

SAP SuccessFactors 📿

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Managing, Monitoring, and Troubleshooting Organizational Data Replication from Employee Central to SAP ERP HCM

THE BEST RUN

Content

1	Introduction to Managing, Monitoring, and Troubleshooting Organizational Data Replication
	from Employee Central.
1.1	Prerequisites for Managing, Monitoring, and Troubleshooting Organizational Data Integration
1.2	Your Integration leam.
1.3	Target Group of This Document
2	Management of Organizational Data Replication from Employee Central
2.1	Scheduling of Replication Processes
	How Often Should the Processes Run?
2.2	Scheduling of Periodic Tasks in the SAP ERP HCM System
	Scheduling the Organizational Object Query as a Regular Background Job
	Scheduling the Employee Master Data and Organizational Assignment Query as a Regular
	Background Job
	Scheduling the Database Update Programs as Regular Background Jobs. \ldots \ldots \ldots 12
2.3	Required Manual Periodic Tasks
3	Monitoring of Organizational Data Replication from Employee Central.
3.1	Monitoring Tools in the SAP ERP HCM System
	Analyzing SOAP Messages with Web Service Utilities
	Analyzing the Application Log
	Replication Request Monitor for Organizational Data Replication.
	Replication Request Viewers for Organizational Data Replication.
3.2	Monitoring Tools in Employee Central
	Replication Request Monitor for Organizational Data Replication.
	Employee Central Data Replication Monitor
	Analyzing API Calls with the SFAPI Audit Log
	Analyzing API Calls with the OData API Audit Log
3.3	Monitoring Tools in the Middleware
	Process Reporting in Boomi AtomSphere
	Monitoring in SAP Cloud Integration
4	Software Change Management
4.1	Support Packages and Patch Implementation
5	Troubleshooting of Organizational Data Replication from Employee Central
5.1	Checking Organizational Assignments Replicated to SAP ERP HCM.
5.2	Technical Configuration of the Web Service Runtime Environment 42
5.3	Known Issues
0.0	

Known Issue: You've Created or Changed an Employee's Organizational Assignment in Employee Central, But This Change Is Not Reflected in SAP ERP HCM	14
Known Issue: You've Created or Changed an Organizational Object in Employee Central, But This Change Is Not Reflected in SAP ERP HCM.	15
Known Issue: Manager Not Yet Replicated From Employee Central.	47
Known Issue: Organizational Assignment Replication from Employee Central Creates New Position and New Position Assignment Although a Position Assignment Already Exists in SAP ERP HCM	
· · · · · · · · · · · · · · · · · · ·	18
Known Issue: After You've Changed the External Code of an Organizational Object in Employee Central, Organizational Assignments in SAP ERP HCM Are No Longer Correct	19
Known Issue: After Data Replication from Employee Central to SAP ERP HCM Error Messages Related to Positions are Shown in the Application Log	50
Known Issue: You Have Changed the Job Classification Title or Description in Employee Central, but Your Changes Aren't Replicated to SAP ERP HCM.	52
Known Issue: Organizational Structure Items Can't Be Replicated Because cust_toDivision and cust_toBusinessUnit Associations Are Missing	54
Known Issue: "Invalid Property Name" Error Message is Shown for FOBusinessUnit/ nameTranslationNav and FODivision/nameTranslationNav	55
Known Issue: Replication Request Monitor Shows Internal Server Error.	56
Known Issue: Mandatory Field HRP1000-STEXT Was Not Mapped	59
Known Issue: Deletion Isn't Replicated from Employee Central	50
Known Issue: Cost Center Assignments Are Deleted When You Use a Default Cost Center in SAP ERP HCM.	61
Known Issue: Organizational Assignment Change Extends Too Far Into the Past 6	52
Known Issue: Staging Area Tables Contain a Large Amount of Data 6	53
Known Issue: Employee is Inactive, Replicate Active Employee from Employee Central	54
Reporting Incidents for Organizational Data Replication.	55

6

Change History

Learn about changes to the documentation for Managing, Monitoring, and Troubleshooting Organizational Data Replication from Employee Central to SAP ERP HCM in recent releases.

2H 2021 – Present

Type of Change	Description	More Info
None	We did not update this document.	

1H 2021

Type of Change	Description	More Info
Changed	The SAP Cloud Platform Integration	
	brand has been retired. We've updated	
	this guide with the new SAP Cloud	
	Integration brand accordingly.	

1 Introduction to Managing, Monitoring, and Troubleshooting Organizational Data Replication from Employee Central

Find out how to keep organizational data replication from SAP SuccessFactors Employee Central to SAP ERP HCM up and running.

In particular, take a look at:

- · Which tasks you should schedule periodically and how you can do this
- · Which tools are available for monitoring the integration
- · Which isues are known and how you can troubleshooting them

Prerequisites for Managing, Monitoring, and Troubleshooting Organizational Data Integration [page 5] What needs to be in place before you can carry out the tasks described in this document.

Your Integration Team [page 6]

The implementation and integration process of SAP SuccessFactors Employee Central with SAP ERP HCM is a collaborative effort that leverages the skills of various experts.

Target Group of This Document [page 6]

Take a look at the target groups this document is intended for.

1.1 Prerequisites for Managing, Monitoring, and Troubleshooting Organizational Data Integration

What needs to be in place before you can carry out the tasks described in this document.

The organizational data integration we're referring to in this document supports the *Core Hybrid HXM* deployment option. *Core Hybrid HXM* means that Employee Central is used as the system of record holding the employee data and reporting lines of all employees. But existing processes such as Payroll, Time Management, or custom HR processes still run in an SAP ERP HCM system landscape. To facilitate the *Core Hybrid HXM* deployment option, you set up a regular replication of organizational data from Employee Central to SAP ERP HCM. This replication must be up and running. For more information, see the following implementation guides:

- Replicating Employee Master Data and Organizational Assignments from Employee Central to SAP ERP HCM
- Replicating Organizational Objects from Employee Central to SAP ERP HCM

Find the most current version of these guides in SAP Help Portal at http://help.sap.com/hr_ecintegration.

1.2 Your Integration Team

The implementation and integration process of SAP SuccessFactors Employee Central with SAP ERP HCM is a collaborative effort that leverages the skills of various experts.

You need to pull together a team of experts for your implementation project when integrating SAP SuccessFactors Employee Central with SAP ERP HCM.

The following experts are typically involved in the process:

Expert	What the Expert Does			
SAP SuccessFactors consultant	 Is the main point of contact for the entire implementation and integration process. Ensures that all required system settings for Employee Central are done. Works closely with the SAP ERP HCM team, to ensure successful data replication. 			
Middleware consultant	Provides support on setting up the middleware.			
SAP ERP HCM consultant	 Is the main point of contact for the configuration of SAP ERP HCM according to the needs of the customer. Works closely with the SAP SuccessFactors consultant to ensure successful data replication. 			

1.3 Target Group of This Document

Take a look at the target groups this document is intended for.

The following groups of people will benefit from reading this document:

- Implementation partners, consultants, and Product Support, for fast support of customers and prospective customers
- Cloud operations
- SAP-certified administrators at customer site

2 Management of Organizational Data Replication from Employee Central

Here's an overview of periodic tasks related to organizational data replication from Employee Central to SAP ERP HCM.

Scheduling of Replication Processes [page 7]

Depending on the version of organizational data integration your are using, the replication processes are scheduled either in the middleware or in the SAP ERP HCM system.

Scheduling of Periodic Tasks in the SAP ERP HCM System [page 8]

You schedule various tasks to be carried out periodically in SAP ERP HCM.

Required Manual Periodic Tasks [page 14]

It's good practice to regularly check in the SAP ERP HCM system for replication requests that have the status *Open* or *Pending*.

2.1 Scheduling of Replication Processes

Depending on the version of organizational data integration your are using, the replication processes are scheduled either in the middleware or in the SAP ERP HCM system.

Versions of Organizational Data Replication from Employee Central

This integration version	Uses this middleware	And requires integration processes to be scheduled in	Find more information in this integration guide
Standard integration version – for new integration projects	SAP Cloud Integration	Both integration processes, organizational assignment replication and organizational object replication, are trig- gered by the SAP ERP HCM system	Replicating Employee Master Data and Organizational As- signments from Employee Central to SAP ERP HCM Replicating Organizational Ob- jects from Employee Central to SAP ERP HCM

This integration version	Uses this middleware	And requires integration processes to be scheduled in	Find more information in this integration guide
Previous version – only for in- itial implementation that was started before Q2 2017	SAP Cloud Integration or Boomi AtomSphere	The integration process for or- ganizational assignment repli- cation is triggered by the mid- dleware	Replicating Organizational Data from Employee Central to SAP ERP HCM (For Implemen- tation Started Before Q2 2017)
		The integration process for or- ganizational object replication is triggered by the SAP ERP HCM system	
Previous version – only for in- itial implementation that was started before Q1 2016	Boomi AtomSphere	Both integration processes, organizational assignment replication and organizational object replication, are trig- gered by the middleware	Replicating Organizational As- signments and Specific Or- ganizational Objects from Em- ployee Central to SAP ERP HCM (For Implementation Started Before Q1 2016)

2.1.1 How Often Should the Processes Run?

When scheduling the processes for replicating organizational data, take into account these considerations.

- How often do you change organizational objects and organizational assignments in Employee Central?
- How much do you depend on the SAP ERP HCM system being up to date?
- Try to keep the organizational objects and the corresponding assignments in sync. It doesn't make sense to replicate department assignments every hour, but the departments themselves once a week.
- Each time a process runs, an entry is written to the log. So if the processes run very often, the log becomes more difficult to oversee.

2.2 Scheduling of Periodic Tasks in the SAP ERP HCM System

You schedule various tasks to be carried out periodically in SAP ERP HCM.

- If you're using an integration version that is triggered by the SAP ERP HCM system, the program the queries information from Employee Central needs to be scheduled regularly.
- The programs that post the replicated data from the staging area to the database need to run regularly, registered on an event.
- We recommend that you schedule the same programs also periodically so that they can pick up all replication requests that couldn't be processed yet.

Scheduling the Organizational Object Query as a Regular Background Job [page 9]

Managing, Monitoring, and Troubleshooting Organizational Data Replication from Employee Central to SAP ERP HCM Management of Organizational Data Replication from Employee Central Trigger queries regularly by scheduling the query program as a background job, to request organizational objects from Employee Central on an ongoing basis.

Scheduling the Employee Master Data and Organizational Assignment Query as a Regular Background Job [page 10]

Trigger queries to request employee master data and organizational assignments from Employee Central on a regular basis.

Scheduling the Database Update Programs as Regular Background Jobs [page 12]

Whenever replication requests from Employee Central are written to the staging area tables in the SAP ERP HCM system, an event is triggered. Schedule the programs that process the replication requests in the staging area and post the results to the database as separate background jobs that are registered on the corresponding events.

2.2.1 Scheduling the Organizational Object Query as a Regular Background Job

Trigger queries regularly by scheduling the query program as a background job, to request organizational objects from Employee Central on an ongoing basis.

Prerequisites

You've defined a suitable variant or several variants for the *Create and Execute Organizational Object Replication Query* (RH_SFIOM_ORG_OBJ_REPL_QUERY) program.

Context

The RH_SFIOM_ORG_OBJ_REPL_QUERY program creates and sends a query to replicate organizational data from SAP SuccessFactors Employee Central to the SAP ERP HCM system. Schedule this program to run regularly in the background. You can define and schedule background jobs in two ways:

- Directly from the *Define Background Job* (SM36) transaction. This option is best for users already familiar with background job scheduling.
- Using the *Job Scheduling Wizard*. This option is best for users unfamiliar with SAP background job scheduling. To use the *Job Scheduling Wizard*, choose *Job Wizard* in the *Define Background Job* transaction.

Procedure

- 1. Go to the Define Background Job (SM36) transaction.
- 2. Decide on a name for the job you're defining and enter it in the Job Name field.

