



SuccessFactors Operational Manual (External)

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1 Abstract

This manual provides guideline in order to smoothly operate SuccessFactors solutions. The following guidelines principle and related operation guidelines will be addressed:

- Single source of truth
- Full transparency regarding performance and availability
- Reliable data transfer and message transport
- Every business critical exception is caught and reported
- No data inconsistencies between Public Cloud and OP/Private Cloud components
- Business Process KPIs can be tracked for all components
- Maintenance windows and down times need to be communicated in advance
- Synchronized software and configuration maintenance needs to be ensured
- No change is executed unsynchronized
- All software and configuration changes are tested end-to-end
- All IT Service Management processes have to run smoothly integrated
- Safe and reliable remote access

Accordingly this document provides information about existing tools to support customer for daily operations on the integrated solution but also some best practices and references.

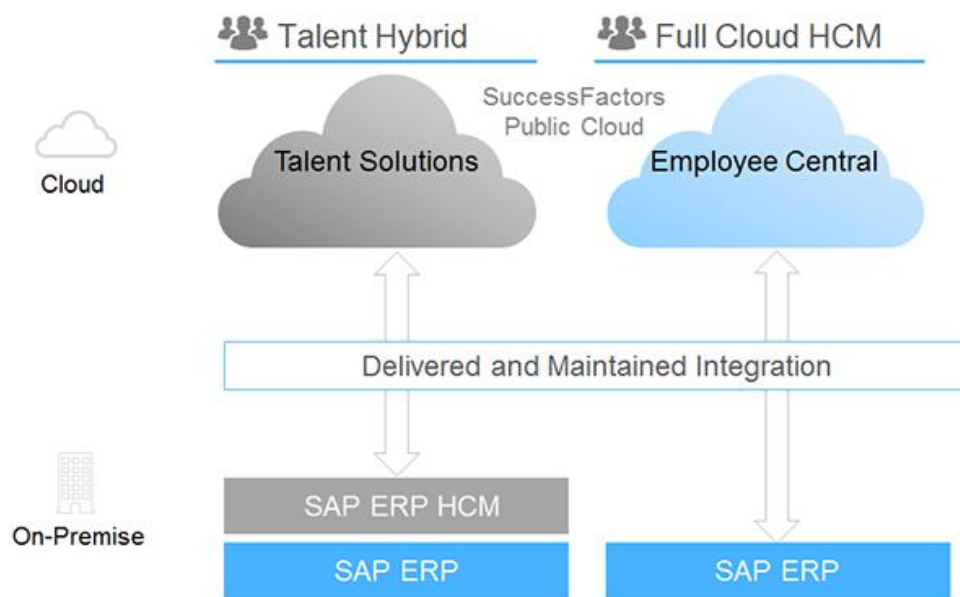
2 Architecture Context and Overview

2.1 Solution Architecture

SAP and SuccessFactors offer flexibility for SAP customers who want to move HR business processes to the cloud. There are two typical deployment models that are prevalent across the SAP customer base. These are:

1. Talent Hybrid
2. Full Cloud HCM

SAP Human Resources Deployment Options



For details on the different offers from SAP and architectural details, please refer to <http://service.sap.com/public/hybrid>

The vast majority of SuccessFactors customers does NOT integrate Success Factors with SAP ERP. Such customers still oftentimes integrate SuccessFactors with other solutions. Some standard cases of such integrations are described under <https://help.sap.com/cloud4hr> → [EmployeeCentral in various integration guides](#).

3 Operational Manual per Topic

3.1 Solution Documentation

Solution Documentation is referencing the guiding principle Single source of truth also for hybrid solutions. It is divided into two parts:

- Technical Landscape Documentation:

In SAP Solution Manager this task is fulfilled by the Landscape Management Database (LMDB)

- Business Process Documentation:

Documenting the end-to-end business processes is especially important for testing purposes and change impact analysis.

This includes documentation for OP/Private Cloud components as well as Public Cloud components. Documentation of Public Cloud components in SAP Solution Manager is a new functionality.

3.1.1 Technical Landscape Documentation

3.1.1.1 Use Case Description

The various Public Cloud components need to be represented in SAP Solution Manager in a light weight fashion. For this purpose the entity External Service has been introduced.

External Services are modeled in LMDB. External Services can be seen as light weight technical systems. They offer a rough description of their service, but do not provide details about how the service is built technically. For example SAP Solution Manager will not get knowledge about installed software components or host virtualization.

Like technical systems, external services can also be assigned to business processes.

3.1.1.2 Solution Documentation via SAP Solution Manager

Solution Manager provides a way to document your Landscape component in a light way so that they can be used in the different applications like the Monitoring and Alerting ones.



How To

Launch the System Creation UI

In your Solution Manager run transaction s2c_setup

Here you can define and configure different system types for Hybrid solutions and use them in Integration Monitoring and exception management.

You can create for those systems connections with name, description and endpoint description which can later on be used for exception extraction or connection monitoring.

Basic Setup for Monitoring of SAP Based Hybrid Solutions

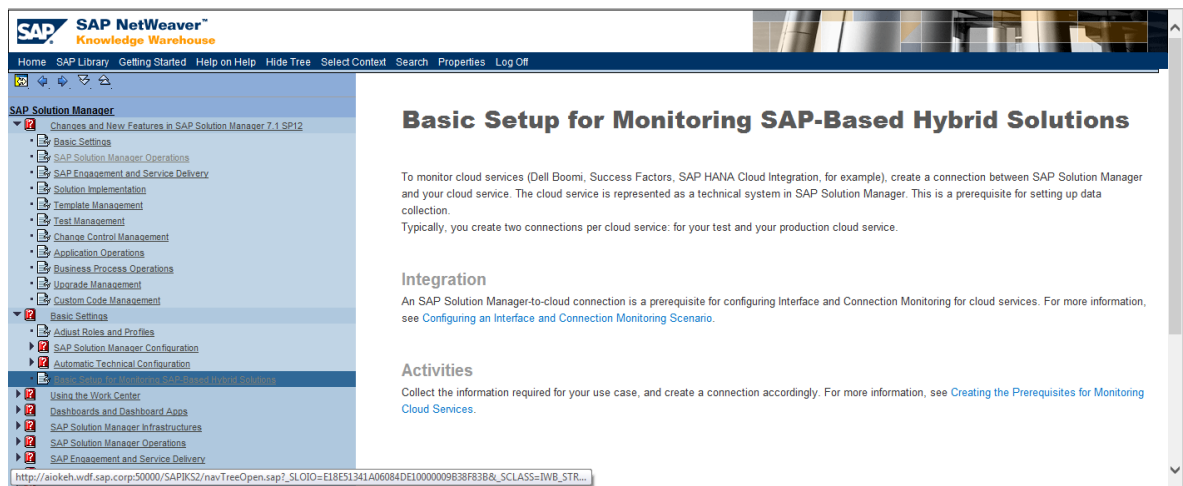
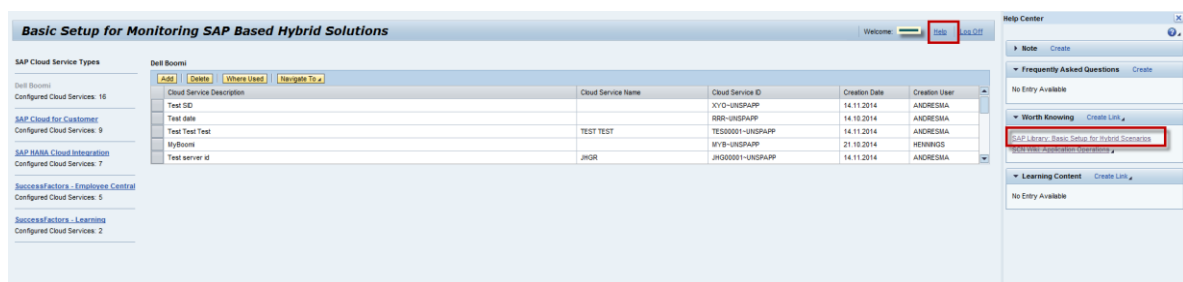
SuccessFactors - Employee Central

Cloud Service Description	Cloud Service Name	Cloud Service ID	Creation Date	Creation User
SFEmployeeCentral	SEC_FAT	SEC-UNGAPP	26.11.2014	

Configuration for: SFEmployeeCentral

Email Endpoints		S/FTP Endpoints	
Description	Type	S/FTP Inbox User ID	Email (Service Provider)
Email Endpoint	Others	SDX	
			ID
			SEC_EMAIL_0

More information about how to document your solution is available from the Application Help.



Setup guide is available here:

http://wiki.scn.sap.com/wiki/display/TechOps/Public_Cloud_Operations_home



Prerequisites and additional information

Solution Manager 7.10 SP13

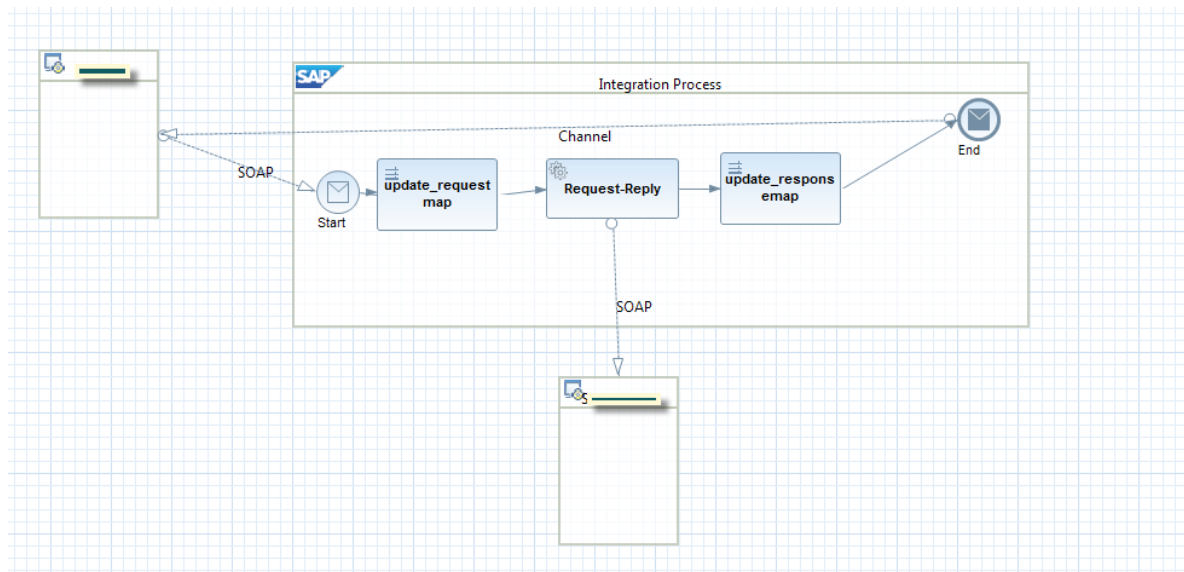
This functionality is not included in the standard Solution Manager setup, however, it is fully supported by SAP. The notion of extended services has been introduced in addition of the Technical systems entities to allow customer to model their cloud solution and benefit of the standard Solution manager tools.

