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Integration with SAP Field Service Management

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1 Introduction

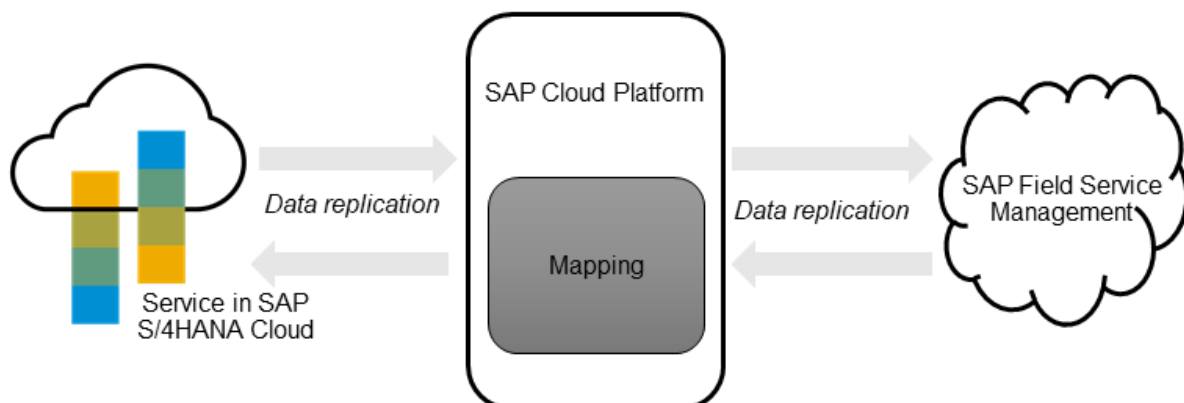
You can integrate SAP Field Service Management with Service in SAP S/4HANA Cloud to optimize your field service processes. The integration ensures a seamless, fast, and flexible delivery of field services, and therefore helps you to provide more efficient customer services. This document describes the configuration steps for the integration of SAP S/4HANA Cloud and SAP Field Service Management via SAP Cloud Platform.

About SAP Field Service Management

SAP Field Service Management supports field service technicians with real-time, automated workforce scheduling, planning, and dispatching for employees and provides self-service options for field service needs. With SAP Field Service Management, you can support your technicians with mobile tools and enable them to excel at their work. You can also increase customer satisfaction by providing proactive customer service with machine learning and Internet of Things (IoT) technology.

Basic Processes

The following figure shows an overview of the basic service processes between SAP S/4HANA Cloud and SAP Field Service Management:



Integration Scenarios

The solution supports the following integration scenarios:

- Immediately after a service order is released in SAP S/4HANA Cloud, a service call and the corresponding activities are automatically created in SAP Field Service Management.
- Immediately after an activity is assigned to a technician in SAP Field Service Management, the technician is automatically updated in the corresponding service order in SAP S/4HANA Cloud.
- Immediately after any item of the time efforts, expenses, or materials is approved in SAP Field Service Management, a service confirmation is created and then completed automatically in SAP S/4HANA Cloud.
- Immediately after all the time efforts, expenses, and materials associated with an activity are approved in SAP Field Service Management, the corresponding service item in the service order is completed automatically in SAP S/4HANA Cloud.
- When all service items in a service order are completed in SAP S/4HANA Cloud, the service order is completed automatically.
- When an activity triggered by a service product item is duplicated in SAP Field Service Management, a duplicate of the service product item is automatically created as a subitem under the original item in SAP S/4HANA Cloud.
- Immediately after a service order is completed in SAP S/4HANA Cloud, the status of the corresponding service call is automatically changed to *Technically Complete* in SAP Field Service Management.

Mapping of Data of S/4HANA to Data of SAP Field Service Management

Mapping of data of a service order to data of a service call

SAP S/4HANA	SAP Field Service Management
Service Order	Service Call
Service Oder Description	Service Call Subject
Priority	Service Call Priority
Equipment ID	Service Call Equipment
Requested Start	Service Call Start
Requested End	Service Call Due
Employee Responsible	Service Call Responsible
Ship-To Party/Service Recipient	Service Call Customer
Service Part (item level)	Service Call Reserved Material

Mapping of data of a service order item to data of a service activity

SAP S/4HANA	SAP Field Service Management
Service Order Item	Activity
Service Order Item Description	Activity Subject
Quantity	Activity Original Estimate
Equipment ID	Activity Equipment
Executive Service Employee	Activity Responsible

For more information about the technical field mapping between S/4HANA and SAP Field Service Management, see [Field Mapping \[page 39\]](#).