Managing, Monitoring, and Troubleshooting Organizational Data Replication from Employee Central to SAP ERP HCM Management of Organizational Data Replication from Employee Central

9

- 3. Select the job's priority in the Job Class field:
 - High priority: class A
 - Medium priority: class B
 - Low priority: class C
- 4. In the *Target Server* field, indicate whether to use system load balancing. For the system to use system load balancing to automatically select the most efficient application server to use at the moment, leave this field empty. To use a particular application server to run the job, enter a specific target server.
- 5. If spool requests generated by this job are to be sent to someone as email, specify the email address. To do so, choose *Spool List Recipient*.
- 6. Define when the job is to start. To do so, choose Start Condition Date/Time . Enter a suitable date and time and select the *Periodic Job* checkbox.
- 7. Define the job's steps by choosing Step ABAP Program. Specify the variant to be used.
- 8. Save the fully defined job to submit it to the background processing system.
- 9. Release the job so that it can run.
- 10. Repeat these steps for each program variant.

Next Steps

When you need to modify, reschedule, or otherwise manipulate a job after you've scheduled it the first time, you'll manage jobs from the *Simple Job Selection* (SM37) or *Extended Job Selection* (SM37C) transactions.

For more information about background processing in SAP systems, go to http://help.sap.com/netweaver and search for *background processing*.

2.2.2 Scheduling the Employee Master Data and Organizational Assignment Query as a Regular Background Job

Trigger queries to request employee master data and organizational assignments from Employee Central on a regular basis.

Prerequisites

You have defined a suitable variant or several variants for the *Create and Execute Employee Master Data and Org. Assignment Query* (ECPAO_EE_ORG_REPL_QUERY) program.

Context

You can define and schedule background jobs in two ways:

- Directly from the *Define Background Job* (SM36) transaction. This is best for users already familiar with background job scheduling.
- Using the Job Scheduling Wizard. This is best for users unfamiliar with SAP background job scheduling. To use the Job Scheduling Wizard, choose Job Wizard in the Define Background Job transaction.

Carry out the following steps for each variant:

Procedure

- 1. Go to the Define Background Job (SM36) transaction.
- 2. Decide on a name for the job you are defining and enter it in the *Job Name* field.
- 3. Select the job's priority in the *Job Class* field:
 - High priority: class A
 - Medium priority: class B
 - Low priority: class C
- 4. In the *Target Server* field, indicate whether to use system load balancing. For the system to use system load balancing to automatically select the most efficient application server to use at the moment, leave this field empty. To use a particular application server to run the job, enter a specific target server.
- 5. If spool requests generated by this job are to be sent to someone as e-mail, specify the e-mail address. To do so, choose *Spool List Recipient*.
- 6. Define when the job is to start. To do so, choose Start Condition Date/Time . Enter a suitable date and time and select the *Periodic Job* checkbox.
- 7. Define the job's steps by choosing Step ABAP Program Specify the variant to be used (see above).
- 8. Save the fully defined job to submit it to the background processing system.
- 9. Release the job so that it can run.

Next Steps

When you need to modify, reschedule, or otherwise manipulate a job after you've scheduled it the first time, you'll manage jobs from the *Simple Job Selection* (SM37) or *Extended Job Selection* (SM37C) transactions.

2.2.3 Scheduling the Database Update Programs as Regular Background Jobs

Whenever replication requests from Employee Central are written to the staging area tables in the SAP ERP HCM system, an event is triggered. Schedule the programs that process the replication requests in the staging area and post the results to the database as separate background jobs that are registered on the corresponding events.

Prerequisites

You have defined a suitable variant for each program. These are the programs and the corresponding events:

Processing Programs and Events

Program	Event
Replicate Organizational Objects from EC to ERP Org. Mgmt (RH_SFIOM_PROC_ORG_STRUC_RPRQ)	SAP_SFIOM_ORG_STRUC_RPRQ_CREATED
Replicate Employee Org. Assignments from EC to ERP Org. Mgmt (RH_SFIOM_PROC_EE_ORG_ASS_RPRQ)	SAP_SFIOM_EE_ORGAS_RPPQ_CREATED

If you use generic object replication with generic processing, we recommend that you define a separate variant for each object type for the *Replicate Organizational Objects from EC to ERP Org. Mgmt* (RH_SFIOM_PROC_ORG_STRUC_RPRQ program. One for business units, one for departments, and so on. To do this, enter the required object type, such as **03** (*Business Unit*) in the *EC Org. Object Type* field (under *Other Organizational Object*). Don't make any other settings on the program selection screen. Then save your selection as a variant. This way you can schedule multiple jobs, which can run simultaneously, to post the different object types independently of each other to the database.

Context

You can define and schedule background jobs in two ways:

- Directly from the *Define Background Job* (SM36) transaction. This is best for users already familiar with background job scheduling.
- Using the Job Scheduling Wizard. This is best for users unfamiliar with SAP background job scheduling. To use the Job Scheduling Wizard, choose Job Wizard in the Define Background Job transaction.

Carry out the steps described below for each program:

Procedure

- 1. Go to the Define Background Job (SM36) transaction.
- 2. Decide on a name for the job you are defining and enter it in the Job Name field.

Managing, Monitoring, and Troubleshooting Organizational Data Replication from Employee Central to SAP ERP HCM Management of Organizational Data Replication from Employee Central

- 3. Select the job's priority in the *Job Class* field:
 - High priority: class A
 - Medium priority: class B
 - Low priority: class C
- 4. In the *Target Server* field, indicate whether to use system load balancing. For the system to use system load balancing to automatically select the most efficient application server to use at the moment, leave this field empty. To use a particular application server to run the job, enter a specific target server.
- 5. If spool requests generated by this job are to be sent to someone as email, specify the email address. To do so, choose *Spool List Recipient*.
- 6. Define when the job is to start. To do so, choose Start Condition After Event and enter the event name:
 - For organizational objects: SAP_SFIOM_ORG_STRUC_RPRQ_CREATED
 - For organizational assignments: SAP_SFIOM_EE_ORGAS_RPPQ_CREATED

If you want the job to be executed only when the event was raised in a specific client of your SAP ERP HCM system, enter the client ID (such as **200**) in the *Parameter* field. If you want the job to be executed in all clients, leave the *Parameter* field empty.

Select Periodic Job for the job to repeat.

- 7. Define the job's steps by choosing Step ABAP Program . Specify the corresponding program and variant to be used (see above).
- 8. Save the fully defined job to submit it to the background processing system.
- 9. Release the job so that it can run.

Next Steps

When you need to modify, reschedule, or otherwise manipulate a job after you've scheduled it the first time, you'll manage jobs from the *Simple Job Selection* (SM37) or *Extended Job Selection* (SM37C) transactions.

→ Tip

In addition to the background jobs that are registered on the events as described above, we recommend that you schedule a periodical background job for each of the database update programs, which picks up all replication requests that couldn't be processed yet. During initial load, for example, often two events follow each other in close succession. If this happens, the processing triggered by the second event might not be successful if the staging area is still locked by the processing triggered by the first event.

To process open, pending, or failed requests again, schedule a background job that runs at a time when the system load is low (for example, each night). This way, you don't need to wait until the next event is triggered that would start the next run of the database update program.

To schedule periodical background jobs, carry out the steps described above. However, in step 6, don't select an event. Instead, choose Start Condition Date/Time . Enter a suitable date and time and select the *Periodic Job* checkbox.

For more information about background processing in SAP systems, go to http://help.sap.com/netweaver and search for *background processing*.

2.3 Required Manual Periodic Tasks

It's good practice to regularly check in the SAP ERP HCM system for replication requests that have the status *Open* or *Pending*.

This is particularly important for the organizational objects replication, since the Employee Central Data Replication Monitor doesn't show messages regarding this replication. You can use these tools:

- The Replication Request Monitor (Web Dynpro application SFIUI_A_REPL_REQ_MONITOR)
- The Replication Request Viewers (SFIOM_VIEW_REQUESTS for organizational assignments and SFIOM_VIEW_ORG_REQS for organizational objects)

From all tools, you can trigger the database update programs manually for selected requests to post pending replications manually.

For more information, see the *Monitoring* section. If you encounter problems, check the *Troubleshooting* section for a solution.

3 Monitoring of Organizational Data Replication from Employee Central

Find out about the tools that are available for monitoring organizational data replication from Employee Central to the SAP ERP HCM system.

The table shows an overview of the monitoring tools.

Monitoring Tools for Organizational Data Integration

In this system	Use this tool	To monitor	And here's how to find this tool		
SAP ERP HCM	Web Service Utilities	Incoming SOAP messages	Transaction SRUTIL or SXMB_MONI		
SAP ERP HCM	Application Log	Creation of inbound message and storage of replication re- quests in the staging area	Transaction SLG1		
SAP ERP HCM	Replication Request Monitor i Note You can use the Repli- cation Request Monitor in SAP ERP HCM as well as in Employee Cen- tral. To use it in Em- ployee Central, add the Web Dynpro application to the SAP SuccessFac- tors user interface us- ing the Configure Custom Navigation admin tool.	Replication requests for or- ganizational objects (when us- ing generic object replication) and for organizational assign- ments	Web Dynpro application SFIUI_A_REPL_REQ_MONITO R		
SAP ERP HCM	Replication Request Viewer for Organizational Assignments	Replication requests for or- ganizational assignments in the staging area	Transaction SFIOM_VIEW_REQUESTS		
SAP ERP HCM	Replication Request Viewer for Organizational Objects	Replication requests for or- ganizational objects in the staging area	Transaction SFIOM_VIEW_ORG_REQS		

And here's how to find this

In this system	Use this tool	To monitor	tool
In this system Employee Central Employee Central Employee Central Employee Central Employee Central SAP Cloud Integration Boomi AtomSphere	Replication Request Monitor i Note You can use the Replication Request Monitor in SAP ERP HCM as well as in Employee Cen- tral. To use it in Em- ployee Central, add the Web Dynpro application to the SAP SuccessFac- tors user interface us- ing the Configure Custom Navigation admin tool.	Replication requests for or- ganizational objects (when us- ing generic object replication) and for organizational assign- ments	Web Dynpro application SFIUI_A_REPL_REQ_MONITO R
Employee Central	Data Replication Monitor	Employee organizational as- signment replication	Admin Alerts tile on the home page or in the Admin Center, Data Replication Monitor for SAP ERP Integration tool in the Admin Center
Employee Central	SFAPI Audit Log	Employee Central CompoundEmployee API calls for organizational assign- ment data	<i>SFAPI Audit Log</i> tool in the Ad- min Center
Employee Central	OData API Audit Log	OData API organizational object data	<i>OData API Audit Log</i> tool in the Admin Center
SAP Cloud Integration	Web-Based Monitoring	Process execution in the mid- dleware	To launch the web-based mon- itoring application, access the URL provided by SAP in a web browser
Boomi AtomSphere	Process Reporting	Process execution in the mid- dleware	Manage ➤ Process Reporting

3.1 Monitoring Tools in the SAP ERP HCM System

Various monitoring tools are available in SAP ERP HCM for checking data replication results.