Currently (SP13) supported are the following extended services:

SuccessFactors – Employee Central, SuccessFactors-Learning, Dell Boomi, SAP Cloud for customer, SAP Hana Cloud Integration

3.1.1.3 Solution Documentation via SAP HANA Cloud Integration

Additionally, in SAP HCI, you can model your landscape and define the various business processes like the synchronization one.



An Eclipse add-on allows you to model your landscape and processes, to do some mapping or transformation to your messages and then deploy the result to your HCI tenant.

This allows you to integrate different systems in your Landscape.



How To use HCI Integration Designer

In the Eclipse, install the SAP HANA Cloud Integration Tools. It contains the feature SAP HANA Cloud Integration to develop and configure integration flows. For more details, please refer to:

<https://tools.hana.ondemand.com/#hci>



Prerequisites and additional information

To use the HCI Eclipse add-on required version of Eclipse is Kepler (4.3)

3.2 Performance and Availability Management

The section Availability and Performance Management is referencing to the guiding principle Full transparency regarding performance and availability.

3.2.1 Use Case Description

Availability and performance management is based on monitoring and detecting deviations from expected end user performance targets aligned between customer and service provider.

3.2.2 Performance and Availability Management via Successfactors Administration tools

Successfactors regularly provide to his customers Product Operations Customer Reports. Based on the support contract, customers can get them monthly or on demand. Some on this information relies on internal tools, some others are accessible online

ART (Availability and Response Time) are available for general use on Sharepoint.

3.2.2.1 Customer Availability

System Availability

The Customer's application URL is monitored once every minute, from the Internet, via 30+ global sensors (testing sites). The monitoring tools measures the time the system was available. System Availability is defined by the monitoring tool's access to the URL and with Login/Logout activity from the monitoring tool.

Unsuccessful tests could be due to:

- Transient Internet Issue
- Scheduled Maintenance
- Application or Data Center Infrastructure Issue

	12 Month Average	Mar 2014	Apr 2014	May 2014
System Availability	99.85 %	99.96 %	99.9 %	100 %
Response Time in msec.	408.28	420.14	399.47	380.98

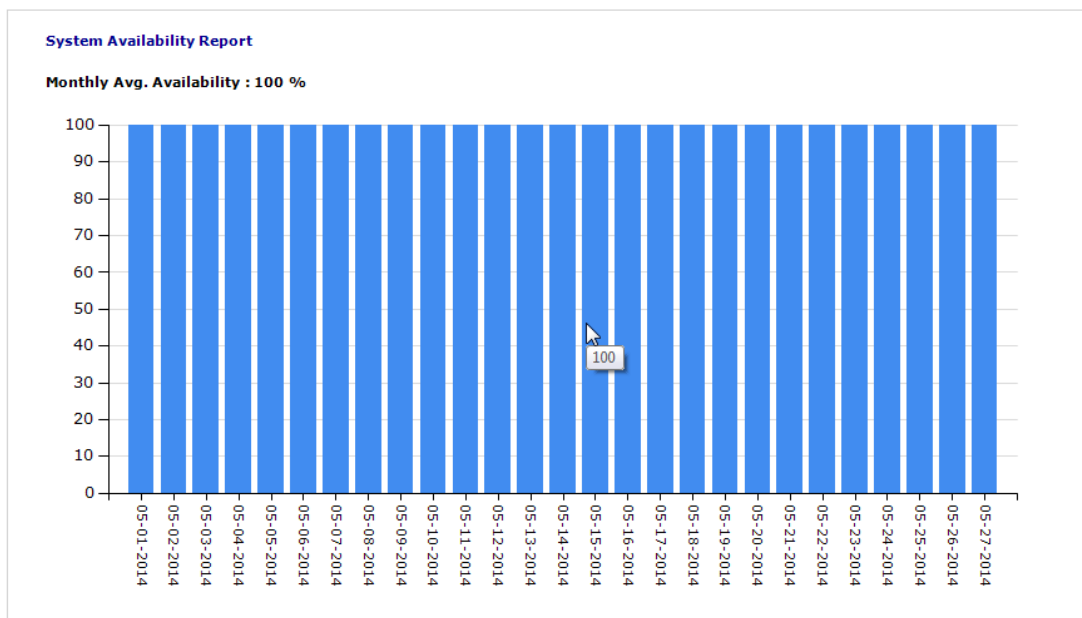


Figure 1 – System Availability Report

3.2.2.2 Response Time Report

Response Time

Response time is measured during each one minute test with the average for the measured period provided in milliseconds.

Note: As of September 2013, monitoring tools are configured to capture response times using the latest BizX feature-rich user interface-v12. Because of these monitoring changes beginning September 2013, reports will show new v12 interface standard response times that are more reflective of actual customer experience when logging into the application.

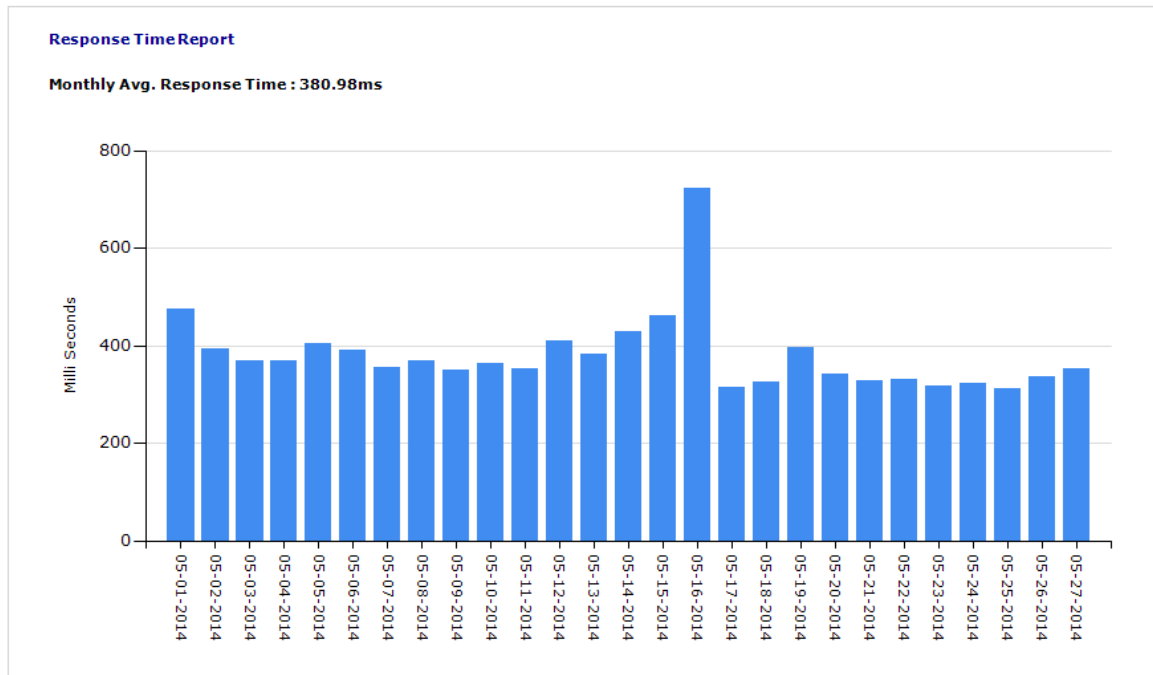


Figure 2 - Response Time Report

3.2.2.3 Service Availability Status

Service Status Dashboard provides a macro-level overview of the production data centers and service status. Service Status Dashboard provides status for the current day and monthly historical status of each data center.

Service Status Dashboard [External Version] – Generally Available

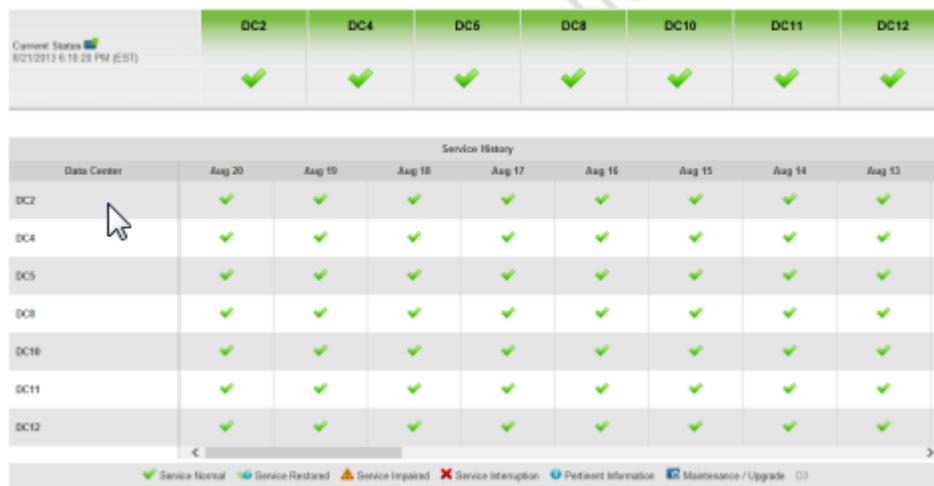


Figure 3 - Service Status Dashboard



How to

Until March 2015, you will have access to your service status via the support portal

support.successfactors.com > Service Status

After that, use the new SAP support / customer portal

3.2.2.4 Customer Performance Metrics (Platinum Only)

Platinum customers can get additional information through the Customer Performance Metrics report.

It correlates the number of transactions with the average time spent in the network or the data center. Since the Success factors client applications are also instrumented, it is also possible to measure the end-user average response time.

