program: STRING;	
 function_module: STRING; 	
 state_code: STRING; 	
 state_code_enum: STRING; 	
 state_description: STRING; 	
 ksa_status: STRING; 	
 ksa_status_enum: STRING; 	
 status_number: INTEGER; 	
 status_description: STRING; 	
error: STRING;	
 update_key: STRING; 	
 update_server: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
 state_description_u: STRING; 	
 status_description_u: STRING; 	
error_u: STRING;	
 program_u: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Event slots	IBM Tivoli Enterprise Console event class
R/3_Gateway_Connections attribute group	ITM_R3_Gateway_Connections
 managed_system: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 instance_name: STRING; 	
 connection_number: INTEGER; 	
 connection_number_enum: STRING; 	
 in_use: STRING; 	
 in_use_enum: STRING; 	
 local_logical_unit_name: STRING; 	
 local_transaction_program_name: STRING; 	
 local_appc_version: INTEGER; 	
 local_appc_version_enum: STRING; 	
 remote_logical_unit_name: STRING; 	
 remote_transaction_program_name: STRING; 	
 remote_appc_version: INTEGER; 	
 remote_appc_version_enum: STRING; 	
• userid: STRING;	
 ksa_status: STRING; 	
 symbolic_destination_name: STRING; 	
 conversation_identifier: STRING; 	
 trace_level: INTEGER; 	
 trace_level_enum STRING; 	
 cpic_return_code: INTEGER; 	
 cpic_return_code_enum: STRING; 	
 sap_return_code: INTEGER; 	
 sap_return_code_enum: STRING; 	
 request_time: STRING; 	
 local_host: STRING; 	
 local_ip_address: STRING; 	
 remote_host: STRING; 	
 remote_ip_address: STRING; 	
 system_type: STRING; 	
 registration_status: STRING; 	
 connection_speed: STRING; 	
 number_of_connections: INTEGER; 	
 number_of_connections_enum: STRING; 	
 sample_time: STRING; 	
 logon_parameters: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 local_ip_address_v6: STRING; 	
 remote_ip_address_v6: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Gateway_Statistics attribute group	ITM_R3_Gateway_Statistics
 managed_system: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 instance_name: STRING; 	
 statistics_active: STRING; 	
 statistics_active_enum: STRING; 	
 connect_accepts: INTEGER; 	
 connect_accepts_enum: STRING; 	
cminits: INTEGER;	
cminits_enum: STRING;	
• timeouts: INTEGER;	
 timeouts_enum: STRING; 	
overflows: INTEGER;	
overflows_enum: STRING;	
 current_overflow_usage: REAL; 	
 current_overflow_usage_enum: STRING; 	
 max_overflow_usage: REAL; 	
 max_overflow_usage_enum: STRING; 	
 current_data_stack: INTEGER; 	
 current_data_stack_enum: STRING; 	
 max_data_stack: INTEGER; 	
 max_data_stack_enum: STRING; 	
 data_stack_limit: INTEGER; 	
 data_stack_limit_enum: STRING; 	
 connection_with_maximum_stack: INTEGER; 	
 connection_with_maximum_stack_enum: STRING; 	
 reader_requests: INTEGER; 	
 reader_requests_enum: STRING; 	
 total_reader_time: REAL; 	
 total_reader_time_enum: STRING; 	
 min_reader_time: REAL; 	
 min_reader_time_enum: STRING; 	
 max_reader_time: REAL; 	
 max_reader_time_enum: STRING; 	
 avg_reader_time: REAL; 	
 avg_reader_time_enum: STRING; 	
 longest_reader_request: STRING; 	
 work_process_requests: INTEGER; 	
 work_process_requests_enum: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
• total_work_process_time: REAL;	ITM_R3_Gateway_Statistics (continued)
 total_work_process_time_enum: STRING; 	
 minwork_process_time: REAL; 	
 minwork_process_time_enum: STRING; 	
 maxwork_process_time: REAL; 	
 maxwork_process_time_enum: STRING; 	
 avgwork_process_time: REAL; 	
 avgwork_process_time_enum: STRING; 	
 tcp_reads: INTEGER; 	
 tcp_reads_enum: STRING; 	
 fragmented_tcp_reads: INTEGER; 	
 fragmented_tcp_reads_enum: STRING; 	
 tcp_read_size: INTEGER; 	
 tcp_read_size_enum: STRING; 	
 total_tcp_read_time: REAL; 	
 total_tcp_read_time_enum: STRING; 	
 min_tcp_read_time: REAL; 	
 min_tcp_read_time_enum: STRING; 	
 max_tcp_read_time: REAL; 	
 max_tcp_read_time_enum: STRING; 	
 avg_tcp_read_time: REAL; 	
 avg_tcp_read_time_enum: STRING; 	
tcp_writes: INTEGER;	
 tcp_writes_enum: STRING; 	
 fragmented_tcp_writes: INTEGER; 	
 fragmented_tcp_writes_enum: STRING; 	
 tcp_write_size: INTEGER; 	
 tcp_write_size_enum: STRING; 	
 total_tcp_write_time: REAL; 	
 total_tcp_write_time_enum: STRING; 	
 min_tcp_write_time: REAL; 	
 min_tcp_write_time_enum: STRING; 	
 max_tcp_write_time: REAL; 	
 max_tcp_write_time_enum: STRING; 	
 avg_tcp_write_time: REAL; 	
 avg_tcp_write_time_enum: STRING; 	
 tcp_read_rate: INTEGER; 	
 tcp_read_rate_enum: STRING; 	
tcp_write_rate: INTEGER;	
 tcp_write_rate_enum: STRING; 	
tcp_errors: INTEGER;	
 tcp_errors_enum: STRING; 	
(Continued on the next page)	

Event slots	IBM Tivoli Enterprise Console event class
• cpic_reads: INTEGER;	ITM_R3_Gateway_Statistics (continued)
 cpic_reads_enum: STRING; 	
 cpic_read_size: INTEGER; 	
 cpic_read_size_enum: STRING; 	
 total_cpic_read_time: REAL; 	
 total_cpic_read_time_enum: STRING; 	
 min_cpic_read_time: REAL; 	
 min_cpic_read_time_enum: STRING; 	
 max_cpic_read_time: REAL; 	
 max_cpic_read_time_enum: STRING; 	
 avg_cpic_read_time: REAL; 	
 avg_cpic_read_time_enum: STRING; 	
cpic_writes: INTEGER;	
 cpic_writes_enum: STRING; 	
 cpic_write_size: INTEGER; 	
 cpic_write_size_enum: STRING; 	
 total_cpic_write_time: REAL; 	
 total_cpic_write_time_enum: STRING; 	
 min_cpic_write_time: REAL; 	
 min_cpic_write_time_enum: STRING; 	
 max_cpic_write_time: REAL; 	
 max_cpic_write_time_enum: STRING; 	
 avg_cpic_write_time: REAL; 	
 avg_cpic_write_time_enum: STRING; 	
 cpic_read_rate: INTEGER; 	
 cpic_read_rate_enum: STRING; 	
 cpic_write_rate: INTEGER; 	
 cpic_write_rate_enum: STRING; 	
cpic_errors: INTEGER;	
 cpic_errors_enum: STRING; 	
 sample_time: STRING; 	
 logon_parameters: STRING; 	
description: STRING;	
 ksa_value: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Number_Range_Buffer_Summary attribute group	ITM_R3_Number_Range_Buffer_Summary
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
• instance_name: STRING;	
 maximum_entries: INTEGER; 	
 current_entries: INTEGER; 	
 maximum_indexes: INTEGER; 	
 current_indexes: INTEGER; 	
 buffer_size: INTEGER; 	
• buffer_calls: INTEGER;	
• get_calls: INTEGER;	
• server_calls: INTEGER;	
 database_calls: INTEGER; 	
conflicts: INTEGER;	
• timeouts: INTEGER;	
 buffer_responses_less_than_50us: INTEGER; 	
 buffer_responses_less_than_1ms: INTEGER; 	
 buffer_responses_1ms_or_greater: INTEGER; 	
 server_responses_less_than_1ms: INTEGER; 	
 server_responses_less_than_50ms: INTEGER; 	
 server_responses_50ms_or_greater: INTEGER; 	
 sample_time: STRING; 	
 logon_parameters: STRING; 	
description: STRING;	
• ksa_value: STRING;	
 sapshcut_parameters: STRING; 	
system_label: STRING;	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Number_Range_Buffer_Details attribute group	ITM_R3_Number_Range_Buffer_Details
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 instance_name: STRING; 	
client: STRING;	
 object_name: STRING; 	
 sub-object_name: STRING; 	
 range_number: STRING; 	
• year: INTEGER;	
• year_enum: STRING;	
 from_number: STRING; 	
 to_number: STRING; 	
• last_number: STRING;	
• external_range: STRING;	
• external_range_enum: STRING;	
 interval_to_number: STRING; 	
 sample_time: STRING; 	
 logon_parameters: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
R/3_Developer_Traces attribute group	ITM_R3_Developer_Traces
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 instance_name: STRING; 	
• file_name: STRING;	
 system_component: STRING; 	
 log_data: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
R/3_Saprouter_Log attribute group	ITM_R3_Saprouter_Log
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 file_name: STRING; 	
 date_time: STRING; 	
 log_data: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Event slots	IBM Tivoli Enterprise Console event class
R/3_Database_Logs attribute group	ITM_R3_Database_Logs
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
file_name: STRING;	
 log_data: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
sapshcut_parameters: STRING;	
 system_label: STRING; 	
R/3_Transactional_RFC attribute group	ITM_R3_Transactional_RFC
 managed_system: STRING; 	
system_name: STRING;	
 system_name_enum: STRING; 	
 send_receive: STRING; 	
 send_receive_enum: STRING; 	
• userid: STRING;	
 function_module: STRING; 	
 target_name: STRING; 	
• time: STRING;	
 ksa_status: STRING; 	
 transaction_id: STRING; 	
 ksa_hostname: STRING; 	
 transaction_code: STRING; 	
client: STRING;	
• program: STRING;	
• data_size: REAL;	
 data_size_enum: STRING; 	
 retries: INTEGER; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
 function_module_u: STRING; 	
 target_name_u: STRING; 	
 status_u: STRING; 	
 transaction_code_u: STRING; 	
 program_u: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
• queue_name: STRING;	
 status_code: STRING; 	
• data_size_64: REAL;	
 data_size_64_enum: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Logon_Groups attribute group	ITM_R3_Logon_Groups
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
• name: STRING;	
type: STRING;	
 type_enum: STRING; 	
 instance_name: STRING; 	
 maximum_response_time: INTEGER; 	
 maximum_response_time_enum: STRING; 	
 current_response_time: INTEGER; 	
 current_response_time_enum: STRING; 	
 event_frequency: INTEGER; 	
 event_frequency_enum: STRING; 	
 maximum_users: INTEGER; 	
 maximum_users_enum: STRING; 	
 current_users: INTEGER; 	
 current_users_enum: STRING; 	
 alternate_ip_address: STRING; 	
 ksa_status: STRING; 	
 ksa_status_enum: STRING; 	
 statistics_sample_time: STRING; 	
 current_favorite: STRING; 	
 current_favorite_enum: STRING; 	
• sample_time: STRING;	
 logon_parameters: STRING; 	
• name_u: STRING;	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 alternate_ip_address_v6: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Intermediate_Documents attribute group	ITM_R3_Intermediate_Documents
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
number: INTEGER;	
 number_enum: STRING; 	
type: STRING;	
 create_time: STRING; 	
• update_time: STRING;	
direction: STRING;	
 direction_enum: STRING; 	
 message_type: STRING; 	
 message_code: STRING; 	
 message_function: STRING; 	
 test_production: STRING; 	
 test_production_enum: STRING; 	
 partner_port: STRING; 	
 partner_type: STRING; 	
 partner_function: STRING; 	
 partner_name: STRING; 	
 status_number: STRING; 	
 status_description: STRING; 	
 status_information: STRING; 	
 status_for_statistics: STRING; 	
 status_for_statistics_enum: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
 type_u: STRING; 	
 status_description_u: STRING; 	
 status_information_u: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
• number_64: REAL;	
 number_64_enum: STRING; 	
client: STRING;	
 receiver_partner_port: STRING; 	
 receiver_partner_type: STRING; 	
 receiver_partner_function: STRING; 	
 receiver_partner_number: STRING; 	
 sender_partner_port: STRING; 	
 sender_partner_type: STRING; 	
 sender_partner_function: STRING; 	
 sender_partner_number: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_EDI_Files attribute group	ITM_R3_EDI_Files
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
• file_name: STRING;	
• last_record: INTEGER;	
 last_record_enum: STRING; 	
• last_idoc: INTEGER;	
 last_idoc_enum: STRING; 	
delete_file: STRING;	
delete_file_enum: STRING;	
• sample_time: STRING;	
 logon_parameters: STRING; 	
• file_name_u: STRING;	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
• last_idoc_64: REAL;	
 last_idoc_64_enum: STRING; 	
R/3_Logon_Information attribute group	ITM_R3_Logon_Information
• managed_system: STRING;	
• system_name: STRING;	
 system_name_enum: STRING; 	
 instance_name: STRING; 	
client: STRING;	
• userid: STRING;	
• userid_enum: STRING;	
 userid_type: STRING; 	
 userid_type_enum: STRING; 	
 userid_state: STRING; 	
 userid_state_enum: STRING; 	
• terminal: STRING;	
• ip_address: STRING;	
 logon_logoff: STRING; 	
 logon_logoff_enum: STRING; 	
• time: STRING;	
 session_duration: INTEGER; 	
 session_duration_enum: STRING; 	
 invalid_password_count: INTEGER; 	
 invalid_password_count_enum: STRING; 	
 sample_interval_start: STRING; 	
• sample_interval_end: STRING;	
 logon_parameters: STRING; 	
 sapshcut_parameters: STRING; 	
changing_userid: STRING;	
changing_time: STRING;	
• system_label: STRING;	
• ip_address_v6: STRING;	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Archive_Monitor attribute group	ITM_R3_Archive_Monitor
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 open_spool_requests: INTEGER; 	
 open_spool_requests_enum: STRING; 	
 open_spool_errors: INTEGER; 	
 open_spool_errors_enum: STRING; 	
 transactional_rfc_requests: INTEGER; 	
 transactional_rfc_requests_enum: STRING; 	
 open_asynchronous_requests: INTEGER; 	
 open_asynchronous_errors: INTEGER; 	
 archiving_queues: INTEGER; 	
 archiving_queues_enum: STRING; 	
 archiving_errors: INTEGER; 	
 archiving_errors_enum: STRING; 	
 confirmation_queues: INTEGER; 	
 confirmation_queues_enum: STRING; 	
 confirmation_errors: INTEGER; 	
 confirmation_errors_enum: STRING; 	
 retrieval_queues: INTEGER; 	
 retrieval_queues_enum: STRING; 	
 retrieval_errors: INTEGER; 	
 retrieval_errors_enum: STRING; 	
 background_scheduled: INTEGER; 	
 background_archiving: INTEGER; 	
 background_confirmation: INTEGER; 	
 background_retrieval: INTEGER; 	
 background_file_processing: INTEGER; 	
 background_file_processing_enum: STRING; 	
 open_bar_codes: INTEGER; 	
 bar_code_archive_files: INTEGER; 	
 logging_entries: INTEGER; 	
 archive_device_status: STRING; 	
 archive_device_status_enum: STRING; 	
• sample_time: STRING;	
 logon_parameters: STRING; 	
description: STRING;	
• ksa_value: STRING;	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

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IBM Tivoli Enterprise Console event class
ITM_R3_SAP_Office_Inbox

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_CCMS_Current_State attribute group	ITM_R3_CCMS_Current_State
 managed_system: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 system_label: STRING; 	
 instance_name: STRING; 	
 monitor_set: STRING; 	
• ksa_monitor: STRING;	
 monitoring_context_name: STRING; 	
 monitoring_types_number: STRING; 	
 monitoring_types_id: STRING; 	
 monitoring_types_class: STRING; 	
 monitoring_types_full_name: STRING; 	
 monitoring_types_short_name: STRING; 	
 monitor_object_name: STRING; 	
current_state: INTEGER;	
 current_state_enum: STRING; 	
 customization_group_name: STRING; 	
 monitoring_segment_name: STRING; 	
occurrence_time: STRING;	
 last_value_change_time: STRING; 	
• mt_index: INTEGER;	
 parent_mt_index: INTEGER; 	
 tid_internal_handle: STRING; 	
number: INTEGER;	
 logon_parameters: STRING; 	
 sapshcut_parameters: STRING; 	