2 Prerequisites and Limitations

The system prerequisites for the integration are as follows:

- SAP S/4HANA Cloud
 - OData APIs for service orders and service confirmations are functioning correctly.
 - Communication arrangements have been set up correctly.
 - The master data has been synchronized from SAP S/4HANA Cloud to SAP Field Service Management.
 - Expense products have been created.
 - When you create a service order through the OData API with service contract relevant errors, you need to correct the errors and release the service order manually in the *Manage Service Orders* app.
- SAP Field Service Management
 - FSM Connector API is functioning correctly.
 - The FSM connector is properly configured.
For more information about the FSM Connector, see <https://docs.coresystems.net/platform-integration/fsm-connector.html> .
- SAP Cloud Platform Enterprise Messaging
 - A subaccount has been created in SAP Cloud Platform Cloud Foundry.
 - A service instance has been created for the Enterprise Messaging service.
- Others
Default mapping between SAP Field Service Management expense types and SAP S/4HANA Cloud expense product IDs has been defined in the value mapping. For details about the mapping relationship, see [Value Mapping \[page 44\]](#).

The system limitations for the integration are as follows:

- SAP S/4HANA Cloud
 - For service items of the *Service Product* category, the default time unit is hours.
 - The field *Work Duration* is disabled in the master data of service products, so the final working hour is equivalent to the value of *Quantity* for service products.
 - Service order type *SVO1* and *SVO2* are supported. The corresponding service confirmation types are *SVC1* and *SVC2*.
 - When you create a service order through the OData API, you may need to specify a service contract that has to be determined for the new service order. If you then do not specify a service contract, the service order will contain errors. In this situation, you must correct the errors and release the service order manually in the *Manage Service Orders* app.
- SAP Field Service Management
 - In service confirmation requests from SAP Field Service Management, the prices of involved time efforts and spare parts are ignored by SAP S/4HANA Cloud.
 - An activity that has been assigned to a technician cannot be assigned to any other technician, even when the activity has subsequently been unassigned.

3 Integration Procedure

This chapter describes the procedures for integrating SAP S/4HANA Cloud with SAP Field Service Management.

It includes the following parts:

- [Configuration in SAP Cloud Platform Enterprise Messaging \[page 7\]](#)
- [Configuration for SAP Cloud Platform Enterprise Messaging \[page 10\]](#)
- [Configuration in SAP Cloud Platform Integration \[page 14\]](#)
- [Enable SAP Field Service Management Connector \[page 34\]](#)

3.1 Configuration in SAP Cloud Platform Enterprise Messaging

Context

SAP Enterprise Messaging falls under SAP Cloud Platform (Cloud Foundry) Integrations capabilities. To access SAP Cloud Platform Enterprise Messaging, the user must be assigned the necessary space quota in their Cloud Foundry subaccount.

i Note

To enable communication between SAP S/4HANA Cloud and the SAP Cloud Platform Enterprise Messaging, create required messaging instances, communication systems, and communication arrangements in advance. In this case, SAP Cloud Platform Enterprise Messaging can consume events from SAP S/4HANA Cloud.

3.1.1 Create an Enterprise Messaging Service Instance

Context

This part describes how to use the SAP Cloud Platform cockpit to create a service instance for the Enterprise Messaging service.

i Note

For more information about enterprise messaging, see <https://help.sap.com/viewer/bf82e6b26456494cbdd197057c09979f/Cloud/en-US/df532e8735eb4322b00bfc7e42f84e8d.html> on SAP Help Portal.

Procedure

1. Open SAP Cloud Platform cockpit.
2. Navigate to *Spaces* in your own Cloud Foundry environment and choose ► *Services* ► *Service Marketplace* ► *Enterprise Messaging Service* ⌵.
3. Choose ► *Instances* ► *New Instance* ⌵.
4. Specify *Plan* and click *Next*.
5. Specify associated parameters, and then click *Next*.
 - (Mandatory) *emname*: Enterprise Messaging service instance name. It is good practice to set it to the name of the concerned service instance because *emname* indicates a service instance in the Cloud Foundry environment.
 - (Optional) To use REST APIs for management, set the *management* parameter to *true*. Similarly, to use the REST APIs for messaging, set the *messagingrest* parameter to *true*.