Customer Performance Metrics – Platinum Only

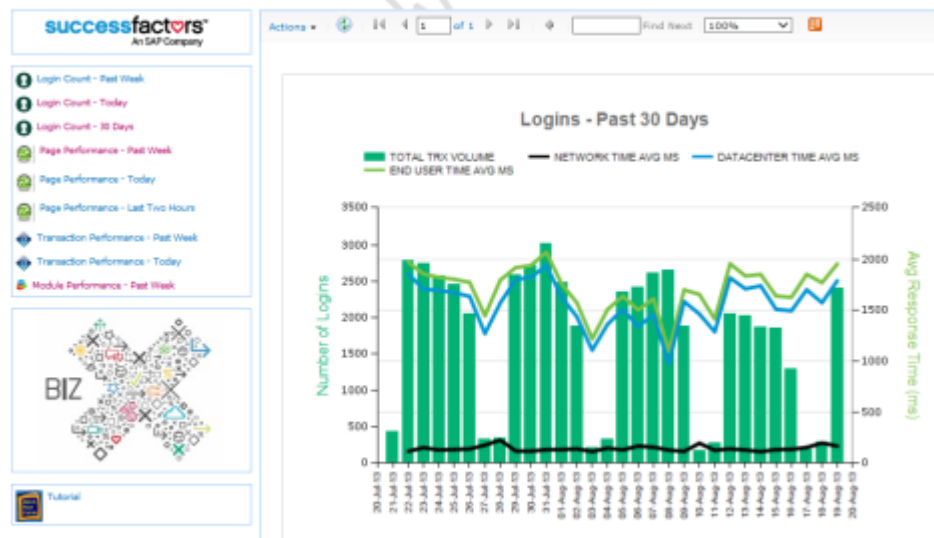


Figure 7 - Customer Performance Metrics Login Report for the Last 30 Days

3.2.2.5 SFAPI Metering Details



How To

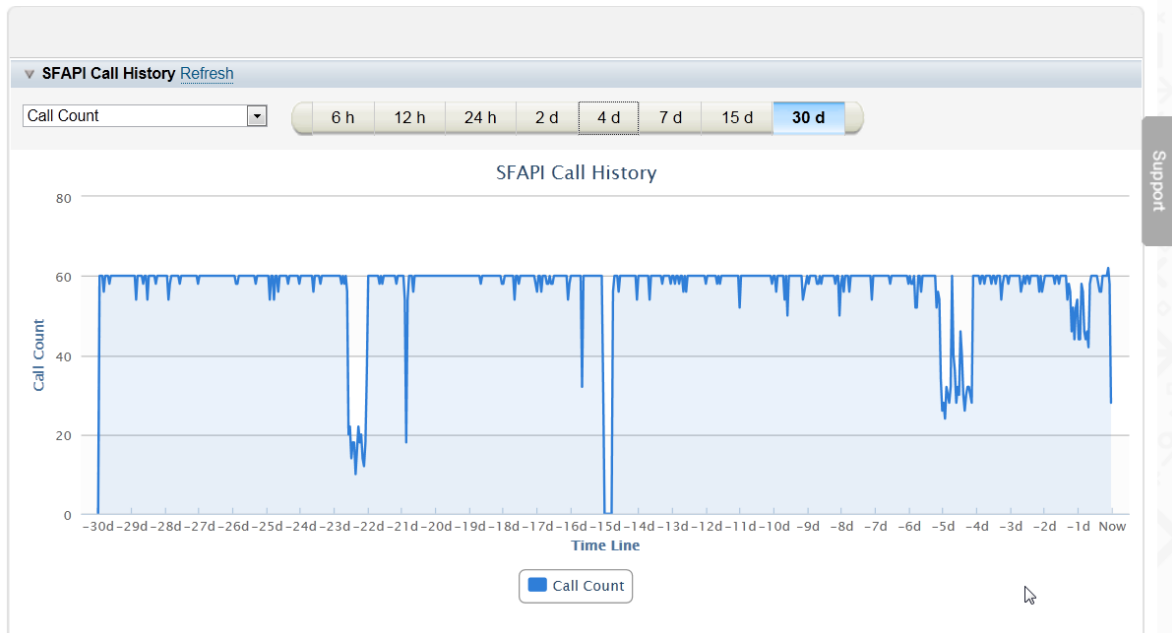
Open a browser to Success Factors website : start SFAPI Metering Details from the admin tools.

The API Metering Details page will give you analytics on your API usage for the last 30 days. You can use this page to see API call history analytics like how many times the API was called, or what was the total record counts accessed in your system.

Admin Tools

Back to [Admin Tools](#)

SFAPI Metering Details



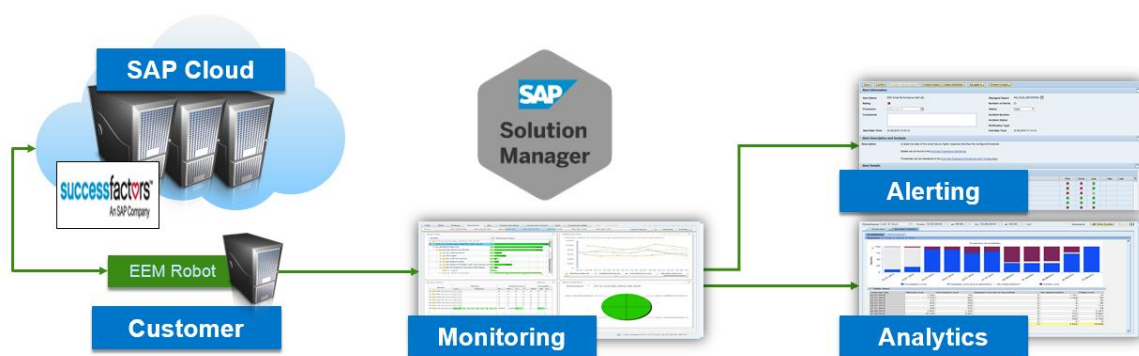
3.2.2.6 Performance and Availability in Solution Manager

3.2.2.6.1 General Infrastructure

It is possible to measure performance and availability of the solution via the End User Experience Monitoring tool in Solution Manager.

Based on recorded scenario which can be deployed and executed from different locations towards the Cloud, it gives an overview of the scenario performance during the day and depending on the location.

It is available for all HTML based end user scenarios.

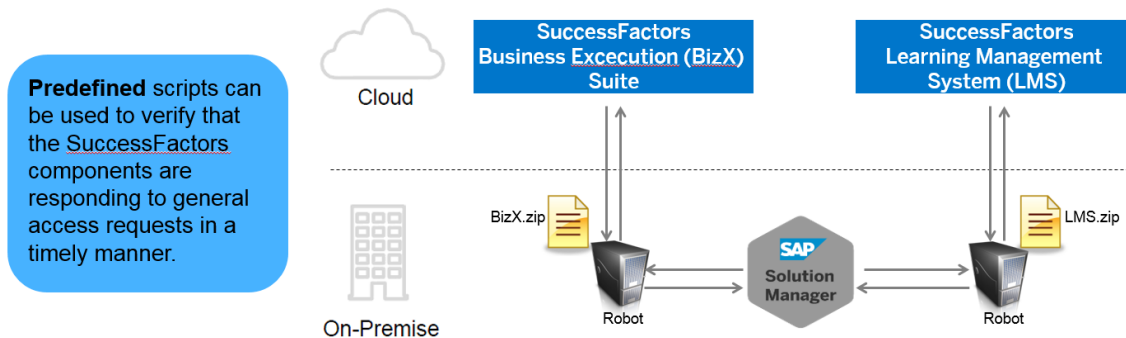


Prerequisites and additional information

Solution Manager 7.10 SP10

3.2.2.6.2 SuccessFactors use case

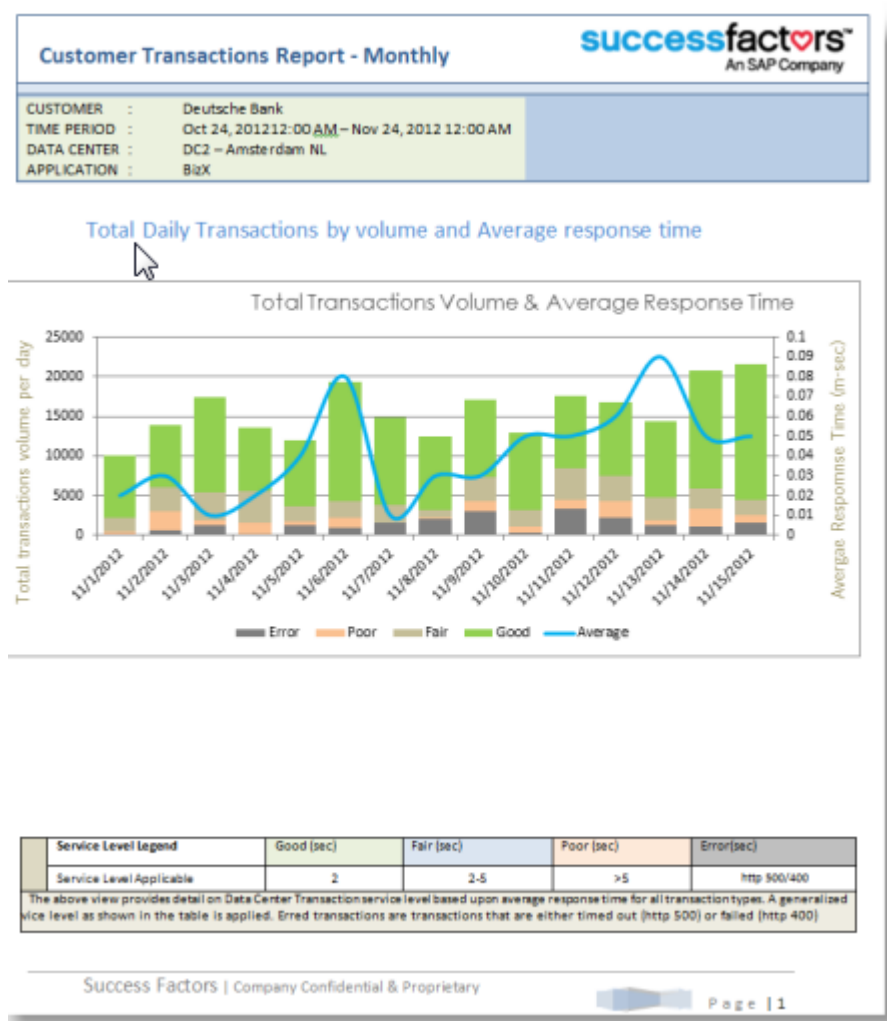
Some pre-delivered scripts allow to check the behavior of your Success Factor solution from different locations. However this should be used only in case of bad performance suspicion and in agreement with the cloud provider as this might generate some unnecessary load on the cloud provider side and generate even worse performance.



Existing scripts are available in the following location:

<http://wiki.scn.sap.com/wiki/display/EEM/Monitoring+Successfactors+with+EEM>Customer

3.2.2.7 Transactions Report (Platinum Only)



3.2.3 Performance and Availability Management via SAP Solution Manager

API should be provided but no data is available yet.

Standard tools for on-premise are still available in case the customers has a hybrid solution.

In general, to be able to use the different monitoring tools in SuccessFactors environment, it is necessary to:

- Run the Managed System Configuration for any on-premise technical system which should be considered (in case of hybrid scenario)
- Create the cloud services via Basic Setup for Monitoring SAP Based Hybrid Solutions (s2c_setup)
- Run the technical monitoring infrastructure configuration
- Configure the Solution Manager self-monitoring (mandatory for SFTP monitoring)

3.2.4 Performance optimization via Akamai



Prerequisites and additional information

Akamai optimization has to be enabled

In case a Success Factors customer has licensed Akamai optimization for a certain SuccessFactors module but still observes unsatisfactory internet latencies or strong internet response time differences between business regions, the customer should address this to SuccessFactors support in order to check if Akamai optimization has been enabled and is used properly. In case a certain SuccessFactors module shows unsatisfactory internet latencies and Akamai services have not been enabled yet for this module, the customer is encouraged to contact SuccessFactors support in order to assist with the available options of Akamai usage.

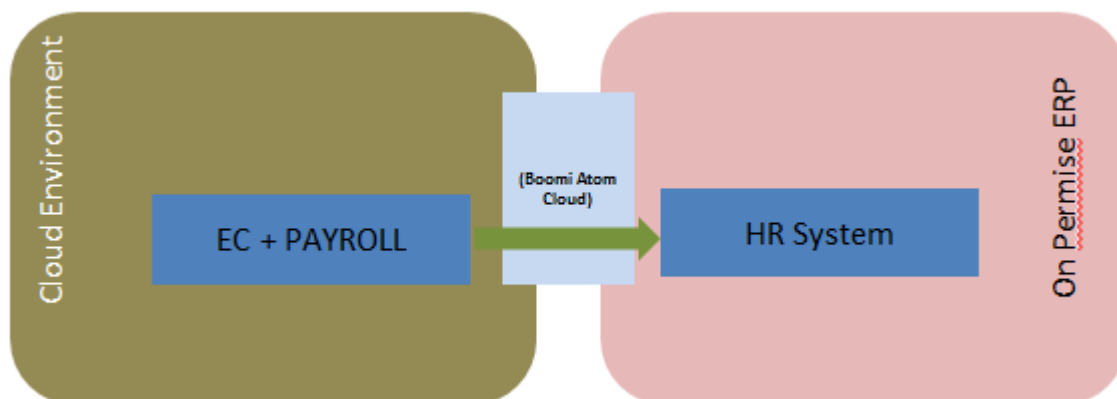
3.3 Integration Monitoring

Integration Monitoring is referencing to the guiding principle reliable data transfer and message transport.