IBM Tivoli Enterprise Console event class	
cs_64	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
• tcp_reads: REAL;	ITM_R/3_Gateway_Statistics_64 (continued)
 tcp_reads_enum: STRING; 	
 fragmented_tcp_reads: REAL; 	
 fragmented_tcp_reads_enum: STRING; 	
 tcp_read_size: REAL; 	
 tcp_read_size_enum: STRING; 	
 total_tcp_read_time: REAL; 	
 total_tcp_read_time_enum: STRING; 	
 min_tcp_read_time: REAL; 	
 min_tcp_read_time_enum: STRING; 	
 max_tcp_read_time: REAL; 	
 max_tcp_read_time_enum: STRING; 	
 avg_tcp_read_time: REAL; 	
 avg_tcp_read_time_enum: STRING; 	
 tcp_writes: REAL; 	
 tcp_writes_enum: STRING; 	
 fragmented_tcp_writes: REAL; 	
 fragmented_tcp_writes_enum: STRING; 	
 tcp_write_size: REAL; 	
 tcp_write_size_enum: STRING; 	
 total_tcp_write_time: REAL; 	
 total_tcp_write_time_enum: STRING; 	
 min_tcp_write_time: REAL; 	
 min_tcp_write_time_enum: STRING; 	
 max_tcp_write_time: REAL; 	
 max_tcp_write_time_enum: STRING; 	
 avg_tcp_write_time: REAL; 	
 avg_tcp_write_time_enum: STRING; 	
 tcp_read_rate: REAL; 	
 tcp_read_rate_enum: STRING; 	
 tcp_write_rate: REAL; 	
 tcp_write_rate_enum: STRING; 	
tcp_errors: REAL;	
 tcp_errors_enum: STRING; 	
• cpic_reads: REAL;	
 cpic_reads_enum: STRING; 	
 cpic_read_size: REAL; 	
 cpic_read_size_enum: STRING; 	
 total_cpic_read_time: REAL; 	
 total_cpic_read_time_enum: STRING; 	
 min_cpic_read_time: REAL; 	
 min_cpic_read_time_enum: STRING; 	
 max_cpic_read_time: REAL; 	
 max_cpic_read_time_enum: STRING; 	
(Continued on the next page)	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
• avg_cpic_read_time: REAL;	ITM_R/3_Gateway_Statistics_64 (continued)
 avg_cpic_read_time_enum: STRING; 	
cpic_writes: REAL;	
 cpic_writes_enum: STRING; 	
cpic_write_size: REAL;	
 cpic_write_size_enum: STRING; 	
 total_cpic_write_time: REAL; 	
 total_cpic_write_time_enum: STRING; 	
 min_cpic_write_time: REAL; 	
 min_cpic_write_time_enum: STRING; 	
 max_cpic_write_time: REAL; 	
 max_cpic_write_time_enum: STRING; 	
 avg_cpic_write_time: REAL; 	
 avg_cpic_write_time_enum: STRING; 	
 cpic_read_rate: REAL; 	
 cpic_read_rate_enum: STRING; 	
 cpic_write_rate: REAL; 	
 cpic_write_rate_enum: STRING; 	
cpic_errors: REAL;	
 cpic_errors_enum: STRING; 	
• sample_time: STRING;	
 logon_parameters: STRING; 	
description: STRING;	
 ksa_value: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Event slots	IBM Tivoli Enterprise Console event class
R/3_Buffer_Performance_64 attribute group	ITM_R3_Buffer_Performance_64
 managed_system: STRING; 	
 name: STRING; hitratio: REAL; 	
requests: REAL; requests on the second sec	
• requests_enum: STRING;	
hits: REAL; hits: answer: STRING:	
hits_enum: STRING;	
• misses: REAL;	
misses_enum: STRING;	
• db_access_quality: REAL;	
db_accesses: REAL;	
db_accesses_enum: STRING;	
db_accesses_saved: REAL;	
db_accesses_saved_enum: STRING;	
• size_allocated: REAL;	
• size_allocated_enum: STRING;	
• size_used: REAL;	
• size_used_enum: STRING;	
• size_free: REAL;	
• size_free_enum: STRING;	
 directory_allocated: REAL; 	
 directory_allocated_enum: STRING; 	
 directory_used: REAL; 	
 directory_used_enum: STRING; 	
 directory_free: REAL; 	
 directory_free_enum: STRING; 	
 objects_swapped: REAL; 	
 objects_swapped_enum: STRING; 	
 frames_swapped: REAL; 	
 frames_swapped_enum: STRING; 	
 total_resets: REAL; 	
 total_resets_enum: STRING; 	
 last_reset: STRING; 	
 objects_in_buffer: REAL; 	
 objects_in_buffer_enum: STRING; 	
• inserts: REAL;	
 inserts_enum: STRING; 	
• changes: REAL;	
 changes_enum: STRING; 	
• deletes: REAL;	
 deletes_enum: STRING; 	
 sample_time: STRING; 	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 instance_name: STRING; 	
 size_free_percent: INTEGER; 	
 size_free_percent_enum: STRING; 	
・ size_used_percent: INTEGER; 【787】月日本TiveはCompositerApplication Manager Age	ent for SAP Applications: SAP agent Reference

• size_in_memory: REAL;

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
 size_in_memory_enum: STRING; 	ITM_R/3_Buffer_Performance_64 (continued)
• size_on_disk: REAL;	
 size_on_disk_enum: STRING; 	
• max_used: REAL;	
 max_used_enum: STRING; 	
 max_used_percent: INTEGER; 	
 max_used_percent_enum: STRING; 	
 directory_used_percent: INTEGER; 	
 directory_used_percent_enum: STRING; 	
 directory_free_percent: INTEGER; 	
 directory_free_percent_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 size_reserved: REAL; 	
 size_reserved_enum: STRING; 	
 size_reserved_percent: INTEGER; 	
 size_reserved_percent_enum: STRING; 	
 encoded_name: STRING; 	
 encoded_name_enum: STRING; 	
 system_label: STRING; 	

	IBM Tivoli Enterprise Console event class
_Trans_Perf_Task_Type attribute group	ITM_R3_Trans_Perf_Task_Type
nanaged_system: STRING;	
program_or_tran_code: STRING;	
upplication: STRING;	
serid: STRING;	
escription: STRING;	
ialog_steps: INTEGER;	
otal_response_time: INTEGER;	
otal_response_time_enum: STRING;	
vg_response_time: INTEGER;	
<pre>g_response_time_enum: STRING;</pre>	
tal_cpu_time: INTEGER;	
otal_cpu_time_enum: STRING;	
vg_cpu_time: INTEGER;	
vg_cpu_time_enum: STRING;	
otal_wait_time: INTEGER;	
otal_wait_time_enum: STRING;	
vg_wait_time: INTEGER;	
vg_wait_time_enum: STRING;	
otal_database_request_time: INTEGER;	
tal_database_request_time_enum: STRING;	
g_database_request_time: INTEGER;	
rg_database_request_time_enum: STRING;	
tal_db_requested_bytes: INTEGER;	
tal_db_requested_bytes_enum: STRING;	
tal_database_calls: INTEGER;	
tal_database_calls_enum: STRING;	
ample_interval_start: STRING;	
mple_interval_end: STRING;	
gon_parameters: STRING;	
gregation: STRING;	
/stem_name: STRING;	
stem_name_enum: STRING;	
stance_name: STRING;	
g_total_memory: INTEGER;	
g_total_memory_enum: STRING;	
<pre>g_extended_memory: INTEGER;</pre>	
/g_extended_memory_enum: STRING;	
ax_extended_memory_per_session: INTEGER;	
ax_extended_memory_per_session_enum: STRING;	
ax_extended_memory_per_transaction: INTEGER;	
ax_extended_memory_per_transaction_enum: STRING;	
g_private_memory: INTEGER;	
g_private_memory_enum: STRING;	
rogram_or_tran_code_u: STRING;	
pplication_u: STRING;	
escription_u: STRING;	
apshcut_parameters: STRING; /npro_number: STRING;	

• gui_count: INTEGER;

Table 17. Overview of attribute groups to event classes and slots (contin Event slots	IBM Tivoli Enterprise Console event class
• gui_time_enum: STRING;	ITM_R/3_Trans_Perf_Task_Type (continued)
 front_end_network_time: INTEGER; 	
<pre>front_end_network_time_enum: STRING;</pre>	
executed_in: STRING;	
row_aggregation: STRING;	
dialog_step_response_threshold: INTEGER;	
dialog_step_response_threshold_enum: STRING;	
dialog_steps_above_threshold: INTEGER;	
dialog_steps_above_threshold_enum: STRING;	
dialog_steps_above_threshold_percent: INTEGER;	
dialog_steps_above_threshold_percent_enum: STRING;	
system_label: STRING;	
service_type: STRING;	
service_type_encoded: STRING;	
service_type_encoded_enum: STRING;	
dialog_steps_64: REAL;	
dialog_steps_64_enum: STRING;	
total_response_time_64: REAL;	
total_response_time_64_enum: STRING;	
avg_response_time_64: REAL;	
avg_response_time_64_enum: STRING;	
total_cpu_time_64: REAL;	
total_cpu_time_64_enum: STRING;	
avg_cpu_time_64: REAL;	
avg_cpu_time_64_enum: STRING;	
total_wait_time_64: REAL;	
total_wait_time_64_enum: STRING;	
avg_wait_time_64: REAL;	
avg_wait_time_64_enum: STRING;	
total_database_request_time_64: REAL;	
total_database_request_time_64_enum: STRING;	
avg_database_request_time_64: REAL;	
avg_database_request_time_64_enum: STRING;	
total_db_requested_bytes_64: REAL;	
total_db_requested_bytes_64_enum: STRING;	
total_database_calls_64: REAL;	
total_database_calls_64_enum: STRING;	
avg_total_memory_64: REAL;	
avg_total_memory_64_enum: STRING;	
avg_extended_memory_64: REAL;	
avg_extended_memory_64_enum: STRING;	
max_extended_memory_per_session_64: REAL;	
max_extended_memory_per_session_64_enum: STRING;	
max_extended_memory_per_transaction_64: REAL;	
max_extended_memory_per_transaction_64_enum: STRING;	
avg_private_memory_64: REAL;	
avg_private_memory_64_enum: STRING;	
gui_count_64: REAL;	
gui_count_64_enum: STRING;	
gui_time_64: REAL;	
	er 8. IBM Tivoli Enterprise Console event mapping
front and network time 64 PEAL:	

• front_end_network_time_64: REAL;

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SolMan_Servers_Details attribute group	ITM_SolMan_Servers_Details
 managed_system: STRING; 	
 ip_address: STRING; 	
 system_id: STRING; 	
 system_number: STRING; 	
 system_name: STRING; 	
 sytem_description: STRING; 	
instance: STRING;	
 instance_number: STRING; 	
version: STRING;	
 system_label: STRING; 	
SolMan_LDS_SYS_Overview attribute group	ITM_SolMan_LDS_SYS_Overview
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 system_number: STRING; 	
system: STRING;	
 ksa_hostname: STRING; 	
 ip_address: STRING; 	
 product_type: STRING; 	
 product_version: STRING; 	
instance: STRING;	
 install_number: STRING; 	
 transport_domain: STRING; 	
 database_type: STRING; 	
 database_release: STRING; 	
 database_hostname: STRING; 	
 database_os_type: STRING; 	
 database_os_release: STRING; 	
 database_ip_address: STRING; 	
 message_server_hostname: STRING; 	
 message_server_os_type: STRING; 	
 message_server_os_release: STRING; 	
 message_server_ip_address: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
number: INTEGER;	
number_enum: STRING;	
 type_of_database: STRING; 	

Event slots	IBM Tivoli Enterprise Console event class
SolMan_Landscape_Client attribute group	ITM_SolMan_Landscape_Client
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
• system: STRING;	
 client: STRING; 	
 client_name: STRING; 	
 ksa_hostname: STRING; 	
 ip_address: STRING; 	
• group_keys: STRING;	
version: STRING;	
 last_change_by: STRING; 	
 last_change_date: STRING; 	
 logical_system: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
SolMan_Landscape_Instance attribute group	ITM_SolMan_Landscape_Instance
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
• system: STRING;	
 instance: STRING; 	
 group_keys: STRING; 	
 version: STRING; 	
 ppms_product: STRING; 	
 logical_system: STRING; 	
 server_name: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
SolMan_LDS_Soft_Comp attribute group	ITM_SolMan_LDS_Soft_Comp
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
• system: STRING;	
 group_keys: STRING; 	
• version: STRING;	
 software_component: STRING; 	
• sap_release: STRING;	
 support_package_level: STRING; 	
 component_type: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued) Event slots IBM Tivoli Enterprise Console event class	
SolMan_LDS_SYS_Topology attribute group	ITM_SolMan_LDS_SYS_Topology
 managed_system: STRING; 	
 system_name: STRING; 	
system_name_enum: STRING;	
 system_name_endm. srking, system: STRING; 	
context: STRING;	
 node_type: INTEGER; 	
 node_type_enum: STRING; 	
 index: INTEGER; 	
index_enum: STRING;	
 parent_index: INTEGER; 	
 parent_index_invice River STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
• –	
PI/XI_WF_Trace attribute group	ITM_PI_per_XI_WF_Trace
managed_system: STRING;	
• system_id: STRING;	
 system_id_enum: STRING; 	
index: INTEGER;	
 ksa_status: STRING; 	
 ksa_status_enum: STRING; 	
locally_visible: STRING;	
trace_level_description: STRING;	
trace_level_description_enum: STRING;	
trace_level: STRING;	
• system: STRING;	
description: STRING;	
trace_component: STRING;	
activated_timestamp: STRING;	
activation_end_timestamp: STRING;	
expiry_timestamp: STRING;	
creation_timestamp: STRING;	
creator_name: STRING;	
trace_id: STRING;	
parent_trace_id: STRING;	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SolMan_Servers_Overview attribute group	ITM_SolMan_Servers_Overview
 managed_system: STRING; 	
 system_id: STRING; 	
 ksa_hostname: STRING; 	
• ip_address: STRING;	
host_os: STRING;	
 os_version: STRING; 	
 no_of_cpus: INTEGER; 	
 no_of_cpus_enum: STRING; 	
 cpu_details: STRING; 	
 cpu_frequency: INTEGER; 	
 cpu_frequency_enum: STRING; 	
 memory_size: INTEGER; 	
 memory_size_enum: STRING; 	
 virtual_memory: INTEGER; 	
 virtual_memory_enum: STRING; 	
 system_label: STRING; 	
 application_server_hardware: STRING; 	
 hardware_manufacturer: STRING; 	
 saps_measured: STRING; 	
 saps_vendor: STRING; 	
 central_system_routing_information: STRING; 	
 central_system_to_server_routing_information: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_qRFC_Outbound_Queue_overview attribute group	ITM_SAP_qRFC_Outbound_Queue_overview
 managed_system: STRING; 	
client: STRING;	
 system_name: STRING; 	
 system_name_enum: STRING; 	
• queue_name: STRING;	
 queue_destination: STRING; 	
 queue_entries: INTEGER; 	
 queue_entries_enum: STRING; 	
queue_status: STRING;	
 queue_status_enum: STRING; 	
 queue_count: INTEGER; 	
 wait_for_queue: STRING; 	
 first_application_server_timestamp: STRING; 	
 last_application_server_timestamp: STRING; 	
 trfc_first_counter: STRING; 	
 trfc_last_counter: STRING; 	
 queue_error_message: STRING; 	
 queue_counter_in_luw: STRING; 	
 first_tid: STRING; 	
queue_version: STRING;	
 queue_suppliment: INTEGER; 	
 queue_suppliment_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)		
Event slots	IBM Tivoli Enterprise Console event class	
SAP_qRFC_Outbound_Queue_details attribute group	ITM_SAP_qRFC_Outbound_Queue_details	
 managed_system: STRING; 		
• client: STRING;		
 luw_hostid_hex: STRING; 		
 luw_host_id: STRING; 		
 luw_process_id: STRING; 		
 luw_timestamp_hex: STRING; 		
 luw_timestamp: STRING; 		
 luw_transaction_id: STRING; 		
 system_name: STRING; 		
 system_name_enum: STRING; 		
• queue_name: STRING;		
 queue_destination: STRING; 		
 hpqueue_name: STRING; 		
 no_send: STRING; 		
 queue_status: STRING; 		
 queue_status_enum: STRING; 		
• qrfc_user: STRING;		
 qrfc_function_module: STRING; 		
 appserver_timestamp: STRING; 		
 queue_mailed: STRING; 		
 queue_error_message: STRING; 		
 queue_arfc_state: STRING; 		
 queue_arfc_reply: STRING; 		
 queue_arfc_tcode: STRING; 		
 number_of_attempts: INTEGER; 		
 queue_arfc_program: STRING; 		
 sapshcut_parameters: STRING; 		
 system_label: STRING; 		
SolMan_Landscape_Databases attribute group	ITM_SolMan_Landscape_Databases	
 managed_system: STRING; 		
 system_name: STRING; 		
 system_name_enum: STRING; 		
• database_name: STRING;		
version: STRING;		
 database_vendor: STRING; 		
 database_release: STRING; 		
 database_patch_level: STRING; 		
 database_hostname: STRING; 		
 sapshcut_parameters: STRING; 		
 system_label: STRING; 		

Table 17. Overview of attribute groups to event classes and slots (continued) Functional state	
Event slots	IBM Tivoli Enterprise Console event class
PI_XI_XML_Log attribute group	ITM_PI_XI_XML_Log
 managed_system: STRING; 	
 message_id: STRING; 	
 pipeline_id: STRING; 	
 sending_system: STRING; 	
 outbound_interface_namespace: STRING; 	
 outbound_interface_name: STRING; 	
 receiving_system: STRING; 	
 inbound_interface_namespace: STRING; 	
 inbound_interface_name: STRING; 	
 message_type: STRING; 	
 message_type_enum: STRING; 	
 execution_from: STRING; 	
 initial_timestamp: STRING; 	
 send_timestamp: STRING; 	
 user_name: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 period_start: STRING; 	
 period_end: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
SolMan_Solution_Overview attribute group	ITM_SolMan_Solution_Overview
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 solution_id: STRING; 	
 solution_name: STRING; 	
 solution_status: STRING; 	
 solution_status_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued) Event slots IBM Tivoli Enterprise Console event class	
SolMan_SYS_MON_Alerts attribute group	ITM_SolMan_SYS_MON_Alerts
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 monitor_object: STRING; 	
 previous_object: STRING; 	
 last_but_one_object: STRING; 	
 alert_description: STRING; 	
 alert_value: STRING; 	
 alert_rating: INTEGER; 	
 alert_rating_enum: STRING; 	
 alert_object_number: STRING; 	
 monitored_by_solution: STRING; 	
 solution_id: STRING; 	
 ksa_status: STRING; 	
 mte_name: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
• number: INTEGER;	
 number_enum: STRING; 	
 monitoring_type: STRING; 	
 monitoring_type_enum: STRING; 	
 server_ip_address: STRING; 	
 alert_numeric_value: REAL; 	
 alert_numeric_value_enum: STRING; 	
 alert_unit: STRING; 	
SolMan_Solution_Alerts_History attribute group	ITM_SolMan_Solution_Alerts_History
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 ksa_severity: INTEGER; 	
 ksa_severity_enum: STRING; 	
 alert_message: STRING; 	
 occurrence_time: STRING; 	
client: STRING;	
• userid: STRING;	
 alert_unique_identifier: INTEGER; 	
 alert_unique_identifier_enum: STRING; 	
• mte_name: STRING;	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	

