



Operations Guide | CUSTOMER
SAP Visual Business
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SAP Visual Business 2.1 Operations Guide

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1 Getting Started

⚠ Caution

This guide does not replace the daily operations handbook that we recommend customers create for their specific production operations.

About This Guide

Designing, implementing, and running your SAP applications at peak performance 24 hours a day has never been more vital for your business success than now.

This guide provides a starting point for managing SAP Visual Business and maintaining and running it optimally. It contains specific information for various tasks and lists the tools that you can use to implement them. This guide also provides references to the documentation required for these tasks, as you sometimes also need other documentation such as the Master Guide, Technical Infrastructure Guide, and SAP Library.

i Note

This document covers not only the operation concept for the Visual Business front-end component and the Visual Business back-end component, but also for the Visual Business applications. For information about the operation concepts of the Visual Business integrating applications, see the corresponding Operations Guides.

1.1 Definitions

Visual Business Components

Component	Technical Name	Definition
Visual Business front-end component	VISUALBIZ 2.1	<p>Representation of the user interface element, built in C++ utilizing Microsoft DirectX, which provides a platform for the visual representation of a business application or scenario.</p> <p>This front-end component is embedded as control in SAP GUI or as an ActiveX control in a Web Dynpro UI.</p>

Component	Technical Name	Definition
Visual Business back-end components	Visual_Business_Foundation	A part of the ABAP software component SAP UI2 Foundation (UI2_FND SP04). It represents the part of the interface of the Visual Business back end.
	Visual Business Fnd Impl	A part of the ABAP software component SAP UI2 Impl. For SAP NetWeaver 7.0 (UI2_700 SP04) it represents the UI-independent part of the Visual Business back end, configuration components in Customizing, and the SAP GUI integration.
	Visual Business 702 Impl	A part of the ABAP software component SAP UI2 Impl. For SAP NetWeaver 7.0 EHP2 (UI2_702 SP04) it represents the Web Dynpro ABAP component that enables the embedding of the Visual Business front end component in a Web Dynpro UI.

Note

As all objects of UI Add-On for the SAP NetWeaver releases 7.00 to 7.31, Visual Business back-end components are included in SAP NetWeaver 7.4 as of SP03. They are included in the software component User Interface Technology 7.40 (SAP_UI 740).

Visual Business Definitions


Term	Definition
Visual Business application	An application setup configuring the visual appearance of the component, navigation features, and available maps.
Visual Business integrating application	An SAP application that embeds the Visual Business component.

1.2 Important SAP Notes

Caution

Check regularly for updates available for the Application Operations Guide.