Sample Code

```
{
  "emname": "messaging-products",
  "options": {
    "management": true,
    "messagingrest": true
  }
}
```

6. Specify the instance name and click *Finish*.
7. Configure endpoints for an event source.
 - a. Open the newly created enterprise messaging service instance, and then select *Service Keys* in the navigation tree. In the displayed dialog box, click *Create Service Key*, and specify the key name.
 - b. Record the client ID, client secret, token endpoint, and base URL, then use these parameters to create a communication arrangement.

The newly created Service Key contains following information:

- *clientId*: client ID for access to the Enterprise Messaging endpoint from an external system
- *clientsecret*: client password
- *Uri*: It specifies the endpoints provided by Enterprise Messaging. It contains the hostname and path for configuring communication arrangements on SAP S/4HANA Cloud.

3.1.2 Configure Enterprise Messaging Service Instances

Context

This part describes how to configure Enterprise Messaging service instances.

i Note

Before you perform this task, complete the tasks described in [Configuration for SAP Cloud Platform Enterprise Messaging \[page 10\]](#).

Procedure

1. On SAP Cloud Platform cockpit, open the dashboard of the newly created Enterprise Messaging service instance.
2. Select *Queues* in the navigation tree, click *Create* under *Queues*, and specify *Queue Name* in the displayed dialog box.
3. Select *Queues Subscriptions* in the navigation tree and click *Create* under *Queues Subscriptions*. In the displayed dialog box, set *Queue Name* to the name you specified in the previous step and set *Topic Name* or *Pattern* to the value you have configured in SAP S/4HANA Cloud, such as `{Topic Space}/BO/ServiceOrder/*`.
4. Select *Webhook Subscriptions* in the navigation tree and click *Create*. In the displayed dialog box, set *Webhook URL* to the integration-flow endpoint deployed in SAP Cloud Platform Integration.

3.2 Configuration in SAP S/4HANA Cloud

This part describes how to configure communication systems and communication arrangements in SAP S/4HANA Cloud.

3.2.1 Configuration for SAP Cloud Platform Enterprise Messaging

Procedure

1. Log on to the SAP S/4HANA Cloud system as user *Administrator*, and then click *Communication Management*.
2. Choose the *Communication Systems* app and click *New*. In the displayed dialog box, specify *System ID* and *System Name*, and then click *Create*.
3. Specify required items under *Technical Data*.
 - a. Specify the host name, which refers to the URI contained in the service key of the SAP Cloud Platform Enterprise Messaging service instance, excluding *https://*.
 - b. Specify the token endpoint, which refers to the service key ended with */oauth/token*.
 - c. Specify the authentication endpoint, which refers to the service key ended with */oauth/authorize*.
4. Under *Users for Inbound Communication*, choose to create an inbound communication user if you don't have such a user.
5. (Optional) Specify relevant fields for this new user.
 - a. Specify *User Name* and *Description*.
 - b. Specify *Password*. Alternatively, click *Propose Password* and save the proposed password to a safe place so that it can't be retrieved.
 - c. Click *Create*.
6. Under *Users for Outbound Communication*, choose to create an outbound communication user.

An outbound communication user is required to connect SAP S/4HANA Cloud to the SAP Cloud Platform Enterprise Messaging on CF (Cloud Foundry).
7. Specify the following fields for the new outbound communication user, and then save the communication system.
 - a. Authentication Method: Set it to *OAuth 2.0*.
 - b. OAuth 2.0 Client ID: It is contained in the service keys of the Enterprise Messaging service instance.
 - c. Client Secret: It is contained in the service keys of the Enterprise Messaging service.
8. Switch to the home page, open *Communication Arrangements*, and click *New* to create a communication arrangement.
9. In the displayed *New Communication Arrangement* dialog box, select *SAP_COM_0092* from the input help list of *Scenario*, specify *Arrangement Name*, and then click *Create*.
10. Under *Common Data*, select a Communication System you created previously from the input help list of *Communication System*.