3.3.1 Use Case Description

Integration monitoring is intended to ensure secure and reliable data and message transfer between OP/Private Cloud and Public Cloud components. It needs to be ensured that no data or message get lost or is manipulated at its path.

In case Dell Boomi software is used as middleware between EC and ERP, a specific tool is available to track replication issues. HCI scenario is handled in a different document.



3.3.2 Checking Data Replication Results

3.3.2.1 Monitoring tools in the SAP ERP system: Web Service Utilities and Application Log

On the ERP side there are two monitoring tools that will help you identify errors that occur during the replication of employee master data. The tools cover different stages of the replication process. Replication messages are first received by the Web Service Framework. Here the system performs a technical check on the compliance of the received message with the XML schema required by the inbound service interface. The error log in the transaction Web Service Utilities (SRTUTIL) shows errors that come up in this check. Use interface name `II_PAOCF_EC_EMPLOYEE_MASTER_DA` to narrow the search in the Re-select dialog, if necessary. Erroneous messages are not further processed.

Correct messages are passed on to the application logic that maps the data to the structures of the SAP HCM employee infotypes and performs the updates on the HCM master data records. Numerous checks are performed here. Examples of errors are unknown code values, missing mandatory field data, or editing locks if records are currently being edited by another user. These errors can be monitored in the Application Log (transaction SLG1). On the selection screen enter `PAOC_SFI_PA` for the input field Object.

Display logs

Technical Information Help

Date/Time/User	Nu...	External ID	Object txt	Sub-object text	Tran	Program	Mode	Log number
01.07.2014 06:34:57 ZEEREPLTEST	96	316	PAOC_SFI_PA	EE		CL_PAOCF...	Dialog pro...	00000000000004932676
01.07.2014 12:50:40 ZREPL_TIM_AU	3	297	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932877
01.07.2014 12:50:40 ZREPL_TIM_AU	3	305	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932878
01.07.2014 12:51:25 ZREPL_TIM_AU	3	297	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932879
01.07.2014 12:51:25 ZREPL_TIM_AU	3	305	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932880
01.07.2014 12:53:12 ZREPL_TIM_AU	3	297	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932882
01.07.2014 12:53:12 ZREPL_TIM_AU	3	305	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932883
01.07.2014 12:55:11 ZREPL_TIM_AU	3	297	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932885
01.07.2014 12:55:11 ZREPL_TIM_AU	3	305	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932886
01.07.2014 12:57:15 ZREPL_TIM_AU	3	297	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932888
01.07.2014 12:57:15 ZREPL_TIM_AU	3	305	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932889
01.07.2014 12:59:12 ZREPL_TIM_AU	3	297	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932891
01.07.2014 12:59:12 ZREPL_TIM_AU	3	305	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932892
01.07.2014 13:01:45 ZREPL_TIM_AU	3	297	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932894
01.07.2014 13:01:45 ZREPL_TIM_AU	3	305	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932895
01.07.2014 13:03:10 ZREPL_TIM_AU	3	297	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932897
01.07.2014 13:03:10 ZREPL_TIM_AU	3	305	PAOC_SFI_PA	EE_TIME		CL_PAOCF...	Dialog pro...	00000000000004932898

Message Text

- Data set for objnodetype 3 ext code f6ec2dc237074143a9c7e6f8376e7b21 not found. Deletion not necessary.
- Employee number 297 (1795//); Personnel number 00000000; Infotype ; Node Time
- Replication of time data was successful for employee ID 297 (1795).

Often it may be useful to look in detail at the data of the replication message to better understand why an error has occurred. This can be done in the message monitor of transaction Web Service Utilities (SRTUTIL). On the selection screen enter `EmployeeMasterDataReplicationRequest_In` for the input field Interface Name at the bottom of the screen and choose appropriate entries for the timestamp

fields. Here every received replication message is logged. By double clicking on a message its content can be displayed. It can also be displayed as an XML.

```
<?xml version="1.0"?>
- <ns2:EmployeeTimeECToERPRequest xmlns:ns2="http://sap.com/xi/PASEIN">
  - <MessageHeader>
    <CreationDateTime>2014-07-01T15:24:30.808+00:00</CreationDateTime>
    <RecipientBusinessSystemID>VMUCLNT800</RecipientBusinessSystemID>
  </MessageHeader>
  - <Employment>
    <EmployeeIDExternal>297</EmployeeIDExternal>
    <UserID>297</UserID>
    <FullTransmissionStartDate>2014-04-02</FullTransmissionStartDate>
    - <Time>
      <OriginTypeCode>ECTOF</OriginTypeCode>
      <CategoryCode>3</CategoryCode>
      <TypeCode>SICK_DAYS</TypeCode>
      <ExternalCode>f6ec2dc237074143a9c7e6f8376e7b21</ExternalCode>
      <EmployeeTimeStatusCode>DELETED</EmployeeTimeStatusCode>
    - <EmployeeTimeValidity>
      - <DatePeriod>
        <StartDate>2014-06-19</StartDate>
        <EndDate>2014-06-19</EndDate>
      </DatePeriod>
    </EmployeeTimeValidity>
    </Time>
  </Employment>
  - <Employment>
    <EmployeeIDExternal>305</EmployeeIDExternal>
    <UserID>305</UserID>
    <FullTransmissionStartDate>2014-04-02</FullTransmissionStartDate>
    - <Time>
      <OriginTypeCode>ECTOF</OriginTypeCode>
      <CategoryCode>3</CategoryCode>
      <TypeCode>VACATIONVE</TypeCode>
      <ExternalCode>dcff39e0f51948faa5cb4ae1548b07f7</ExternalCode>
      <EmployeeTimeStatusCode>DELETED</EmployeeTimeStatusCode>
    - <EmployeeTimeValidity>
      - <DatePeriod>
        <StartDate>2014-05-22</StartDate>
        <EndDate>2014-05-22</EndDate>
      </DatePeriod>
    </EmployeeTimeValidity>
    </Time>
  </Employment>
</ns2:EmployeeTimeECToERPRequest>
```

3.3.2.2 Internet Communication Manager (ICM)

See also the complete documentation on ICM in the SAP Library or on the Help portal (<http://help.sap.com>) under SAP NetWeaver Library -> Solution Lifecycle Management by Key Component -> System Management -> Administration of the Internet Communication Manager

3.3.2.3 Middleware Error and Process Log

Use this error and process log to track mapping errors in the middleware. For more information see Set up Middleware. -----> Boomi

3.3.2.4 API Audit Log

Use the API Audit log to capture payload details for the last 10,000 API calls. This log allows you to inspect exactly the API payload request made to the system and the corresponding API response sent by the system. The API Audit Log is intended to help with support and debugging of API usage. The intended end user will be a developer who is using the API during an implementation or an administrator who can share information in this log with SuccessFactors support to help resolve API related support issues. The tool allows you to download data from individual calls, which you could then send to a SuccessFactors support representative.

3.3.3 Dell Boomi Dashboard



How To

<https://platform.boomi.com/#dashboard>

The Account Dashboard page is divided into several sections, or gadgets.

Offline Atoms (to be investigated)

Process Errors

Throughput

Pending Executions and Connector Usage

Execution Count

Document Count



How To

For complete documentation please refer to help.boomi.com

The monitoring data contained in the standard Boomi dashboard can be also extracted via the AtomSphere API. This allows to build custom dashboards via various UI technologies like e.g. HTML5, extracting monitoring information via the AtomSphere API.



How To

For more details, refer to help.boomi.com → AtomSphere API.

3.3.4 Dell Boomi RSS feeds and email alerting

For proactive monitoring, customers can set up subscriptions to receive emails reporting atom status, process execution status and/or user notifications.

Account Information	AtomSphere MDM				
User Information	Add Email Alert				
Email Alerts					
User Management	Actions	Log Level	Event Type	Account ID	Account Name
Account Groups		ERROR	PROCESS.EXECUTION	boomidocumentation	Boomi Documentation
Developer		INFO	ATOM.STATUS	boomidocumentation	Boomi Documentation
Licensing		WARNING	USER.NOTIFICATION	documentation	Documentation
Document Tracking		ERROR	ALL	boomi	Boomi - Document

In addition to subscription to an RSS Monitor Feed and an RSS Alerts only feed is possible for an Atom, Molecule or Atom Cloud.

Atom Info	
Atom Name:	Production Atom
Atom ID:	
Instance ID:	
Host Name:	SF Boomi EU Amsterdam Stage Cloud (DC2)
Date Installed:	2013-05-31 12:05:05 AM
Version:	53143
RSS Monitor Feed:	 Subscribe
RSS Alerts Only Feed:	 Subscribe



How To

For email alerts, check help.boomi.com → Managing Email Alerts
For RSS feeds, check help.boomi.com → Atom Info Tab

3.3.5 Integration Monitoring via SAP Solution Manager

It is possible to monitor the communication channels between the different components for exception and then detect any issue during the synchronization process.



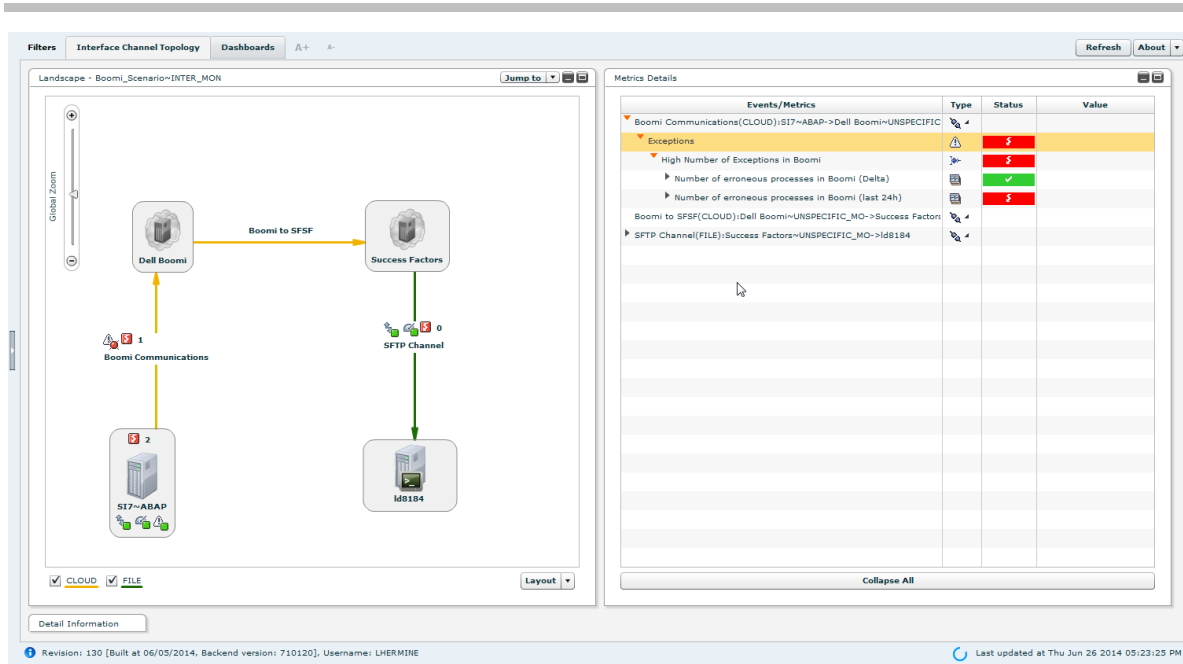
How To

Solution Manager (transaction SM_WORKCENTER) > Technical Monitoring > Integration Monitoring > Interface Channel Monitoring