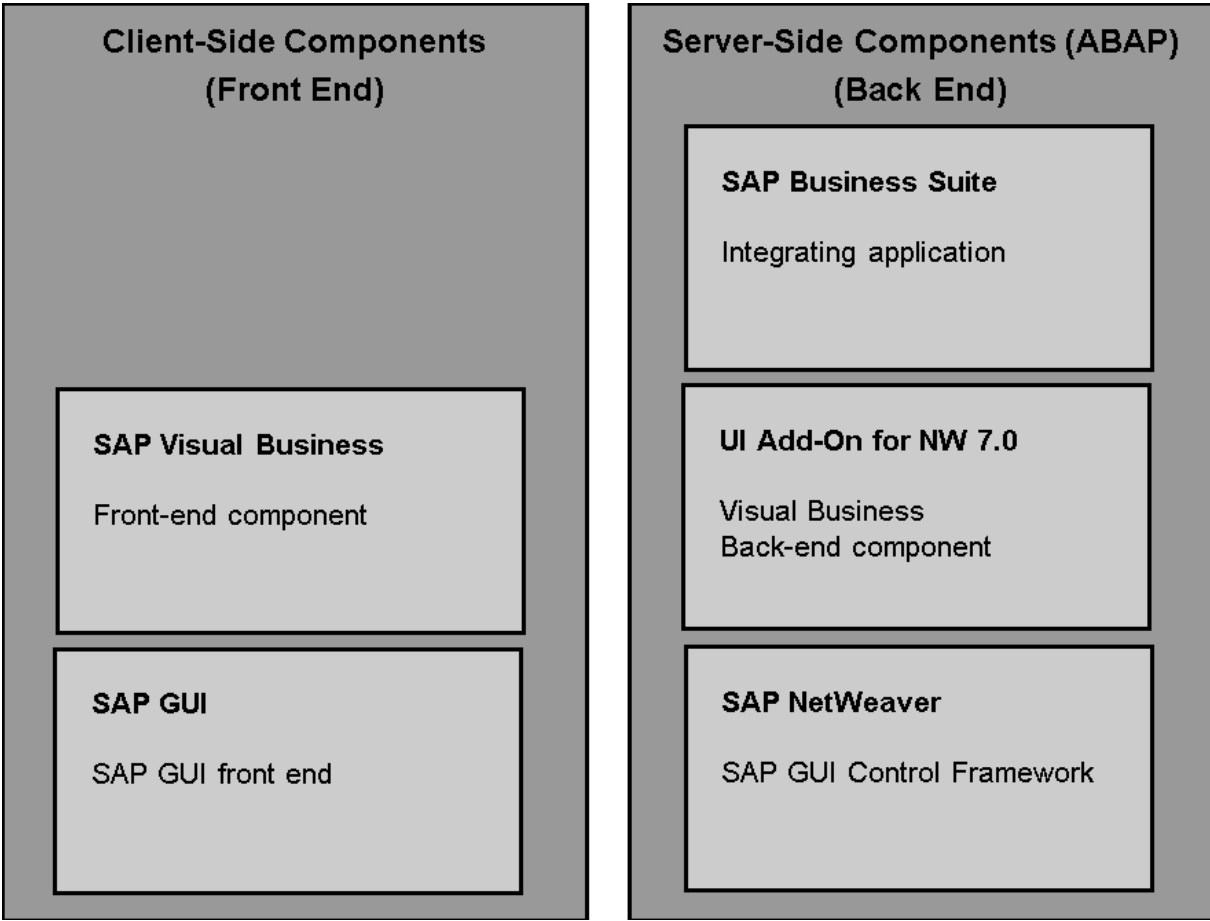
Important SAP Notes

SAP Note Number	Title	Comment
1038811 	BMC AppSight Recording Profile Templates for SAP	If you have any difficulty using the Visual Business integrating application, use the BMC AppSight tool to reproduce the issue with the recording profile provided in this SAP Note.