Fields under *Inbound Communication*, *Inbound Services*, *Outbound Communication*, and *Outbound Services* are specified automatically.
11. Specify the following fields under Additional Properties.
 - a. Channel: channel name
 - b. Description: channel description

- c. Topic Space: topic space name.
It's good practice to set it to the name of the system from which events are consumed. `<topic space>/<event path>` indicates the topic pattern of the event payload sent to the SAP Cloud Platform Enterprise Messaging service instance.
 - d. QoS: quality of service, defaulting to value `1`
 - e. Reconnect Attempts: number of reconnect attempts allowed if there are connection failures
 - f. Reconnect Wait Time(sec): idle time between 2 reconnect attempts
12. Specify *Path* (for example: `/protocols/mqtt311ws`) under *Outbound Services*, and then click *Save*.
 13. Click *Check Connection* to check whether a connection can be established between SAP S/4HANA Cloud and SAP Cloud Platform Cloud Foundry.
 14. Log on to SAP S/4HANA Cloud again as a user that has access rights to Implementation Cockpit. Then, click *Manage Your Solution* and *Configure Your Solution* in sequence.
 15. Type in *messaging* in the filter, and select the item called *Event Handling* from the results list.
 16. Click *Configure* after the step named *Maintain Event Topics*.
 17. After *Channel*, press *F4*, select *Event Channel* you configured in the communication arrangement, and confirm it.
 18. Perform the following steps to configure topics that you want to add to your channel.
 - a. Click *New Entries*.
 - b. Select the first empty line of the table and press *F4* to list available topics.
 - c. Select topics that you want to add to your channel.
 - d. Click *Save*.

3.2.2 Configuration for Master Data

Procedure

1. Log on to the SAP S/4HANA Cloud system as user *Administrator*, click *Communication Management*, and click *New*.
2. In the *New Communication Arrangement* dialog box that is displayed, select *SAP_COM_0008* from the input help list of *Scenario*, specify *Arrangement Name*, and then click *Create*.
3. Choose the *Communication Systems* app and click *New*. In the displayed dialog box, specify *System ID* and *System Name*, and then click *Create*.
4. Specify required items under *Technical Data*.
 - a. Specify the host name, which refers to the URI contained in the service key of the SAP Cloud Platform Integration tenant, excluding *https://*.
5. Under *Users for Inbound Communication*, choose to create an inbound communication user if you don't have such a user.
6. (Optional) Specify relevant fields for this new user.
 - a. Specify *User Name* and *Description*.

- b. Specify *Password*. Alternatively, click *Propose Password* and save the proposed password to a safe place so that it can't be retrieved.
 - c. Click *Create*.
7. Under *Common Data*, select a communication system you created previously from the input help list of *Communication System*.
 8. Under *Replicate Customers from S/4 System to Client*, set *Service Status* to inactive for all interfaces with application protocol *IDOC*.
 9. Under outbound service *Business Partner - Replicate from SAP S/4HANA Cloud to Client*, enter the following data:
 - a. *Service Status*: set the service status to active.
 - b. *Path*: specify the service endpoints of the service you want to use, for example, `/cx£/BusinessPartnerPush`.
 - c. *Replication Model*: specify a name for the replication model under *Additional Properties*.
 - d. *Output Mode*: choose an output mode under *Additional Properties*.

If you choose *D (Direct Output)* for the output mode, no other settings is required. All changes to business partners will be replicated immediately. If you choose *P (Pooled Output)* for the output mode, change pointers will be created for every changed business partner. In this case, you have to specify *Replication Mode* to *C (Change Replication)* and specify the job execution details that will schedule a job to make sure the change pointers are processed.

10. Under outbound service *Business Partner Relationship - Replicate from SAP S/4HANA Cloud to Client*, enter the following data:
 - a. *Service Status*: set the service status to active.
 - b. *Path*: specify the service endpoints of the service you want to use, for example, `/cx£/BusinessPartnerRelationshipPush`
11. Under outbound service *Business Partner - Send Confirmation from SAP S/4HANA Cloud to Client*, set the service status to inactive.
12. Under outbound service *BP Relationship - Send Confirmation from SAP S/4HANA Cloud to Client*, set the service status to inactive.
13. Click *Save*. The communication arrangement will become active and all required configurations will be generated.
14. In the *New Communication Arrangement* dialog box that is displayed, select *SAP_COM_0009* from the input help list of *Scenario*, specify *Arrangement Name*, and then click *Create*.
15. Under *Common Data*, select a communication system you created previously from the input help list of *Communication System*.
16. Under outbound service *Product Master - Replicate from SAP S/4HANA to Client*, set the service status to active.
17. Under outbound service *Product Master - Replicate from SAP S/4HANA to Client*, enter the following data:
 - a. *Service Status*: set the service status to active.
 - b. *Path*: specify the service endpoints of the services you want to use, for example, `/cx£/Product_Push`.
 - c. *Replication Model*: specify a name for the replication model.
 - d. *Output Mode*: specify the output mode under *Additional Properties*.