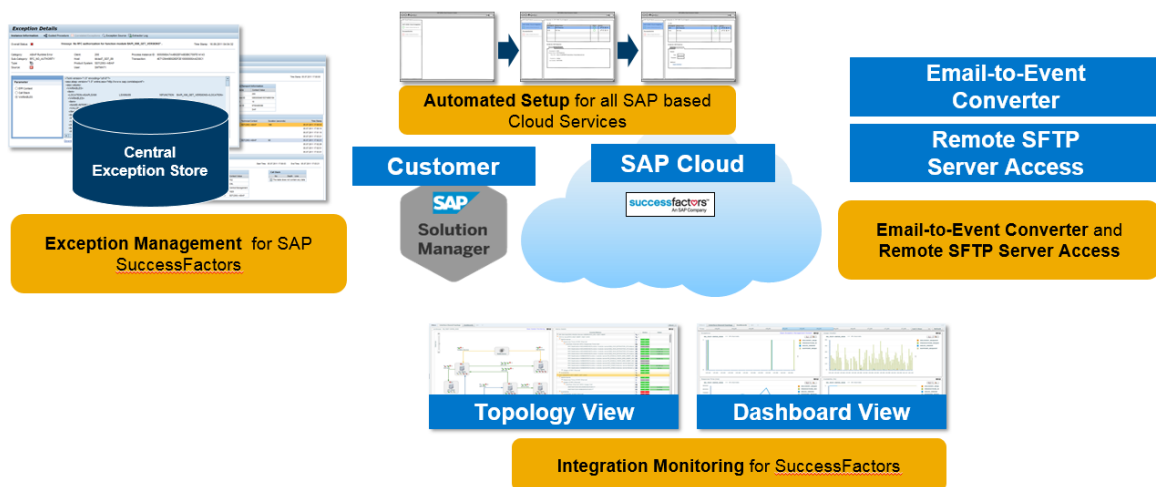


Prerequisites and additional information

Create a technical scenario with the required components. Perform the Interface and Connection Monitoring setup



In combination with Exception management (see chapter [Exception Management](#)), Interface and Connection Monitoring is able to get information for Dell Boomi integration system, SuccessFactor Bizx (catching Emails and sent by the tool and interpreting the data). Those information can then be integrated in the Monitoring and Alerting tools and raise events in your inbox.



Prerequisites and additional information

Integration Chanel monitoring is available starting with Solution Manager 7.10 SP12

Solution Manager 7.10 SP13 integrates more data source like Email and SFTP messages

For HCM scenario, the following data are available in Interface and Connection Monitoring:

- Number of exceptions in SAP HCM
- Number of exceptions in BizX export logs (Delta)
- Number of exceptions in BizX export logs (last 24h)



How To

In the Interface and Connection Monitoring Configuration, select Interface Type Cloud and MAI template Cloud (Success Factors)

- Age, existence and size of remote files on FTP server if used in the scenario



How To

Run the Managed System Configuration on the Solution Manager itself
Configure SFTP endpoint in the Basic Setup for Monitoring SAP Based Hybrid Solutions (s2c_setup)
Interface and Connection Definition, select Interface type File and MAI template File (Remote)

- HCI IFlow errors in case of integration via HCI



How To

Configure SAP HCI endpoint in the Basic Setup for Monitoring SAP Based Hybrid Solutions (s2c_setup)

In Exception Management setup, configure the log stores by selecting the correct endpoint and create adequate filters (IFlow name and message)

Interface and Connection Definition, select Interface type Cloud and MAI template Cloud (HCI)

3.4 Roles and responsibilities for integration operations

In case a customer integrates his SuccessFactors solution with other systems, there are certain roles for operating this integration which are not covered from SAP side. Therefore, these roles should be assigned to responsible people on customer side. In the following, the four required roles are described in more detail. Tasks related to Dell Boomi are analogous in case another integration platform than Dell Boomi is used.

3.4.1 Boomi content owner

Patches and new versions of SAP standard content need to be tested and deployed by the customer. Maintenance, support, updates and extensions of custom content need to be provided by the customer as well.

3.4.2 Business configuration owner

This role comprises the following tasks:

- Business configuration of processes and integrated backends
- Solve issues due to configuration mismatches in source and target systems
- Boomi process scheduling (timing, frequency...)

3.4.3 Integration Operations

To operate the integrations, the following tasks should be covered:

- Monitor planned process executions
- Detect and follow up on process failures
 - With SAP support if issues are related to SuccessFactors or Boomi platform, or standard Boomi content

- With custom content owner if issues are on custom Boomi content
- With business configuration owner if configuration issue
- Trigger retry of failed processes after issues are fixed (unless regular schedule will catch up)

3.4.4 Technical configuration owner

The overall technical configuration needs to be owned by a responsible person, having the following use cases in mind:

- Understand complete landscape (Cloud and on Prem)
- Configure connectivity and access credentials in Boomi environments and integrated systems
- Work with IT security / network on firewalls, whitelists ...
- Solve issues with systems access on customer side

3.5 Exception Management

The section Exception Management is referencing to the guiding principle Every mission-critical exception is caught and reported.

3.5.1 Use Case Description

Exception Management needs to ensure that every mission-critical technical and business exception is detected and forwarded to the right audience.

3.5.2 Exception Management via SFAPI Audit Log

In SuccessFactors to navigate to the SFAPI Log, go to the upper right corner of the screen select the user and choose Admin Tools -> API Audit Log

Scroll down to Integration Tools -> API Audit Log

Admin Tools

Back to Admin Tools

SFAPI Audit Log

Filter Options

Refresh

Items per page 10 Page 1 of 39506

ID	Login ID	Status	SFAPI Call	Object	SOAP	HTTP	Call Time	Response	Session ID	Correlation ID
396906	admin	Success	query	compoundemployee			2014-06-27 14:36:30.352	231 0B214BD8D4C6A06BB77EDFB42E980A7D DC13QACANDSFAP102		abe3208b-ce30-45d1-8c16-204b6fe0a18c
396905	admin	Success	login				2014-06-27 14:36:30.087	37 0B214BD8D4C6A06BB77EDFB42E980A7D DC13QACANDSFAP102		650fedf8-0b29-4d72-8c69-9a919c8e2a1f
396904	admin	Success	query	compoundemployee			2014-06-27 14:34:31.754	233 9DE2D05A82DC4D00CCECF6D0C0A3C04E6 DC13QACANDSFAP101		625d20e-77f4-4aea-968a-9b9b64e39f5
396903	admin	Success	login				2014-06-27 14:34:31.621	40 9DE2D05A82DC4D00CCECF6D0C0A3C04E6 DC13QACANDSFAP101		fe0930b-d296-4852-8853-399ad5c01536
396902	admin	Success	query	compoundemployee			2014-06-27 14:32:30.978	252 C5B5033ACAFEB6BCB47792CB5401BD28 DC13QACANDSFAP102		a8112679-0111-409c-9792-d8c75374d886
396901	admin	Success	login				2014-06-27 14:32:30.856	40 C5B5033ACAFEB6BCB47792CB5401BD28 DC13QACANDSFAP102		b89d7277-66d6-47f5-91c8-fb6250912509
396900	admin	Success	query	compoundemployee			2014-06-27 14:30:55.741	240 9DD6AEBCA705C2BDD32873551D73614A DC13QACANDSFAP102		6231bb61-e4b2-4e0a-a9dc-39ad35f4af0d
396899	admin	Success	login				2014-06-27 14:30:55.575	58 9DD6AEBCA705C2BDD32873551D73614A DC13QACANDSFAP102		fb09f52-67dd-4427-3e62-b06f7fc1353
396898	admin	Success	query	compoundemployee			2014-06-27 14:28:35.293	239 6DDFF353711425CE9EB539A170EA11D5 DC13QACANDSFAP101		68639615-d387-49c3-a53e-29cc0a3254c0
396897	admin	Success	login				2014-06-27 14:28:35.097	33 6DDFF353711425CE9EB539A170EA11D5 DC13QACANDSFAP101		96afceaf-9810-46a9-a305-1e7054a880d4

In the Audit Log you can filter for the sessionId from your Login message response (soapUI; SetCookie-Header-Property(JSessionID)).

As an administrator you can inspect the SOAP request/response and the http-request-header. In the response XML you can detect the exceptions.

3.5.3 Exception Management via SAP Solution Manager

Starting with SAP Solution Manager 7.1 SP12, SAP provides with Exception Management a tool to detect, analyze and handle (solve or forward) SAP HCI based Exceptions.

When used with DELL boomi or HCI middleware, exceptions can be detected using Interface and Connection Monitoring as described in Integration part.

Exception for Successfactor can come from SFTP or email extraction.

For information on how to enable central monitoring of exception for Hybrid scenarios go to SAP Note 1996648.

Once you have configured your system in LMDb (see [Solution Documentation via SAP Solution Manager](#)), start Exception Management configuration application using Root Cause Analysis->Exception Management Cockpit->Configuration->Overview.

There you can define different extractor sources and filters.

Afterwards, detailed exceptions are available in the Exception Management Cockpit for the corresponding category

The screenshot displays the SAP Exception Management Cockpit Configuration Overview. It includes a 'Monitoring' tab and a 'Configuration' tab. The 'Active Queries' section shows a query for 'Without Category Assignment' with 2 SF Scenarios and 5 Alerts. The 'SF Scenario' section shows a table of exceptions with columns for Category, Type, Source, Error, Warning, Successful, and Unknown. The 'Instance Group' section shows a table of exceptions with columns for Technical Context, Subcategory, Message, User, Status, and Start Timestamp.

Category	Type	Source	Error	Warning	Successful	Unknown
ABAP Aborted Jobs			2,022	0	0	0
ABAP HCM Error Log			411	0	0	0

Technical Context	Subcategory	Message	User	Status	Start Timestamp
DED(201)-ABAP	SFSF User: 201120	Field LOCATION has no value for person 00201120			18.11.2014 14:27:10
DED(201)-ABAP	SFSF User: 201348	Field LOCATION has no value for person 00201348			18.11.2014 14:27:10
DED(201)-ABAP	SFSF User: 201182	Field LOCATION has no value for person 00201182			18.11.2014 14:27:10
DED(201)-ABAP	SFSF User: 201418	Field LOCATION has no value for person 00201418			18.11.2014 14:27:10
DED(201)-ABAP	SFSF User: 201133	Field LOCATION has no value for person 00201133			18.11.2014 14:27:10

From the navigation, you can get more details on the exception

The screenshot displays the SAP Exception Details screen. It includes a 'Menu' bar with options like 'Exception Source', 'Correlated Exceptions', 'Guided Procedure', 'Create Notification', 'Create Incident', and 'Extractor Log'. The 'Instance Information' section shows the overall status, message, and time stamp. The 'Collection Context' table lists various parameters and their values.