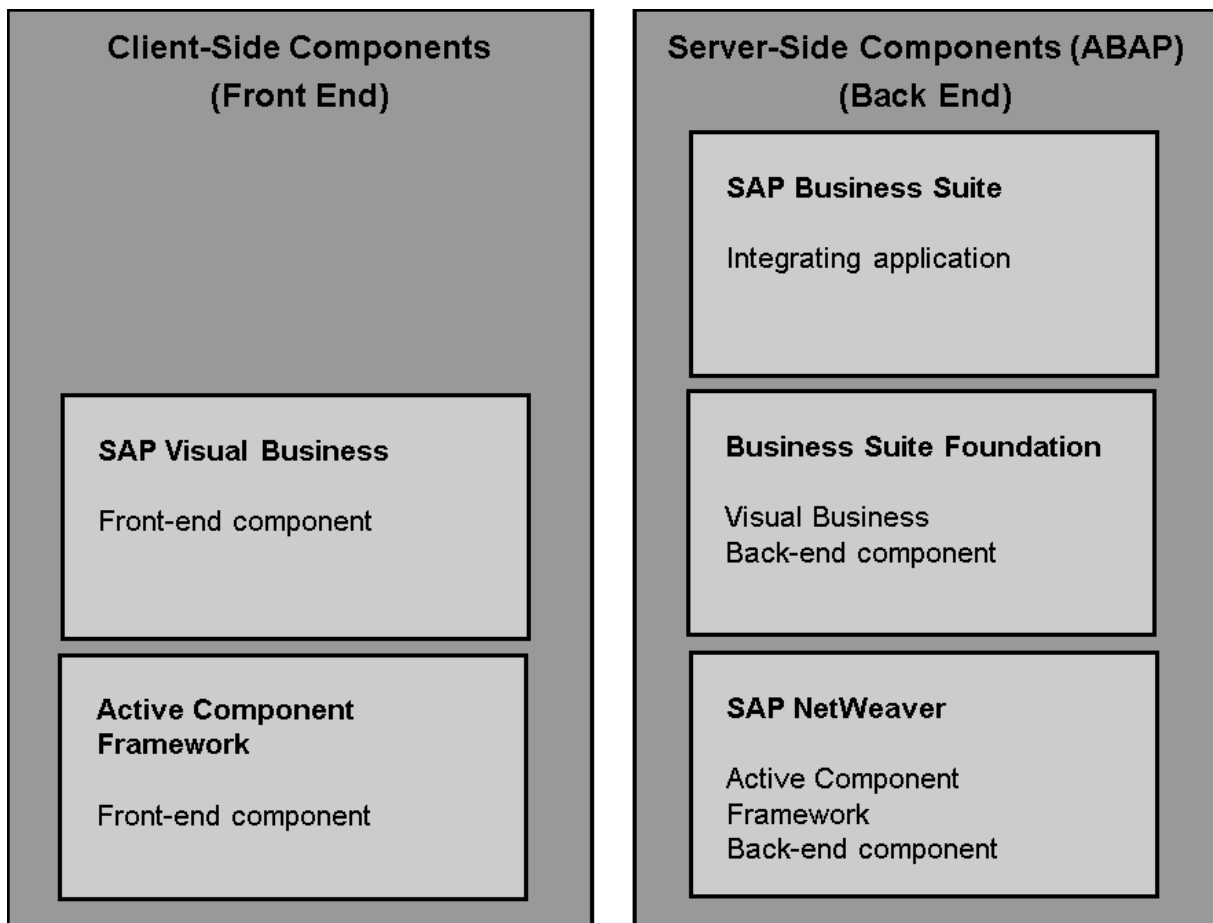
2 Technical System Landscape

2.1 Component Matrix

The following figure shows the system landscape for SAP Visual Business:



Visual Business System Landscape SAP GUI



Visual Business System Landscape Web Dynpro

2.2 Related Documentation

The following table lists where you can find more information about the technical system landscape:

Topic	Guide/Tool	Link on SAP Service Marketplace
Application and technology components	Installation and Configuration Guide	http://service.sap.com/instguides
Security	Security Guide	http://service.sap.com/securityguide
Related SAP Notes		http://service.sap.com/notes

3 Monitoring of SAP Visual Business

Within the management of SAP Technology, monitoring is an essential task. A section has therefore been devoted solely to this subject.

For more information about the underlying technology, see *Technical Operations for SAP NetWeaver* on SAP Help Portal at <http://help.sap.com> ► *SAP NetWeaver* ► *SAP NetWeaver 7.3 including Enhancement Package 1* ► *SAP NetWeaver Library* ► *Administrator's Guide* ►.

3.1 Alert Monitoring

Proactive, automated monitoring is the basis for ensuring reliable operations for your SAP system environment. SAP provides you with the infrastructure and recommendations needed to set up your alert monitoring to recognize critical situations for the Visual Business ABAP component or the Visual Business integrating application as quickly as possible.

i Note

Use the Application event log in the Windows Event Viewer to monitor critical issues in the Visual Business front-end component. For more information, see section [Visual Business Log and Trace Files \[page 11\]](#).

3.1.1 CCMS Monitoring Installation and Setup

The CCMS agent is used for monitoring. It allows information to be collected from the SAP NetWeaver server through a central monitoring server.





The Visual Business ABAP component is based on the Web Application Server (Web AS) and therefore benefits from the complete technical monitoring capabilities of the Web AS.

For more information, see the most recent version of the *Monitoring Setup Guide* on SAP Service Marketplace at <http://service.sap.com/instguides> ► *SAP NetWeaver* ► *SAP NetWeaver 7.3* ► *Operations* ►. In the screen area, click *Monitoring* to display the list of setup guides, and choose the most recent version.

i Note

To enable the auto-alert mechanism of CCMS, see SAP Note [617547](#) ►. There are no alerts specific to the Visual Business component.

3.2 Detailed Monitoring and Tools for Problem and Performance Analysis

Visual Business technology is based on SAP NetWeaver 7.0. For information about technical problem analysis of a database, the operating system, or about a workload analysis, refer to the corresponding guide for SAP NetWeaver 7.0 on SAP Service Marketplace at <http://service.sap.com/instguides>  [SAP NetWeaver](#)  [SAP NetWeaver 7.0](#)  [Operations](#) .