Event slots	IBM Tivoli Enterprise Console event class
SolMan_Early_Watch_Alert attribute group	ITM_SolMan_Early_Watch_Alert
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 solution_id: STRING; 	
 session_number: STRING; 	
 planned_date: STRING; 	
 report_url: STRING; 	
 rating: STRING; 	
 rating_enum: STRING; 	
 installation_number: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 sample_time: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
PI_BP_ENGINE_STATUS attribute group	ITM_PI_BP_ENGINE_STATUS
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 component: STRING; 	
 class_name: STRING; 	
 engine_status: STRING; 	
 engine_status_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 process_type: STRING; 	
 system_label: STRING; 	
 user_name: STRING; 	
 sap_server_current_time: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_qRFC_Inbound_Queues_Overview attribute group	ITM_SAP_qRFC_Inbound_Queues_Overview
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
client: STRING;	
• queue_name: STRING;	
 queue_destination: STRING; 	
queue_entries: INTEGER;	
 queue_entries_enum: STRING; 	
• queue_status: STRING;	
 queue_status_enum: STRING; 	
 queue_count: INTEGER; 	
 first_timestamp: STRING; 	
 last_timestamp: STRING; 	
 trfc_first_count: STRING; 	
 trfc_last_count: STRING; 	
 queue_error_messages: STRING; 	
 queue_luw_counter: STRING; 	
 first_tid: STRING; 	
queue_version: STRING;	
 queue_suppliment: INTEGER; 	
 queue_suppliment_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (a	IBM Tivoli Enterprise Console event class	
SAP_qRFC_Inbound_Queue_Details attribute group	ITM_SAP_qRFC_Inbound_Queue_Details	
managed_system: STRING;		
system_name: STRING;		
system_name_enum: STRING;		
client: STRING;		
 luw_host_id_hex: STRING; 		
luw_host_id: STRING;		
 luw_process_id: STRING; 		
 luw_timestamp_hex: STRING; 		
luw_timestamp: STRING;		
luw_transaction_id: STRING;		
• queue_name: STRING;		
queue_destination: STRING;		
trfc_counter: STRING;		
no_send: STRING;		
queue_status: STRING;		
• queue_status_enum: STRING;		
 trfc_lock_counter: STRING; 		
 qrfc_user: STRING; 		
 qrfc_function_module: STRING; 		
 application_server_timestamp: STRING; 		
 qrfc_tid: STRING; 		
 queue_luw_counter: STRING; 		
 retry_timestamp: STRING; 		
 number_of_attempts: INTEGER; 		
 queue_mailed: STRING; 		
 queue_error_message: STRING; 		
 queue_arfc_state: STRING; 		
 queue_arfc_reply: STRING; 		
 queue_arfc_tcode: STRING; 		
 queue_arfc_program: STRING; 		
 sapshcut_parameters: STRING; 		
 system_label: STRING; 		
PI_Component_Monitoring attribute group	ITM_PI_Component_Monitoring	
 managed_system: STRING; 		
• system_name: STRING;		
 system_name_enum: STRING; 		
• url: STRING;		
 sapshcut_parameters: STRING; 		
 system_label: STRING; 		
• user_name: STRING;		

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
PI_PROSS_STATISTICS attribute group	ITM_PI_PROSS_STATISTICS
 managed_system: STRING; 	
• category: STRING;	
• value_64: REAL;	
• value_64_enum: STRING;	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
SAP_qRFC_Saved_Inbound_Queues_Overview attribute group	ITM_SAP_qRFC_Saved_Inbound_Queues_Overview
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
client: STRING;	
• queue_name: STRING;	
queue_entries: INTEGER;	
 queue_entries_enum: STRING; 	
 queue_status: STRING; 	
 queue_status_enum: STRING; 	
queue_count: INTEGER;	
 first_timestamp: STRING; 	
 last_timestamp: STRING; 	
 trfc_first_count: STRING; 	
 trfc_last_count: STRING; 	
 queue_error_messages: STRING; 	
 queue_luw_counter: STRING; 	
queue_version: STRING;	
 queue_suppliment: INTEGER; 	
 queue_suppliment_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_qRFC_Saved_Inbound_Queue_Details attribute group	ITM_SAP_qRFC_Saved_Inbound_Queue_Details
 managed_system: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
client: STRING;	
 luw_hostid_hex: STRING; 	
 luw_host_id: STRING; 	
 luw_process_id: STRING; 	
 luw_timestamp_hex: STRING; 	
 luw_timestamp: STRING; 	
 luw_transaction_id: STRING; 	
• luw_tid: STRING;	
• queue_name: STRING;	
• queue_destination: STRING;	
 trfc_counter: STRING; 	
• no_send: STRING;	
• queue_status: STRING;	
 queue_status_enum: STRING; 	
 trfc_lock_counter: STRING; 	
• qrfc_user: STRING;	
 qrfc_function_module: STRING; 	
 application_server_timestamp: STRING; 	
 original_tid: STRING; 	
 queue_luw_counter: STRING; 	
 retry_timestamp: STRING; 	
 number_of_attempts: INTEGER; 	
• queue_mailed: STRING;	
 queue_error_message: STRING; 	
• queue_arfc_state: STRING;	
 queue_arfc_reply: STRING; 	
• queue_arfc_tcode: STRING;	
 queue_arfc_program: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	

Table 17. Overview of attribute groups to event classes and slots (continued) Event slots IBM Tivoli Enterprise Console event class	
PI_IntEng_Job_Overview attribute group	ITM_PI_IntEng_Job_Overview
managed_system: STRING;	
system_name: STRING;	
system_name_enum: STRING;	
sapshcut_parameters: STRING;	
• system_label: STRING;	
 job_status: STRING; 	
 job_status_enum: STRING; 	
 job_name: STRING; 	
type: STRING;	
 type_enum: STRING; 	
• timestamp: STRING;	
 sample_time: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
PI_IntEng_Background_Job attribute group	ITM_PI_IntEng_Background_Job
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 job_status: STRING; 	
 job_status_enum: STRING; 	
• job_name: STRING;	
• job_id: STRING;	
 job_created_by: STRING; 	
• timestamp: STRING;	
 message_text: STRING; 	
 message_number: INTEGER; 	
 message_type: STRING; 	
 message_class: STRING; 	
 sample_time: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_HTTP_SRVS attribute group	ITM_SAP_HTTP_SRVS
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 service_name: STRING; 	
 parent_guid: STRING; 	
 service_node_guid: STRING; 	
 ksa_status: STRING; 	
 ksa_status_enum: STRING; 	
 host_name: STRING; 	
 host_number: INTEGER; 	
 host_number_enum: STRING; 	
 sap_authority: STRING; 	
client: STRING;	
• user: STRING;	
• path: STRING;	
 session_timeout: STRING; 	
 session_timeout_sec: INTEGER; 	
 session_timeout_sec_enum: STRING; 	
 created_by: STRING; 	
 created_for_client: STRING; 	
 created_on: STRING; 	
 created_on_timestamp: STRING; 	
 last_changed_by: STRING; 	
 changed_for_client: STRING; 	
 changed_on: STRING; 	
 changed_on_timestamp: STRING; 	
description: STRING;	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
	ITM_SAP_Message_Server_Monitor
 managed_system: STRING; 	
 field_name: STRING; 	
 field_value: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
eyetem_name_ename entrand,	

Event slots	IBM Tivoli Enterprise Console event class
PI_XI_Persist_layer attribute group	ITM_PI_XI_Persist_layer
 managed_system: STRING; 	
 system_id: STRING; 	
 system_id_enum: STRING; 	
 instance_name: STRING; 	
 switch_mode: STRING; 	
 switch_mode_enum: STRING; 	
current_container: STRING;	
 current_mast_tab: STRING; 	
 number_of_entries: INTEGER; 	
 number_of_entries_enum: STRING; 	
 maximum_entries: INTEGER; 	
 maximum_entries_enum: STRING; 	
current_fill_level: STRING;	
 reorganization_status: STRING; 	
 reorganization_status_enum: STRING; 	
 messages_in_database: INTEGER; 	
 messages_in_database_enum: STRING; 	
 messages_in_client: INTEGER; 	
 messages_in_client_enum: STRING; 	
 messages_for_reorganization: INTEGER; 	
 messages_for_reorganization_enum: STRING; 	
 messages_to_be_archived: INTEGER; 	
 messages_to_be_archived_enum: STRING; 	
 logically_deleted_messages: INTEGER; 	
 logically_deleted_messages_enum: STRING; 	
 archived_and_logically_deleted_messages: INTEGER; 	
 archived_and_logically_deleted_messages_enum: STRING; 	
 messages_in_clur: INTEGER; 	
 messages_in_clur_enum: STRING; 	
 messages_in_clup: INTEGER; 	
 messages_in_clup_enum: STRING; 	
 messages_in_vers: INTEGER; 	
 messages_in_vers_enum: STRING; 	
 messages_in_error: INTEGER; 	
 messages_in_error_enum: STRING; 	
 messages_in_emast: INTEGER; 	
 messages_in_emast_enum: STRING; 	
 messages_in_mast: INTEGER; 	
 messages_in_mast_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_ICM_SER_INFO attribute group	ITM_SAP_ICM_SER_INFO
 managed_system: STRING; 	
• system_id: STRING;	
 system_id_enum: STRING; 	
 service_status: STRING; 	
 service_status_enum: STRING; 	
 internet_protocol_id: INTEGER; 	
 internet_protocol_id_enum: STRING; 	
 time_period_for_keep_alive: INTEGER; 	
 time_period_for_keep_alive_enum: STRING; 	
 maximum_processing_time_in_back_end: INTEGER; 	
 maximum_processing_time_in_back_end_enum: STRING; 	
 ssl_client_verification: INTEGER; 	
 ssl_client_verification_enum: STRING; 	
 virtual_host_index: INTEGER; 	
 virtual_host_index_enum: STRING; 	
 icm_service_name_or_port_number: STRING; 	
 host_name: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
 instance_name: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_ICM_MON_INFO attribute group	ITM_SAP_ICM_MON_INFO
• managed_system: STRING;	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 system_specific_thread_id: STRING; 	
 status_of_icmn: INTEGER; 	
 status_of_icmn_enum: STRING; 	
trace_level: INTEGER;	
 trace_level_enum: STRING; 	
maximum_thread: INTEGER;	
 maximum_thread_enum: STRING; 	
• peak_thread: INTEGER;	
 peak_thread_enum: STRING; 	
current_thread: INTEGER;	
 current_thread_enum: STRING; 	
• maximum_count: INTEGER;	
 maximum_count_enum: STRING; 	
 peak_count: INTEGER; 	
 peak_count_enum: STRING; 	
current_count: INTEGER;	
 current_count_enum: STRING; 	
 maximum_queue: INTEGER; 	
 maximum_queue_enum: STRING; 	
• peak_queue: INTEGER;	
 peak_queue_enum: STRING; 	
 current_queue: INTEGER; 	
current_queue_enum: STRING;	
 status_of_thread: STRING; 	
 status_of_thread_enum: STRING; 	
 request_type: STRING; 	
 number_of_requests: INTEGER; 	
 number_of_requests_enum: STRING; 	
connection_identifier: INTEGER;	
 connection_identifier_enum: STRING; 	
 guid_connection_identifier: INTEGER; 	
 guid_connection_identifier_enum: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
• instance_name: STRING;	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
DB2_CON_INFO attribute group	ITM_DB2_CON_INFO
 Managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 application_control_heap_size: INTEGER; 	
 application_control_heap_size_enum: STRING; 	
 application_heap_size: INTEGER; 	
 application_heap_size_enum: STRING; 	
• auto_restart: STRING;	
 average_number_of_active_applications: INTEGER; 	
 average_number_of_active_applications_enum: STRING; 	
• catalog_cache_size_64: REAL;	
 catalog_cache_size_64_enum: STRING; 	
 database_heap_size_64: REAL; 	
 database_heap_size_64_enum: STRING; 	
 maximum_storage_for_lock_list: INTEGER; 	
 maximum_storage_for_lock_list_enum: STRING; 	
lock_timeout: INTEGER;	
 lock_timeout_enum: STRING; 	
 log_buffer_size: INTEGER; 	
 log_buffer_size_enum: STRING; 	
 log_file_size_64: REAL; 	
 log_file_size_64_enum: STRING; 	
 number_of_primary_log_files: INTEGER; 	
 number_of_primary_log_files_enum: STRING; 	
 number_of_secondary_log_files: INTEGER; 	
 number_of_secondary_log_files_enum: STRING; 	
 maximum_number_of_active_applications: INTEGER; 	
 maximum_number_of_active_applications_enum: STRING; 	
 maximum_number_of_database_files_open_per_application_64: REAL; 	
 maximum_number_of_database_files_open_per_application_64_enum: STRING; 	
 maximum_percentage_of_lock_list_before_escalation: INTEGER; 	
 maximum_percentage_of_lock_list_before_escalation_enum: STRING; 	
 number_of_asynchronous_page_cleaners: INTEGER; 	
 number_of_asynchronous_page_cleaners_enum: STRING; 	
 number_of_io_servers: INTEGER; 	
 number_of_io_servers_enum: STRING; 	
 package_cache_size_64: REAL; 	
 package_cache_size_64_enum: STRING; 	
 sort_heap_size_64: REAL; 	
 sort_heap_size_64_enum: STRING; 	
(Continued on the next page)	

 statistics_heap_size_64: REAL; statistics_heap_size_64_enum: STRING; statement_heap_size: INTEGER; statement_heap_size_enum: STRING; utility_heap_size_64: REAL; utility_heap_size_64_enum: STRING; backup_pending_indicator: STRING; 	ITM_DB2_CON_INFO (continued)
 statement_heap_size: INTEGER; statement_heap_size_enum: STRING; utility_heap_size_64: REAL; utility_heap_size_64_enum: STRING; 	
 statement_heap_size_enum: STRING; utility_heap_size_64: REAL; utility_heap_size_64_enum: STRING; 	
utility_heap_size_64: REAL;utility_heap_size_64_enum: STRING;	
 utility_heap_size_64_enum: STRING; 	
 backup_pending_indicator: STRING; 	
, /	
database_release_level: INTEGER;	
database_release_level_enum: STRING;	
restore_pending: STRING;	
rollforward_pending_indicator: STRING;	
territory_of_the_database: STRING;	
dynamic_query_management: STRING;	
number_of_database_backups_to_retain: INTEGER;	
number_of_database_backups_to_retain_enum: STRING;	
locks_currently_held_64: REAL;	
locks_currently_held_64_enum: STRING;	
lock_waits_since_first_connect_64: REAL;	
lock_waits_since_first_connect_64_enum: STRING;	
total_time_database_waited_for_locks_64: REAL;	
total_time_database_waited_for_locks_64_enum: STRING;	
deadlocks_since_first_db_connect_64: REAL;	
deadlocks_since_first_db_connect_64_enum: STRING;	
total_sort_heap_allocated_64: REAL;	
total_sort_heap_allocated_64_enum: STRING;	
number_of_sorts_since_first_connect_64: REAL;	
number_of_sorts_since_first_connect_64_enum: STRING;	
elapsed_time_spent_in_sorts_64: REAL;	
elapsed_time_spent_in_sorts_64_enum: STRING;	
number_of_sort_overflows_64: REAL;	
number_of_sort_overflows_64_enum: STRING;	
sorts currently active 64: REAL;	
sorts_currently_active_64_enum: STRING;	
status_of_the_database: STRING;	
number_of_lock_timeouts_since_first_connect_64: REAL; number_of_lock_timeouts_since_first_connect_64_enum: STRING;	
operating_system: STRING;	
log_space_available_in_database_64: REAL;	
log_space_available_in_database_64_enum: STRING;	
log_space_used_by_database_64: REAL;	
log_space_used_by_database_64_enum: STRING;	
sapshcut_parameters: STRING;	
 system_label: STRING; sample_time: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
DB2_DB12_BACKUPHIST attribute group	ITM_DB2_DB12_BACKUPHIST
 managed_system: STRING; 	
 system_id: STRING; 	
 system_id_enum: STRING; 	
 system_label: STRING; 	
 sapshcut_parameters: STRING; 	
• workload: STRING;	
 workload_enum: STRING; 	
 row_insert_timestamp: STRING; 	
 data_logical_reads_64: REAL; 	
 data_logical_reads_64_enum: STRING; 	
 data_physical_reads_64: REAL; 	
 data_physical_reads_64_enum: STRING; 	
 data_physical_writes_64: REAL; 	
 data_physical_writes_64_enum: STRING; 	
 index_logical_reads_64: REAL; 	
 index_logical_reads_64_enum: STRING; 	
 index_physical_reads_64: REAL; 	
 index_physical_reads_64_enum: STRING; 	
 index_physical_writes_64: REAL; 	
 index_physical_writes_64_enum: STRING; 	
 commit_statements_64: REAL; 	
 commit_statements_64_enum: STRING; 	
 rollback_statements_64: REAL; 	
 rollback_statements_64_enum: STRING; 	
 lock_waits_64: REAL; 	
 lock_waits_64_enum: STRING; 	
 lock_wait_time_64: REAL; 	
 lock_wait_time_64_enum: STRING; 	
• deadlocks_64: REAL;	
 deadlocks_64_enum: STRING; 	
 lock_escalations_64: REAL; 	
 lock_escalations_64_enum: STRING; 	
• x_lock_escalations_64: REAL;	
 x_lock_escalations_64_enum: STRING; 	
 average_physical_read_time_64: REAL; 	
 average_physical_read_time_64_enum: STRING; 	
 average_physical_write_time_64: REAL; 	
 average_physical_write_time_64_enum: STRING; 	
• sample_time: STRING;	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_TRFC_Monitoring attribute group	ITM_SAP_TRFC_Monitoring
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
• caller: STRING;	
 function_module: STRING; 	
• message: STRING;	
 server_timestamp: STRING; 	
 status_of_rfc_call: INTEGER; 	
 status_of_rfc_call_enum: STRING; 	
 target_system: STRING; 	
• host: STRING;	
 transaction_counter: INTEGER; 	
 transaction_counter_enum: STRING; 	
 sample_time: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
PI_XI_SYN_ASYN_COMM attribute group	ITM_PI_XI_SYN_ASYN_COMM
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 synchronous_message_id: STRING; 	
 asynchronous_message_id: STRING; 	
• transfer_date: STRING;	
 communication_timeout: STRING; 	
 communication_timeout_sec: INTEGER; 	
• pipeline_status: STRING;	
 pipeline_status_enum: STRING; 	
• bpe_status: STRING;	
 bpe_status_enum: STRING; 	
• ksa_status: INTEGER;	
 ksa_status_enum: STRING; 	
• server: STRING;	
• system_label: STRING;	
 sapshcut_parameters: STRING; 	
• sample_time: STRING;	

Event slots	IBM Tivoli Enterprise Console event class
PI_BPE_Monitoring attribute group	ITM_PI_BPE_Monitoring
managed_system: STRING;	
• system_name: STRING;	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
 ksa_status: STRING; 	
 ksa_status_enum: STRING; 	
• message_id: STRING;	
 quality_of_service: STRING; 	
 quality_of_service_enum: STRING; 	
 retry_count: INTEGER; 	
 retry_count_enum: STRING; 	
• queue_name: STRING;	
 relation_between_message_and_process_instance: STRING; 	
 relation_between_message_and_process_instance_enum: STRING; 	
 configuration_version: INTEGER; 	
 configuration_version_enum: STRING; 	
 received_timestamp: STRING; 	
 queue_assignment: STRING; 	
 queue_assignment_enum: STRING; 	
 message_packaging_mode: STRING; 	
 message_packaging_mode_enum: STRING; 	
 maximum_number_of_messages: INTEGER; 	
 maximum_number_of_messages_enum: STRING; 	
 maximum_memory_per_message_package: INTEGER; 	
 maximum_memory_per_message_package_enum: STRING; 	
 maximum_wait_time: INTEGER; 	
 maximum_wait_time_enum: STRING; 	
 number_of_queues: INTEGER; 	
 number_of_queues_enum: STRING; 	
sample_time: STRING;	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_BPM_ALERTS attribute group	ITM_SAP_BPM_ALERTS
• managed_system: STRING;	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 solution_id: STRING; 	
 monitoring_id: STRING; 	
• alert_type: STRING;	
 monitoring_type: STRING; 	
• alert_timestamp: STRING;	
 system_id: STRING; 	
• client: STRING;	
 alert_rating: INTEGER; 	
 alert_rating_enum: STRING; 	
• alert_message: STRING;	
 sap_system: STRING; 	
 sample_time: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
SAP_Connection_Monitoring attribute group	ITM_SAP_Connection_Monitoring
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 rfc_connection: STRING; 	
 rfc_type: STRING; 	
 rfc_type_enum: STRING; 	
description: STRING;	
 rfc_status: INTEGER; 	
 rfc_status_enum: STRING; 	
 count_rfc_status: INTEGER; 	
 count_rfc_status_enum: STRING; 	
 created_by: STRING; 	
created_on: STRING;	
 last_changed_by: STRING; 	
 changed_on: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
• sample_time: STRING;	