Context Name	Context Value
FIRST_CRT_DATE	20131009
FIRST_CRT_TIME	101946
MAIN_PERSON	00201348
MESSAGE_ID	HRSP_BMPL_DATA
MESSAGE_NUMBER	003
NBR	002
ORIGIN	1
PERSONID	00002025
SCENARIO	FULL LOAD
SFSF_USERID	201348

It is also possible to link such exceptions to the Alert Infrastructure and display them in the alert inbox.

The screenshot displays the HCM HRSF interface. At the top, there are navigation buttons like 'Show Quick Criteria Maintenance', 'Change Query', 'Define New Query', and 'Personalize'. Below this is a 'View:' dropdown set to 'Standard View' and several action buttons including 'Confirm', 'Show Action Log', 'Change Configuration', 'Postponement', 'Navigate to', 'Problem Analysis', and 'Print Version'. A table lists various alert categories such as 'Doc Errors', 'HCM Jobs', 'HCM Errors - Duplicate username', 'Errors in ABAP System Log', and 'BizX Exceptions'. The 'HCM Errors - Duplicate username' row is highlighted in orange. Below the table, an 'Alerts - "HCM Errors - Duplicate username" at "DE0-ABAP"' section is shown. It includes a 'Timeframe' selector set to 'All' and a 'View:' dropdown set to 'Standard View'. A detailed table of alerts is displayed, with columns for 'R...', 'Exception Sub-Cat...', 'Process Instance ID', 'Stat...', 'Pr...', 'Comments', 'Guide...', 'Incid...', 'L...', 'Date Time', 'I...', 'N...', and 'W...'. The table contains several rows of data, including 'SFSF User: 850137' and 'SFSF User: 850136'.

System monitoring and Alert inbox integration is automated in guided procedure Step 2 (Sp12)

The screenshot displays the 'Exception Management and Monitoring' interface. At the top, there is a 'Personalize' button. Below this, the 'Technical System' is set to 'SI7~ABAP~200' and the 'User Name' is 'GUIRAUD'. A navigation bar shows two steps: '1 Exception Management C...' and '2 Exception Monitoring Co...'. Below the navigation bar, there are buttons for 'Read Only', 'Previous', 'Next', 'Save', and 'Reset'. A 'Monitoring is active' status is shown, along with a 'Metric View' button and a 'Delete' button. A table lists various alert/metric entries, including 'ABAP Short Dump', 'ERRID=*, HOST=*', 'ABAP Update Error', 'ABAP Application Log Errors', 'ABAP System Log Errors (ExMon)', and 'ABAP Aborted Job (ExMon)'. The 'ABAP Aborted Job (ExMon)' row is highlighted in orange. Below this, a detailed view of a single exception is shown, with columns for 'JOBNAME=*', 'USER=ANDRESMA', 'PROCESS_INSTANCE=*', 'SOURCE=ABAP_JOBS', 'TECH_CTXT=SI7~ABAP', and 'USER=ANDRESMA'. The detailed view is enclosed in a red box.

The detail can be displayed for a single exception:

Alert Details: "HCM Errors" at "DE0~ABAP"

Confirm Assign Create Incident Create Notification Create Analysis Report Navigate to Problem Analysis Show Action Log Change Configuration Navigate to Exception Management Add Comment

Alert Header

Alert Name HCM Errors Managed Object DE0~ABAP Work Mode Number of Alerts 1
Date Time 18.11.2014 14:23:49 CET Reason for closure

Alert Processing

Processor User ID Status Open Incident Status
Comments Incident Number Notification Type

Alert Description and Analysis

Alert Details

Include metrics with rating: ☒ ☒ ☒ ☒ ☐ ☐

Change Configuration

Description	Type	Managed Object	Value	Text Value
HCM Errors		DE0~ABAP		
ABAP HCM Error Log		DE0~ABAP		
Exception Sub-Category=SFSF User: 201190/Process Instance ID=34001C716505305C3CFD...		DE0~ABAP		Field LOCATION has no val...

Text Value
Field LOCATION has no value for person 00201190

Metric Threshold

Work mode: No workmode configured
Threshold Type: Already Rated

Finally it is possible to use Guided procedure to react accurately to each alert

The following exception can be retrieved for SuccessFactors:

- SAP HCM
 - Job log monitoring is integrated in standard to exception management and allows to track failing Abap jobs
 - Errors from table HRSFI_D_ERR_LOG can be extracted for the Employee data integration scenario.
- Integration via HCI (see 3.3.5)

It is possible to collect errors for the different IFLows which are running

- Email converter

It is possible to configure Exception Management to extract data from some configuration emails. Currently supported formats are Dell Boomi errors and Bizx export jobs emails



How To

Configure Solution Manager to receive emails (SAP note 455140)

Configure Email endpoint in the Basic Setup for Monitoring SAP Based Hybrid Solutions (s2c_setup)

In Exception Management setup, configure the email log stores by selecting the correct endpoint and create adequate filters

Interface and Connection Definition, select Interface type Cloud and MAI template Cloud (SuccessFactor)

- Dell Boomi

It is possible to create specific endpoint for Dell Boomi. Currently supported are HTTP (to get data from the Dell Boomi Atom API) and Email



How To

Configure endpoint in the Basic Setup for Monitoring SAP Based Hybrid Solutions (s2c_setup)

In Exception Management setup, configure the log stores by selecting the correct endpoint and create adequate filters

Interface and Connection Definition, select Interface type Cloud and MAI template Cloud (Dell Boomi)

To complete the integration, guided procedure can be created to react on the different alerts.



Prerequisites and additional information

Solution Manager 7.10 SP12 (more exception sources available in SP13)

3.6 Data Consistency Management

The section Data Consistency Management (DCM) is referencing to the guiding principle No data Inconsistencies between Public CLOUD and OP/Private Cloud components.

3.6.1 Use Case Description

DCM ensures that inconsistencies between OP/Private Cloud and Public Cloud components can be discovered post-mortem.

3.6.2 Data Consistency Management Success Factors Audit Tools



How To: Open the Data replication Monitor

Connect to <https://<sf>/xi/ui/ect/pages/admin/payrollEmployeeDataReplicationStatus.xhtml>



Prerequisites and additional information

User should have admin rights

Data Replication Monitor
Replication Status [Status Per Employees](#)

Display Options
Replication Time
☒ All Until Now
☐ Last Week
☐ Last Hour
☐ Selected Time Period
Replication Status
☐ Successful Replications
☒ Replication In Process
☒ Failed Replications
Replication Content Type
☒ Employee Master Data
☒ Employee Time Data
Replication Date From: 06/27/2014 Time: 13 : 55
Replication Date To: 06/27/2014 Time: 14 : 55 Pay Group: No Selection

Update

Standard View [Extended View](#)

Select All Deselect All Send

Items per page: 25 Page 1 of 2

Select	Employee Name	Job Title	Replication Status	Replication Content T	Last Replicated At	Replication Sched
☐	Robert, Neil (262)	For All Jobs	Failed	Employee Master Data	Tue May 20 14:53:25 L	☐
☐	Albani, Robert (262)	For All Jobs	Failed	Employee Master Data	Wed May 14 11:06:24 L	☐
☐	Redmondson, Redmond (262)	For All Jobs	Failed	Employee Master Data	Mon Jan 27 13:02:34 U	☐
☐	Reuter, Nicole (262)	For All Jobs	Failed	Employee Master Data	Fri Jun 27 13:16:59 UT	☐
☐	Reuter, Nicole (275)	For All Jobs	Failed	Employee Master Data	Mon May 19 16:47:23 L	☐

3.6.3 Data consistency within HRIS Sync

In case you use SuccessFactors Employee Central and Employee profile, the data between these two modules is kept in sync. This is ensured by the HRIS Sync functionality.

More details about HRIS Sync are explained under

http://help.successfactors.com/3Knowledge_Base/Employee_Central/Employee_Central%3A_HRIS_Sync_-_Explained

As explained in this reference, HRIS Sync can be scheduled as a job.

Data consistency provided by these jobs can be checked via Admin Tools → monitor job. Not all errors within HRIS Sync can be identified and resolved within job monitoring. Further troubleshooting procedures are described within

http://help.successfactors.com/3Knowledge_Base/Employee_Central/Employee_Central%3A_HRIS_Sync_-_Troubleshooting_Guide

It is recommended to schedule a nightly HRIS Sync job for picking up future effective dated changes. This job can be monitored via email notifications as explained in

http://help.successfactors.com/3Knowledge_Base/Employee_Central/Employee_Central%3A_How_to_receive_status_updates_on_the_nightly_HRIS_Sync_job.

3.6.4 Administration of Employee Central imports

In order to ensure that Employee Central contains consistent data, imports of employee data via files is an important means. Data imports can be used for an initial data migration or in order to correct data inconsistencies. Best practices for administration of data imports are described within http://help.sap.com/saphelpiis_cloud4hr/EN/SF_EC_Imports_Admin.pdf. Several important topics are contained there:

- How to optimize performance of imports
- How to optimize sequence of imports
- How to resolve issues after imports
- Validation steps for data imports

3.7 Business Process Analytics / Monitoring

Business Process Monitoring is referencing to the guiding principle Business Process KPIs can be tracked for all components.

3.7.1 Use Case Description

Business Process Monitoring should provide a way to monitor business process KPIs cross different business process steps and technical components.

3.7.2 SFSF Job Monitor



How To

From Successfactors Admin Tools – Select Job Monitor

Back to: Admin Tools

Monitor Jobs

Items per page 25 Page 1 of 97

	Job Type	Job Status	Submission Time	Job Details	Download Status
_ECERPPAYROLL_2014-07...	MDF Object Definition To DB SYNC	Completed	2014-07-03 13:16:51.1...	Total:2/Processed:2, P...	Download Status
_ECERPPAYROLL_2014-06...	MDF Object Definition To DB SYNC	Completed	2014-06-30 21:42:59.9...	Total:3/Processed:3, P...	Download Status
_ECERPPAYROLL_2014-06...	MDF Object Definition To DB SYNC	Completed	2014-06-26 22:47:41.1...	Total:3/Processed:3, P...	Download Status
_ECERPPAYROLL_2014-06...	MDF Object Definition To DB SYNC	Completed	2014-06-24 08:22:48.6...	Total:1/Processed:1, P...	Download Status
_ECERPPAYROLL_2014-06...	MDF Object Definition To DB SYNC	Completed	2014-06-19 06:20:34.3...	Total:9/Processed:9, P...	Download Status
_ECERPPAYROLL_2014-06...	MDF Object Definition To DB SYNC	Completed	2014-06-16 12:19:48.0...	Total:7/Processed:7, P...	Download Status
_ECERPPAYROLL_2014-06...	MDF Object Definition To DB SYNC	Completed	2014-06-12 19:05:00.1...	Total:6/Processed:6, P...	Download Status
_ECERPPAYROLL_2014-06...	MDF Object Definition To DB SYNC	Completed	2014-06-10 21:45:38.6...	Total:45/Processed:45...	Download Status
_ECERPPAYROLL_2014-06...	MDF Object Definition To DB SYNC	Completed	2014-06-09 14:15:48.0...	Total:1/Processed:1, P...	Download Status
_ECERPPAYROLL_2014-06...	MDF Object Definition To DB SYNC	Completed	2014-06-06 22:13:16.1...	Total:6/Processed:6, P...	Download Status
_ECERPPAYROLL_2014-06...	MDF Object Definition To DB SYNC	Completed	2014-06-06 13:13:04.9...	Total:1/Processed:1, P...	Download Status
_ECERPPAYROLL_2014-06...	MDF Object Definition To DB SYNC	Completed	2014-06-05 00:09:12.6...	Total:2/Processed:2, P...	Download Status
_ECERPPAYROLL_2014-05...	MDF Object Definition To DB SYNC	Completed	2014-05-30 21:53:16.9...	Total:1/Processed:1, P...	Download Status
_ECERPPAYROLL_2014-05...	MDF Object Definition To DB SYNC	Completed	2014-05-27 21:53:18.8...	Total:14/Processed:14...	Download Status
_ECERPPAYROLL_2014-05...	MDF Object Definition To DB SYNC	Completed	2014-05-20 12:24:51.8...	Total:1/Processed:1, P...	Download Status

This monitor can e.g. be used to check the status of jobs and their submission time.