This Operations Guide only covers additional information specific to SAP Visual Business and differences between SAP Visual Business and SAP NetWeaver 7.0.

3.2.1 Automatic Client Diagnostics using BMC AppSight BlackBox

The BMC AppSight BlackBox is the recording agent of BMC AppSight for SAP Client Diagnostics and can be used to record client-side issues for problem resolution at SAP or for analysis on customer side directly if the customer has licensed the SAP Solution Support Enablement Package (SEP).

It allows you to trace and record operations on Windows systems and in Windows applications. For the analysis of the recording BMC AppSight for SAP Client Diagnostics is required, which is a part of the SAP Solution Support Enablement Package (SEP) - an Enhancement Package of SAP Solution Manager 4.0.

Therefore, only download and install the BMC AppSight BlackBox if you have licensed the SAP Solution Support Enablement Package (SEP) or if SAP Support asked you to provide an AppSight Recording for analyzing your client-side problem.

You can download the recording profiles provided by SAP to make a recording from SAP Note [1038811](#) .

You can find instructions on how to make a recording with the BMC AppSight in SAP Note [1034758](#) .

Relevant SAP Notes

Note [1038811](#) : *BMC AppSight Recording Profile Templates for SAP Client Applications*

Note [1034902](#) : *FAQ: "BMC AppSight for SAP Client Diagnostics"*

3.2.2 Problem Detection by End-to-End (E2E) Trace Analysis

SAP provides a tool for End-to-End root cause analysis.

E2E root cause analysis in SAP Solution Manager supports components implemented in ABAP, Java, or C(++), or that run on the Microsoft .NET framework.

When an IT problem is experienced, it can be recorded, categorized, and prioritized in the SAP Solution Manager service desk by the end user or IT employee.

This message is sent to first-level support, which attempts to clarify the problem and performs a search in the customer's solution database or a note search in the SAP Service Marketplace. If a solution cannot be found, second-level customer support begins by carrying out a root cause analysis.

If the IT error cannot be clearly assigned to a customer solution component, SAP Solution Manager uses cross component diagnostics to directly identify the component that is responsible for the problem.

This powerful function systematically helps target the cause of the error and hence avoid having to perform detailed root cause analysis on multiple components using various component experts, who usually cannot detect a malfunction for their specific component. The latter method involves much more time and expense.

For more information, see <https://websmp110.sap-ag.de/diagnostics>.

For more information about how to perform an E2E trace analysis, see the *End-to-End Diagnostics User Guide* at https://websmp110.sap-ag.de/~sapidb/011000358700000960012009E/SP20_TA_UserGuide.pdf.

3.2.3 Visual Business Log and Trace Files

Trace and log files are essential for analyzing problems.

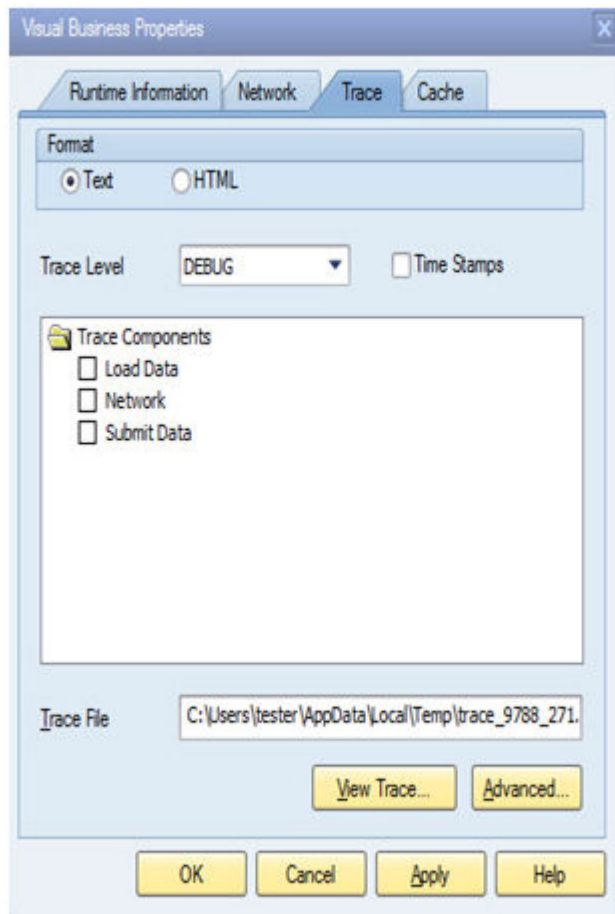
In contrast to automatic E2E Trace and AppSight Diagnostics, which analyze the network traffic, the Visual Business client log and trace entries describe program internal issues and events and help administrators and the support to detect and solve problems in the code version and installation.