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Analyzing SOAP Messages with Web Service Utilities [page 17]
Use Web Service Utilities to monitor incoming SOAP messages in the SAP ERP HCM system.
```

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Analyzing the Application Log [page 18]
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Using the application log you can analyze the incoming messages for organizational data replication from Employee Central in your SAP ERP HCM system.

Replication Request Monitor for Organizational Data Replication [page 18]

Using the Replication Request Monitor, you can access the staging area for organizational data in SAP ERP HCM to check statuses, analyze errors, or process requests manually.

Replication Request Viewers for Organizational Data Replication [page 27]

Using the Replication Request Viewers, you can access the staging areas for organizational data in SAP ERP HCM to check statuses or process requests manually.

3.1.1 Analyzing SOAP Messages with Web Service Utilities

Use Web Service Utilities to monitor incoming SOAP messages in the SAP ERP HCM system.

Context

Web Service Utilities (transaction SRTUTIL) in SAP ERP HCM offers an *Error Log* and a *Message Monitor* tool, which you can use, for example, to analyze errors in incoming SOAP messages or check the content of messages.

i Note

For more information about the tool, see Web Service Logging and Tracing in the SAP NetWeaver documentation.

Depending on your system configuration, the SRTUTIL transaction might not be available. If it's not, use the *Integration Engine: Monitoring* (SXMB_MONI) transaction instead.

Procedure

- 1. Choose Error Log to see information about all errors happening during the processing in the SOAP runtime.
- 2. Double-click an error message to see more details.
- 3. Choose Original XML to display the error message in the XML format.
- 4. Go back and choose Message Monitor to get an overview of all received messages along with their content.
- 5. Select the messages you want to see.
 - You can, for example, specify the execution time in the *Timestamp From* and *Timestamp To* fields on the *Standard Selection* tab.
 - You can also filter for messages related to a specific interface by entering the interface in the *Interface Name* field for the receiver.
 - Or you filter for messages with a specific message ID. Find the message ID in *Process Reporting* in Boomi AtomSphere.
- 6. Double-click a message to see the content that was transferred from Employee Central.

17

7. Choose Original XML to display the content in the XML format.

Related Information

Process Reporting in Boomi AtomSphere [page 32]

3.1.2 Analyzing the Application Log

Using the application log you can analyze the incoming messages for organizational data replication from Employee Central in your SAP ERP HCM system.

Context

An application log is written when the incoming messages are processed and stored as replication requests in the staging area, as well as when the entries in the staging area are being processed. Here's how to check these messages.

i Note

You can also display the application log for selected replication requests from the replication request viewers.

Procedure

- 1. Go to the Analyze Application Log (SLG1) transaction.
- 2. Enter the **PAOC_SFI_OM** object and one of the following subobjects:
 - REPL REQ PROCESSING for the log created by the replication to the SAP ERP HCM system
 - REPL_REQ_PROXY for the log created when processing the inbound message in SAP ERP HCM
- 3. Make additional selections as suits your requirements and choose *Execute*.

3.1.3 Replication Request Monitor for Organizational Data Replication

Using the Replication Request Monitor, you can access the staging area for organizational data in SAP ERP HCM to check statuses, analyze errors, or process requests manually.

The Replication Request Monitor (SFIUI_A_REPL_REQ_MONITOR) is a Web Dynpro application that allows you to check replication requests for organizational objects and organizational assignments in all details, analyze error message issued by the replication from Employee Central, and process replication requests manually.

The SFIUI_A_REPL_REQ_MONITOR Web Dynpro application is assigned to the role menu of the SAP_HR_SFIOM_PROCESSING role in SAP ERP HCM. You can also add it to the SAP SuccessFactors user interface using the *Configure Custom Navigation* admin tool in Employee Central. This tool allows you to add hyperlinks to various locations in the SAP SuccessFactors UI, enabling users to navigate from that location to the specified URL. The URL you need to add is: cprotocol><host name>/sap/bc/webdynpro/sap/sfiui_a_repl_req_monitor.

For more information about the tool, refer to Managing Custom Navigation Links.

Selecting Replication Requests for Monitoring [page 20]

Select the replication requests that you want to check in the Replication Request Monitor by time frame, ID, or status.

Sorting and Filtering to Show Replication Requests You're Interested In [page 21]

Adjust the results list in the Replication Request Monitor so that only the requests you want to monitor right now are shown.

Creating a Personalized View for the Results List [page 21]

Adjust the results list in the Replication Request Monitor according to your personal preferences, for example, to remove columns you're not interested in.

Viewing Time Slices, Job Information, and Messages for a Replication Request [page 22]

Review time slices contained in a request for organizational object replication or Job Information assignments contained in a request for organizational assignment replication, to find out what data was replicated. And check whether any messages occurred.

Viewing Mapped Object IDs, Message IDs, and Other Technical Details for a Replication Request [page 23]

Review details about a replication request in the Replication Request Monitor, such as what Employee Central and SAP ERP HCM IDs are mapped, what full transmission start date and transformation template are used, and so on.

Exporting the Results List [page 24]

Export the results list from the Replication Request Monitor to work on it offline or share it with someone else.

Processing Replication Requests Manually to Directly Store Updates in SAP ERP HCM [page 25]

Post selected requests from the Replication Request Monitor manually on the database if you want to store the contained updates immediately, without waiting for the next scheduled run of the database update program.

Example: Checking Why the Parent Division Is Missing for a Department [page 26]

Go through this example to see how you can use the Replication Request Monitor when a replication request wasn't successful because the associated object is missing.

3.1.3.1 Selecting Replication Requests for Monitoring

Select the replication requests that you want to check in the Replication Request Monitor by time frame, ID, or status.

Procedure

- 1. Select a time frame. By default requests are shown for the past week. Available time frames are:
 - Past hour
 - Past 24 hours
 - Past week
 - Past 4 weeks
 - All
- 2. Select a status or multiple statuses. By default, failed, open, and pending requests are shown. To select

multiple statuses, choose 💜 (Advanced Options). Available statuses are:

- 01 = Open
- 02 = Pending
- 03 = Successful
- 04 = *Failed*
- 05 = Outdated
- 06 = Redundant
- 3. Select organizational objects by object type or ID or select organizational assignments by employee ID or personnel number.
- 4. Choose Apply.

Results

All replication requests that match your selection criteria are shown in the results list on the *Organizational Object Replication* tab or the *Organizational Assignment Replication* tab.

Next Steps

Next, adjust the results list so that only the requests you want to monitor right now are shown.

3.1.3.2 Sorting and Filtering to Show Replication Requests You're Interested In

Adjust the results list in the Replication Request Monitor so that only the requests you want to monitor right now are shown.

Prerequisites

You've selected replication requests so that the results list is shown.

Procedure

- 1. Select the header of a column to sort the entries in ascending or descending order.
- 2. Select the column header again to filter for one of the entries or to define your own filter.

Next Steps

Next, personalize the results list according to your preferences, for example, to remove columns you're not interested in.

3.1.3.3 Creating a Personalized View for the Results List

Adjust the results list in the Replication Request Monitor according to your personal preferences, for example, to remove columns you're not interested in.

Prerequisites

You've selected replication requests so that the results list is shown.

Procedure

1. Choose (Open Settings Dialog) to personalize the results list. For example:

Managing, Monitoring, and Troubleshooting Organizational Data Replication from Employee Central to SAP ERP HCM Monitoring of Organizational Data Replication from Employee Central

- Add or remove columns
- Change the default order of columns
- Sort columns by default
- Filter columns by default
- 2. Save your settings as a personalized view to reuse them.

Next Steps

Next, check the time slices, job information, and messages for a replication request.

3.1.3.4 Viewing Time Slices, Job Information, and Messages for a Replication Request

Review time slices contained in a request for organizational object replication or Job Information assignments contained in a request for organizational assignment replication, to find out what data was replicated. And check whether any messages occurred.

Prerequisites

- You've selected replication requests so that the results list is shown.
- You've sorted, filtered, and personalized the results list if desired so that only the requests you want to monitor right now are shown.

Procedure

1. Choose *Show Details* for a replication request in the results list to view the data records (time slices) replicated for the selected object or the Job Information assignments for the selected employee, and also the message log.

If an employee's master data wasn't replicated yet from Employee Central, no employee name is shown. In this case, searching for the employee name in the *ERP Personnel Number* field in the selection criteria doesn't produce any results either.

2. Choose *Show Details* for a time slice shown in the *Details for* <Organizational Object> section to view the fields and field values replicated from Employee Central to SAP ERP HCM.

You're shown, for example, the external code, the title (in all languages included in the replication), or the parent object of an object replicated from Employee Central.

3. Choose *Show Details* for an assignment shown in the *Job Information Assignments* section to view the job info replicated from Employee Central and the corresponding fields in SAP ERP HCM.

You're shown, for example, the supervisor, company, business unit, position, or job classification assigned in Employee Central and the corresponding manager, company code, organizational unit, position, or job assigned in SAP ERP HCM.

4. Choose *Show Details* for an assignment shown in the *Additional Assignments* section to view Job Relationship assignments, such as a matrix manager relation.

Additional Assignments is only displayed for employees that have additional Job Relationship assignments and only if you've enabled replication of associated employee information in the middleware (for organizational object replication) or the SAP ERP HCM system (for employee master data and organizational assignment replication).

5. If an error occurred, the related messages are shown.

The *Message Log* section shows the messages stored for the selected replication request in the *Analyze Application Log* (SLG1) transaction of the SAP ERP HCM system.

Next Steps

Next, view mapped object IDs, message IDs, and other technical details for a replication request.

3.1.3.5 Viewing Mapped Object IDs, Message IDs, and Other Technical Details for a Replication Request

Review details about a replication request in the Replication Request Monitor, such as what Employee Central and SAP ERP HCM IDs are mapped, what full transmission start date and transformation template are used, and so on.

Prerequisites

You've chosen *Show Details* for a time slice shown in the *Details* for <Organizational Object> section or for an assignment shown in the *Details* for *Employee* (<Employee ID>) section.

Context

You can view the following detailed information for a replication request:

- The ID of the object replicated from Employee Central and the mapped object ID from the SAP ERP HCM system
- The ID of the employee replicated from Employee Central and the mapped personnel number from the SAP ERP HCM system
- The ID of the web service message used to replicate this specific object or employee
- The status, creation date, and last change date of the replication request

- The unique ID of the replication request
- The full transmission start date (FTSD) used by the replication
- The transformation template group used in the replication
- Whether the generic, configuration-based or the object-specific processing of organizational objects was used in SAP ERP HCM
- Whether Enforce Update was set in employee master data replication
- Whether Is No-Show was set for a time slice

Procedure

Choose Show Technical Details at the bottom of the screen.

3.1.3.6 Exporting the Results List

Export the results list from the Replication Request Monitor to work on it offline or share it with someone else.

Prerequisites

- You've selected replication requests so that the results list is shown.
- You've sorted, filtered, and personalized the results list if desired so that only the requests you want to monitor right now are shown.

Procedure

Choose Export Export to Microsoft Excel to download the list.

Results

The export option downloads the plain list, without adding any details or links.

3.1.3.7 Processing Replication Requests Manually to Directly Store Updates in SAP ERP HCM

Post selected requests from the Replication Request Monitor manually on the database if you want to store the contained updates immediately, without waiting for the next scheduled run of the database update program.

Prerequisites

- You've selected replication requests so that the results list is shown.
- You've sorted, filtered, and personalized the results list if desired so that only the requests you want to monitor right now are shown.

Procedure

Select a request or multiple requests and choose Process Requests.

Results

The Replication Request Monitor runs the following database update programs directly, without asking for confirmation:

- Replicate Organizational Objects from EC to ERP Org. Mgmt (RH_SFIOM_PROC_ORG_STRUC_RPRQ) for organizational object requests
- *Replicate Employee Org. Assignments from EC to ERP Org. Mgmt* (RH_SFIOM_PROC_EE_ORG_ASS_RPRQ) for organizational assignment requests

Processed replication requests disappear from the results list in the Replication Request Monitor.

3.1.3.8 Example: Checking Why the Parent Division Is Missing for a Department

Go through this example to see how you can use the Replication Request Monitor when a replication request wasn't successful because the associated object is missing.

Procedure

- 1. Check which replication requests weren't successful since yesterday.
 - a. Go to the Selection Criteria section.
 - b. Choose the selection period *Last 24 Hours*.
 - c. Choose the statuses *Failed* and *Pending*.
 - d. If needed, restrict the selection to the Employee Central object type you want to monitor, such as *Department*.
- 2. From the result list, show the details for a specific object, such as *Department 2*, to check which error occurred.

You're shown this error message: FODepartment DEP_2: Target object DIV_11 for relationship A002 does not exist

- 3. Check for the target object mentioned in the error message.
 - a. Go back to the Selection Criteria section.
 - b. Choose the selection period All.
 - c. Restrict the selection to the target object ID, DIV_11.

The Replication Request Monitor doesn't show any result for your selection – apparently division *Division 011* (DIV_011) wasn't replicated yet.

4. Go to the Admin Center in SAP SuccessFactors, open the *Manage Data* admin tool, and check *Department 2*.

Department 2 has associations to two divisions: Division 011 and Division 012

- 5. Trigger replication of organizational objects from Employee Central to SAP ERP HCM again.
- 6. Go back to the Replication Request Monitor, select the entry for *Division 011*, and choose *Process Requests* to post the result to the database.
- 7. Select the entry for *Department 2* and choose *Process Requests*.
- 8. Check the details for *Department 2* again this time, no error is shown.