3.7.3 Solution Manager Job Monitoring

It is possible to use the Solution Manager Job monitoring tool to monitor the jobs used for the data consistency management. You can then detect failing jobs and get detailed information via the exception management tool.

In Job monitoring you can define a list of jobs you want to monitor and see their status:

Exception Management allows to find out the detailed exceptions which might have occurred.

3.7.4 Business Process Analytics / Monitoring via SAP Solution Manager

SAP Solution Manager provides with Business Process Monitoring (BP Mon) an integrated solution to collect and visualize business process KPIs cross different business process steps and technical components. Business process KPIs can be collected from SAP as well as non-SAP business systems. Different technical data retrieving methods as RFC, WS and direct data base access are supported. Once the appropriate data is retrieved, it will be unified and interpreted in the appropriate business context (modelled business processes with appropriate business process steps).

3.8 Work Mode and Downtime Management

The section **Work Mode and Down Time Management** is referencing to the guiding principle **Maintenance windows and down times need to be communicated in advance**. Work Mode and Down Time Management needs to ensure synchronization of maintenance times for OP/Private Cloud and Public Cloud components.

3.8.1 Use Case Description

Customers may want to check the status of any systems involved in their business processes.

3.8.2 Work Mode and Downtime Management via SAP HANA Cloud Integration

The section **Work Mode and Down Time Management** is referencing to the guiding principle **Maintenance windows and down times need to be communicated in advance**. Work Mode and Down Time Management needs to ensure synchronization of maintenance times for OP/Private Cloud and Public Cloud components.

3.8.2.1 Uptime Report

Detailed Uptime Report

This table breaks down uptime availability into 3 categories: Scheduled Maintenance, Emergency Maintenance, and Unplanned Downtime (outages) windows. Planned and Emergency Maintenance windows **are not included** in the percentage as these are not considered 'outages' per customer contracts.

SCHEDULED MAINTENANCE						NOVEMBER 2012
Item	Data Center	App	Time			Notes
			Start	End	Duration	
1	DC2 - Amsterdam NL / AMS-2	BizX	30/Nov/12 4:00 PM PST	30/Nov/12 8:00 PM PST	4 Hours	Standard Maintenance

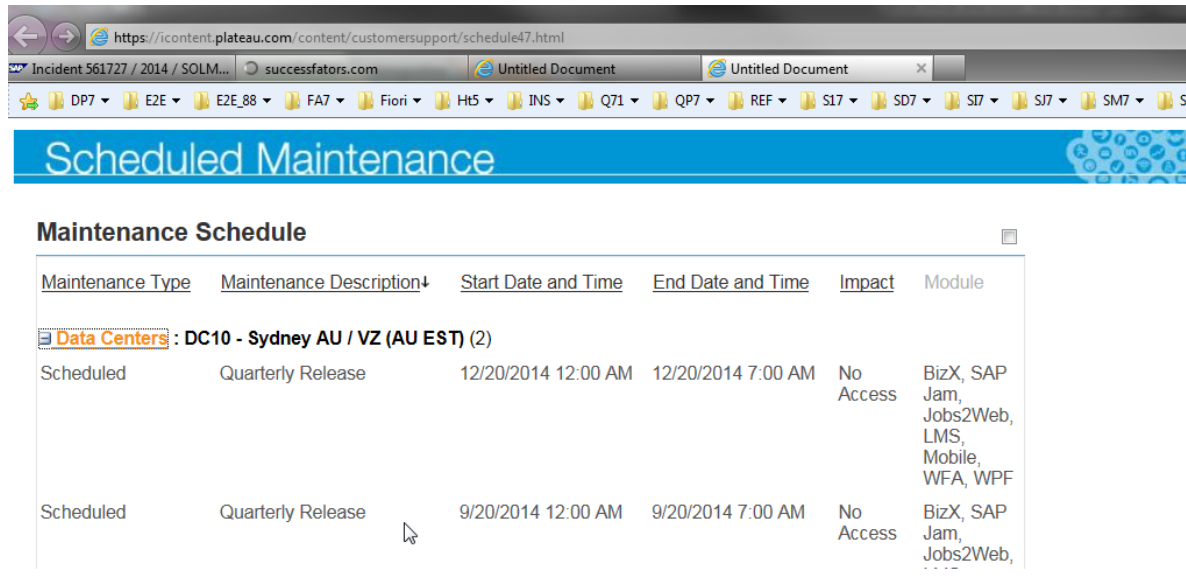
EMERGENCY MAINTENANCE						NOVEMBER 2012
Item	Data Center	App	Time			Notes
			Start	End	Duration	
1	DC2 - Amsterdam NL / AMS-2		N/A	N/A	N/A	No Maintenance

UNSCHEDULED DOWNTIME						NOVEMBER 2012
Item	Data Center	App	Time			Notes
			Start	End	Duration	
1	DC2 - Amsterdam NL / AMS-2		N/A	N/A	N/A	No Maintenance

3.8.2.2 Scheduled Maintenance

A scheduled maintenance window is defined as a period in which SuccessFactors' service may be down for maintenance. More information about contractual maintenance windows, which are regular times SuccessFactors may utilize for scheduled maintenance, is available at: <https://help.successfactors.com/3Knowledge Base/Maintenance FAQ>.

You can view upcoming scheduled maintenance by visiting the Service Status tab in the Cloud Support Portal and clicking the Scheduled Maintenance link.



Maintenance Type	Maintenance Description	Start Date and Time	End Date and Time	Impact	Module
Data Centers : DC10 - Sydney AU / VZ (AU EST) (2)					
Scheduled	Quarterly Release	12/20/2014 12:00 AM	12/20/2014 7:00 AM	No Access	BizX, SAP Jam, Jobs2Web, LMS, Mobile, WFA, WPF
Scheduled	Quarterly Release	9/20/2014 12:00 AM	9/20/2014 7:00 AM	No Access	BizX, SAP Jam, Jobs2Web, ...



How To : Open URL <https://support.successfactors.com/>

> Cloud Support Portal > Service Status > Scheduled Maintenance

3.8.3 Work Mode and Downtime Management (Boomi Scenario)



How To Access Dell BOOMI website

Dell Boomi > Your Account > Setup > System Message

Dashboard ▼
Build
Deploy
Manage ▼

Account Information

My User Information

My Email Alerts

Developer

Licensing

Document Tracking

Account Information

Account Name:

Account ID: successfactorscsteam-FRJEAP

Account Edition: Personal

Support Access Role:

Boomi Suggest: ☒ Enable Boomi Suggest ([read privacy policy](#))

Boomi Assure: ☐ Enable Boomi Assure ([read privacy policy](#))

RSS Monitor Feed: Subscribe

RSS Alerts Only Feed: Subscribe

System Message:

Pending Updates Available

Pending Atom and connector updates are now available for download through the Release Control feature. With the Release Control feature, you can get pending atom and connector updates at any time during the two weeks before the full release. This allows you to select a time within that window that's convenient for you to get and test the updates. The pending updates are applied per atom. You are able to update your "Test" atoms and test the changes against your processes before the full release. If you are happy with the test results you can apply the changes to your "Production" atoms and move the updates into your production environment before the full release.

Dell Boomi plan regular maintenance windows.

This has to be kept in mind for customer operation.

3.8.4 Work Mode and Downtime Management via SAP Solution Manager



How To

Solution Manager > Technical Administration > Work Mode Management



Prerequisites and additional information

Allows to view the planned maintenance and suspend the corresponding Alerts and setup Notification.

3.9 Maintenance and Release Management

The section maintenance and release management is referencing to the guiding principle synchronized software and configuration maintenance needs to be ensured

3.9.1 Use Case Description

In public cloud applications the release and maintenance management is owned by the cloud provider. Any corrections or software updates in the public cloud software are defined and deployed by the cloud provider. Customers cannot withdraw from maintenance activities conducted by the cloud provider. However, in return the cloud provider has to ensure maximum business continuity for the customers.

3.9.2 BizX application Upgrade Center

The Upgrade Center in BizX application provides the summary of Upgrades activated within Upgrade Center. You can get a snapshot of past upgrades performed via the Upgrade Center, get additional information about the feature, know who did the upgrade, and even undo the change.



How To

> BizX application > Administration Tools > Upgrade Center

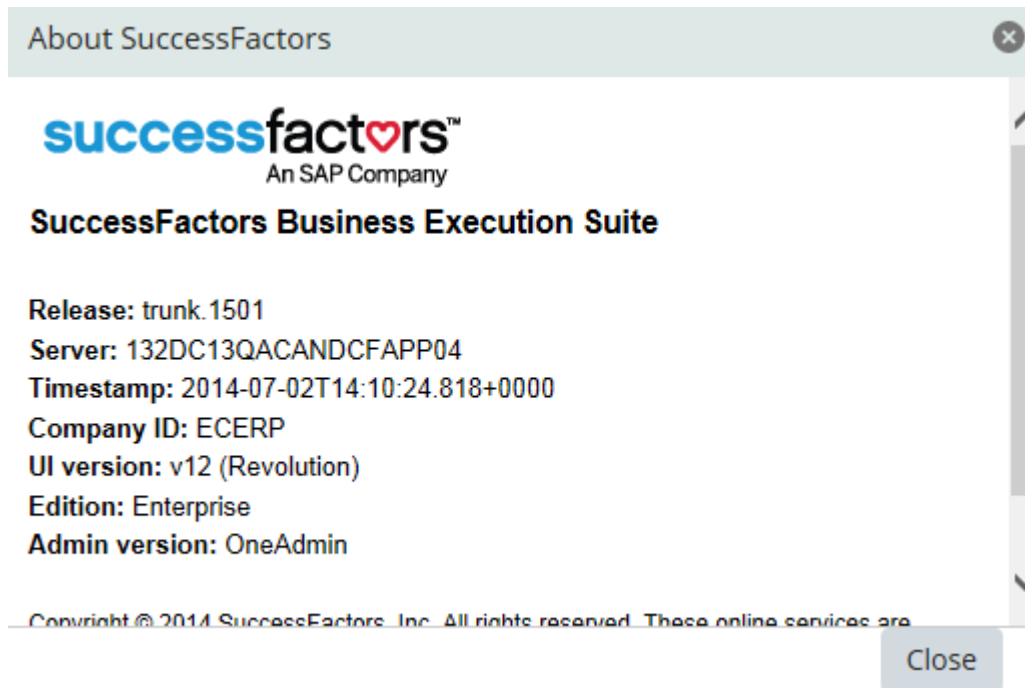


Prerequisites and additional information

https://help.successfactors.com/3Knowledge_Base/Upgrade_Center

3.9.3 BizX application information

From within the BizX application, navigate to the bottom of any page and click the hyperlink 'Show version information.'