Visual Business Front-End Component

Important Trace and Log Files

Visual Business provides several log and trace files. All files will be stored in the user's temporary folder. The actual logging and tracing can be controlled in the *Visual Business Properties* dialog, which opens upon **Ctrl**+**Alt**+**Right click**. On the *Trace* tab, you can choose the trace format, the trace level, for example *ERROR* or *DEBUG*, and the trace components. The concept is illustrated in the figure below.

For security reasons, any logging and tracing have to be permitted by the back end as a pre-condition. You need to enable tracing on the back-end per user. This setting is maintained in maintenance view `VBID_CLNT_TRACE` using transaction `SM30`.



Properties Dialog for Logging and Tracing

Log Files

Visual Business allows you to log the entire data flow to and from the front-end component. This allows you to detect setup issues and malformed data.

Trace Files

Trace files help you to locate and fix errors. The trace file name and location can be set in the properties dialog. There you can also choose the trace level and the trace file format.

→ Recommendation

We recommend the following:

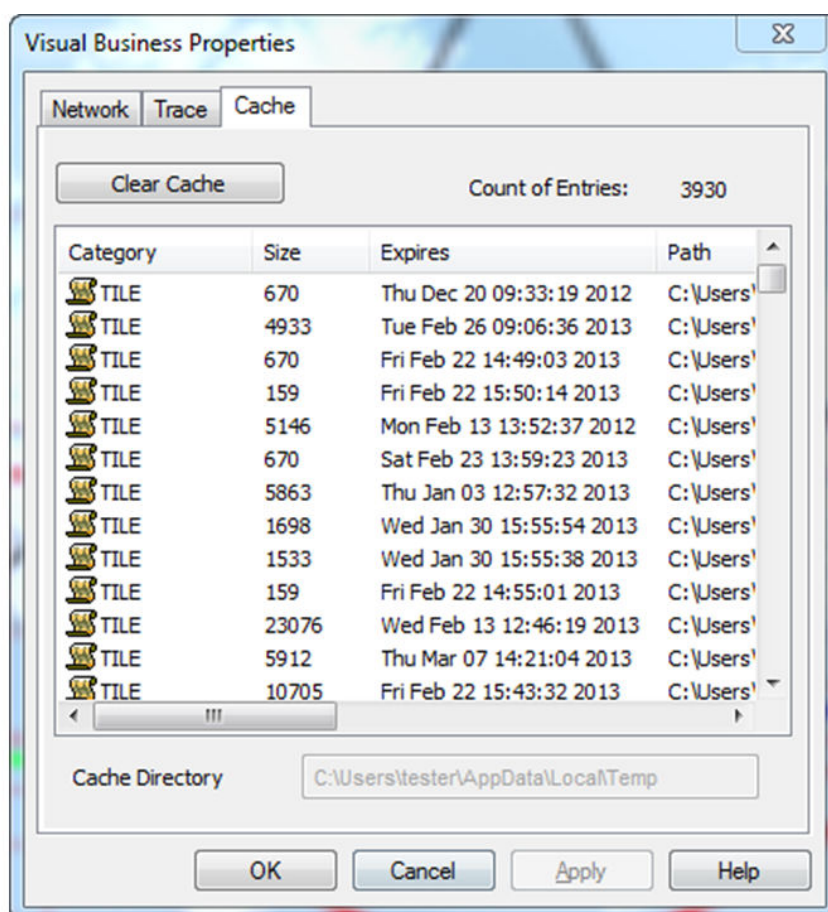
- Tracing adversely affects the performance of the application. As soon as the actions needed for the analysis have been traced, disable the trace.
- Make a copy of the trace file immediately after the issue is reproduced. The trace file is overwritten by the application each time SAP Visual Business is run with the tracing switched on.

3.2.4 Data Growth and Data Archiving Monitors

Visual Business applications are not numerous enough and data generated by Visual Business applications is not large enough to require archiving. Therefore, SAP Visual Business does not require data growth or data archiving monitors.