Table 17. Overview of attribute groups to event classes and slo Event slots	IBM Tivoli Enterprise Console event class
SAP_MAI_ALERTS attribute group	ITM_SAP_MAI_ALERTS
 managed_system: STRING; 	
 object_type: STRING; 	
 object_type_enum: STRING; 	
 alert_id: STRING; 	
 alert_timestamp: STRING; 	
 tech_name: STRING; 	
• alert_name: STRING;	
• alert_text_value: STRING;	
 alert_description: STRING; 	
 managedobject_name: STRING; 	
 managedobject_type: STRING; 	
 managedobject_typeenum: INTEGER; 	
 alert_category: STRING; 	
 alert_category_enum: STRING; 	
• alert_severity: INTEGER;	
 alert_severity_enum: STRING; 	
 alert_rating: INTEGER; 	
 alert_rating_enum: STRING; 	
 alert_priority: INTEGER; 	
 alert_priority_enum: STRING; 	
 ksa_status: STRING; 	
 ksa_status_enum: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
• sample_time: STRING;	
 logon_parameters: STRING; 	
 default_period: INTEGER; 	
•	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_Connection_ABAP attribute group	ITM_SAP_Connection_ABAP
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 rfc_connection: STRING; 	
 rfc_type: STRING; 	
 rfc_type_enum: STRING; 	
• rfc_status: INTEGER;	
 rfc_status_enum: STRING; 	
 load_balancing: STRING; 	
 load_balancing_enum: STRING; 	
 logon_group: STRING; 	
 target_host: STRING; 	
 rfc_service_number: STRING; 	
 gateway_host: STRING; 	
 gateway_service: STRING; 	
 logon_language: STRING; 	
 logon_client: STRING; 	
 logon_user: STRING; 	
 trusted_system: STRING; 	
 trusted_system_enum: STRING; 	
 secure_network_communication: STRING; 	
 secure_network_communication_enum: STRING; 	
 trace_status: STRING; 	
 trace_status_enum: STRING; 	
 destination_lock_status: STRING; 	
 destination_lock_status_enum: STRING; 	
 keep_alive_timeout: STRING; 	
 keep_alive_timeout_enum: STRING; 	
 authorization_for_destination: STRING; 	
 driver_program: STRING; 	
 rfc_logon_gui: STRING; 	
 rfc_logon_gui_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 sample_time: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_MAI_PI_MON attribute group	ITM_SAP_MAI_PI_MON
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 system_label: STRING; 	
 sapshcut_parameters: STRING; 	
 pi_domainname: STRING; 	
 pi_domaindescription: STRING; 	
 componentname: STRING; 	
 component_type: STRING; 	
 componentstack: STRING; 	
 availablestatus: STRING; 	
 availablestatus_enum: STRING; 	
 availabilityrating: INTEGER; 	
 availabilityrating_enum: STRING; 	
 availabilitytime: STRING; 	
 self_teststatus: STRING; 	
 self_teststatus_enum: STRING; 	
 self_test_time: STRING; 	
 self_testrating: INTEGER; 	
 self_testrating_enum: STRING; 	
 sample_time: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_Connection_HTTP attribute group	ITM_SAP_Connection_HTTP
 managed_system: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 rfc_connection: STRING; 	
 rfc_type: STRING; 	
 rfc_type_enum: STRING; 	
• rfc_status: INTEGER;	
 rfc_status_enum: STRING; 	
• rfc_host: STRING;	
• rfc_sysid: STRING;	
 proxy_host: STRING; 	
 proxy_user: STRING; 	
 proxy_service: STRING; 	
 ssl_client_identity: STRING; 	
 logon_with_user: STRING; 	
 logon_with_user_enum: STRING; 	
 assertion_ticket_status: STRING; 	
 assertion_ticket_status_enum: STRING; 	
 assertion_ticket_system: STRING; 	
 assertion_ticket_system_enum: STRING; 	
 assertion_ticket_client: STRING; 	
 assertion_ticket_client_enum: STRING; 	
 destination_lock_status: STRING; 	
 destination_lock_status_enum: STRING; 	
• authority: STRING;	
 http_timeout: INTEGER; 	
 http_timeout_enum: STRING; 	
 connection_type_path: STRING; 	
 category_of_rfc_connections: STRING; 	
 sap_authentication_ticket: STRING; 	
 sap_authentication_ticket_enum: STRING; 	
• rfc_alias: STRING;	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
• sample_time: STRING;	

Event slots	IBM Tivoli Enterprise Console event class
SAP_MAI_SYS_MON attribute group	ITM_SAP_MAI_SYS_MON
 managed_system: STRING; 	
 technicalsystem_name: STRING; 	
 system_type: STRING; 	
 productversion: STRING; 	
• availability: INTEGER;	
• availability_enum: STRING;	
• performance: INTEGER;	
 performance_enum: STRING; 	
 configuration: INTEGER; 	
 configuration_enum: STRING; 	
exception: INTEGER;	
 exception_enum: STRING; 	
 configurationstatus: INTEGER; 	
 configurationstatus_enum: STRING; 	
count: INTEGER;	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 sample_time: STRING; 	
SAP_MAI_SOL_VIEW attribute group	ITM_SAP_MAI_SOL_VIEW
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 solution_id: STRING; 	
 solution_name: STRING; 	
 solution_status: STRING; 	
 solution_status_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 sample_time: STRING; 	

Event slots	IBM Tivoli Enterprise Console event class
SAP_MAI_BP_MON attribute group	ITM_SAP_MAI_BP_MON
 managed_system: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
 solution_id: STRING; 	
 monitoring_id: STRING; 	
 alert_type: STRING; 	
 monitoring_type: STRING; 	
 alert_timestamp: STRING; 	
 system_id: STRING; 	
 client: STRING; 	
alert_rating: INTEGER;	
 alert_rating_enum: STRING; 	
 alert_message: STRING; 	
 sap_system: STRING; 	
 sample_time: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
SAP_MAI_PICHN_MON attribute group	ITM_SAP_MAI_PICHN_MON
 managed_system: STRING; 	
 system_name: STRING; 	
system_name_enum: STRING;	
pi_channelname: STRING;	
 processingstatus: INTEGER; 	
 processing_status_enum: STRING; 	
 adapter_engine: STRING; 	
 adapter_type: STRING; 	
 direction: STRING; 	
 communication_component: STRING; 	
 party: STRING; 	
 adapter_namespace: STRING; 	
 log_detail: STRING; 	
 last_refreshed_timestamp: STRING; 	
 include_for_alerting: STRING; 	
 include_for_alerting_enum: STRING; 	
 count: INTEGER; 	
count_enum: STRING;	
 system_label: STRING; 	
 sapshcut_parameters: STRING; 	
 sapple_time: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued) Event slots IBM Tivoli Enterprise Console event classes	
SAP_MAI_MSG_TRG attribute group	ITM_SAP_MAI_MSG_TRG
managed_system: STRING;	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 time_range: STRING; 	
description: STRING;	
 sample_interval_start: STRING; 	
start_high: STRING;	
• end_low: STRING;	
• sample_interval_end: STRING;	
• sample_time: STRING;	
 system_label: STRING; 	
 sapshcut_parameters: STRING; 	
SAP_MAI_MSG_FDL attribute group	ITM_SAP_MAI_MSG_FDL
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 time_range: STRING; 	
 pi_domain_name: STRING; 	
 pi_domain_description: STRING; 	
 sender_component: STRING; 	
 sender_interface: STRING; 	
 receiver_component: STRING; 	
 receiver_interface: STRING; 	
 sender_namespace: STRING; 	
 receiver_namespace: STRING; 	
 sender_party: STRING; 	
 receiver_party: STRING; 	
 sender_channel: STRING; 	
 receiver_channel: STRING; 	
 error_count: INTEGER; 	
 error_count_enum: STRING; 	
 scheduled_count: INTEGER; 	
 scheduled_count_enum: STRING; 	
 cancelled_count: INTEGER; 	
 cancelled_count_enum: STRING; 	
 forwarded_count: INTEGER; 	
 forwarded_count_enum: STRING; 	
 success_count: INTEGER; 	
 success_count_enum: STRING; 	
 pi_component_name: STRING; 	
 sample_interval_start: TRING; 	
 sample_interval_end: STRING; 	
 sample_time: TRING; 	
 system_label: STRING; 	
 sapshcut_parameters: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_qRFC_MsgQueue_Info attribute group	ITM_SAP_qRFC_MsgQueue_Info
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
client: STRING;	
scheduler: STRING;	
 scheduler_enum: STRING; 	
 scheduler_status: STRING; 	
 scheduler_status_enum: STRING; 	
 last_update: STRING; 	
 number_of_entries: INTEGER; 	
 number_of_entries_enum: STRING; 	
 host_id: STRING; 	
 number_of_active_connections: INTEGER; 	
 number_of_active_connections_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
• sample_time: STRING;	

Event slots	IBM Tivoli Enterprise Console event class
SAP_qRFC_MsgQueue_Detail attribute group	ITM_SAP_qRFC_MsgQueue_Detail
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
client: STRING;	
• queue_name: STRING;	
• type: STRING;	
 registration_mode: STRING; 	
 registration_mode_enum: STRING; 	
 maximum_runtime: INTEGER; 	
 maximum_runtime_enum: STRING; 	
attempts: INTEGER;	
 attempts_enum: STRING; 	
• pause: INTEGER;	
pause_enum: STRING;	
 destination_with_logon_data: STRING; 	
user_name: STRING;	
 timestamp_of_application_server: STRING; 	
destination: STRING;	
 processing_without_trfc: STRING; 	
 processing_without_trfc_enum: STRING; 	
 maximum_number_of_connections: INTEGER; 	
 maximum_number_of_connections_enum: STRING; 	
 ksa_status: STRING; 	
ksa_status_enum: STRING;	
 active_connection: INTEGER; 	
 active_connection_enum: STRING; 	
host_id: STRING;	
• scheduler: STRING;	
 scheduler_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
• sample_time: STRING;	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
PI_XI_RNTCHE_STAT attribute group	ITM_PI_XI_RNTCHE_STAT
 managed_system: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 sample_time: STRING; 	
 cache_category: STRING; 	
 cache_category_enum: STRING; 	
• ksa_status: STRING;	
 ksa_status_enum: STRING; 	
description: STRING;	
• party_id: STRING;	
• party: STRING;	
• party_schema: STRING;	
• agency: STRING;	
 component_id: STRING; 	
 service_schema: STRING; 	
 communication_component: STRING; 	
 service_type: STRING; 	
 service_type_enum: STRING; 	
• flag: STRING;	
• flag_enum: STRING;	
 process_component_directory: STRING; 	
 process_component_repository: STRING; 	
 process_component_namespace_repository: STRING; 	
 top_software_component: STRING; 	
• priority: INTEGER;	
 priority_enum: STRING; 	
 basic_software_component: STRING; 	
 party_in_directory: STRING; 	
 integration_process_component: STRING; 	
• task: STRING;	
• sap_release: STRING;	
return_code: INTEGER;	
 return_code_enum: STRING; 	
 repository_name: STRING; 	
 repository_namespace: STRING;c 	
repository_swcv: STRING;c	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
PI_XI_RNTCHE_MON attribute group	ITM_PI_XI_RNTCHE_MON
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 sample_time: STRING; 	
 cache_category: STRING; 	
 cache_category_enum: STRING; 	
 interface_namespace: STRING; 	
 interface_name: STRING; 	
• from_party: STRING;	
 from_service: STRING; 	
 to_party: STRING; 	
 to service: STRING; 	
 sequence: INTEGER; 	
from_action_namespace: STRING;	
 from_action_name: STRING; 	
 to_action_namespace: STRING; 	
 to_action_name: STRING; 	
 required: INTEGER; 	
required_enum: STRING;	
version_id: STRING;	
support_package: INTEGER;	
component: STRING; manning, pameanage: STRING;	
mapping_namespace: STRING;	
mapping_name: STRING;	
condition: STRING;	
 processing_sequence: STRING; 	
• parameter_id: STRING;	
• operation: STRING;	
• to_operation: STRING;	
 software_component_id: STRING; 	
validation: STRING;	
validation_enum: STRING;	
communication_party: STRING;	
 communication_component: STRING; 	
 communication_channel: STRING; 	
adapter_engine_type: STRING;	
 adapter_engine_type_enum: STRING; 	
 adapter_engine_name: STRING; 	
 adapter_name: STRING; 	
 adapter_name_enum: STRING; 	
 adapter_namespace: STRING; 	
 adapter_software_component: STRING; 	
 message_protocol: STRING; 	
 message_protocol_version: STRING; 	
 transport_protocol: STRING; 	
(Continued on the next page)	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
 transport_protocol_version: STRING; 	ITM_PI_XI_RNTCHE_MON (continued)
• call_direction: STRING;	
 call_direction_enum: STRING; 	
 from_party_agency: STRING; 	
 from_party_schema: STRING; 	
 to_party_agency: STRING; 	
 to_party_schema: STRING; 	