3.1.4 Replication Request Viewers for Organizational Data Replication

Using the Replication Request Viewers, you can access the staging areas for organizational data in SAP ERP HCM to check statuses or process requests manually.

Organizational Objects

Replication requests for organizational objects are stored in a staging area in the SAP ERP HCM system. To view the requests, go to the *Display Organizational Object Replication Requests* (SFIOM_VIEW_ORG_REQS) transaction.

Ľ	Display Org	anizational Ob	ject Repl	ication Requ	ests						
-0	👌 🚸 🛛 Proces	s Selected Requests	Delete Select	ed Requests App	lication Log						
		M (* † .) E	ð . 🕒 .	• = , i							
	EC Obj. ID	EC Obj. Type	ERP Obj. ID	ERP Obj. Type	Creation D.	Creation	Last Chan	Last Chan	Status	Status Text	
	50005010	Job Classification	50005010	Job	27.03.2015	06:55:5	6 27.03.2015	06:56:04	01	Open	
	50005330	Job Classification	50005330	Job					01	Open	Ŧ
	50005885	Job Classification	50005885	Job					01	Open	
	50006435	Job Classification	50006435	Job					01	Open	
	50006438	Job Classification	50006438	Job					01	Open	
	50006338	Department	50006338	Organizational unit		06:46:4	0	06:46:47	01	Open	
	50006358	Position	50006358	Position		06:40:5	6	06:41:05	01	Open	
	50005399	Position	50005399	Position	26.03.2015	06:26:0	2 26.03.2015	06:26:10	01	Open	
	50005859	Position	50005859	Position				01	Open		
	50006508	Position	50006508	Position					01	Open	
	50005047	Department	50005047	Organizational unit	24.03.2015	12:52:4	5 24.03.2015	12:52:49	01	Open	
	50005150	Department	50005150	Organizational unit					01	Open	
	50005196	Department	50005196	Organizational unit					01	Open	
	50005197	Department	50005197	Organizational unit					01	Open	-
	50005198	Department	50005198	Organizational unit					01	Open	-
Or	ganizational Obje	ect Details									
E	C Obj. Name	🕈 Start Date 📩	End Date 📩	Description	Parent	EC P	arent EC Obj. ID	Parer	nt Org		
- 1		31.12.2013	31.12.9999		Division	n A	E01	5000	5149		

Replication Request Viewer for Organizational Objects

Organizational Assignments

Replication requests for employee organizational assignments are stored in a staging area in the SAP ERP HCM system. To view the requests, go to the *Display Employee Org. Assignment Replication Requests* (SFIOM_VIEW_REQUESTS) transaction.

Ľ	Display Em	ployee Org.	Assignme	ent Replica	tion Reques	ts								
-2	👌 🚸 Proc	cess Selected Requ	iests Delete S	Selected Reques	ts Application Lo	g								
	9127													
B	Ext. Empl. ID	Employee ID	Creation Date	Creation Time	Last Change Date	Last Change Tim	e Status	Code Status Text						
~	02012289	42948	18.04.2016	01:11:23	18.04.2016	01:11:23	01	Open						
	02012290	42949					01	Open		-				
	02012291	42950					01	Open						
	02012292	42951					01	Open						
	02012293	42952					01	Open						
	02012294	42953				01	Open							
	02012295	42954					01	Open						
	02012296	42955					01	Open						
	02012297	42956									01	Open		
	02012298	42957					01	Open						
	02012299	42958					01	Open						
	02012300	42959					01	Open						
	02012301	42960					01	Open						
	02012302	42961					01	Open						
	02012303	42962					01	Open		Ŧ				
Or	ganizational Ass	signments												
9		n (* 14 (* 14	0.0.) 🌐 I 🚺										
En	nployment ID 🕇	Start date 🕇 En	d Date 📩 Per	rsonnel Number	Employee Name	Company ID Comp	any Code	Man. Employee ID	Man. Empl.	Ma				
41	140	01.01.2015 31	.12.9999	12687		US01 US01								

Replication Request Viewer for Organizational Assignments

Using the Replication Request Viewers

By default, in both transactions replication requests with the status *Open*, *Pending*, or *Failed* are displayed. You can change the selection by pushing F9.

You can trigger the database update manually for selected requests by choosing Process Selected Requests.

From both transactions you can go to the *Analyze Application Log* (SLG1) transaction and check the messages issued for the selected replication requests.

3.2 Monitoring Tools in Employee Central

Various monitoring tools are available in Employee Central for checking data replication results.

Replication Request Monitor for Organizational Data Replication [page 29]

Using the Replication Request Monitor, you can access the staging area for organizational data in SAP ERP HCM to check statuses, analyze errors, or process requests manually.

Employee Central Data Replication Monitor [page 29]

Employee Central provides an admin tool for monitoring data replication to the SAP ERP HCM system.

Analyzing API Calls with the SFAPI Audit Log [page 29]

Use the SFAPI Audit Log to monitor API calls to Employee Central.

Analyzing API Calls with the OData API Audit Log [page 31] Use the OData API Audit Log to monitor OData API calls to Employee Central.

3.2.1 Replication Request Monitor for Organizational Data Replication

Using the Replication Request Monitor, you can access the staging area for organizational data in SAP ERP HCM to check statuses, analyze errors, or process requests manually.

The Replication Request Monitor (SFIUI_A_REPL_REQ_MONITOR) is a Web Dynpro application that allows you to check replication requests for organizational objects and organizational assignments in all details, analyze error message issued by the replication from Employee Central, and process replication requests manually.

The SFIUI_A_REPL_REQ_MONITOR Web Dynpro application is assigned to the role menu of the SAP_HR_SFIOM_PROCESSING role in SAP ERP HCM. You can also add it to the SAP SuccessFactors user interface using the *Configure Custom Navigation* admin tool in Employee Central. This tool allows you to add hyperlinks to various locations in the SAP SuccessFactors UI, enabling users to navigate from that location to the specified URL. The URL you need to add is: spiolocol><host name>/sap/bc/webdynpro/sap/sfiui_a_repl_req_monitor.

For more information about the tool, refer to Managing Custom Navigation Links.

3.2.2 Employee Central Data Replication Monitor

Employee Central provides an admin tool for monitoring data replication to the SAP ERP HCM system.

The integration processes update the status in the Employee Central Data Replication Monitor by sending notifications and confirmations. Use the Data Replication Monitor to check the replication status, view alerts, and analyze error messages related to data replication from Employee Central to SAP ERP HCM. For more information, refer to the Employee Central Data Replication Monitor administration guide.

3.2.3 Analyzing API Calls with the SFAPI Audit Log

Use the SFAPI Audit Log to monitor API calls to Employee Central.

Context

The Employee Central CompoundEmployee API used by this integration is an employee-specific version of the SOAP-based SAP SuccessFactors API (SFAPI). It's provided specifically for extracting employee data (including organizational assignments) out of Employee Central. You can monitor the SFAPI using the SFAPI Audit Log.

The SFAPI Audit Log is intended to help with support and debugging of API usage. You can use it, for example, to share information with Product Support to help resolve API-related support issues. The tool allows you to download data from individual calls, which you could then send to Product Support.

For more information about the SFAPI Audit Log and how to access it, see Integration Tools in the SAP SuccessFactors HXM Suite SFAPI developer guide. Find the most current version of this guide in SAP Help Portal at https://help.sap.com/hr_foundation.

Procedure

1. Go to the Admin Center and choose the SFAPI Audit Log tool.

The Audit Log page shows the last 10,000 API calls to this system.

- 2. Select the button under the SOAP or HTTP columns in the log table to view the payload information for each call.
- 3. Use the session ID from process reporting in the middleware to find a specific API call in the SFAPI Audit Log.

SFAPI Audit Log

	Filter	Optio	ns								
Þ	Logir	n ID]				
	Sess A44E Corre	ion II)2AE elatio	D EB03 n ID	CA5E6F	-1FB	8984]				
							Example: Fil	terin	g for Session ID		
ID	Login ID	Status	SFAPI Cal	I Object	SOAP	HTTP	Call Time		Response (ms) Session ID	Correlatio	on ID
662759	-	Success	query o	compoundemployee			2015-05-05 14:16:02.083	1906	A44D2AEEB03CA5E6F1FB89846D2812F1.E	0C13QACANDSFAPI01	27e62790-70a3-4ff2-ac54-1408bd423a22
662755	****	Success	login				2015-05-05 14:15:58.252	51	A44D2AEEB03CA5E6F1FB89846D2812F1.E	0C13QACANDSFAPI01	6eb8edc4-8ce1-4877-a23f-97a8f0167643

Example: SFAPI Audit Log Table Filtered for Session ID

Related Information

Process Reporting in Boomi AtomSphere [page 32]

3.2.4 Analyzing API Calls with the OData API Audit Log

Use the OData API Audit Log to monitor OData API calls to Employee Central.

Context

You can filter, display, and download the transaction history of OData APIs using the OData API Audit Log tool. In the context of organizational data replication, OData APIs are used to retrieve data for generic objects from Employee Central.

i Note

If you use the *iFlow: EC to ERP - Employee Organizational Assignment Replication v1.0* middleware process, an OData call can also be sent for organizational assignments when reading information about managers. This is only the case if you've set the ECERPORG_READ_MANAGER_COMPANY parameter of the middleware process for replicating organizational assignments to **x** to read the company of the manager and deliver it in the web service. For performance reasons, we don't recommend that you set this parameter, however.

The *Packaged Integration: EC to ERP - Employee Organizational Assignment Replication v2.0* process doesn't read the company of the manager and doesn't deliver it in the web service. Instead, you use the system to identify the personnel number of the employee's manager and to create the employee-manager relation.

For more information about the OData API Audit Log and how to access it, see Enabling API Audit Logs in SAP SuccessFactors HXM Suite OData API: Developer Guide. Find the most current version of this guide in SAP Help Portal at https://help.sap.com/hr_foundation.

Procedure

1. Go to the Admin Center and choose the OData API Audit Log tool.

The Audit Log shows the last 10,000 OData calls to this system.

2. Select the button under the *HTTP* or *REST* columns in the log table to view the payload information for each call.

Log ID	Login ID	Session ID	Request ID	Status	OData API	Call Entity	HTTP	REST	Request Time 🔺	Response (ms)
1790021	sbsadmin	47076A1F45500FD93C34C9 QACANDSFAPI01	A6B7102DB8.DC13 1429603424886	Success	Query	FOBusinessUnit			2015-04-21 08:03:44.71	235
1790022	sbsadmin	C2A4FD35EC18EA0807AA3 QACANDSFAPI01	C19482E0F50.DC131429603426078	Success	Query	FOBusinessUnit			2015-04-21 08:03:45.913	211
1790023	sbsadmin	CF8FD86BC559BEB380A40 3QACANDSFAPI01	AC47D6F5AEC.DC11429603429861	Success	Query	FODivision			2015-04-21 08:03:49.696	221
1790024	sbsadmin	EB1B561313CED8A970BA1 QACANDSFAPI01	655244D01F8.DC13 1429603430806	Success	Query	FODivision			2015-04-21 08:03:50.647	211

Example: OData API Audit Log Table

3. Use the *Request ID* column in the log table to display the request ID for each recorded OData API call.

You can use request IDs as search criteria when needed.

3.3 Monitoring Tools in the Middleware

Take a look at the monitoring tools available for your middleware.

Process Reporting in Boomi AtomSphere [page 32]

To monitor the process execution in the middleware system, choose Manage Process Reporting .

Monitoring in SAP Cloud Integration [page 39]

Use the monitoring features of SAP Cloud Integration to check whether any issues occurred in your middleware processes.

3.3.1 Process Reporting in Boomi AtomSphere

To monitor the process execution in the middleware system, choose Manage Process Reporting

You see a list of all process executions that were carried out or are being carried out within the specified time frame on the Atoms in which your processes are deployed. The list shows information about the execution of the processes, such as:

- When the process was executed
- How long the process has run
- On which Atom the process has run

Checking the execution status

The status symbols show the execution status of the process. This is what they mean:

Execution Statuses

Symbol	Short Description	Meaning
0	In Process	Process is currently being executed
•	Complete	Process has run successfully
0	Error	There was an error, therefore the process execution has stopped

Checking the type of execution

The execution type symbols show how the process was executed. This is what they mean:

Execution Types

Symbol	Short Description	Meaning	Example		
8	Manual execution	Process was executed manually	Testing the execution of a specific process		
1	Event Listener	Process was triggered by an event	Cost center replication from SAP ERP HCM to Employee Central		
	Scheduled Execution	Process was scheduled	Organizational data replication from Employee Central to SAP ERP HCM		

Changing the time frame

To change the time frame, click the field that shows the current time frame (such as *Past Hour*) and select one of the options.

Executions -



Changing the Time Frame

Applying filters

You can filter, for example, for a specific execution ID. To do so, click *Add Filter* and choose your filter criterion.

Executions -

	Past Hour 🔻	Add Filter		
	Time	Atoms		
•	2015-03-31 04:35"	Process	2	
•	2015-03-31 04:35:0	Execution ID		
•	2015-03-31 04:35:0	Hide Successes with 0 Inbound Docs	31	
•	2015-03-31 04:35:(Execution Modes	ž	

Adding a Filter

i Note

The *Hide Successes with O Inbound Docs* option isn't available for scheduled processes since there's always an inbound doc needed for triggering a scheduled process.

You can also filter for the execution status. To do so, click the status name (such as *Errors*) in the upper right corner.

All Errors Pending Successes

Filtering for Execution Status

Checking error messages

The *Error Message* column shows the first error message from the log. Usually, the processing is stopped after this error. Analyze the error using the execution log

Checking the execution log

To analyze the process execution, go to the log. To do so, click the Show Log symbol.



Showing the Log

You can filter the log so that you only see message with a specific status (such as *SEVERE*). You can also download the log to your local disk and open it with a suitable editor to see more details. To do so, click *Save Logs*.

Show Log					
Minimum Status to Show	DEBUG INFO WARNING			s	ave Logs
Time	SEVERE	Shape	Ext Info	Message	Details
2015-04-01 11:40:09 A	M INFO	initializing		Executing Process Main:SFAPI Server Check	
2015-04-01 11:40:09 A	M INFO	Start	NoData	Executing Start Shape	^
2015-04-01 11:40:09 A	M INFO	Start	NoData	1 document(s) found for processing.	
2015-04-01 11:40:09 A	M INFO	Start	NoData	Shape executed successfully in 115ms.	
2015-04-01 11:40:09 A	M INFO	Process Call	passing in start data, no re	Executing Process Call Shape with 1 docume	
2015-04-01 11:40:11 A	M INFO	Process Call	passing in start data, no re	Shape executed successfully in 1509ms.	
2015-04-01 11:40:11 A	M INFO	Branch		Executing Branch Shape with 1 document(s).	
2015-04-01 11:40:11 A	M INFO	Branch		Shape executed successfully in 1ms.	
2015-04-01 11:40:11 A	M INFO	Branch		Executing Branch Shape with 1 document(s).	
2015-04-01 11:40:11 A	M INFO	Branch		Shape executed successfully in 0ms.	
2015-04-01 11:40:11 A	M INFO	Connector	SFAPI 1: successfactorsm	Executing Connector Shape with 1 document	
2015-04-01 11:40:12 A	M INFO	Connector	SFAPI 1: successfactorsm	[SFAPI] HTTP Client Timeout time in minutes	
2015-04-01 11:40:12 A	M INFO	Connector	SFAPI 1: successfactorsm	[SFAPI] SOAP Endpoint: http://10.10.20.110:8	
2015-04-01 11:40:12 A	M INFO	Connector	SFAPI 1: successfactorsm	[QUERY] Starting row: 1	
2015-04-01 11:40:12 A	M INFO	Connector	SFAPI 1: successfactorsm	[QUERY] Max records number: 1	
2015-04-01 11:40:12 A	M INFO	Connector	SFAPI 1: successfactorsm	[QUERY] Query Page Size: 200	
2015-04-01 11:40:12 A	M INFO	Connector	SFAPI 1: successfactorsm	[QUERY] Keep report definition: false	
2015-04-01 11:40:12 A	M INFO	Connector	SFAPI 1: successfactorsm	[QUERY] Async Query Report Format: XML	
2015-04-01 11:40:12 A	M INFO	Connector	SFAPI 1: successfactorsm	[QUERY] Adhoc Timeout time in minutes: 15	
2015-04-01 11:40:12 A	M INFO	Connector	SFAPI 1: successfactorsm	[QUERY] Sleep time in seconds: 15	
2015-04-01 11:40:12 A	M INFO	Connector	SFAPI 1: successfactorsm	[QUERY] Field Definition Cookie Found	~
	UL INFA	0	OF A DLA	Rental Community Description and address	
				📧 🕢 1-25 of over 10	i0 🕩
				с	ancel

Filtering the Log

In the log for organizational assignment process executions you can also find the session ID. You can use the session ID to filter for a specific API call in the SFAPI Audit Log.

→ Tip

Download the log and search for *JSESSIONID* to find the session ID entry such as shown in this example:

```
[...] INFO Connector CON_EC Compound Employee [...]
JSESSIONID=JSESSIONID=A44D2AEEB03CA5E6F1FB89846D2812F1.DC13QACANDSFAPI01 [...]
```

Showing extended execution information

You can display additional information such as the execution ID. To do so, click the symbol in the *Actions* column and choose *View Extended Information*. *Extended Execution Information* will open, where you can find the execution ID.



Showing Extended Information

Extended Execution Information

Execution ID	execution-983cb5ee-7668-406e-9049-c0963ad5c97a-2015.04.01
Process ID	3d7e4c51-d953-4545-a569-61324e5c166e
Atom ID	c74f56d5-735c-4acc-b5e4-ade4fef0d9e8
Node ID	10_8_23_32[execution-983cb5ee-7668-406e-9049-c0963ad5c97a-2015.04.01]
Deployment ID	6af413af-55f3-42d8-9a32-cb5fce5ce573
	Close

Execution ID in Extended Execution Information

The execution ID is helpful, for example, when you need to inform your support organization about a specific process run that has failed.

Displaying inbound and outbound documents

Click the timestamp of a process to see the inbound and outbound docs for each connector.

iFlow: EC to ERP - Employee Organ Time Elapsed Time Doc	zational Assignment Replication v1.0 Iments In 1 Documents Out 3 Atom	Execution Type Scheduled Execution	
Actions			
(Start) No Data Connection nodata Operation Start Successes: 1 Errors: 0	SuccessFactors Connection CON_EC Compound Employee Operation OP CREATE Employee Data Replication Notification Successes: 1 Errors: 0	SuccessFactors Connection CON_EC Compound Employee Operation OP CompoundEmployee with Company Successes: 1 Errors: 0	Web Services SOAP Client Connection CON_EC to ERP Replication of Employee Organizational Assignment Data Operation OP_EC to ERP Replication of Employee Organizational Assignment Data

Showing Inbound and Outbound Docs

• Since the organizational data replication processes are scheduled, the first document is an empty dummy document.

- The inbound operation shows the documents coming in from reading the SAP SuccessFactors APIs. In this case it's the Compound Employee API, which is used to retreive organizational assignment data.
- The outbound operation shows the replication to the SAP ERP HCM system.

i Note

When sending data to the SAP ERP HCM system the middleware puts packets of hundred together. Therefore, two documents on the inbound side might result in one document on the outbound side.

Documents Out shows the complete communication. Even if only one document was sent to the SAP ERP HCM system, three documents might show up here (notification, read, and write).

Finding the message ID

You can use the message ID from the middleware to filter for a specific entry in the message monitor of the *Web Service Utilities* tool in the SAP ERP HCM system.

1. Click the timestamp of a process that has outbound docs.

	Executions -							Execute Process			
	Past 24 Hours • Atom	ms: [EV Org: ECPayInt -> QI • 🛞 🛛 Add Filter 🖉 🖏							All Errors Pending Succe	ISSES
	Time		Process	Actions		Atom	In	Out 🔻	Elapsed Time	Error Message	
•	2015-05-06 07:55:00 AM		iFlow: EC to ERP - Employee Organizational Assignment Replication v1.0	۵.		DEV Org: ECPayInt <-> QI9/	1	3	1:00		~
	2015-05-06 08:45:00 AM		iFlow: EC to ERP - Employee Organizational Assignment Replication v1.0	۹		DEV Org: ECPayInt <-> QI9/	1	3	0:53		
•	2015-05-06 08:45:00 AM		iFlow: EC to ERP Job Replication v1.0			DEV Org: ECPayInt <-> QI9/	1	3	0:50		

Selecting a Process with Outbound Docs

2. Choose the outgoing connection.

Selecting the Outgoing Connection

3. Choose View Document.



Showing the Document for the Outgoing Connection

4. Go to the message header.

Document Viewer

Raw Formatted XML



Message ID in Message Header

Starting a process from Process Reporting

You can directly execute a process from the *Process Reporting* UI, for example, for test purposes. To do so, choose *Execute Process*, then choose your Atom and click the *Choose the desired component* symbol to select the process.

Choose the Atom on which you want to execute the process, then choose the process to execute.

	Atom						
	SF Boomi						
	Process	Choose the desired component					
	Choose	Q.					
	Q Filter Processes						
	Generation SuccessFactors	- Master					
~							
	😑 📁 SF Infrast	tructure Testing/Monitoring					
	Itility:	NAME TRANSPORTATION OF TRANSPORT					

Choosing the Process to Be Started from Process Reporting

3.3.2 Monitoring in SAP Cloud Integration

Use the monitoring features of SAP Cloud Integration to check whether any issues occurred in your middleware processes.

SAP Cloud Integration provides a web-based monitoring UI that allows you to check the status of messages and integration content artifacts for a tenant cluster. For more information, see Monitoring.

Use the log ID that you find in the monitoring to find the log of a specific process that didn't run successfully and to filter the log for detailed information.

4 Software Change Management

Ensure software maintenance for your organizational data integration system landscape.

Support Packages and Patch Implementation [page 40]

To be able to use the newest features we provide, always install the latest support package of the integration add-on for SAP ERP HCM and SAP SuccessFactors Employee Central (software component version PA_SE_IN 100).

4.1 Support Packages and Patch Implementation

To be able to use the newest features we provide, always install the latest support package of the integration add-on for SAP ERP HCM and SAP SuccessFactors Employee Central (software component version PA_SE_IN 100).

You'll find the required support package in the corresponding integration guides, such as:

- Replicating Employee Master Data and Organizational Assignments from Employee Central to SAP ERP HCM
- Replicating Organizational Objects from Employee Central to SAP ERP HCM

Find the most current version of these guides in SAP Help Portal at http://help.sap.com/hr_ecintegration.

We also recommend that you regularly check the SAP Notes that are published for the LOD-EC-INT-ORG application area using the SAP ONE Support Launchpad at https://launchpad.support.sap.com/

For more information about the implementation of support packages and SAP Notes, see Software Maintenance in the SAP NetWeaver documentation.

5 Troubleshooting of Organizational Data Replication from Employee Central

Info on how to troubleshoot organizational data replication from Employee Central to SAP ERP HCM.

Checking Organizational Assignments Replicated to SAP ERP HCM [page 41]

Check organizational assignments of a specific employee in SAP ERP HCM to see whether they were correctly replicated from Employee Central.

Technical Configuration of the Web Service Runtime Environment [page 42]

Here's an SAP Note that gives instructions on how to set up the technical configuration of the web service runtime environment and how to check it in your SAP ERP HCM system.

Known Issues [page 42]

Learn more about some known issues regarding organizational data replication from Employee Central to SAP ERP HCM, and how to troubleshoot them.

5.1 Checking Organizational Assignments Replicated to SAP ERP HCM

Check organizational assignments of a specific employee in SAP ERP HCM to see whether they were correctly replicated from Employee Central.

Context

You can check, for example, whether the employee's assignment was replicated at all and whether the Employee Central object the employee is assigned to (such as the position) was correctly mapped to an SAP ERP HCM object.

Procedure

1. Go to the SFIOM_CHK_EE_ORG_ASS transaction in your SAP ERP HCM system.

This transaction calls the *Display Employee Organizational Assignment Replications* (RH_SFIOM_CHECK_EE_ORG_ASS) program.

2. Select an employee by their SAP ERP HCM personnel number, Employee Central employee ID, or external employee ID from Employee Central and choose *Execute*.

In the upper part of the screen, you're shown the employee's personnel number, employee ID, external employee ID, and name. The mapping of the personnel number with the employee ID and the external

employee ID is read from the *Employee Key Mapping* (PAOCFEC_EEKEYMAP) table. If multiple personnel numbers are shown, this means that the employee has several personnel assignments (for example, because they have a concurrent employment or are on a global assignment).

3. Expand the information in the lower part of the screen to see the position assignments of this employee per personnel number, as they exist in the SAP ERP HCM system over time.

For each position you're shown the assignments to other organizational objects over time, such as organizational units, jobs, manager positions, or cost centers. The mapping of the object IDs from Employee Central to object IDs in SAP ERP HCM. This mapping is read from the *Organizational Structure Item Key Mapping* (SFIOM_KMAP_OSI) table. If an object doesn't have an Employee Centrall object ID this means that it wasn't replicated from Employee Central. It was created directly in the SAP ERP HCM system.

4. Select an entry with the *Person* object type and choose *Replication Requests* to find out whether there are open, pending, or failed replication requests for the employee.

You're redirected to the staging area viewer (transaction SFIOM_VIEW_REQUESTS). The employee ID and external employee ID of the employee are preselected so that you only see the requests for this specific employee.

Example

Checking the replication requests is useful, for example, when the employee was assigned a new position in Employee Central, but you don't see this assignment in the SAP ERP HCM system yet. In this case, the replication request transferring the new assignment from Employee Central might not have been processed yet in SAP ERP HCM.

5.2 Technical Configuration of the Web Service Runtime Environment

Here's an SAP Note that gives instructions on how to set up the technical configuration of the web service runtime environment and how to check it in your SAP ERP HCM system.

Go to SAP Note 1043195/ to find more information.

5.3 Known Issues

Learn more about some known issues regarding organizational data replication from Employee Central to SAP ERP HCM, and how to troubleshoot them.

Known Issue: You've Created or Changed an Employee's Organizational Assignment in Employee Central, But This Change Is Not Reflected in SAP ERP HCM [page 44]

Here's how to troubleshoot organizational assignment replication from Employee Central if changes don't show up in the SAP ERP HCM system.

Known Issue: You've Created or Changed an Organizational Object in Employee Central, But This Change Is Not Reflected in SAP ERP HCM [page 45]

Here's how to troubleshoot organizational object replication from Employee Central if changes don't show up in the SAP ERP HCM system.

Known Issue: Manager Not Yet Replicated From Employee Central [page 47]

Here's how to troubleshoot organizational assignment replication from Employee Central if SAP ERP HCM can't determine the employee's manager.

Known Issue: Organizational Assignment Replication from Employee Central Creates New Position and New Position Assignment Although a Position Assignment Already Exists in SAP ERP HCM [page 48]

Here's how to troubleshoot organizational assignment replication from Employee Central if SAP ERP HCM can't reuse an existing position assignment.

Known Issue: After You've Changed the External Code of an Organizational Object in Employee Central, Organizational Assignments in SAP ERP HCM Are No Longer Correct [page 49]

Here's how to troubleshoot organizational data replication from Employee Central if organizational assignments beome incorrect in SAP ERP HCM.

Known Issue: After Data Replication from Employee Central to SAP ERP HCM Error Messages Related to Positions are Shown in the Application Log [page 50]

Here's how to troubleshoot organizational data replication from Employee Central if the error log in the SAP ERP HCM system shows position-related errors.

Known Issue: You Have Changed the Job Classification Title or Description in Employee Central, but Your Changes Aren't Replicated to SAP ERP HCM [page 52]

Here's how to troubleshoot organizational data replication from Employee Central if changes to job titles or descriptions don't show up in the SAP ERP HCM system.

Known Issue: Organizational Structure Items Can't Be Replicated Because cust_toDivision and cust_toBusinessUnit Associations Are Missing [page 54]

Here's how to troubleshoot organizational data replication from Employee Central if the middleware shows errors about *cust_toDivision* or *cust_toBusinessUnit*.

Known Issue: "Invalid Property Name" Error Message is Shown for FOBusinessUnit/nameTranslationNav and FODivision/nameTranslationNav [page 55]