3.3 Data Consistency

The Visual Business application and configuration data is stored only in the back end. Therefore, inconsistencies are not possible.



Cache Maintenance Dialog

The Visual Business front-end component caches application related information (such as map tiles, and so on) in local storage in the client system. The consistency of this data is automatically ensured by the Visual Business front-end component. However, in the case of inconsistencies in SAP Visual Business (for example, problems with displaying the map), you can delete the data in local storage and check it in again.

The figure above shows the cache tab in the *Visual Business Properties* dialog. There you can see the location and the content of the cache. The dialog also allows you to clear the cache.

For more information, see section [Troubleshooting \[page 23\]](#).

4 Management of SAP Visual Business

SAP provides you with an infrastructure to help your technical support consultants and system administrators effectively manage all SAP components and complete all tasks related to technical administration and operation.

For more information about the underlying technology, see *Technical Operations for SAP NetWeaver* on SAP Help Portal at <http://help.sap.com> ► [SAP NetWeaver](#) ► [SAP NetWeaver 7.0](#) ► [SAP NetWeaver Library](#) ► [Administrator's Guide](#) ►.

4.1 Starting and Stopping

The Visual Business back-end component starts automatically when the Web AS starts. Therefore, SAP Visual Business does not require start or stop tools.

4.2 Software Configuration

The Visual Business back-end component requires configuration. The tools that are used to configure the component are listed here. For a detailed description, see section [Administration Tools \[page 16\]](#).

Component Configuration Tools

Component	Configuration Tools	Detailed Description
Visual Business back-end component	IMG node: ► SAP Customizing Implementation Guide ► SAP NetWeaver ► UI Technologies ► Visual Business ► Maintain Application Definitions ►	In this Customizing activity, you can maintain own Visual Business applications. For more information, see section Administration Tools [page 16] .
	IMG node: ► SAP Customizing Implementation Guide ► SAP NetWeaver ► UI Technologies ► Visual Business ► Overwrite Map Server Default URLs ►	In this Customizing activity, you can overwrite map product service URLs. For more information, see section Administration Tools [page 16] .

Component	Configuration Tools	Detailed Description
	IMG node: ► SAP Customizing Implementation Guide ► SAP NetWeaver ► UI Technologies ► Visual Business ► Overwrite Geo-Coding Service Default URLs ►	In this Customizing activity, you can overwrite geo-coding service URLs. For more information, see section Administration Tools [page 16] .

4.3 Administration Tools

Software Component	Transaction/Tool	Detailed Description	Prerequisites
Visual Business back-end component	IMG node: ► SAP Customizing Implementation Guide ► SAP NetWeaver ► UI Technologies ► Visual Business ► Maintain Application Definitions ►	<p>Maintain Application Definitions</p> <p>In this Customizing activity you define and assign geo coding services, map products, map layer stacks and applications for Visual Business 2.1. Those settings are mandatory to operate Visual Business 2.1. The settings are client-independent and SAP and customer entries are separated by namespace reservations.</p> <p>For more information, see the documentation for this Customizing activity.</p>	Visual Business application stored in the ABAP back end

Software Component	Transaction/Tool	Detailed Description	Prerequisites
	IMG Node: ► SAP Customizing Implementation Guide ► SAP NetWeaver ► UI Technologies ► Visual Business ► Overwrite Map Server Default URLs ►	<p>Overwrite Map Server Default URLs</p> <p>In this Customizing activity, you can overwrite the map server default URLs assigned to a SAP delivered map product. The map products are used by the Visual Business 2.1 control.</p> <p>For more information, see the documentation for this Customizing activity.</p>	
	IMG Node: ► SAP Customizing Implementation Guide ► SAP NetWeaver ► UI Technologies ► Visual Business ► Overwrite Geo-Coding Service Default URLs ►	<p>Overwrite Geo-Coding Service Default URLs</p> <p>In this Customizing activity, you can overwrite the geo-coding service default URLs assigned to a SAP delivered service ID. The geo-coding service can be used through the Visual Business back-end API to search for addresses and routes.</p> <p>For more information, see the documentation for this Customizing activity.</p>	

4.4 Backup and Restore

You need to back up your system landscape regularly to ensure that you can restore and recover it in case of failure.