Event slots	IBM Tivoli Enterprise Console event class
PI_XI_RNTCHE_ALT attribute group	ITM_PI_XI_RNTCHE_ALT
 managed_system: STRING; 	
 system_name: STRING; 	
system_name_enum: STRING;	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 sample_time: STRING; 	
cache_category: STRING;	
cache_category_enum: STRING;	
software_component_id: STRING;	
 version_support_package: INTEGER; 	
 version_support_package_enum: STRING; direction: INTEGEP; 	
 direction: INTEGER; direction: enum: STRING; 	
direction_enum: STRING; stop: INTEGEP;	
step: INTEGER; step: opum: STRING:	
step_enum: STRING; manning_required; INTECED;	
mapping_required: INTEGER;	
mapping_required_enum: STRING;	
mapping_type: STRING;	
mapping_type_enum: STRING;	
mapping_program: STRING; TTRING	
mapping_namespace: STRING;	
mapping_name: STRING;	
• ifm_namespace: STRING;	
• ifm_name: STRING;	
ofm_namespace: STRING;	
ofm_name: STRING;	
container_id: STRING;	
parameter_id: STRING;	
 mapping_step_container_id: STRING; 	
 mapping_message_container_id: STRING; 	
 version_id: STRING; 	
 param_type: STRING; 	
param_type_enum: STRING;	
interface_namespace: STRING;	
interface_name: STRING;	
 software_component_version: STRING; 	
name: STRING;	
namspace: STRING;	
alert_category: STRING;	
 long_name_of_an_alert_category: STRING; 	
 description_of_alert_category: STRING; 	
• runtime_id: STRING;	
 adapter_engine_name: STRING; 	
 adapter_engine_type: STRING; 	
 adapter_engine_type_enum: STRING; 	
• message_url: STRING;	
 user_name: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_Connection_TCPIP attribute group	ITM_SAP_Connection_TCPIP
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 rfc_connection: STRING; 	
 rfc_type: STRING; 	
 rfc_type_enum: STRING; 	
 rfc_status: INTEGER; 	
 rfc_status_enum: STRING; 	
 rfc_host: STRING; 	
• gateway_host: STRING;	
• gateway_service: STRING;	
 start_type: STRING; 	
 start_type_enum: STRING; 	
 identification_of_program: STRING; 	
 rfc_server_program_name: STRING; 	
 logon_with_user: STRING; 	
 logon_with_user_enum: STRING; 	
 sap_authentication_ticket: STRING; 	
 sap_authentication_ticket_enum: STRING; 	
 assertion_ticket_status: STRING; 	
 assertion_ticket_status_enum: STRING; 	
 assertion_ticket_system: STRING; 	
 assertion_ticket_system_enum: STRING; 	
 assertion_ticket_client: STRING; 	
 assertion_ticket_client_enum: STRING; 	
 secure_network_communication: STRING; 	
 secure_network_communication_enum: STRING; 	
 destination_lock_status: STRING; 	
 destination_lock_status_enum: STRING; 	
 trace_status: STRING; 	
 trace_status_enum: STRING; 	
 authorization_for_destination: STRING; 	
 keep_alive_timeout: STRING; 	
 keep_alive_timeout_enum: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
 sample_time: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_Conn_CHECK attribute group	ITM_SAP_Conn_CHECK
 managed_system: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 rfc_connection: STRING; 	
 rfc_type: STRING; 	
 rfc_type_enum: STRING; 	
 rfcping: INTEGER; 	
 rfcping_enum: STRING; 	
 rfc_pingmsg: STRING; 	
 rfc_latency: INTEGER; 	
 rfclatency_enum: STRING; 	
 rfc_logon: INTEGER; 	
 rfc_logon_enum: STRING; 	
 rfc_logonmsg: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
• sample_time: STRING;	
SAP_MaxDB_Activity_History attribute group	ITM_SAP_MaxDB_Activity_History ISA KSA_Base
 managed_system: STRING; 	
database_type: STRING;	
 week_day: STRING; 	
 timestamp: STRING; 	
 data_cache_hit_percent: INTEGER; 	
 data_cache_hit_percent_enum: STRING; 	
 catlog_cache_hit_percent: INTEGER; 	
 catlog_cache_hit_percent_enum: STRING; 	
 user_calls: INTEGER;user_calls_enum: STRING; 	
 rollbacks: INTEGER;rollbacks_enum: STRING; 	
 commits: INTEGER;commits_enum: STRING; 	
 prepares: INTEGER;prepares_enum: STRING; 	
 physical_reads: INTEGER; 	
 physical_reads_enum: STRING; 	
 physical_writes: INTEGER; 	
 physical_writes_enum: STRING; 	
 log_pages_written: INTEGER; 	
 log_pages_written_enum: STRING; 	
 converter_cache_hit_percent: INTEGER; 	
 converter_cache_hit_percent_enum: STRING; 	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
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Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_MaxDB_Fill_Level_History attribute group	ITM_SAP_MaxDB_Fill_Level_History ISA KSA_Base
 managed_system: STRING; 	
 database_type: STRING; 	
• week_day: STRING;	
• timestamp: STRING;	
 total_used_percent: INTEGER; 	
 total_used_percent_enum: STRING; 	
 total_free_percent: INTEGER; 	
 total_free_percent_enum: STRING; 	
 logon_parameters: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 total_used_kb: INTEGER; 	
 total_used_kb_enum: STRING; 	
 total_free_kb: INTEGER; 	
 total_free_kb_enum: STRING; 	
 total_used_kb_64: REAL; 	
 total_used_kb_64_enum: STRING; 	
 total_free_kb_64: REAL; 	
 total_free_kb_64_enum: STRING; 	
SAP_MaxDB_Summary attribute group	ITM_SAP_MaxDB_Summary ISA KSA_Base
 managed_system: STRING; 	
 database_name: STRING;database_type: STRING; 	
 database_release: STRING; 	
 total_used_percent: STRING; 	
 total_free_percent: STRING; 	
 logon_parameters: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	
 total_size_mb: STRING; 	
 total_used_mb: STRING; 	
 total_free_mb: STRING; 	
R/3_ABAP_Dump_Count attribute group	ITM_R3_ABAP_Dump_Count
• managed_system: STRING;	
• system_name: STRING;	
• system_name_enum: STRING;	
 instance_name: STRING; 	
 total_abap_dump_count: INTEGER; 	
 logon_parameters: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Output_Requests_Status_Count attribute group	ITM_R3_Output_Requests_Status_Count
• managed_system: STRING;	
 output_requests_status: STRING; 	
 output_requestsstatus_count: INTEGER; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	
 logon_parameters: STRING; 	
R/3_License_Information attribute group	ITM_R3_License_Information
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 system_number: STRING; 	
 hardware_key: STRING; 	
 software_product: STRING; 	
 installation_number: STRING; 	
 begin_date: STRING; 	
• end_date: STRING;	
 license_date: STRING; 	
• validity: INTEGER;	
 validity_enum: STRING; 	
 days_to_expiry: INTEGER; 	
 days_to_expiry_enum: STRING; 	
 logon_parameters: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_MSSQL_Database_Detail attribute group	ITM_R3_MSSQL_Database_Detail ISA KSA_Base
 managed_system: STRING; 	
• database_name: STRING;	
 database_type: STRING; 	
 ksa_hostname: STRING; 	
 sql_server_version: STRING; 	
 sql_server_edition: STRING; 	
 sql_server_edition_enum: STRING; 	
 sql_server_start_time: STRING; 	
 param_diff_flag: STRING; 	
 param_diff_flag_enum: STRING; 	
 disk_perf_flag: STRING; 	
 disk_perf_flag_enum: STRING; 	
 clustered_sql_server: STRING; 	
 clustered_sql_server_enum: STRING; 	
 3gb_switch_sql_server: STRING; 	
 3gb_switch_sql_server_enum: STRING; 	
• pae_sql_server: STRING;	
 pae_sql_server_enum: STRING; 	
• awe_sql_server: STRING;	
 awe_sql_server_enum: STRING; 	
 windows_version: STRING; 	
 cpus_used_by_sql_server: INTEGER; 	
 cpus_used_by_sql_server_enum: STRING; 	
 cpus_used_by_sql_server_64: REAL; 	
 cpus_used_by_sql_server_64_enum: STRING; 	
 number_of_cpus_configured: INTEGER; 	
 number_of_cpus_configured_enum: STRING; 	
 number_of_cpus_configured_64: REAL; 	
 number_of_cpus_configured_64_enum: STRING; 	
• mask: STRING;	
 physical_memory: INTEGER; 	
 physical_memory_enum: STRING; 	
 physical_memory_64: REAL; 	
 physical_memory_64_enum: STRING; 	
• trace_flag: STRING;	
 sql_memory_setting: STRING; 	
 logon_parameters: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Event slots	IBM Tivoli Enterprise Console event class
R/3_MSSQL_Database_Summary attribute group	ITM_R3_MSSQL_Database_Summary ISA KSA_Base
 managed_system: STRING; 	
• database_name: STRING;	
 database_type: STRING; 	
 database_release: STRING; 	
 database_size: INTEGER; 	
 database_size_enum: STRING; 	
 database_size_64: REAL; 	
 database_size_64_enum: STRING; 	
 allocated_database_size: INTEGER; 	
 allocated_database_size_enum: STRING; 	
 allocated_database_size_64: REAL; 	
 allocated_database_size_64_enum: STRING; 	
 log_size: INTEGER; 	
 log_size_enum: STRING; 	
 log_size_64: REAL; 	
 log_size_64_enum: STRING; 	
 allocated_log_size: INTEGER; 	
 allocated_log_size_enum: STRING; 	
 allocatedlog_size_64: REAL; 	
 allocatedlog_size_64_enum: STRING; 	
 free_log_size: INTEGER; 	
 free_log_size_enum: STRING; 	
 free_log_size_64: REAL; 	
 free_log_size_64_enum: STRING; 	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
SAP_MaxDB_Detail attribute group	ITM_SAP_MaxDB_Detail ISA KSA_Base
 managed_system: STRING; 	
 locks_available: INTEGER; 	
 locks_available_enum: STRING; 	
 locks_available_64: REAL; 	
 locks_available_64_enum: STRING; 	
 maximum_set: INTEGER; 	
 maximum_set_enum: STRING; 	
 maximum_set_64: REAL; 	
 maximum_set_64_enum: STRING; 	
 average_set: INTEGER; 	
 average_set_enum: STRING; 	
 average_set_64: REAL; 	
 average_set_64_enum: STRING; 	
 lock_owners: INTEGER; 	
 lock_owners_enum: STRING; 	
 lock_owner_64: REAL; 	
 lock_owner_64_enum: STRING; 	
 lock_requester: INTEGER; 	
 lock_requester_enum: STRING; 	
 lock_requester_64: REAL; 	
 lock_requester_64_enum: STRING; 	
 row_locks: INTEGER; 	
 row_locks_enum: STRING; 	
 row_locks_64: REAL; 	
 row_locks_64_enum: STRING; 	
 table_locks: INTEGER; 	
 table_locks_enum: STRING; 	
 table_locks_64: REAL; 	
 table_locks_64_enum: STRING; 	
collisions: INTEGER;	
collisions_enum: STRING;	
• collisions_64: REAL;	
collisions_64_enum: STRING;	
escalations: INTEGER;	
escalations_enum: STRING;	
• escalations_64: REAL;	
 escalations_64_enum: STRING; 	
 log_pages_written: INTEGER; 	
 log_pages_written_enum: STRING; 	
 log_pages_written_64: REAL; 	
 log_pages_written_64_enum: STRING; 	
 waiting_for_log_writer: INTEGER; 	
 waiting_for_log_writer_enum: STRING; 	
 waiting_for_log_writer_64: REAL; 	
 waiting_for_log_writer_64_enum: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
 group_commits: INTEGER; 	ITM_SAP_MaxDB_Detail ISA KSA_Base (continued)
 group_commits_enum: STRING; 	
group_commits_64: REAL;	
 group_commits_64_enum: STRING; 	
log_io_queue_overflow: INTEGER;	
log_io_queue_overflow_enum: STRING;	
log_io_queue_overflow_64: REAL;	
log_io_queue_overflow_64_enum: STRING;	
sql_statements: INTEGER;	
sql_statements_enum: STRING;	
sql_statements_64: REAL;	
sql_statements_64_enum: STRING;	
sql_rollbacks: INTEGER;	
sql_rollbacks_enum: STRING;	
sql_rollbacks_64: REAL;	
<pre>sql_rollbacks_64_enum: STRING;</pre>	
sql_commits: INTEGER;	
sql_commits_enum: STRING;	
sql_commits_64: REAL;	
sql_commits_64_enum: STRING;	
sql_prepares: INTEGER;	
sql_prepares_enum: STRING;	
sql_prepares_64: REAL;	
sql_prepares_64_enum: STRING;	
sql_executes: INTEGER;	
sql_executes_enum: STRING;	
sql_executes_64: REAL;	
sql_executes_64_enum: STRING;	
sql_creates: INTEGER;	
sql_creates_enum: STRING;	
sql_creates_64: REAL;	
sql_creates_64_enum: STRING;	
sql_alters: INTEGER;	
sql_alters_enum: STRING;	
sql_alters_64: REAL;	
sql_alters_64_enum: STRING;	
sql_drops: INTEGER;	
sql_drops_enum: STRING;	
sql_drops_64: REAL;	
sql_drops_64_enum: STRING;	
sql_inserts: INTEGER;	
sql_inserts_enum: STRING;	
sql_inserts_64: REAL;	
sql_inserts_64_enum: STRING;	
sql_select_and_fetches: INTEGER;	
sql_select_and_fetches_enum: STRING;	
sql_select_and_fetches_64: REAL;	
sql_select_and_fetches_64_enum: STRING;	

vent slots	IBM Tivoli Enterprise Console event class
sql_updates: INTEGER;	ITM_SAP_MaxDB_Detail ISA KSA_Base (continued)
sql_updates_enum: STRING;	
sql_updates_64: REAL;	
sql_updates_64_enum: STRING;	
sql deletes: INTEGER;	
sql_deletes_enum: STRING;	
sql_deletes_64: REAL;	
sql_deletes_64_enum: STRING;	
db_procedure_internal_calls: INTEGER;	
db_procedure_internal_calls_enum: STRING;	
db_procedure_internal_calls_64: REAL;	
db_procedure_internal_calls_64_enum: STRING;	
db_procedure_external_calls: INTEGER;	
db_procedure_external_calls_enum: STRING;	
db_procedure_external_calls_64: REAL;	
db_procedure_external_calls_64_enum: STRING;	
io_physical_reads: INTEGER;	
io_physical_reads_enum: STRING;	
io_physical_reads_64: REAL;	
io_physical_reads_64_enum: STRING;	
io_physical_writes: INTEGER;	
io_physical_writes_enum: STRING;	
io_physical_writes_64: REAL;	
io_physical_writes_64_enum: STRING;	
io_logical_reads: INTEGER;	
io_logical_reads_enum: STRING;	
io_logical_reads_64: REAL;	
io_logical_reads_64_enum: STRING;	
io_logical_writes: INTEGER;	
io_logical_writes_enum: STRING;	
io_logical_writes_64: REAL;	
io_logical_writes_64_enum: STRING;	
data_cache_size: INTEGER;	
data_cache_size_enum: STRING;	
data_cache_size_64: REAL;	
data_cache_size_64_enum: STRING;	
data_cache_accesses: INTEGER;	
data_cache_accesses_enum: STRING;	
data_cache_accesses_64: REAL;	
data_cache_accesses_64_enum: STRING;	
data_cache_hits: INTEGER;	
data_cache_hits_enum: STRING;	
data_cache_hits_64: REAL;	
data_cache_hits_64_enum: STRING;	
data_access_hitratio: INTEGER;	
data_access_hitratio_enum: STRING;	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
 converter_cache_size: INTEGER; 	ITM_SAP_MaxDB_Detail ISA KSA_Base (continued)
 converter_cache_size_enum: STRING; 	
 converter_cache_size_64: REAL; 	
 converter_cache_size_64_enum: STRING; 	
 catalog_cache_size: INTEGER; 	
 catalog_cache_size_enum: STRING; 	
 catalog_cache_size_64: REAL; 	
 catalog_cache_size_64_enum: STRING; 	
 catalog_cache_accesses: INTEGER; 	
 catalog_cache_accesses_enum: STRING; 	
 catalog_cache_accesses_64: REAL; 	
 catalog_cache_accesses_64_enum: STRING; 	
 catalog_cache_hits: INTEGER; 	
 catalog_cache_hits_enum: STRING; 	
 catalog_cache_hits_64: REAL; 	
 catalog_cache_hits_64_enum: STRING; 	
 catalog_cache_hitratio: INTEGER; 	
 catalog_cache_hitratio_enum: STRING; 	
 database_server: STRING; 	
 database_name: STRING; 	
 restart_time: STRING; 	
version: STRING;	
 logon_parameters: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued) Event slots	
Event slots	IBM Tivoli Enterprise Console event class
SAP_MaxDB_Log_Detail attribute group	ITM_SAP_MaxDB_Log_Detail ISA KSA_Base
 managed_system: STRING; 	
 available_log_size: INTEGER; 	
 available_log_size_enum: STRING; 	
 available_log_size_64: REAL; 	
 available_log_size_64_enum: STRING; 	
 log_size: INTEGER; 	
 log_size_enum: STRING; 	
 log_size_64: REAL; 	
 log_size_64_enum: STRING; 	
 used_log_area: INTEGER; 	
 used_log_area_enum: STRING; 	
 used_log_area_64: REAL; 	
 used_log_area_64_enum: STRING; 	
 used_log_percent: INTEGER; 	
 used_log_percent_enum: STRING; 	
 unsaved_log_pages: INTEGER; 	
 unsaved_log_pages_enum: STRING; 	
 unsaved_log_pages_64: REAL; 	
 unsaved_log_pages_64_enum: STRING; 	
 log_pages_since_last_backup: INTEGER; 	
 log_pages_since_last_backup_enum: STRING; 	
 log_pages_since_last_backup_64: REAL; 	
 log_pages_since_last_backup_64_enum: STRING; 	
 reserved_log_size_for_redo: INTEGER; 	
 reserved_log_size_for_redo_enum: STRING; 	
 reserved_log_size_for_redo_64: REAL; 	
 reserved_log_size_for_redo_64_enum: STRING; 	
 sequence_number: INTEGER; 	
 sequence_number_enum: STRING; 	
 sequence_number_64: REAL; 	
 sequence_number_64_enum: STRING; 	
 log_segment_size: INTEGER; 	
 log_segment_size_enum: STRING; 	
 log_segment_size_64: REAL; 	
 log_segment_size_64_enum: STRING; 	
 log_segment_full: STRING; 	
automatic_backup: STRING;	
• savepoints: INTEGER;	
• savepoints_enum: STRING;	
• savepoints_64: REAL;	
 savepoints_64_enum: STRING; 	
 checkpoints: INTEGER; 	
checkpoints_enum: STRING;	
 checkpoint_64: REAL; 	
 checkpoint_64_enum: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
• mode: STRING;	ITM_SAP_MaxDB_Log_Detail ISA KSA_Base (continued)
• mirrored: STRING;	
• auto_overwrite: STRING;	
 log_writer: STRING; 	
 logon_parameters: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 sapshcut_parameters: STRING; 	
 system_label: STRING; 	

Event slots	IBM Tivoli Enterprise Console event class	
Central_Instance_Configuration attribute group	ITM_Central_Instance_Configuration ISA KSA_Base	
 managed_system: STRING; 		
 instance_host_name: STRING; 		
 system_release: STRING; 		
 central_instance_name: STRING; 		
 central_instance: STRING; 		
 central_instance_enum: STRING; 		
 database_name: STRING; 		
 database_host_name: STRING; 		
 message_service_configured: STRING; 		
 message_service_configured_enum: STRING; 		
 update_service_configured: STRING; 		
 update_service_configured_enum: STRING; 		
 dialog_service_configured: STRING; 		
 dialog_service_configured_enum: STRING; 		
 batch_service_configured: STRING; 		
 batch_service_configured_enum: STRING; 		
 enqueue_service_configured: STRING; 		
 enqueue_service_configured_enum: STRING; 		
 gateway_service_configured: STRING; 		
 gateway_service_configured_enum: STRING; 		
 spool_service_configured: STRING; 		
 spool_service_configured_enum: STRING; 		
 system_number: STRING; 		
 instance_status: STRING; 		
 instance_status_enum: STRING; 		
 sample_time: STRING; 		
 configuration_string: STRING; 		
 instance_start_time: STRING; 		
 system_start_time: STRING; 		
 instance_stop_time: STRING; 		
active_users: INTEGER;		
 assigned_update_instance: STRING; 		
 system_description: STRING; 		
 database_host_ip_address: STRING; 		
 instance_op_mode_state: STRING; 		
 instance_op_mode_state_enum: STRING; 		
 operation_mode: STRING; 		
 dialog_processes: INTEGER; 		
 update_processes: INTEGER; 		
 batch_processes: INTEGER; 		
 spool_processes: INTEGER; 		

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
 instance_host_ip_address: STRING; 	ITM_Central_Instance_Configuration ISA KSA_Base
 instances_running: INTEGER; 	(continued)
 instances_down: INTEGER; 	
 description: STRING; 	
 ksa_value: STRING; 	
 logon_parameters: STRING; 	
• system_name: STRING;	
 system_name_enum: STRING; 	
 instance_name: STRING; 	
 system_up_duration: INTEGER; 	
 system_up_duration_enum: STRING; 	
 instance_up_duration: INTEGER; 	
 instance_up_duration_enum: STRING; 	
 instance_down_duration: INTEGER; 	
 instance_down_duration_enum: STRING; 	
 total_external_sessions: INTEGER; 	
 total_external_sessions_enum: STRING; 	
 total_gui_sessions: INTEGER; 	
 total_gui_sessions_enum: STRING; 	
 total_rfc_sessions: INTEGER; 	
 total_rfc_sessions_enum: STRING; 	
 nowp_queue: INTEGER; 	
 nowp_queue_enum: STRING; 	
 dialog_queue: INTEGER; 	
 dialog_queue_enum: STRING; 	
 update_queue: INTEGER; 	
 update_queue_enum: STRING; 	
enqueue_queue: INTEGER;	
 enqueue_queue_enum: STRING; 	
 batch_queue: INTEGER; 	
 batch_queue_enum: STRING; 	
 spool_queue: INTEGER; 	
 spool_queue_enum: STRING; 	
 update2_queue: INTEGER; 	
 update2_queue_enum: STRING; 	
 system_description_u: STRING; 	
 operation_mode_u: STRING; 	
 sapshcut_parameters: STRING; 	
• system_label: STRING;	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
 batch_stopped_percent: INTEGER; 	ITM_Central_Instance_Configuration ISA KSA_Base
 batch_stopped_percent_enum: STRING; 	(continued)
 batch_running_percent: INTEGER; 	
 batch_running_percent_enum: STRING; 	
 batch_waiting_percent: INTEGER; 	
 batch_waiting_percent_enum: STRING; 	
 batch_complete_percent: INTEGER; 	
 batch_complete_percent_enum: STRING; 	
 dialog_stopped_percent: INTEGER; 	
 dialog_stopped_percent_enum: STRING; 	
 dialog_running_percent: INTEGER; 	
 dialog_running_percent_enum: STRING; 	
 dialog_waiting_percent: INTEGER; 	
 dialog_waiting_percent_enum: STRING; 	
 dialog_complete_percent: INTEGER; 	
 dialog_complete_percent_enum: STRING; 	
 enqueue_stopped_percent: INTEGER; 	
 enqueue_stopped_percent_enum: STRING; 	
 enqueue_running_percent: INTEGER; 	
 enqueue_running_percent_enum: STRING; 	
 enqueue_waiting_percent: INTEGER; 	
 enqueue_waiting_percent_enum: STRING; 	
 enqueue_complete_percent: INTEGER; 	
 enqueue_complete_percent_enum: STRING; 	
 enqueue_processes: INTEGER; 	
 spool_stopped_percent: INTEGER; 	
 spool_stopped_percent_enum: STRING; 	
 spool_running_percent: INTEGER; 	
 spool_running_percent_enum: STRING; 	
 spool_waiting_percent: INTEGER; 	
 spool_waiting_percent_enum: STRING; 	
 spool_complete_percent: INTEGER; 	
 spool_complete_percent_enum: STRING; 	
 update_stopped_percent: INTEGER; 	
 update_stopped_percent_enum: STRING; 	
 update_running_percent: INTEGER; 	
 update_running_percent_enum: STRING; 	
 update_waiting_percent: INTEGER; 	
 update_waiting_percent_enum: STRING; 	
 update_complete_percent: INTEGER; 	
 update_complete_percent_enum: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
 update2_stopped_percent: INTEGER; 	ITM_Central_Instance_Configuration ISA KSA_Base
 update2_stopped_percent_enum: STRING; 	(continued)
 update2_running_percent: INTEGER; 	
 update2_running_percent_enum: STRING; 	
 update2_waiting_percent: INTEGER; 	
 update2_waiting_percent_enum: STRING; 	
 update2_complete_percent: INTEGER; 	
 update2_complete_percent_enum: STRING; 	
 update2_processes: INTEGER; 	
 update2_service_configured: STRING; 	
 update2_service_configured_enum: STRING; 	
 dialog_queue_percent: INTEGER; 	
 dialog_queue_percent_enum: STRING; 	
 enqueue_queue_percent: INTEGER; 	
 enqueue_queue_percent_enum: STRING; 	
 spool_queue_percent: INTEGER; 	
 spool_queue_percent_enum: STRING; 	
 update_queue_percent: INTEGER; 	
 update_queue_percent_enum: STRING; 	
update2_queue_percent: INTEGER;	
 update2_queue_percent_enum: STRING; 	
 database_host_ip_address_v6: STRING; 	
 instance_host_ip_address_v6: STRING; 	
 total_active_users: INTEGER; 	
 rfc_users: INTEGER; 	
interactive_users: INTEGER;	
registered_users: INTEGER;	
 database_type: STRING; 	
 database_release: STRING; 	
 instances_passive: INTEGER; 	
 instances_unknown: INTEGER; 	
 instances_connectionfailed: INTEGER; 	