Here's how to troubleshoot organizational object replication from Employee Central if SAP ERP HCM shows errors about *nameTranslationNav*.

Known Issue: Replication Request Monitor Shows Internal Server Error [page 56]

Here's how to troubleshoot position replication from Employee Central if the Replication Request Monitor shows an internal server error.

Known Issue: Mandatory Field HRP1000-STEXT Was Not Mapped [page 59]

Here's how to troubleshoot organizational object replication from Employee Central if SAP ERP HCM can't fill in the STEXT field of the *Object* (1000) infotpye.

Known Issue: Deletion Isn't Replicated from Employee Central [page 60]

Here's how to troubleshoot organizational object replication from Employee Central if deletions don't show up in the SAP ERP HCM system.

Known Issue: Cost Center Assignments Are Deleted When You Use a Default Cost Center in SAP ERP HCM [page 61]

Here's how to troubleshoot organizational assignment replication from Employee Central if cost center assignments overwrite each other in the SAP ERP HCM system.

Known Issue: Organizational Assignment Change Extends Too Far Into the Past [page 62]

Here's how to troubleshoot organizational assignment replication from Employee Central if the SAP ERP HCM system shows an error about changes extending too far into the past.

Known Issue: Staging Area Tables Contain a Large Amount of Data [page 63]

Here's how to troubleshoot organizational data replication from Employee Central if the staging area tables in the SAP ERP HCM system contain too much data.

Known Issue: Employee is Inactive, Replicate Active Employee from Employee Central [page 64] Here's how to troubleshoot organizational assignment replication from Employee Central if replication fails and the SAP ERP HCM system shows an error message about the employee being inactive.

5.3.1 Known Issue: You've Created or Changed an Employee's Organizational Assignment in Employee Central, But This Change Is Not Reflected in SAP ERP HCM

Here's how to troubleshoot organizational assignment replication from Employee Central if changes don't show up in the SAP ERP HCM system.

What's the issue?

In the Employee Central Data Replication Monitor the corresponding entries typically show the replication status *In Progress*.

What you can do

Here's how you can check why the changes weren't replicated from Employee Central to the SAP ERP HCM system.

Check the incoming SOAP messages

- 1. Go to the SRTUTIL transaction in your SAP ERP HCM system and open the Message Monitor.
- 2. Specify the replication time frame.
- 3. In the *Interface Name* field for the receiver, enter the name of the employee organizational assignments interface (*EmployeeOrganisationalAssignmentReplicationRequest_In*).
- 4. Click *Execute*, then check the result:
 - If no entry can be found:
 - Check in the middleware whether the process is scheduled and has run successfully. For more information refer to section Monitoring Tools in the Middleware [page 32].
 - Check the SFAPI Audit Log in Employee Central using the session ID from the middleware. For more information refer to section Analyzing API Calls with the SFAPI Audit Log [page 29].
 - If entries are found, double-click the relevant entry to check the transferred data.

Check the replication requests

1. Go to the SFIOM_VIEW_REQUESTS transaction in your SAP ERP HCM system.

Managing, Monitoring, and Troubleshooting Organizational Data Replication from Employee Central to SAP ERP HCM Troubleshooting of Organizational Data Replication from Employee Central

- 2. Check whether there is an entry for the employee whose organizational assignment was changed in Employee Central. To do so, search for relevant entries using the employee's External Employee ID or Employee ID from Employee Central.
- 3. Depending on the status of the entries you find for the employee, carry out the following steps:
 - If there is an entry with the status Open:
 - 1. Double-click this entry to display the organizational assignment details.
 - 2. Click Process Selected Requests to process the open request.
 - 3. Refresh the result list and make sure that the entry has disappeared from the list.
 - If there is an entry with the status *Pending* or *Failed*:
 - 1. Check if there are error messages in the application log. To do so, select the entry and click *Application Log*. The object PAOC_SFI_OM, the subobject REPL_REQ_PROCESSING, and the external ID EMPLOYEE_ID_EXT (which refers to the *External ID* column in SLG1) are preset. In the Application Log, check for the reason why the request has the status *Pending* or *Failed*. Typical errors are, for example, that the employee or the assigned organizational object (such as the position) haven't been replicated yet or that the employee has more than one position assigned. Resolve the error, then go back to the SFIOM_VIEW_REQUESTS transaction and click *Process Selected Requests* to process the pending organizational assignment requests again.
 - 2. Check if the employee was successfully replicated to the SAP ERP HCM system. To do so, check whether an entry for this employee exists in the ECPAO_EE_KMAP table.
 - 3. Check if the organizational object (such as the job classification) the employee is to be assigned to was successfully replicated to the SAP ERP HCM system. To do so, check in the SFIOM_VIEW_ORG_REQS transaction if there are open replication requests containing relevant organizational objects. If yes, click *Process Selected Requests* to process these requests. If the processing was successful, go back to the SFIOM_VIEW_REQUESTS transaction and click *Process Selected Requests* to process the pending organizational assignment requests again.
 - 4. If the missing assignment refers to a manager, make sure that this manager was replicated to the SAP ERP HCM system before you run the organizational assignment request for the employee..

5.3.2 Known Issue: You've Created or Changed an Organizational Object in Employee Central, But This Change Is Not Reflected in SAP ERP HCM

Here's how to troubleshoot organizational object replication from Employee Central if changes don't show up in the SAP ERP HCM system.

What's the issue?

Data of organizational objects doesn't seem to be correctly replicated to the SAP ERP HCM system.

What you can do

Check the incoming SOAP messages

- 1. Go to the SRTUTIL transaction in your SAP ERP HCM system and open the Message Monitor.
- 2. Specify the replication time frame.
- 3. In the *Interface Name* field for the receiver, enter the names of the interfaces for organizational objects:
 - PositionReplicationRequest_In
 - JobReplicationRequest_In
 - OrganisationalStructureReplicationRequest_In
- 4. Click *Execute*, then check the result:
 - If no entry can be found:
 - Check in the middleware whether the process is scheduled and has run successfully.
 - Check the OData API Audit Log in Employee Central.
 - If entries are found, double-click the relevant entry to check the transferred data.

Check the replication requests

- 1. Go to the SFIOM_VIEW_ORG_REQS transaction in your SAP ERP HCM system.
- 2. Check whether there are entries for the organizational objects you have created or changed in Employee Central.
- 3. Depending on the status of the entries you find, carry out the following steps:
 - If there is an entry with the status Open:
 - 1. Select the request and click Process Selected Requests to process it.
 - 2. Make sure that the entry has disappeared from the list.
 - If there is an entry with the status *Pending* or *Failed*:
 - 1. Select the entry and click *Application Log*. The object PAOC_SFI_OM, the subobject REPL_REQ_PROCESSING, and the external ID are preset.
 - 2. Check for relevant error messages for the objects in question and resolve the errors.
 - 3. Go back to the SFIOM_VIEW_ORG_REQS transaction and click *Process Selected Requests* to process the replication requests again.

Related Information

Monitoring Tools in the Middleware [page 32] Analyzing API Calls with the OData API Audit Log [page 31]

5.3.3 Known Issue: Manager Not Yet Replicated From Employee Central

Here's how to troubleshoot organizational assignment replication from Employee Central if SAP ERP HCM can't determine the employee's manager.

What's the issue?

You are shown this error message in the application log in the SAP ERP HCM system:

Employee <ID>: Manager <ID> not yet replicated from EC

This can happen, for example, if you have managers in Employee Central who are assigned to other companies than their employees.

What you can do

Make sure that the manager's company ID is transferred from Employee Central so that the SAP ERP HCM system can identify the manager. To do so, we recommend to enable replication of associated employee information in the middleware.

→ Remember

If you use the *iFlow: EC to ERP - Employee Organizational Assignment Replication v1.0* process in the middleware, you can set the ECERPORG_READ_MANAGER_COMPANY parameter in the process properties to **x** instead of enabling replication of associated employee information. Then the process reads the company of the manager and delivers it in the web service. But for performance reasons we don't recommend to do so.

5.3.4 Known Issue: Organizational Assignment Replication from Employee Central Creates New Position and New Position Assignment Although a Position Assignment Already Exists in SAP ERP HCM

Here's how to troubleshoot organizational assignment replication from Employee Central if SAP ERP HCM can't reuse an existing position assignment.

What's the issue?

If no position assignment is provided by Employee Central and the existing position assignment in the SAP ERP HCM system isn't considered to be appropriate and therefore can't be reused by the SAP ERP HCM system, new positions and position assignments are created. Appropriate means:

- The employee mustn't be assigned to several different positions in overlapping time slices.
- The employee must be assigned to the position during the complete assignment period.
- The position mustn't be shared by several employees.
- The position itself must be valid during the complete assignment period.
- The position mustn't be mapped to an Employee Central position (which would mean that it was replicated from Employee Central).

If these conditions aren't fulfilled, the existing assignment is delimited. A new position and a new position assignment are created in the SAP ERP HCM system.

What you can do

Ensure that the listed conditions are fulfilled.

5.3.5 Known Issue: After You've Changed the External Code of an Organizational Object in Employee Central, Organizational Assignments in SAP ERP HCM Are No Longer Correct

Here's how to troubleshoot organizational data replication from Employee Central if organizational assignments beome incorrect in SAP ERP HCM.

What's the issue?

You change the external code of a business unit, division, department, job classification, or position in Employee Central that is replicated to the SAP ERP HCM system. In SAP ERP HCM, the organizational assignments are no longer correct after data replication.

Example

You replicate organizational data, including the department with the external code D_1234, from Employee Central to SAP ERP HCM. In SAP ERP HCM, the organizational unit 1234 is created that corresponds to department D_1234. Then you change the external code of department D_1234 to D_5678 in Employee Central. Now you replicate the organizational data again from Employee Central to SAP ERP HCM. The replication considers the existing department, which now has the new external code D_5678, to be a new object and therefore creates a new organizational unit 5678. But the employees' assignments to the department in Employee Central aren't automatically reassigned to the new organizational unit 5678 in SAP ERP HCM. In SAP ERP HCM, the employees are still assigned to the organizational unit 1234.

What you can do

Replicate the affected employee organizational assignments again from Employee Central to clean up the assignments in the SAP ERP HCM system.

→ Tip

To avoid this kind of error, do **not** change the external codes of business units, divisions, departments, job classifications, or positions in Employee Central that are affected by the organizational data replication.

5.3.6 Known Issue: After Data Replication from Employee Central to SAP ERP HCM Error Messages Related to Positions are Shown in the Application Log

Here's how to troubleshoot organizational data replication from Employee Central if the error log in the SAP ERP HCM system shows position-related errors.

What's the issue?

You are shown error messages for positions in the application log in the SAP ERP HCM system.

What you can do