The backup and restore strategy for your system landscape should not only consider SAP systems, but should also be embedded in overall business requirements and incorporate your company's entire process flow.

In addition, the backup and restore strategy must cover disaster recovery processes, such as the loss of a data center through fire. You must ensure that backup devices are not lost together with normal data storage (separation of storage locations).

Since SAP Visual Business does not provide any specific backup or restore tools, you must use the tools provided by the database to back up and restore data.

The following Visual Business data requires backup:

- **Visual Business Application Configuration**
Software data that describes the Visual Business applications only. It is stored in the ABAP back-end tables. This data changes only when a newer version of the application becomes available from SAP or when corrections to the application in a corresponding support package have been implemented. The data of customer application configurations will change upon their maintenance. Use the tools provided by the database to back up and restore this data.
- **Visual Business Configuration**
Configuration data that can be maintained in the corresponding Customizing activities. Create a backup before changing this data. To back up and restore data, use the tools provided by the database.
- **Visual Business Front-End Log and Trace Files**
The Visual Business front-end trace files are available in the directory chosen in the properties dialog (the user's temp folder by default). Create a backup of this by copying them to another directory. You do not need to restore these log and trace files, as they do not help to automatically recover the application in case of failure. They can be used only to analyze the cause of the failure.

4.5 Periodic Tasks

There are no periodic tasks for Visual Business.

4.6 User Management

Refer to the SAP Visual Business Security Guide for information about defining, maintaining, and managing users of the SAP Visual Business system.

5 High Availability

SAP Visual Business does not include a special recovery mechanism in the case of a system crash. These functions are provided by the Web AS.

6 Software Change Management

Software Change Management standardizes and automates software distribution, maintenance, and testing procedures for complex software landscapes and multiple software development platforms. These functions support your project teams, development teams, and application support teams.

The goal of Software Change Management is to establish consistent, solution-wide change management that allows for specific maintenance procedures, global rollouts (including localizations), and open integration with third-party products.

This section provides additional information about the most important software components.

The following topics are covered:

- **Transport and Change Management**
Enables and secures the distribution of software changes from the development environment to the quality assurance and production environment
- **Development Request and Development Release Management**
Enables customer-specific maintenance procedures and open integration with third-party products
- **Quality Management and Test Management**
Reduces the time, cost, and risk associated with software changes
- **Support Packages and SAP Notes Implementation**
Provides standardized software distribution and maintenance procedures

6.1 Transport and Change Management

Use

Visual Business Back-End Component

The Visual Business back-end component is a server component that uses the standard ABAP Transport Management System (TMS) for software logistics. The back-end component belongs to the technical software layer UI Add-On for SAP NetWeaver 7.0 as well as to User Interface Technology 7.40 (SAP_UI 740) as part of SAP NetWeaver 7.4. Updates to the back-end component are supplied through SAP Notes or the SAP Note Assistant and support packages.

Visual Business Front-End Component

The Visual Business front-end component is a client component. The client-side installation is integrated into the SAP front-end installer, also known as SAP Setup, available on SAP Service Marketplace. When there are updates, you can download the installer package and distribute it to the PCs in your network. For more information, see the SAP Visual Business Installation and Configuration Guide.

Component Change Management Tools

Component	Solution Manager Maintenance Optimizer Integration	Transport Management Tool
Visual Business back-end component	Yes	Transport Management System
Visual Business front-end component	No	SAP Setup

6.2 Development Requests and Development Release Management

The Visual Business front-end components are developed solely by SAP. It is not possible for customers to enhance them. Customers are advised to install all SAP updates to the Visual Business front-end component.

The Visual Business back-end is subject of the standard enhancement concept for ABAP and Web Dynpro. Furthermore, it allows enhancing certain behavior by exchanging implementation parts via Web Dynpro component configuration.

Customers can customize the application configuration, which can be transported as client-independent Customizing. For more information, see section [Administration Tools \[page 16\]](#).

6.3 Quality Management and Test Management

Visual Business Front-End Component and Visual Business Applications

The Visual Business front-end component can only be tested by testing a Visual Business application. There is no automatic process for testing the Visual Business applications.

Visual Business Back-End Component

There is no support for eCATT testing.

6.4 Support Packages and SAP Note Implementation

Visual Business Back-End Component

Patches for the Visual Business back-end component are available either as regular support packages or as SAP Notes. To download the SAP Notes, use SAP Solution Manager or the SAP Note Assistant.