Table 17. Overview of attribute groups to event classes and slots (continued)	
Event slots	IBM Tivoli Enterprise Console event class
R/3_Logon_Information_Sys attribute group	ITM_R3_Logon_Information_Sys ISA KSA_Base
 managed_system: STRING; 	
 system_name: STRING; 	
 system_name_enum: STRING; 	
 instance_name: STRING; 	
client: STRING;	
• userid: STRING;	
• userid_enum: STRING;	
 userid_type: STRING; 	
 userid_type_enum: STRING; 	
• userid_state: STRING;	
 userid_state_enum: STRING; 	
• terminal: STRING;	
 ip_address: STRING; 	
 logon_logoff: STRING; 	
 logon_logoff_enum: STRING; 	
• time: STRING;	
 session_duration: INTEGER; 	
 session_duration_enum: STRING; 	
 invalid_password_count: INTEGER; 	
 invalid_password_count_enum: STRING; 	
 sample_interval_start: STRING; 	
 sample_interval_end: STRING; 	
 logon_parameters: STRING; 	
 sapshcut_parameters: STRING; 	
 changing_userid: STRING; 	
• changing_time: STRING;	
 system_label: STRING; 	
 ip_address_v6: STRING; 	

Table 17. Overview of attribute groups to event classes and slots (continued)		
Event slots	IBM Tivoli Enterprise Console event class	
SolMan_Landscape_DB_Sys attribute group	ITM_SolMan_Landscape_DB_Sys ISA KSA_Base	
 managed_system: STRING; 		
 system_name: STRING; 		
 system_name_enum: STRING; 		
 database_name: STRING; 		
 database_vendor: STRING; 		
 database_release: STRING; 		
 sapshcut_parameters: STRING; 		
 system_label: STRING; 		
• global_id: STRING;		
• caption: STRING;		
 registration_source: STRING; 		
 landscape_id: STRING; 		
 database_creation_date: STRING; 		
 landscape_directory_id: STRING; 		
 landscape_directory_key: STRING; 		
 database_description: STRING; 		
 remote_connection: STRING; 		
 database_type: STRING; 		
 system_bits: STRING; 		
 connection_address: STRING; 		
 cluster_type: STRING; 		
 system_type: STRING; 		
 installation_number: STRING; 		
 license_number: STRING; 		
 system_creation_date: STRING; 		
 product_flag: STRING; 		
R/3_MessageServer_Configuration attribute group	R/3_MessageServer_Configuration	
 Managed\System: STRING; 		
• System Name: STRING;		
 Message Server\Host Name: STRING; 		
 System\Release: STRING; 		
 Message\Server\Status: STRING; 		
 Message Server\Host IP\Address: STRING; 		
• System Label: STRING;		
 SAPshcut Parameters: STRING; 		
 Logon\Parameters: INTEGER; 		

Event mapping for IBM Tivoli Monitoring V5.1 events

You can receive Tivoli Enterprise Console events from IBM Tivoli Monitoring V6.2 that look like the Tivoli Enterprise Console events you received from IBM Tivoli Monitoring V5.1 Tivoli Enterprise Console adapters, both in name and slot content.

The adapter BAROC files are found on the Tivoli Enterprise Monitoring Server in the installation directory in TECLIB/itm5migr. You must install the following files on the Tivoli Enterprise Console servers where you want to forward mapped CCMS and Syslog adapter events:

- tecad_wr3moni.baroc
- tecad_wr3slog.baroc

These files ensure that you have the required slots such as cms_hostname.

IBM Tivoli Monitoring V5.1 Centralized Computing Center Management System (CCMS) event adapter events

The CCMS Tivoli Enterprise Console adapter that is delivered in IBM Tivoli Monitoring for Applications: mySAP.com, Version 5.1 is a tool that reads alerts from CCMS and reports them as Tivoli Enterprise Console events.

The SAP agent V6.2 also reads alerts from CCMS and can report them as Tivoli Enterprise Console events. However, the name and slots of the default CCMS Tivoli Enterprise Console events that come from version 6.2, ITM_R3_Alerts, differ from those events that come from the version 5.1 Tivoli Enterprise Console adapter.

This section helps when you want to use version 6.2 of the monitoring agent to generate Tivoli Enterprise Consoleevents that look like the Tivoli Enterprise Console events generated by the version 5.1 CCMS adapter.

Generating IBM Tivoli Monitoring V5.1 Centralized Computing Center Management System (CCMS) Event Adapter events

You can generate CCMS Adapter events.

About this task

If you want version 5.1 CCMS Adapter-like events, complete the following steps:

- 1. Configure IBM Tivoli Monitoring Tivoli Enterprise Console event forwarding. See the *IBM Tivoli Monitoring Installation and Setup Guide*.
- 2. Import the tecad_wr3moni.baroc file into your Tivoli Enterprise Console server rule base to ensure that you have defined the required slots, such as cms_hostname. This version of the tecad_wr3moni.baroc file that contains an updated set of Tivoli Enterprise Console classes based on more recent MTE classes is new in version 6.2 of the SAP agent.

The tecad_wr3moni.baroc file is located in the following directory: \$Candle_Home/cms/TECLIB/ itm5migr

- 3. Create one or more new situations using the R/3_Alerts table that contains the prefix, SA5_CCMS. This prefix is a sign to the IBM Tivoli Monitoring event forwarding capability to generate version 5.1 CCMS Adapter-like events.
- 4. You can use a predefined Alert situation such as SAP_Alert_Crit or SAP_Alert_Warn as a model, and modify the situation formula as needed.

The Tivoli Enterprise Console event mapping for the IBM Tivoli Monitoring 6.2 predefined alert situations such as R3_Alert_Crit, R3_Alert_Warn, SAP_Alert_Crit, and SAP_Alert_Warn remain unchanged. Turn on only one type of Alert monitoring situations (SA5_CCMS or regular) to avoid getting duplicate events for the same alert mapped differently in Tivoli Enterprise Console.

Event classes for Centralized Computing Center Management System (CCMS) events

The set of event classes that the SAP agent provides are uniquely named for each MTE class.

Event classes are generated by prepending the name of the MTE class with SAP_CCMS and replacing blank characters in the MTE class name with underscore (_) characters. The version 6.2 monitoring agent provides an .xml mapping file, ksa_MTE_620.map, that contains a list of CCMS MTE class names used to generate the CCMS Adapter Tivoli Enterprise Console events. MTE classes that are not recognized by the mapping file create default SAP_CCMS_Default_Alert events.

The ksa_MTE_620.map file is located in the following directory: \$CANDLE_HOME/cms/TECLIB. The ksa_MTE_620.map file contains a list of CCMS MTE class names as follows:

```
valueList name="ksa_MTEClassList"
valueItem value="MTE_class_name1"/
valueItem value="MTE_class_name2"/
...
```

```
valueItem value="MTE_class_namen"/
/valueList
```

The following example contains several event class mappings in the ksa_MTE_620.map file:

```
valueList name="ksa_MTEClassList"
valueItem value="5minLoadAverage"/
valueItem value="ALEChpMTAttribClass"/
...
valueItem value="XML_SelfMonitoring"/
/valueList
```

Adding Centralized Computing Center Management System (CCMS) event classes

You can add CCMS event classes to the event server.

About this task

Perform the following steps to add event classes:

Procedure

- 1. Save a copy of the original ksa_MTE_620.map file.
- 2. Edit the ksa_MTEClassList valueList in the ksa_MTE_620.map file. Add a valueItem to the valueList for your new MTE class.
- 3. Add the new event classes to your event server by using the tecad_wr3moni.baroc file as a model. MTE classes not recognized by the mapping file create default SAP_CCMS_Default_Alert events. You may edit the ksa_MTE_620.map file; but may not edit the ksa.map file.

Example for Centralized Computing Center Management System (CCMS) events

The event slots for the CCMS events and the event slot mappings are shown.

The following table shows the set of event slots in the version 5.1 CCMS event class in the left column. The column on the right indicates whether each slot is mapped in version 6.2 CCMS adapter events. When a slot is mapped, the attribute from which it gets its value is listed.

Table 18. IBM Tivoli Monitoring V5.1 CCMS event slots mapped to IBM Tivoli Monitoring V6.2 CCMS adapter event slots	
Version 5.1 slot	Version 6.2 slot value
msg	R3_Alerts.Alert_Msg
mte_class	R3_Alerts.MTE_Class
alert_value	R3_Alerts.Alert_Value
alert_severity	Not mapped.
alert_status	R3_Alerts.Alert_Status
alert_objectname	R3_Alerts.Alert_Object_Name
alert_fieldname	R3_Alerts.Alert_Field_Name
alert_message	R3_Alerts.Alert_Msg
tid_mtsysid	R3_Alerts.System_Name
tid_mtmcname	R3_Alerts.Instance_Name
tid_mtnumrange	Not mapped
tid_mtuid	R3_Alerts.Number
tid_mtclass	Not mapped

Table 18. IBM Tivoli Monit adapter event slots (contir	oring V5.1 CCMS event slots mapped to IBM Tivoli Monitoring V6.2 CCMS nued)
Version 5.1 slot	Version 6.2 slot value
tid_mtindex	Not mapped
tid_extindex	Not mapped
aid_alsysid	R3_Alerts.System_Name
aid_msegname	Not mapped.
aid_aluniqnum	R3_Alerts.Alert_Unique_Identifier
aid_alindex	Not mapped
aid_alertgmttime	R3_Alerts.Occurrence_gmt
	Format is different from Version 5.1. Date and time together. Mapped time contains 20:09:56
aid_alertgmtdate	R3_Alerts.Occurrence_gmt
	Format is different from Version 5.1. Date and time together. Mapped date contains 2005/06/28
aid_alertdate	R3_Alerts.Occurrence_Time
	Format is different from Version 5.1. Date and time together. Mapped date contains 2005/06/28
aid_alerttime	R3_Alerts.Occurrence_Time
	Format is different from Version 5.1. Date and time together. Mapped time contains 20:09:56
conf_filename	Not mapped
r3alert_host	Not mapped

IBM Tivoli Monitoring V5.1 Syslog Event Adapter events

The Syslog event adapter that is delivered in IBM Tivoli Monitoring for Applications: mySAP.com, Version 5.1 processes the SAP syslog and reports a number of specific syslog entries as Tivoli Enterprise Console events.

Version 6.2 of the SAP agent also reads messages from the SAP Syslog, and can report them as TEC events. However, the name and slots of the default Syslog Tivoli Enterprise Console events that come from version 6.2 (ITM_R3_SYSTEM_LOG) differ from those that come from the version 5.1 Syslog event adapter.

Generating IBM Tivoli Monitoring V5.1 Syslog event adapter events

You can generate IBM Tivoli Monitoring V5.1 Syslog event adapter events

About this task

If you want version 5.1 CCMS Adapter-like events, complete the following steps:

Procedure

1. Configure Tivoli Enterprise Console event forwarding.

- 2. Import the tecad_wr3slog.baroc file into your Tivoli Enterprise Console server to ensure that you defined the required slots such as cms_hostname. The tecad_wr3slog.baroc is in the following directory: \$Candle_Home/cms/TECLIB/itm5migr
- 3. Create one or more new situations by using the R/3 System Log attribute group that contains the prefix, SA5_SLOG. This prefix is a sign to OTEA to generate version 5.1 Syslog Adapter-like events.
- 4. You use a predefined syslog situation such as SAP_Syslog_Crit or SAP_Syslog_Warn as a model, and modify the situation formula as needed to specify the syslog entries that are sent to the event console.

The Tivoli Enterprise Console event mapping for the version 6.2 predefined Syslog situations remains unchanged. Turn on only one type of Syslog monitoring situation (SA5_SLOG or predefined) to avoid getting duplicate events for the same Syslog message mapped differently in the Tivoli Enterprise Console.

Event classes for Syslog events

The Syslog event adapter events that the version 6.2 monitoring agent produces are uniquely named for each Syslog message ID.

The events are generated by prepending the Syslog message ID with SAP_SYSLOG. The version 6.2 monitoring agent provides an xml mapping file, ksa_SLOG_620.map, that contains a list of SAP Syslog message IDs used to generate Syslog Tivoli Enterprise Console events. Syslog message IDs that are not recognized by the mapping file create default SAP_SYSLOG_MSG events.

The ksa_SLOG_620.map file is located in the following directory: \$CANDLE_HOME/cms/TECLIB.

Adding Syslog event classes

You can add Syslog event classes to the event server.

About this task

Perform the following steps to define additional syslog event classes:

Procedure

- 1. Save a copy of the original ksa_SLOG_620.map file.
- 2. Edit the ksa_SyslogMsgNumList valueList in the ksa_SLOG_620.map file. Add a valueItem for your new message ID.
- 3. Add the new event classes to your event server using the tecad_wr3slog.baroc file as a model. MTE classes not recognized by the mapping file create default SAP_SYSLOG_MSG events. You may edit the ksa_SLOG_620.map file; but may not edit the ksa.map file.

Example for Syslog events

The following table shows the set of event slots in the version 5.1 syslog event class in the left column. Version 6.2 slot value column indicates whether each slot is mapped in version 6.2 Syslog Adapter events.

When a slot is mapped, the attribute from which it gets its value is listed.

Table 19. IBM Tivoli Monitoring V5.1 Syslog event slots mapped to IBM Tivoli Monitoring V6.2 Syslog Adapter event slots

Version 5.1 slot	Version 6.2 slot value
msg	R3_System_Log.Message_Text
r3syslogMsgNumber	R3_System_Log.Message_Number
r3syslogDate	R3_System_Log.Entry_Time

Table 19. IBM Tivoli Monitoring V5.1 Syslog event slots mapped to IBM Tivoli Monitoring V6.2 Syslog Adapter event slots (continued)

Version 5.1 slot	Version 6.2 slot value
r3syslogTime	R3_System_Log.Entry_Time
r3syslogInstanceName	R3_System_Log.Instance_Name
r3syslogTask	R3_System_Log.Task_Type
r3syslogClient	R3_System_Log.Client
r3syslogUser	R3_System_Log.User
r3syslogTxCode	R3_System_Log.Transaction_Code
r3syslogMsgText	R3_System_Log.Message_Text

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Chapter 9. Commands for utilities

IBM Tivoli Monitoring commands are run from the command line. This appendix describes the commands for the SAP agent utilities.

Input strings to these utilities are provided by the Tivoli Enterprise Portal in UTF-8.

For installation, configuration, and administrative commands, see the *IBM Tivoli Monitoring Command Reference*. For situation commands, see the *IBM Tivoli Monitoring User's Guide*.

Note: If you are observing the same reporting in the portal user interface as you are at the command line, you might encounter some minor variance in the values.

The following information is provided for each command:

Description

Purpose of the command.

CLI syntax

Syntax for the command that you enter on the command line. A list of the parameters for the command and a definition of each parameter follow the command name.

CLI example

The example for the command contains a brief description of the example and an example of the syntax.

Return values

Information that the command returns.

Related commands

Name and cross-reference to any other related commands.

ksanfy

Description

Use the **ksanfy** command to run the ksar3nfy program. By using **ksanfy**, you can set or override environment variables needed by the **ksar3nfy** program.

Note: The command is called ksanfy.exe on Windows systems and ksanfy on UNIX systems.

CLI syntax

ksanfy " [{A | ACTION}{{D | DIALOG} | {F | FUNCTION} | {P | PROGRAM} | {R | REPORT} | {T | TRANSACTION})] [{C | CHANGEABLE}({Y | YES} | {N | NO})] [{E | EXPRESS}({Y | YES} | {N | NO})] [{M | MESSAGE}(message)] [{M | MESSAGE}(message)] [{N | NAME}(mail_name)] [{O | OBJECT}(object_name)] [{O | OBJECT}(object_name)] [{P | PRIORITY}(priority)] [{R | RECIPIENT}(recipient_id)] [{S | SENSITIVITY}{F | FUNCTIONAL} | {P | PRIVATE} | {S | STANDARD})] [{T | TITLE}(mail_title)] [{U | USERTYPE}{(O | OFFICE} | {P | PRIVATE} | {S | SHARED} | {U | USERID}]] "

Note: The command parameter syntax for **ksanfy** is the same as for **ksar3nfy**. See the command syntax for **ksar3nfy** for a full description of the parameters.

CLI example

To send a mail item to a standard mySAP user PERFADMIN with the message "Transaction Performance Poor", attach the transaction ST03 to the mail as follows:

ksanfy "Recipient(PERFADMIN) Message(Transaction Performance Poor) Object(ST03)"

Return values

The ksanfy program returns the RFC return code from the ksar3nfy program.