When positions haven't been replicated, are invalid, or are shared

The following error messages in the application log in the SAP ERP HCM system ...

- Pers.No. <no.>: Mapping for position <name> not found (SFIOM_PROCESSING 135)
- Pers.No. <no.>: Position <name> not found (Position ID <ID>) (SFIOM_PROCESSING 137)
- Pers.No. <no.>: Position <name> not valid (Position ID <ID>) (SFIOM_PROCESSING 136)
- Pers.No. <no.>: Position <name> is shared (SFIOM_PROCESSING 141)

... might be due to Position Management enablement in Employee Central. If Position Management is enabled, employees' position assignments are provided by Employee Central. In this case the SAP ERP HCM system checks if the following conditions are fulfilled:

- The position itself must have been replicated from Employee Central so that it is available in the key mapping table (SFIOM_KMAP_OSI) in the SAP ERP HCM system.
- The position must be valid during the complete assignment period.
- The position mustn't be shared by several employees.

Therefore make sure that these conditions are fulfilled.

When positions are shared

The error message *Pers.No. <ID>: Position <ID> is shared* can also be caused by a change of the external code of a position in Employee Central that is replicated to the SAP ERP HCM system.

Example

You replicate organizational data, including the position with the external code P_1234 and the assignment of employee EE123456 to this position, from Employee Central to SAP ERP HCM. In SAP ERP HCM, the position 1234 and the assignment of employee EE123456 to this position are created:

Position in Employee Central	Position in SAP ERP HCM	Employee Assigned to Position in SAP ERP HCM
P_1234	1234	EE12345

Then you change the external code of position P_1234 to P_5678 in Employee Central. The employee EE12345 is still assigned to this position. You also create a new position that gets the external code P_1234 and assign the employee EE67890 to this position.

Now you try to replicate organizational data again from Employee Central to SAP ERP HCM. The replication considers the existing position, which now has the new external code P_5678, to be a new object and therefore creates a new position 5678. But the assignment of employee EE12345 to the position in Employee Central isn't automatically redirected to the new position 5678 in SAP ERP HCM. In SAP ERP HCM, the employee EE12345 is still assigned to the position 1234. Since you have also assigned employee EE67890 to position P_1234 in Employee Central, this would theoretically result in the following situation:

Position in Employee Central	Position in SAP ERP HCM	Employee Assigned to Position in SAP ERP HCM
P_1234	1234	EE12345, EE67890
P_5678	5678	

Since shared positions aren't supported by SAP ERP HCM, the organizational assignment replication fails and you get the error message *Position is shared*.

→ Tip

To avoid this kind of error, do **not** change the external codes of positions in Employee Central that are affected by the organizational data replication.

5.3.7 Known Issue: You Have Changed the Job Classification Title or Description in Employee Central, but Your Changes Aren't Replicated to SAP ERP HCM

Here's how to troubleshoot organizational data replication from Employee Central if changes to job titles or descriptions don't show up in the SAP ERP HCM system.

What's the issue?

When you create a new job classification in Employee Central and save it, the title and description are automatically filled into the corresponding translation fields for the default language that has been set in Provisioning.

Job Classification: Title of New Job (NewJob)



日本語 (Japanese)

Default English Translation

When you change the title or description, the changes are **not** automatically reflected in the translation fields. The entries in the translation fields stay the same as before.

Job Classification: Title of New Job (NewJob)				
* Effective as of 04/13/2015 🛗 * Required Fields				
Blue indicates that the item changed on this date				
* Job Code	NewJob			
Job Title	New Title of New Job Title of New Job			
Description	Description of New Job			
* Status	Active -			
	Changing a Title			
View Translations				
Job Code NewJob				
U				
Viewir	ng Changed Translations			
Translations				
Slovenščina (Slovenian)				
Português do Brasil (Brazilian Portuguese)				
Polski (Polish)				
English US (English US) T	itle of New Job			
日本語 (Japanese)				
English Translation Is Unabout and				
English Translation Is Unchanged				

The middleware process, however, uses the translated titles and descriptions. This system behavior is intended and works as designed.

What you can do

If you want to replicate changes to job classification titles or descriptions to SAP ERP HCM, also change them on the *Translations* page.

Translation	S	
	Slovenščina (Slovenian)	Click or focus to edit
Português do Brasil (Brazilian Portuguese)		Click or focus to edit
	Polski (Polish)	Click or focus to edit
	English US (English US)	New Title of New Job

Changing Translation

5.3.8 Known Issue: Organizational Structure Items Can't Be Replicated Because cust_toDivision and cust_toBusinessUnit Associations Are Missing

Here's how to troubleshoot organizational data replication from Employee Central if the middleware shows errors about *cust_toDivision* or *cust_toBusinessUnit*.

What's the issue?

The data model of the new generic objects *Department* and *Division* does not contain the *cust_toDivision* and *cust_toBusinessUnit* associations by default. If you haven't added them to the data model, you might see errors such as the following in the middleware application log:

- Bad request invalid property name: FODepartment/cust_toDivision
- Bad request invalid property name: FODivision/cust_toBusinessUnit

The replication of organizational structure items needs the *cust_toDivision* and *cust_toBusinessUnit* associations to build a correct organizational unit hierarchy in the SAP ERP HCM system.

What you can do

Add these associations to the object definitions of the *Department* and *Division* objects when you implement organizational structure item replication.

i Note

The data model of the former foundation objects *Department* and *Division* had included the *divisionFlxNav* and *businessUnitFlxNav* associations by default. Existing implementations that use the *divisionFlxNav* and *businessUnitFlxNav* associations are still supported. But if you implement organizational structure item replication now, based on the new generic objects, these associations are no longer available.

5.3.9 Known Issue: "Invalid Property Name" Error Message is Shown for FOBusinessUnit/nameTranslationNav and FODivision/nameTranslationNav

Here's how to troubleshoot organizational object replication from Employee Central if SAP ERP HCM shows errors about *nameTranslationNav*.

What's the issue?

When you run the *Create and Execute Organizational Object Replication Query* (RH_SFIOM_ORG_OBJ_REPL_QUERY) program to replicate organizational objects from Employee Central to SAP ERP HCM, the following error messages might be shown:

- Invalid property name: FOBusinessUnit/nameTranslationNav
- Invalid property name: FODivision/nameTranslationNav

This is because the *nameTranslationNav* property is missing in the Employee Central OData API Data Dictionary for the *FOBusinessUnit* and *FODivision* entities.

What you can do

Here's how you can correct this issue:

- 1. Go to the Admin Center in Employee Central and choose the Configure Object Definitions tool.
- 2. Search for the *Translations* object definition.
- 3. In the details of the *defaultValue* field, set the visibility to *Editable*.

Configure Object Definitions					
Search : Object Definition 👻 🔍 T	: Object Definition • Q Translations • Advanced			Create New : No Selection +	
Object Definition: Trar	Slations (GOLoca * Code GOLo * Effective Dating From	alizedData) scalizedData Parent		Take Act	tion -
Fields Name rowID mdSystemEntit mdSystemEntit mdSystemVers defaultValue mdSystemVers defaultValue mdSystemVers defaultValue mdSystemEffec mdSystemTran internalid referencingFiel en_US mdSystemStatt mdSystemStatt mdSystemObje createdBy createdDate	Name Database Field Name Maximum Length Data Type Valid Values Source Hide Old Value Decimal Precision Include Inactive Users UI Field Renderer Transient Help Text Help Text Private or Sensitive Information Show Trailing Zeros Default Value Required Visibility Status Label Cascade	defaultValue sfFields.stField2 255 String No No No No Editable Active None	defaultDestinationValue	status	

Visibility of defaultValue Field

4. Go back to the Admin Center, choose the OData API Metadata Refresh and Export tool, and choose Refresh.

5. Go back and check the OData API Data Dictionary. *nameTranslationNav* should now be available for the *FOBusinessUnit* and *FODivision* entities.

5.3.10 Known Issue: Replication Request Monitor Shows Internal Server Error

Here's how to troubleshoot position replication from Employee Central if the Replication Request Monitor shows an internal server error.

What's the issue?

When you try to process a replication request for a position in the Replication Request Monitor (Web Dynpro application SFIUI_A_REPL_REQ_MONITOR), you might be shown a 500 SAP Internal Server Error message with this additional info:

ERROR: No entry in table T528B for S <position ID> (termination: ERROR_MESSAGE_STATE)

Managing, Monitoring, and Troubleshooting Organizational Data Replication from Employee Central to SAP ERP HCM Troubleshooting of Organizational Data Replication from Employee Central This happens if you use integration between Organizational Management and Personnel Administration in SAP ERP HCM (PA-PD integration) and are trying to process a replication request that refers to a position with inconsistent data. Inconsistent means that, if PA-PD integration is active and a position is created in Organizational Management, the system also creates an entry in the *Positions* (T528B) table in Personnel Administration. But the replication request in question refers to a position for which no entry exists in this table.

The error message is shown because the Replication Reqest Monitor is trying to redirect to a different transaction, which is not possible.

What you can do

To correct this issue, go to the Replication Request Viewer (transaction SFIOM_VIEW_REQUESTS) in the SAP ERP HCM system and trigger the processing of the request that causes the error from there. Then the system will redirect you to the *Maintain HR Master Data* (PA30) transaction, where you can copy the organizational assignment that has the inconsistent data.

로 Infotype Edit Goto Extr <u>a</u> s System H	lelp
ଏ 🔲 🗸 🖓	🗋 🛗 🔛 (🎝 🏝 💭 🔛 🔀 🞇 🗾 😵 📑
Copy Organizational assignment	
🗟 🗟 🤽 🛛 Org Structure	
Pers. No. Pers.Assgn Personnel No Name EE group 1 Active Pers.area EE subgroup DN Monthly wage ear Start 02.02.2014 to 31.12.9999	DE01 Personnel area DE01
Enterprise structure	
CoCode DE01 Country Template DE Pers.area DE01 Personnel area DE01 Cost Ctr	Leg.person 0001 Subarea 0001 Bus. Area
Personnel structure	
EE group 1 Active EE subgroup DN Monthly wage earner	Payr.area D2 HR-D: Sal. employees Contract Worker, Others
Organizational plan	Administrator
Percentage 100,00 Position	Group DE01 PersAdmin 001 Time
Job key Org. Unit DE01	PayrAdmin Supervisor
Division DE Org.key DE01	
No entry in table T528B for S	🐠 👔 🕑 🔤 🗸 🗖 🖬 🖬 🖌 👘

Copying Organizational Assignment

Just save the suggested entries and you are done.

Related Information

Replication Request Monitor for Organizational Data Replication [page 18]

5.3.11 Known Issue: Mandatory Field HRP1000-STEXT Was Not Mapped

Here's how to troubleshoot organizational object replication from Employee Central if SAP ERP HCM can't fill in the STEXT field of the *Object* (1000) infotpye.

What's the issue?

You're shown the error message *Mandatory field HRP1000-STEXT was not mapped* (SFIOM_PROCESSING 235) for an Employee Central entity in the SAP ERP HCM system. For example, the error message could be:

FODepartment SALES: Mandatory field HRP1000-STEXT was not mapped

FODepartment is the entity name, *SALES* is the ID of the entity (of the department in this case) in Employee Central. *HRP1000-STEXT* is the *Object Name* (STEXT) field of the *Object* (1000) infotpye in SAP ERP HCM.

i Note

STEXT is a required field, which must be mapped. The mapping for this field is contained in the sample content we provide in the *Define Field Mapping for Organizational Data* Customizing activity.

What you can do

Depending on what causes the error, here's how you can resolve it:

• You haven't defined a language mapping.