Visual Business Front-End Component

Support packages and patches for the Visual Business front-end component are available as updates to the SAP Front-End Installer on SAP Service Marketplace.

7 Troubleshooting

This section lists the main error messages that may occur in SAP Visual Business and offers the corresponding explanations and solutions.

The page area where Visual Business should appear is blue with the text "SAPACF control". A SAP ACF Trace window opens with many errors. The first error is: CACfIO::ReadDataFromFileInternal|Could not open file C:\Users\\AppData\Roaming\SAP\SAPFrontendService<SystemID>CLNT<Client><CertID>.cer LastError= 2| HRESULT=-2147467259(Unspecified error)

- **Problem Description**
When you load the Web Dynpro application, the area in the Web Dynpro UI where the Visual Business application should display is blue. The SAP ACF Trace window opens and shows many errors.
- **Analysis**
The ACF front-end component was not able to find an appropriate whitelist certificate, which is a security pre-requisite for using the Visual Business front-end component.
- **Solution**
Install the whitelist certificate from the back-end system using transaction ACF_WHITELIST_SETUP. There is one certificate per back-end system and client.

The page area where Visual Business should appear is white with the text "SAP DefaultAdapter".

- **Problem Description**
When you load the Web Dynpro application, the area in the Web Dynpro UI where the Visual Business application should display is white.
- **Analysis**
The Visual Business front-end component is not installed.
- **Solution**
Install the latest version of the Visual Business front-end component. For a detailed description of the front-end installation process, see the SAP Visual Business Installation and Configuration Guide and the [SAP Front End Installation Guide](#) on SAP Service Marketplace at <http://service.sap.com/instguides>
▶ [SAP NetWeaver](#) ▶ [SAP NetWeaver 7.0](#) ▶ [Installation](#) ▶ [Installation - Clients](#) ▶

You experience rendering artifacts, wrong colors, or even crashes of the display driver.

- **Problem Description**
When you run an application using the Visual Business control, you see rendering artifacts such as wrong colors. In more severe cases, the application or the display driver of the client machine crashes.
- **Analysis**
The Visual Business control relies on the compliance of the graphics card to the DirectX 10.1 specification.
- **Solution**
Install the latest graphics card driver. If this does not resolve the issue, you may switch to the software rendering mode. For more information, see SAP Note [1740216](#).

8 Support Desk Management

Support desk management enables you to set up an efficient internal support desk for your support organization that seamlessly integrates your end users, internal support employees, partners, and SAP Active Global Support specialists with an efficient problem resolution procedure.

For support desk management, you need the methodology, management procedures, and tools infrastructure to run your internal support organization efficiently.

The following topics are covered:

- Remote support
- Component hierarchy relevant for this application

8.1 Remote Support Setup

SAP Visual Business has no component-specific support tool. You can use the support tools provided by the SAP NetWeaver Administrator framework. For more information, see the SAP Service Marketplace at <http://service.sap.com> ► [SAP Support Portal](#) ► [Help & Support](#) ► [Connect to SAP](#) ►.

For more information about monitoring tools, see chapter [Monitoring of SAP Visual Business \[page 9\]](#).

8.2 Problem Message Handover

We recommend that you send problem messages/tickets to the component of the Visual Business integrating application. After detailed analysis by the experts, the message may be redirected to the Visual Business component (CA-GTF-VBZ (► [Cross-Application Components](#) ► [General Application Functions](#) ► [Visual Business](#) ►)) if the issue is identified as being specific to SAP Visual Business.

9 Appendix

9.1 Related Guides

You can find more information about installation and configuration in the following guides:

- SAP Visual Business Security Guide
- SAP Visual Business Installation and Configuration Guide
- SAP Front-End Installation Guide

9.2 Related Information

The following table contains links to information relating to the Application Operations Guide.



Content	Link to SAP Service Marketplace
Installation and Configuration Guide	http://service.sap.com/instguides
Related SAP Notes	http://service.sap.com/notes
Released Platforms	http://service.sap.com/platforms
Network Security	http://service.sap.com/securityguide http://service.sap.com/network
Technical Infrastructure	http://service.sap.com/ti
SAP Solution Manager	http://service.sap.com/solutionmanager

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