Related commands

See "ksar3nfy" on page 444.

ksar3nfy

Description

Use the **ksar3nfy** command to send SAP Office email to mySAP users.

Note: The command is called ksar3nfy.exe on Windows systems and ksar3nfy on UNIX systems.

CLI syntax

ksar3nfy "[{A | ACTION}({D | DIALOG} | {F | FUNCTION} |

{P | PROGRAM} | {R | REPORT} | {T | TRANSACTION})]

- [{C | CHANGEABLE}({Y | YES} | {N | NO})]
- [{E | EXPRESS}({Y | YES} | {N | NO})]
- [{M | MESSAGE}(message)]
- [{N | NAME}(mail_name)]
- [{O | OBJECT}(object_name)]
- [{P | PRIORITY}(priority)]
- [{R | RECIPIENT}(recipient_id)]
- [{S | SENSITIVITY}({F | FUNCTIONAL} | {P | PRIVATE} |
- {S | STANDARD})]
- [{T | TITLE}(mail_title)]
- [{U | USERTYPE}({O | OFFICE} | {P | PRIVATE} | {S | SHARED} |

{U | USERID})] "

Note:

1. All keywords are case insensitive. All keywords can be abbreviated to any number of characters.

- 2. The parameter string must be enclosed in double quotation marks.
- 3. Parameters can be separated with spaces or commas, or have no separation at all.
- 4. All recognized keywords and values are validated within mySAP. All unrecognized and irrelevant keywords are ignored.

where:

A | ACTION

Attaches an executable action of one of the following types to the mail item:

- DIALOG: Dialog module
- FUNCTION: Function module
- PROGRAM: Program
- REPORT: Report
- TRANSACTION: Transaction

If ACTION is specified, OBJECT must also be specified. If OBJECT is specified, the default ACTION is TRANSACTION. If OBJECT is not specified, the default ACTION is no action.

C | CHANGEABLE

Specifies YES to allow the recipients to change the mail before forwarding it. Specify NO to prevent the recipient from changing the mail. The default is YES.

E | EXPRESS

Specifies YES to use SAPOffice express mail. Specify NO to use standard SAPOffice mail. The default is NO.

M | MESSAGE

Sends the message message in the body of the mail item. The message can be a simple string up to

255 characters in length or the name of a file containing the mail message. Each line of the file can contain up to 255 characters. The default is "Mail from IBMMON".

N | NAME

Uses the name, **mail_name**, for the mail item. The **mail_name** can be 12 characters in length. The default is "IBMMON MAIL".

O | OBJECT

Name of the executable object is **object_name**. The **object_name** is the name of a dialog module, the name of a function module,

the name of a report (program), or the name of a transaction. The default is no action name.

P | PRIORITY

Sends the mail with a priority of **priority**. The **priority** can be any number from 0 through 9. The default is 9.

R | RECIPIENT

Sends the mail to recipients recipient_id. The recipient_id can specify one of the following:

- Standard SAP user ID
- SAPOffice user
- SAPOffice shared distribution list
- SAPOffice private distribution list
- Name of a file containing a list of any of the previous four recipients

If a file is specified, each line of the file is a separate recipient definition. The first word of each line can define a standard SAP user ID, SAPOffice user, or SAPOffice private distribution list.

The second optional word defines the type of recipient. The third optional word specifies whether to use SAPOffice Express mail. (See the descriptions for USERTYPE and EXPRESS

for possible values for the second and third words). The default recipient is the standard SAP user ID that the **ksar3nfy** uses to log on to the mySAP system.

S | SENSITIVITY

Specifies the sensitivity of the mail. Sensitivity can be FUNCTIONAL, PRIVATE, or STANDARD. The default is STANDARD

T | TITLE

Uses the title **mail_title** for the mail item. **mail_title** can be up to 50 characters in length. The default is the first line of the mail message

if message is specified, or "Mail from IBMMON" if no message is specified.

U | USERTYPE

Specifies the USERTYPE as one of the following options:

- OFFICE: SAPOffice user
- PRIVATE: SAPOffice private distribution list
- SHARED: SAPOffice shared distribution list
- USERID: Standard mySAP user ID

The default is USERID.

CLI example

To send a mail item to a standard mySAP user PERFADMIN with the message "Transaction Performance Poor", attach the transaction ST03 to the mail as follows:

ksar3nfy "Recipient(PERFADMIN) Message(Transaction Performance Poor) Object(ST03)"

-or-

ksar3nfy "R(DISTLIST) M(mail.txt) E(Y) C(Y)"

To send an express mail item to an SAPOffice shared distribution list of DISTLIST, the mail message is in file MAIL.TXT, and the mail is changeable by the recipients:

ksar3nfy "Recipient(DISTLIST) Message(mail.txt) Express(Yes) Changeable(Yes)"

-or-

ksar3nfy "R(DISTLIST) M(mail.txt) E(Y) C(Y)"

Return values

The ksar3nfy program returns the RFC return code.

Related commands

See "ksanfy" on page 443.

ksar3

Description

Use the **ksar3** command to run the ksar3exe program. By using **ksar3**, you can set or override environment variables required by the ksar3exe program.

Note: The command is called ksar3.bat on Windows systems and ksar3 on UNIX systems.

CLI syntax

ksar3 " [{A | ABAP}(abap_name)] [{C | CHANGE}(name=value,...)] [{D | DESTINATION}(destination_name)] [{E | EXPORT}(name=value,...)] [{F | FUNCTION}(function_module_name)] [{I | IMPORT}(name=value,...)] [{J | JOB}(job_name, job_number)] [{R | REPORT}(file_name)] [{R | REPORT}(file_name)] [{S | SAPGUI}({Y | YES} | {N | NO})] [{T | TRANSACTION}(transaction_name)] [{V | VARIANT}(variant_name | name-op-value,...)] [{W | WAIT}({Y | YES} | {N | NO})] [{Z | ZTABLES}(name=value,...)] "

Note: The command parameter syntax for **ksar3** is the same as for **ksar3exe**. See the command syntax for **ksar3exe** for a full description of the parameters.

CLI example

The following command runs an ABAP named MYABAP:

```
ksar3 "ABAP(MYABAP)"
```

More examples:

```
ksar3 "FUNCTION(RFC_PING_AND_WAIT) EXPORT(SECONDS=60) WAIT(Yes)"
ksar3 "F(BAPI_TRANSACTION_COMMIT),Z(RETURN=x),WAIT(Yes),REPORT(bapi_call_results.txt)"
ksar3 "F(BAPI_CASE_READLOG),E(GUID=entertheasenumberhere,START_DATE=20060601,
END_DATE=20060824,MAX_ENTRIES=50),Z(RETURN=x),WAIT(Yes),REPORT(bapi_call_results.txt)"
ksar3 "F(BAPI_USER_LOCK),E(USERNAME=userid),Z(RETURN=x),WAIT(Yes),REPORT(bapi_call_results.txt)"
ksar3 "F(BAPI_USER_UNLOCK),E(USERNAME=userid),Z(RETURN=x),WAIT(Yes),REPORT(bapi_call_results.txt)"
ksar3 "F(BAPI_USER_DELETE),E(USERNAME=userid),Z(RETURN=x),WAIT(Yes),REPORT(bapi_call_results.txt)"
ksar3 "F(BAPI_USER_DELETE),E(USERNAME=userid),Z(RETURN=x),WAIT(Yes),REPORT(bapi_call_results.txt)"
ksar3 "F(BAPI_USER_DELETE),E(USERNAME=userid),Z(RETURN=x),WAIT(Yes),REPORT(bapi_call_results.txt)"
ksar3 "F(BAPI_USER_DELETE),E(USERNAME=userid),Z(RETURN=x),WAIT(Yes),REPORT(bapi_call_results.txt)"
```

Return values

The ksar3 program returns the RFC return code from the program

Related commands

See "ksar3exe" on page 447.

ksar3exe

Description

Use the **ksar3exe** command to run a function inside a mySAP system.

Note: The command is called ksar3exe.exe on Windows systems and ksar3exe on UNIX systems.

CLI syntax

```
ksar3exe " [{A | ABAP}(abap_name)]
[{C | CHANGE}(name=value,...)]
[{D | DESTINATION}(destination_name)]
[{E | EXPORT}(name=value,...)]
[{F | FUNCTION}(function_module_name)]
[{I | IMPORT}(name=value,...)]
[{J ] JOB}(job_name, job_number)]
[{R | REPORT}(file_name)]
[{S | SAPGUI}{{F | YES} | {N | NO}]]
[{T | TRANSACTION}(transaction_name)]
[{V | VARIANT}(variant_name | name-op-value,...)]
[{W | WAIT}{{Y | YES} | {N | NO}]]
[{Z | ZTABLES}(name=value,...)]
```

Note:

- 1. All keywords are case insensitive. All keywords can be abbreviated to any number of characters.
- 2. The parameter string must be enclosed in double quotation marks.
- 3. Parameters can be separated with spaces or commas, or have no separation at all.
- 4. All recognized keywords and values are validated within mySAP. All unrecognized and irrelevant keywords are ignored.

where:

A | ABAP

Runs ABAP named *abap_name*. The default is not available.

C | CHANGE

Same as EXPORT, except these parameters are used by the function module and modified values are returned by the function module. As with EXPORT, the type of variable is automatically set by

ksar3exe. If WAIT(YES) and REPORT(file_name) are specified, the original and modified values returned by the function module are printed in *file_name*.

D | **DESTINATION**

Runs it on instance *destination_name* if the requested Job or Function must run on a specific instance *destination_name*. The default is not available.

E | EXPORT

Exports the parameters by specifying them here, if the requested action is a function module that requires import parameters.

name

Parameter name expected by the function module

value

Value for the parameter

Separates multiple name and value combinations with a comma.

The type of the parameter (character, integer, hex, and so on) is automatically handled by **ksar3exe**. For example, function module MYTEST expects to import a character parameter named CHARS and an integer parameter named NUMBER. Specify EXPORT (CHARS=charvalue, NUMBER=nu mvalue). charvalue is automatically typed to character. numvalue is automatically typed to integer.

F | FUNCTION

Runs function module *function_module_name*. The default is not available.

I | IMPORT

Same as EXPORT, except these parameters are returned by the function module. As with EXPORT, the type of variable is automatically set by **ksar3exe**. If WAIT(YES) and REPORT(*file_name*) are specified, the values returned by the function module are printed in *file_name*.

J | JOB

Runs a job named *job_name*. Optionally, the *job_number* job number can be specified if multiple different jobs with the same name exist. The specified job must be in SCHEDULED or RELEASED status in mySAP. **ksar3exe** makes a copy of the job and runs it immediately. The original job is left unchanged and can be used again. The default is not available.

R | REPORT

Specifies the *file_name* if the report output from the requested action is required in a file. Use STDOUT if the report must be sent to standard out. If the requested action was a job, the job log and all spooled output is written to *file_name*. Defaults to STDOUT unless a transaction is requested, in which case the default is not available.

S | SAPGUI

Specifies YES (or Y) if the requested action displays an SAPGUI. If no screen is to be displayed, specify NO (or N). Defaults is NO unless a transaction is requested, in which case the default is YES.

T | TRANSACTION

Runs *transaction_name* transaction. The Tivoli Enterprise Portal passes this parameter to **ksar3exe** when you request a particular mySAP transaction from the Tivoli Enterprise Portal. The default is not available. The use of this option is limited to those transactions that do not display a DYNPRO GUI.

V | VARIANT

Uses *variant_name* if the requested ABAP requires a variant and an appropriate variant is already defined in the mySAP system. The default is not available.

If the requested ABAP requires a variant and an appropriate variant is not defined in the mySAP system, the parameters required by the ABAP can be specified individually as follows:

name

PARAMETER or SELECT-OPTIONS name expected by the ABAP

value

Value for the PARAMETER or SELECT-OPTIONS

ор

Operator connecting the name and the value. Any of the following operators are accepted:

- ^= Not equal
- <> Not equal
- <= Less than or equal
- =< Less than or equal
- ^> Less than or equal, not greater than
- < Less than</p>
- >= Greater than or equal
- => Greater than or equal
- ^< Greater than or equal, not less than
- > Greater than
- ~ Contains pattern
- ^~ Does not contain pattern

Separate multiple combinations of *name-op-value* with a comma.

The type of the PARAMETER or SELECT-OPTIONS (character, integer, hex, and so on) is automatically handled by **ksar3exe**.

To specify ranges for SELECT-OPTIONS, specify the lower limit, followed by the upper limit. For example, to specify a range of 1 through 9 to an ABAP that contains a SELECT-OPTIONS named NUMBERS, specify the variant as follows:

variant(numbers>=1,numbers<=9)</pre>

W | WAIT

Specifies YES (or Y) if **ksar3exe** must wait for the requested action to complete, specify NO (or N) if **ksar3exe** must not wait. Defaults to YES unless a transaction is requested, in which case, the default is NO.

Z | ZTABLES

Same as EXPORT, except these tables are returned by the function module. If WAIT(YES) and REPORT(*file_name*) are specified, the table row values returned by the function module are printed in *file_name*.

CLI example

The following command runs an ABAP named MYABAP: ksar3exe "ABAP(MYABAP)"

The following command runs an ABAP named MYABAP with a variant name PRODRUN that is already saved in the mySAP system: **ksar3exe** "A(MYABAP) VARIANT(PRODRUN)"

The following command runs the ST02 transaction: ksar3exe "Transaction(ST02)"

More examples:

```
ksar3exe"ABAP(RSTRFCQ3) VARIANT(QNAME=%QNAME%,DEST=%QDEST%) Wait(Yes)"
ksar3exe"ABAP(RSTRFCQ3) VARIANT(QNAME=$QNAME,DEST=$QDEST,FORCE=,NO_ACT=)
Wait(Yes)"
ksar3exe"FUNCTION(GWY_READ_CONNECTIONS) EXPORT(GWHOST=,GWSERV=,DISCONNECT=0)
WAIT(Yes) REPORT(test.txt)"
ksar3exe "FUNCTION(RFC_PING_AND_WAIT) EXPORT(SECONDS=60) WAIT(Yes)"
```

Return values

The ksar3exe program returns the RFC return code.

Related commands

See "ksar3" on page 446.

ksapwd

Description

Uses the **ksapwd** command to run the **ksar3pwd** program. By using **ksapwd**, you can set or override environment variables needed by the **ksar3pwd** program.

Note: The command is called ksapwd.bat on Windows systems and ksapwd on UNIX systems.

CLI syntax

```
ksapwd" [{O | OUTPUT}(filename | STDOUT)]
{P | PASSWORD}(password) "
```

Note: The command parameter syntax for **ksapwd** is the same as for **ksar3pwd**. See the command syntax for **ksar3pwd** for a full description of the parameters.

CLI example

To cause the password "tivoli" to be encrypted and written to the default file named ksa.pwd in the current directory, enter the following command:

```
ksapwd "PASSWORD(tivoli)"
```

Return values

The ksapwd program returns the following values:

0 – success 16 – error

Related commands

See "ksar3pwd" on page 450.

ksar3pwd

Description

Use the ksar3pwd command to encrypt a password for use with a mySAP user ID.

Note: The command is called ksar3pwd.exe on Windows systems and ksar3pwd on UNIX systems.

CLI syntax

```
ksar3pwd " [{0 | OUTPUT}(filename | STDOUT)]
{P | PASSWORD}(password) "
```

Note:

- 1. All keywords except STDOUT are case insensitive. All keywords except STDOUT can be abbreviated to any number of characters.
- 2. The parameter string must be enclosed in double quotation marks.
- 3. Parameters can be separated with spaces, commas, or have no separation at all.

where:

O | OUTPUT

Entered as *filename* the name of the file into which the encrypted password is written. Enter a simple file name to have the file created in the current directory. Enter a full path and file name to have the file created in a directory other than the current directory.

Enter STDOUT to have the encrypted password written to standard output instead of being written to a file.

The default value is a file name of ksa.pwd in the current directory.

P | PASSWORD

Entered as password, the password string to be encrypted.

CLI example

To cause the password "tivoli" to be encrypted and written to the default file named ksa.pwd in the current directory, enter:

ksar3pwd "PASSWORD(tivoli)"

To cause the password "other" to be encrypted and written to a file named pwd.txt in the /home directory, enter:

```
ksar3pwd "P(other) 0 (/home/pwd.txt)"
```

To cause the password "newpw" to be encrypted and displayed on your computer screen, enter:

```
ksar3pwd "PASSWORD(newpw) OUTPUT(STDOUT)"
```

Return values

The ksar3pwd program returns the following values:

0: success 16: error

Related commands

See "ksapwd" on page 450.

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Chapter 10. Discovery Library Adapter for the SAP agent

The Tivoli Management Services Discovery Library Adapter (DLA) discovers resources and relationships, and creates a Discovery Library Book file for the agent.

About the DLA

The Book file follows the Discovery Library IdML schema and is used to populate the Configuration Management Database (CMDB) and Tivoli Business Service Manager products. The Tivoli Management Services DLA discovers SAP resources. For all SAP agent instances that are active and online at the Tivoli Enterprise Portal Server, information is included in the discovery book for those resources. The Tivoli Management Services DLA discovers active resources. It is run on demand and can be run periodically to discover resources that were not active during previous discoveries.

The DLA discovers SAP components, for example, MySAPABAPApplicationServer, MySAPDb2Instance, SAPSystem, FunctionalGroup, and MySAPCluster.

More information about DLAs

The following sources contain additional information about using the DLA program with all monitoring agents:

- The *IBM Tivoli Monitoring Administrator's Guide* contains information about using the Tivoli Management Services Discovery Library Adapter.
- For information about using a DLA with Tivoli Application Dependency Discovery Manager (TADDM), see the <u>TADDM Information Center</u> (http://publib.boulder.ibm.com/infocenter/tivihelp/v10r1/topic/com.ibm.taddm.doc_7.2/welcome_page/welcome.html).

DLA data model class types represented in CDM

The source application data objects map to classes in the Common Data Model (CDM) for the SAP agent.

The following information is provided for each class:

CDM class name

Class name for which the agent is providing information

Superior CDM class

CDM class (model object)

Relationships

CDM relationships (hierarchical) between currently identified model objects

CDM attributes, agent attributes, descriptions, and examples

CDM and agent attributes that are required to create an instance of a resource, descriptions of the attributes, and examples of the attributes

DLA data model classes for the SAP agent

CDM class name

app.packagedapp.mysap.basis.MySAPABAPApplicationServer class

Class Descripton

This class represents the detailed information about the SAP server.