How To

BizX application > Show version information (at the bottom of any page)

3.9.4 Dell Boomi Release Control

The Atom/Connector Versions tab on the Atom Management page displays your Atom and connectors, including Dell Boomi connectors and connectors developed by Dell Boomi partners. This tab is used to get pending updates and to roll back updates. See the Atom/Connector Versions Tab topic linked below for more details.

Atom/Connector Versions

Type	Last Update Date	Version	Pending Version
Atom	2014-06-04 08:55 AM	47375	48216
Disk	2014-05-02 08:10 AM	27719	
SFTP	2014-05-05 07:02 AM	39062	
SuccessFactors	2014-06-15 07:36 AM	317	
Web Services Server	2014-06-04 08:55 AM	47097	

Apply Pending Updates



How To

> Dell Boomi > Manage > Atom Management > Atom/Connector Versions



How To

Check trust.boomi.com for information on planned / unplanned downtimes

3.9.5 Dell Boomi Regression Testing

Dell Boomi releases new versions of its integration platform on a regular basis. The same holds true for all kind of backend systems which Dell Boomi connects to. In such cases, it is important to ensure that customer integration content being deployed on Dell Boomi will work also after such software updates.

In case of SAP standard integration packages, SAP tests compatibility of these releases under various conditions. Moreover, corrections to these integration packages are delivered on a regular basis. In this way, SAP ensures compatibility of its integration content with new releases of Dell Boomi or backend systems.

The situation is different for integration content which was developed by the customer himself, who is then responsible for the maintenance of this content himself. In order to ensure compatibility of integration content with new releases of DellBoomi, Dell allows customers to submit their integration processes to Dell Boomi for regression testing by Dell. This feature is called Boomi Assure. For details, go to help.boomi.com and search for “Boomi Assure”, or directly open <http://help.boomi.com/atomsphere/GUID-5AF4D3AC-AB97-47A6-984F-ED5D65E76CF2.html>.

3.10 Change Management

The section Change Management is referencing to the guiding principle synchronized software and configuration maintenance needs to be ensured and no change is executed unsynchronized

3.10.1 Use Case Description

The purpose of the Change Management is to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes associated with customer specific configuration / settings and development. The target is to minimize the number and impact of any related incidents and to support consistent, transparent, and auditable change management processes across the complete system landscape supporting the customer's business. The trigger of such changes could be the need to respond to problems (reactive approach) or reflection of business initiatives, programs, projects, or service improvements (proactive approach)

3.10.2 Instance Sync

The Instance sync tools allows to move configuration settings from one SuccessFactors instance to another instance



How to: Opt-in feature in the Admin Tools area



Prerequisites and additional information

User needs permission granted via the administrative privileges for source instance

Eligible source and target instances need to be defined upfront

Following objects can be transferred:

- PM Templates
- Goal Templates
- Families & Roles
- Competency Libraries
- Picklists
- Route Maps
- Rating Scales
- Form Label Translations
- RBP Roles
- RBP Groups
- Dashboard Settings
- System Properties Settings
- MDF Picklists
- MDF Object Definitions
- MDF Configuration UI

Select objects that the company can push

Select what type of data you want to make available for synchronization.

Configuration Items	
☒ Rating Scales	☐ Competencies
☐ Picklists	☐ Families & Roles
☐ Workflows	☒ Form Label Translation
☐ System Properties	☐ Templates
	☐ PM Templates
	☐ GM Templates
☐ Dashboard Settings	
☐ MDF PickList	☐ MDF Object Definition
☐ MDF Config UI	☒ MDF Rules

3.10.3 Change Management via Upgrade Center

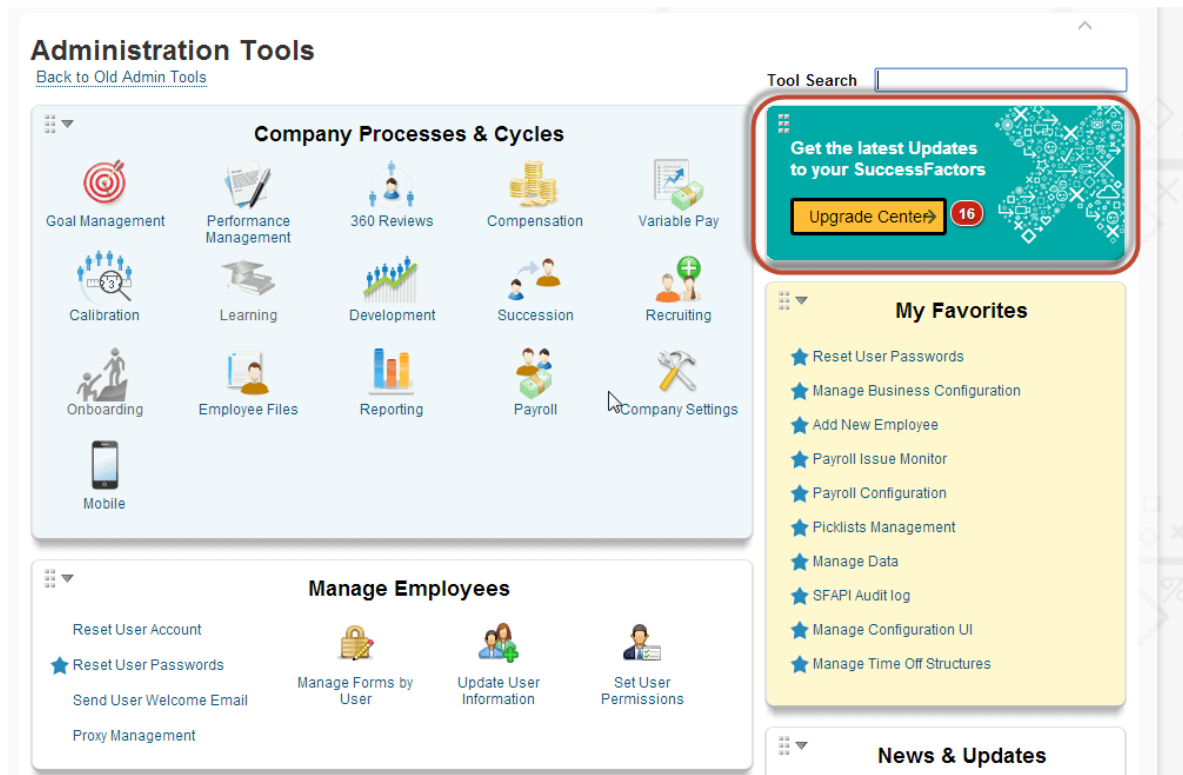


How To

From the Admin tool click on Upgrade Center

Prerequisites and additional information

User needs required admin authorizations.



Upgrade Center displays upgrades that are recommended for your system and provides additional information including a detailed description of the innovation, system prerequisites and gives you the ability to perform the upgrade in a single click.

3.10.4 Maintain and change development content for Dell Boomi

Development content for Dell Boomi is maintained in Dell's platform.boomi.com which is hosted by Dell. In order to provide guidelines for development and changes of content on this platform, SAP has provided development standards in the guide

http://help.sap.com/hr_api --> Boomi Development Standards Guide

Among other things, it discusses:

- Boomi Project Best Practices
- Boomi Project LifeCycle Management
- Development best practices

3.11 Test Management

Not in focus in this document

3.12 IT Service Management and Remote Access

The section IT Service Management and Remote Access is referencing to the guiding principle Safe and reliable remote access

3.12.1 Use Case Description

The target is to provide one tool for the end users and key users in which all incidents are processed, independently from where or for which application the incident has been opened. It is not wanted that end or key users have to use different incident management tools for each application that is consumed by them. It should be possible to create incidents directly from within any application and automatic dispatching of incidents based on the context of the message (e.g. a message created in a HR application should be opened from with the application and automatically be dispatched to the appropriate key user).

4 Glossary

Term	Definition

5 Appendix

Customer support

All SAP Support offerings are unified within the SAP Support portal

<https://support.sap.com>

In this central site, SAP offers various kind of support information which cover SuccessFactors as well as other SAP products within a combined approach. This includes: SAP customer incident processing, SAP Premium and Enterprise Support services and various other topics. Expert advice for operating your SuccessFactors landscape is also given within regular Meet the Expert sessions which are available under

<https://support.sap.com/support-programs-services/programs/enterprise-support/academy.html>

→ Meet the Expert (MTE)

For support offerings specific to SuccessFactors products, visit

<https://support.successfactors.com/> in order to address your SuccessFactors support request via various communication channels available within this central site.

Guideline principle

- Principle: Single source of truth

It needs to be ensured that the complete solution landscape containing can be documented. This includes the technical landscape, as well as the business processes and their context information as interfaces and test cases.

- Principle: Full transparency regarding performance and availability

End users of customers needs to track availability of certain scenarios and measure their performance. Customers like to understand the end-user behavior measured from their end user's locations.

- Principle: Reliable data transfer and message transport

Typically, master data as well as transactional data need to be exchanged on a regular basis between Public Cloud and OP/Private Cloud components. It needs to be ensured that data and message transfer is executed in a reliable matter. This means no data or message can get lost and in case the data or message transfer is disturbed, the situation is monitored and alerted.

- Principle: Every business critical exception is caught and reported

Especially for business processes, it is absolutely necessary to ensure that every business-critical exception is recognized by the customer's business operations team.

- Principle: No data inconsistencies

Master and transactional data are exchanged as a one-time event or on a regular basis. These data exchange processes can be successfully completed or fail. Failed data exchange processes should be identified.

- Principle: Business Process KPIs can be tracked for all components

It needs to be ensured that business process KPIs can be provided and visualized. Business Process KPIs indicate clearly whether business processes are running smoothly.

- Principle: Maintenance windows and down times need to be communicated in advance

To run business processes smoothly, components need to be available or the non-availability of the component needs to be handled sufficiently, e.g. by stopping interfaces and queuing of the relevant message. Accordingly customers need to have transparency in case of maintenance.

- Principle: Synchronized software and configuration maintenance needs to be ensured

Software and configuration dependencies must be clearly documented. Release plans need to be communicated in advance. Overall stable and reliable operation of end-to-end business processes needs to be ensured.

- Principle: No change is executed unsynchronized

This means technical interfaces exist between Public Cloud and OP/Private Cloud components. Accordingly the reliable operation of hybrid solutions is depending on the fact that changes of configuration and software are executed in a synchronized way.

- Principle: All software and configuration changes are tested end-to-end

To avoid disruption in the productive usage of software it needs to be ensured sufficient testing is possible. Manual and automated tests shall be executed on the relevant part of the solution.