To correct this, go to the *Map Languages from Employee Central and ERP* activity in Customizing of the Business Integration Builder and enter the Employee Central locales and SAP ERP HCM languages you're using. Then trigger a full load to replicate the missing names to the **STEXT** field.

i Note

When mapping locales and languages, make sure that you use the correct format:

- The locale identifier from Employee Central must consist of a language identifier in lowercase and a location or country/region identifier in uppercase, linked by an underscore. For example: en_US (English, USA), en_GB (English, UK), fr_FR (French, France), fr_CA (French, Canada).
- The language identifier from SAP ERP HCM must be a two-character country/region ISO code. For example: EN, FR.

If you use two locales for the same language in Employee Central (such as en_US and en_GB), you need to decide which of these locales you want to map to an SAP ERP HCM language. In the SAP ERP HCM system, there's only one language identifier you can map (in our example: EN).

• You haven't defined a field mapping for the Object Name (STEXT) field of the Object (1000) infotype.

To correct this, go to the *Define Field Mapping* for *Organizational Data* activity in Customizing of the Business Integration Builder. Map the STEXT field in the *Primary Mapping* view for the transformation template group and transformation template you're using for the entity type (the department in this case). Then trigger a full load to replicate the missing names to the STEXT field.

The XML of the OrganisationalObjectReplicationResponse_In web service doesn't contain any localized name fields such as name_en_US. Only name_localized and name_defaultValue are contained.
 This can't happen when you create new objects in Employee Central. The issue might have been caused by a data import to Employee Central, for example, from the SAP ERP HCM system, which didn't contain localized fields. Or maybe by migration from foundation to generic objects. To correct the issue, change the affected entity (the SALES department in this case) in Employee Central and replicate it again.

5.3.12 Known Issue: Deletion Isn't Replicated from Employee Central

Here's how to troubleshoot organizational object replication from Employee Central if deletions don't show up in the SAP ERP HCM system.

What's the issue?

You delete a time slice of an organizational object in Employee Central (for example, of a position). The object should be transferred to SAP ERP HCM with the regular replication runs if it is changed. However, this change is not replicated. The deleted time slice still exists in the SAP ERP HCM system after the next replication run.

The cause of the problem is that the deletion history isn't enabled for the corresponding object definition in Employee Central. Therefore, the history of deletions isn't recorded in Employee Central. As a result, the next *Last Modified Query* run of the *Create and Execute Organizational Object Replication Query* (RH_SFIOM_ORG_OBJ_REPL_QUERY) program in SAP ERP HCM system doesn't recognize that there's a change and doesn't replicate the deletion.

What you can do

Enable the deletion history in Employee Central to include deletions of time slices in the regular replication runs.

- 1. Go to the Admin Center and choose the *Configure Object Definition* tool.
- 2. Select Object Definition and the object in question (for example, Position).
- 3. In the *MDF Version History* field, select *Delete History*. For more information, refer to Basic Configurations in Object Definition in Implementing the Metadata *Framework (MDF)*.
- 4. To replicate all deletions that weren't transferred to SAP ERP HCM, run a full load for the object type in question (for example, *Position*).

5.3.13 Known Issue: Cost Center Assignments Are Deleted When You Use a Default Cost Center in SAP ERP HCM

Here's how to troubleshoot organizational assignment replication from Employee Central if cost center assignments overwrite each other in the SAP ERP HCM system.

What's the issue?

You replicate cost center assignments (of departments for example) from Employee Central and map all Employee Central cost centers to one single default cost center in the SAP ERP HCM system. Each time a new department-cost center assignment is replicated from Employee Central, the SAP ERP HCM delimits (deletes) the existing organizational unit-cost center assignment (Employee Central departments are represented by organizational units in SAP ERP HCM). This is because the time constraint of the *Cost Center Assignment* (011) relationship (in our example, the B011 relationship between cost center (object type K) and organizational unit (object type O)) is set up in a way which doesn't allow for multiple assignments at the same time.

What you can do

Correct the time constraint of the *Cost Center Assignment* (011) relationship in your SAP ERP HCM system. Two tables in SAP ERP HCM control time constraints – you'll find them in Customizing for Personnel Management,

under 🌗 Organizational Management ≽ Basic Settings ≽ Data Model Enhancement ≽ Relationship Maintenance 🚬

- Infotype Time Constraint (T777Z) in Customizing activity Maintain Relationships This table defines the default time constraints for relationships. If you don't make entries in the T77ZR table, this is the time constraint used for the relationship.
- Infotype 1001 Time Constraint (Target Object Type-Dependent) (T77ZR) in Customizing activity Define Time Constraint Depending on Target Object Type

If you make entries here, these will override the default settings in table T777Z.

Check first if an entry exists in table T77ZR for the Cost Center Assignment (011) relationship. It might look like this:

Time Constraint in Table T77ZR

Object Type	Infotype	Subtype	Type of Related Object	Time Constraint
К	1001	B011	0	2

This means that the B011 relationship from cost center to organizational unit has time constraint 2. This time constraint allows for only one infotype record of the same type for the same object at the same time. Meaning, there can only be one cost center-organizational unit assignment at one point in time. All other cost center-organizational unit assignments will be deleted. If you see such an entry, either change the time constraint to 3. Or

delete the entry completely to use the time constraint defined for this relationship in table T777Z, which should look like this:

Time Constraint in Table T777Z

Object Type	Infotype	Subtype	Time Constraint
К	1001	B011	3

5.3.14 Known Issue: Organizational Assignment Change Extends Too Far Into the Past

Here's how to troubleshoot organizational assignment replication from Employee Central if the SAP ERP HCM system shows an error about changes extending too far into the past.

What's the issue?

When replicating organizational assignments from Employee Central to SAP ERP HCM, you are shown this message:

Change for person <employee's personnel number> extends too far into past

This happens because the full transmission start date you defined for data replication is before the retroactive accounting limit defined for the employee in SAP ERP HCM. When determining the retroactive accounting limit for payroll, the SAP ERP HCM system takes three dates into account and uses the latest (that is, the most recent) of these dates:

- The date that is stored for the employee in the *Earliest Personal Retroactive Accounting Date* (PRDAT) field in the *Payroll Status*(0003) infotype. PRDAT defines the date up to which master and time data changes are allowed for the employee and up to which the system carries out retroactive accounting.
- The earliest period for which retroactive accounting can be run in general (as specified for the payroll area).
- The employee's hire date.

Retroactive accounting means that previous payroll results must be corrected because payroll-relevant employee master data or time data was changed. **No** changes are allowed for payroll-relevant employee master data or time data **before** the retroactive accounting limit because payroll can't process the changed data. When the FTSD is before the retroactive accounting limit, however, this means that organizational assignment replication might lead to changes in the SAP ERP HCM that are before the retroactive accounting limit. Since SAP ERP HCM can't handle these changes, you are shown the error message.

What you can do

Make sure that the FTSD is on the same date or after the date defined for the retroactive accounting limit in SAP ERP HCM.

Example: Retroactive Accounting Limit (Highlighted) and Possible FTSD

Earliest Personal Retroactive Accounting Date (PRDAT)	Earliest Retroactive Account- ing Period of the Payroll Area	Hiring Date	Full Transmission Start Date
July 1, 2016	January 2015	January 1, 2010	July 1, 2016
empty	January 2015	August 1, 2015	August 1, 2015
December 1, 2014	January 2015	January 1, 2010	February 1, 2015

5.3.15 Known Issue: Staging Area Tables Contain a Large Amount of Data

Here's how to troubleshoot organizational data replication from Employee Central if the staging area tables in the SAP ERP HCM system contain too much data.

What's the issue?

Organizational data that is replicated from Employee Central is filled into a staging area in SAP ERP HCM. A database update program posts the organizational data from the staging area to the database. The staging area tables holding the replication requests are filled with more and more data if you don't remove requests that are no longer needed.

What you can do

Clean up the staging area tables regularly to minimize the number of records in these tables. That is, delete replication requests that were processed in the SAP ERP HCM system and are no longer needed. Use the following programs to do this:

- Delete Organizational Object Replication Requests (RH_SFIOM_DEL_ORG_STRUC_RPRQ)
- Delete Employee Org. Assignment Replication Requests (RH_SFIOM_DEL_EE_ORG_ASS_RPRQ)

Schedule these programs to be run in the background.

5.3.16 Known Issue: Employee is Inactive, Replicate Active Employee from Employee Central

Here's how to troubleshoot organizational assignment replication from Employee Central if replication fails and the SAP ERP HCM system shows an error message about the employee being inactive.

What's the issue?

Organizational assignment replication to the SAP ERP HCM system fails, showing the error message *Employee is inactive in ERP; replicate active employee from EC*.

What you can do

This error message either means that an employee is active in Employee Central, but not (yet) active in SAP ERP HCM (for example, because the employee was rehired in Employee Central, but this information hasn't been transferred to SAP ERP HCM yet). In this case, the error will be gone after the next run of employee master data replication.

However, the error message is also shown when the employee is actually inactive in Employee Central and their data should no longer be transferred to SAP ERP HCM – but the organizational assignment replication process still tries to transfer this data. To prevent the error from happening in the latter case, filter out time slices in which employees are inactive. To do this, enter all employment statuses that show that an employee is inactive in Employee Central (such as *Terminated*) in the corresponding *Ignore Employment Statuses* parameter, either in the middleware or in SAP ERP HCM Customizing (depending on the integration version you are using).

i Note

If you've already replicated organizational assignments before, including inactive time slices, and then change your settings to start filtering out inactive time slices, make sure that you trigger a full load after having made the changes. This ensures that data inconsistencies that may have evolved between Employee Central and SAP ERP HCM are cleaned up.

Another potential issue that causes this error might be that the full transmission start date (FTSD) you've defined for organizational assignment replication from Employee Central is **before** the FTSD defined for employee master data replication from Employee Central. If this is the case, correct the FTSD for organizational assignment replication. Always make sure that you use the same FTSD for organizational data and employee master data replication from Employee Central to SAP ERP HCM.

6 Reporting Incidents for Organizational Data Replication

What to do if you face an issue with the organizational data replication.

Procedure

- 1. Go to our Knowledge Base and check the Knowledge Base Articles and SAP Notes that are published for the LOD-EC-INT-ORG (*Org Integration EC to ERP On Premise*) application area for a possible solution.
- 2. Go to Create an Incident and report an incident for the LOD-EC-INT-ORG component if you can't find a solution.

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