CDM naming policy

- (Y) Name
- (Y) ProductName

- (N) KeyName
- (Y) Label
- (Y) SAPSystemSID
- (Y) SystemHome
- Y) BasisAppSystemNumber
- (Y) MySAPKernelRelease
- (N) Description
- (N) ProductVersion

Relationships

uses(app/packagedapp/mysap/basis/MySAPABAPApplicationServer, app/packagedapp/mysap/SAPSystem)

CDM attributes, agent attributes, descriptions, and examples

• CDM attribute: Name

Agent attribute: KSA.KSASYS.SID:KSA.KSASYS.HOSTNAME: KSA.KSASYS.SYSNR Example: SMR:wfdmdibmsrv:00

CDM attribute: ProductName

Agent attribute: KSA.KSASYS.SID. KSA.KSASYS.SYSNR.KSA.KSASYS.HOSTNAME Example: SMR.00.wfdmdibmsrv

CDM attribute: KeyName

Agent attribute: KSA.KSASYS.SID. KSA.KSASYS.SYSNR.KSA.KSASYS.HOSTNAME Example: SMR.00.wfdmdibmsrv

• CDM attribute: Label

Agent attribute: KSA.KSASYS.SID:KSA.KSASYS.HOSTNAME: KSA.KSASYS.SYSNR Example: SMR:wfdmdibmsrv:00

SAPSystemSID

Agent attribute: KSA.KSASYS.SID Example: SMR

SystemHome

Agent attribute: KSA.KSASYS.HOSTNAME Example: wfdmdibmsrv

BasisAppSystemNumber

Agent attribute: KSA.KSASYS.SYSNR Example: 00

MySAPKernelRelease

Agent attribute: KSA.KSASYS. SAP_KERNEL_RELEASE Example: 700

Description

Agent attribute: KSA.KSASYS.DESCRIPT Example: Domain SMR

ProductVersion

Agent attribute: KSA.KSASYS. SAP_KERNEL_RELEASE Example: 700

CDM class name

app.packagedapp.mysap.db.MySAPDb2Instance

Class description

This class represents the detailed information about the MySAP db2 instance.

CDM naming policy

(Y) Name

- (N) SAPSystemSID
- (Y) SystemHome

Relationships

uses(app/packagedapp/mysap/SAPSystem, app.packageapp/mysap/MySAPDb2instance)

CDM attributes, agent attributes, descriptions, and examples

CDM attribute: Name:

Agent attribute: KSA.KSASYS.SID:KSA.KSASYS.DBHOST Example: SMR:WFDMDIBMSRV

CDM attribute: SAPSystemSID

Agent attribute: KSA.KSASYS.SID Example: SMR

CDM attribute: SystemHome

Agent attribute: KSA.KSASYS.HOSTNAME Example: wfdmdibmsrv

CDM attribute: SID

Agent attribute: KSA.KSASYS. SAP_KERNEL_RELEASE Example: 700

CDM class name

app/packagedapp/mysap/SAPSystem

Class description

This class represents the SAP systems details.

CDM naming policy

- (Y) Name
- (Y) Label
- (Y) SAPSystemSID
- (Y) AppVersion
- (Y) BasisVersion
- (Y) SystemHome

Relationships

uses(app/packagedapp/mysap/basis/MySAPABAPApplicationServer, app/packagedapp/mysap/ SAPSystem)

CDM attributes, agent attributes, descriptions, and examples

CDM attribute: Name

Agent attribute: KSA.KSASYS.SID:KSA.KSASYS.HOSTNAME Example: SMR:wfdmdibmsrv

CDM attribute: Label

Agent attribute: KSA.KSASYS.SID:KSA.KSASYS.HOSTNAME Example: SMR:wfdmdibmsrv

CDM attribute: SAPSystemSID

Agent attribute:KSA.KSASYS.SID Example: SMR CDM attribute: AppVersion

Agent attribute: KSA.KSASYS. SAP_KERNEL_RELEASE Example: 700

CDM attribute: BasisVersion

Agent attribute: KSA.KSASYS. SAP_KERNEL_RELEASE Example: SMR

CDM attribute: SystemHome

Agent attribute: KSA.KSASYS.SID Example: wfdmdibmsrv

CDM attribute: Description

Agent attribute: KSA.DESCRIPT Example: Domain SMR

CDM class name

app/FunctionalGroup

Relationships

memberOf(app/packagedapp/mysap/basis/MySAPABAPApplicationServer, app.FunctionalGroup)

CDM attributes, agent attributes, descriptions, and examples

• CDM attribute: GroupName

Agent attribute: ABAP Tier Example: ABAP Tier

CDM attribute: Description

Agent attribute: ABAP Tier Example: ABAP Tier

CDM class name

app.packagedapp.mysap.basis.MySAPCluster

Relationships

deployedTo(app/packagedapp/mysap/basis/MySAPJ2EEEngineInstance , app/packagedapp/mysap/basis/MySAPCluster)

CDM attributes, agent attributes, descriptions, and examples

• CDM attribute: Label

Agent attribute: KSA.KSASYS.SID:KSA.KSASYS.HOSTNAME Example: SMR:wfdmdibmsrv

CDM attribute: SAPSystemSID

Agent attribute: KSA.KSASYS.SID Example: SMR

• CDM attribute: SystemHome

Agent attribute: KSA.KSASYS.HOSTNAME Example: wfdmdibmsrv

CDM class name

app.packagedapp.mysap.basis.MySAPABAPApplicationServer class

Class Descripton

This class represents the detailed information about the SAP server.

CDM naming policy

(Y) Name

- (Y) ProductName
- (N) KeyName
- (Y) Label
- (Y) SAPSystemSID
- (Y) SystemHome
- (Y) BasisAppSystemNumber
- (N) ProductVersion

Relationships

uses(app/packagedapp/mysap/basis/MySAPABAPApplicationServer, app/packagedapp/mysap/SAPSystem)

CDM attributes, agent attributes, descriptions, and examples

CDM attribute: Name

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME:KSA.KSALDSSYSO.HOSTNAME:KSA. KSALDSSYSO.SYSNR Example: ECC:ps4909:00

• CDM attribute: ProductName

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME:KSA.KSALDSSYSO.SYSNR:KSA. KSALDSSYSO.HOSTNAME Example: ECC:00:ps4909

• CDM attribute: KeyName

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME:KSA.KSALDSSYSO.SYSNR:KSA. KSALDSSYSO.HOSTNAME Example: ECC.00.ps4909

• CDM attribute: Label

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME:KSA.KSALDSSYSO.HOSTNAME: KSA.KSALDSSYSO.SYSNR Example: ECC:ps4909:00

SAPSystemSID

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME Example: ECC

SystemHome

Agent attribute: KSA.KSALDSSYSO.HOSTNAME Example: ps4909

BasisAppSystemNumber

Agent attribute: KSA.KSALDSSYSO.SYSNR Example: 00

ProductVersion

Agent attribute: KSA.KSALDSSYSO.PRODVERS Example: SAP ERP 6.0

CDM class name

app.packaged app.mysap.db.MySAPDb2Instance

Class Descripton

This class represents the detailed information about the MySAP db2 instance.

CDM naming policy

(Y) Name

- (N) SAPSystemSID
- (Y) SystemHome
- (Y) SID
- (Y) TYPE
- (Y) ProductVersion

Relationships

uses(app/packagedapp/mysap/SAPSystem, app.packageapp/mysap/ MySAPDb2instance)

CDM attributes, agent attributes, descriptions, and examples

CDM attribute: Name

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME:KSA.KSALDSSYSO.HOSTNAME Example: ECC:ps4909

SAPSystemSID

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME Example: ECC

• CDM attribute: SystemHome

Agent attribute: KSA.KSALDSSYSO.HOSTNAME Example: PS4909

CDM attribute: SAPSystemSID

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME Example: ECC

CDM attribute: Type

Agent attribute: KSA.KSALDSSYSO.DBTYPE Example: SQL SERVER

CDM attribute: ProductVersion

Agent attribute: KSA.KSALDSSYSO.DBRELEASE Example: 9.00.2050

CDM class name

app/packagedapp/mysap/SAPSystem

Class Descripton

This class represents the SAP systems details.

CDM naming policy

- (Y) Name
- (Y) Label
- (Y) SAPSystemSID
- (Y) SystemHome

Relationships

uses(app/packagedapp/mysap/basis/MySAPABAPApplicationServer, app/packagedapp/mysap/SAPSystem)

CDM attributes, agent attributes, descriptions, and examples

• CDM attribute: Name

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME:KSA.KSALDSSYSO.HOSTNAME Example: ECC:ps4909

• CDM attribute: Label

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME Example: ECC • CDM attribute: SystemHome

Agent attribute: KSA.KSALDSSYSO.HOSTNAME Example: PS4909

CDM class name

app/FunctionalGroup

Relationships

memberOf(app/packagedapp/mysap/basis/MySAPABAPApplicationServer, app.FunctionalGroup)

CDM attributes, agent attributes, descriptions, and examples

• CDM attribute: GroupName

Agent attribute: ABAP Tier Example: ABAP Tier

• CDM attribute: Description

Agent attribute: ABAP Tier Example: ABAP Tier

CDM attribute:Label

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME Example: ECC

CDM attribute:Name

Agent attribute: KSA.KSALDSSYSO. SYSTEMNAME Example: ECC

CDM class name

app.packagedapp.mysap.basis.MySAPCluster

Relationships

deployedTo(app/packagedapp/mysap/basis/MySAPJ2EEEngineInstance, app/packagedapp/mysap/basis/MySAPCluster)

CDM attributes, agent attributes, descriptions, and examples

• CDM attribute: Label

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME:KSA.KSALDSSYSO.HOSTNAME Example: ECC:ps4909

CDM attribute: SAPSystemSID

Agent attribute: KSA.KSALDSSYSO.SYSTEMNAME Example: ECC

CDM attribute: SystemHome

Agent attribute: KSA.KSALDSSYSO.HOSTNAME Example: PS4909

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Chapter 11. Integration with Tivoli Business Service Manager

The SAP agent provides data to create, update the status of, and view IBM Tivoli Business Service Manager services.

The Tivoli Management Services Discovery Library Adapter (DLA) and Discovery Library Toolkit provides data for the Tivoli Business Service Manager service models. The Tivoli Integration Facility (EIF) probe updates the status of these services, and you use the Tivoli Enterprise Portal to view the data for the services. To implement the integration of the agent with Tivoli Business Service Manager, perform the integration tasks.

Components for integrating with Tivoli Business Service Manager

The data for integrating with Tivoli Business Service Manager is supplied through the following components: Tivoli Management Services Discovery Library Adapter (DLA) and Discovery Library Toolkit, Tivoli Integration Facility (EIF) probe, and Tivoli Enterprise Portal.

Tivoli Management Services Discovery Library Adapter (DLA) and Discovery Library Toolkit

By using data from the Tivoli Management Services Discovery Library Adapter, you can build Tivoli Business Service Manager service models that include resources monitored by the SAP agent.

The DLA files can be imported directly into Tivoli Business Service Manager by using the Discovery Library Toolkit or they can be loaded into IBM Tivoli Application Dependency Discovery Manager and then fed into Tivoli Business Service Manager using the Discovery Library Toolkit.

See the following sources for more information about the DLA and Discovery Library Toolkit:

- Resources and relationships that are discovered by theSAP agent and included in Tivoli Management Services DLA files: Chapter 10, "Discovery Library Adapter for the SAP agent ," on page 453
- Using the Tivoli Management Services DLA: IBM Tivoli Monitoring Administrator's Guide
- Using the Discovery Library Toolkit: Tivoli Business Service Manager Customization Guide

Tivoli Integration Facility (EIF) probe

Situation events detected by the SAP agent can update the status of services in Tivoli Business Service Manager.

The situation events are forwarded from IBM Tivoli Monitoring to the Netcool/OMNIbus Probe for the Tivoli Event Integration Facility. The EIF probe then forwards the events to the Netcool/OMNIbus ObjectServer. Tivoli Business Service Manager monitors the Netcool/OMNIbus ObjectServer for new events and updates the status of affected services.

See the following sources for more information about event integration:

- Installation (using an existing EIF probe and Netcool/OMNIbus ObjectServer installation or using Tivoli Business Service Manager to install these components): Netcool/OMNIbus Information Center or the *Tivoli Business Service Manager Installation Guide*.
- Setting up event integration between IBM Tivoli Monitoring, the EIF probe, and the Netcool/OMNIbus ObjectServer: *IBM Tivoli Monitoring Installation and Setup Guide*.

Tivoli Enterprise Portal

You can use the integration of the Tivoli Enterprise Portal with Tivoli Business Service Manager to view the services in the Tivoli Business Service Manager console.

For more detailed examination and analysis, you can easily link from the Tivoli Business Service Manager console to the Tivoli Enterprise Portal to view the data within the SAP agent.

Tasks to integrate the agent with Tivoli Business Service Manager

To integrate the SAP agent with Tivoli Business Service Manager, you must install and configure the required components. Then, you can view the data in the Tivoli Enterprise Portal.

To integrate the SAP agent with Tivoli Business Service Manager and view the data, complete the following tasks:

- Install the Discovery Library Toolkit on the Tivoli Business Service Manager server.
- Configure the Tivoli Event Integration Facility (EIF) probe to enrich SAP agent events.
- Create a service in the Tivoli Business Service Manager console that you want to monitor.
- Create a data source mapping for each data source that you want to access within the Tivoli Business Service Manager.
- Configure an additional IBM Tivoli Monitoring web service for each Tivoli Enterprise Portal Server.
- View data in the Tivoli Enterprise Portal for the services that you have created to monitor through Tivoli Business Service Manager.

Installing the Discovery Library Toolkit on the Tivoli Business Service Manager server

You must install the Discovery Library Toolkit on the Tivoli Business Service Manager server.

The Discovery Library Toolkit imports data from the DLA files and the TADDM software, which includes information about the hardware and the applications that are discovered by the source.

See "Installing the Discovery Library Toolkit" in the *Tivoli Business Service Manager Installation Guide*.

Configuring the Tivoli Event Integration Facility (EIF) probe to enrich events

The Netcool/OMNIbus Probe for Tivoli Event Integration Facility (EIF) forwards the SAP agent events that are received from IBM Tivoli Monitoring to the Netcool/OMNIbus ObjectServer. Tivoli Business Service Manager monitors the Netcool/OMNIbus ObjectServer for new events, and updates the status of affected services.

Install and configure the Netcool/OMNIbus ObjectServer and EIF probe and set up event integration between IBM Tivoli Monitoring and Netcool/OMNIbus. The probe rules files provided with IBM Tivoli Monitoring enrich SAP agent events to identify the affected service.

Creating a service in Tivoli Business Service Manager

You must create a service in the Tivoli Business Service Manager console for each service that you want to monitor.

To create the services that you want to monitor in the Tivoli Business Service Manager console, see "Configuring services" in the *IBM Tivoli Business Service Manager Service Configuration Guide*.

Creating a data source mapping for each data source

You can create a data source mapping for each data source that you want to access within Tivoli Business Service Manager.

Also, you can create the data fetchers and use the data to create incoming status rules that are populated in your service templates.

For more information, see "Data sources" and "Data fetchers" in the *IBM Tivoli Business Service Manager Service Configuration Guide*.

Configuring additional IBM Tivoli Monitoring web services

You can configure additional IBM Tivoli Monitoring web services for each Tivoli Enterprise Portal Server.

To configure an additional IBM Tivoli Monitoring web service for each Tivoli Enterprise Portal server, see "Configure TBSM charts" in the *IBM Tivoli Business Service Manager Scenarios Guide*.

Viewing data in the Tivoli Enterprise Portal

From Tivoli Business Service Manager, you can open the Tivoli Enterprise Portal and view the SAP agent.

You can also launch Tivoli Business Service Manager from the Tivoli Enterprise Portal.

For more information about launching applications, see "Launching to and from applications" in the *Tivoli* Business Service Manager Customization Guide.

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Appendix A. ITCAM for Applications documentation library

Various publications are relevant to the use of ITCAM for Applications .

For information about how to access and use the publications, see <u>Using the publications</u> (http://pic.dhe.ibm.com/infocenter/tivihelp/v61r1/topic/com.ibm.itm.doc_6.3/common/using_publications.htm).

To find publications from the previous version of a product, click **Previous versions** under the name of the product in the **Contents** pane.

Documentation for this product is in the ITCAM for Applications Information Center (http:// publib.boulder.ibm.com/infocenter/tivihelp/v24r1/topic/com.ibm.itcama.doc_7.2.1/ welcome_apps721.html):

- Quick Start Guide
- Offering Guide
- Download instructions
- Links to Prerequisites
- Installation and Configuration Guide for each agent
- · Link to Reference information for each agent
- · Link to Troubleshooting Guide for each agent

Prerequisite publications

To use the information about the agents effectively, you must have some prerequisite knowledge.

See the following information at the IBM Tivoli Monitoring Information Center (http://pic.dhe.ibm.com/ infocenter/tivihelp/v61r1/index.jsp) to gain prerequisite knowledge:

- IBM Tivoli Monitoring Administrator's Guide
- IBM Tivoli Monitoring Installation and Setup Guide
- IBM Tivoli Monitoring High Availability Guide for Distributed Systems
- IBM Tivoli Monitoring: Installation and Configuration Guides for the following agents: Operating System agents and Warehouse agents
- IBM Tivoli Monitoring: User's Guides for the following agents: Agentless OS monitors, Log file agent, System p agents, Systems Director base agent
- IBM Tivoli Monitoring Agent Builder User's Guide
- IBM Tivoli Monitoring Command Reference
- IBM Tivoli Monitoring: Messages
- IBM Tivoli Monitoring Troubleshooting Guide
- IBM Tivoli Monitoring: References for the following agents: Operating System agents and Warehouse agents
- IBM Tivoli Monitoring: Troubleshooting Guides for the following agents: Operating System agents and Warehouse agents
- Tivoli Enterprise Portal User's Guide

Related publications

The publications in related information centers provide useful information.

See the following information centers, which you can find by accessing <u>Tivoli Documentation Central</u> (http://www.ibm.com/tivoli/documentation):

- Tivoli Monitoring
- Tivoli Application Dependency Discovery Manager
- Tivoli Business Service Manager
- Tivoli Common Reporting
- Tivoli Enterprise Console
- Tivoli Netcool/OMNIbus

Tivoli Monitoring Community on Service Management Connect

Service Management Connect (SMC) is a repository of technical information that is organized by communities.

Access Service Management Connect at https://www.ibm.com/developerworks/servicemanagement.

For information about Tivoli products, see the <u>Application Performance Management community</u> (http://www.ibm.com/developerworks/servicemanagement/apm/index.html).

Connect, learn, and share with Service Management professionals. Get access to developers and product support technical experts who provide their perspectives and expertise. You can use SMC for these purposes:

- Become involved with transparent development, an ongoing, open engagement between other users and IBM developers of Tivoli products. You can access early designs, sprint demonstrations, product roadmaps, and prerelease code.
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