If you choose *D (Direct Output)* for the output mode, no other settings is required. All changes to business partners will be replicated immediately. If you choose *P (Pooled Output)* for the output mode,

change pointers will be created for every changed business partner. In this case, you have to specify *Replication Mode* to *C (Change Replication)* and specify the job execution details that will schedule a job to make sure the change pointers are processed.

18. Click *Save*. The communication arrangement will become active and all required configurations will be generated.

3.2.3 Configuration for Communication Scenario of Service Order and Service Confirmation

Context

Procedure

1. Log on to the SAP S/4HANA Cloud system as user *Administrator*, and then click *Communication Management*.
2. Under *Common Data*, select a communication system you created previously from the input help list of *Communication System*.
3. Switch to the home page, open *Communication Arrangements*, and click *New* to create a communication arrangement.
4. In the displayed *New Communication Arrangement* dialog box, select **SAP_COM_0350** from the input help list of *Scenario*, specify *Arrangement Name*, and then click *Create*.
5. Under *Common Data*, select a communication system you created previously from the input help list of *Communication System*.

Fields under *Inbound Communication* and *Inbound Services* are specified automatically.

6. Save the communication arrangement.
7. Switch to the home page, open *Communication Arrangements*, and click *New* to create a communication arrangement.
8. In the displayed *New Communication Arrangement* dialog box, select **SAP_COM_0352** from the input help list of *Scenario*, specify *Arrangement Name*, and then click *Create*.
9. Under *Common Data*, select a communication system you created previously from the input help list of *Communication System*.

Fields under *Inbound Communication* and *Inbound Services* are specified automatically.

10. Save the communication arrangement.

3.3 Configuration in SAP Cloud Platform Integration

Before proceeding with the integration flows (iFlows) in this section, copy the integration package to your workspace. Then, you can configure and deploy the iFlows.

Context

i Note

Before implementing configuration in SAP Cloud Platform, obtain the URL of your SAP Cloud Platform Integration tenant. The URL is provided in the SAP Cloud Platform Integration tenant provisioning email.

This part includes the following tasks:

- [Upload Certificates of SAP Field Service Management to SAP Cloud Platform Integration \[page 14\]](#)
- [Deploy a Credential Artifact by Using SAP Field Service Management Client Data \[page 15\]](#)
- [Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data \[page 16\]](#)
- [Configure and Deploy iFlows in the Integration Package \[page 18\]](#)

3.3.1 Upload Certificates of SAP Field Service Management to SAP Cloud Platform Integration

Context

This part describes how to upload certificates of SAP Field Service Management to the SAP Cloud Platform Integration system.

Procedure

1. Open the Web UI of SAP Cloud Platform Integration (for example, `https://<your SAP Cloud Platform Integration tenant URL>/itspaces`).
2. In the navigation tree, choose *Overview*.
3. Choose the *Connectivity Tests* tile under section *Manage Security*.
4. Choose the *TLS* tab.
5. Set *Host* to the token URL of the SAP Field Service Management (for example, `auth.coresuite.com`) and *Port* to `443`.

6. Deselect [Authenticate with Client Certificate](#) and [Validate Server Certificate](#).
7. Click [Send](#).
8. After the connection is set up, click [Download](#) to save the SAP Field Service Management certificates to your local computer.
9. In the navigation tree, choose [Overview](#).
10. Choose the [Keystore](#) tile in section [Manage Security](#).
11. Choose [Certificate](#) in the [Add](#) dropdown list.
12. Upload the certificates of SAP Field Service Management one by one.

3.3.2 Deploy a Credential Artifact by Using SAP Field Service Management Client Data

Context

Before performing the following steps, create a client ID in your SAP Field Service Management system, and store the client credential in your SAP Cloud Platform Integration tenant as OAuth2 Credentials.

Procedure

1. Open the Web UI of SAP Cloud Platform Integration (for example, `https://<your SAP Cloud Platform Integration tenant URL>/itspaces`).
2. In the navigation tree, choose [Overview](#).
3. Choose the [Security Material](#) tile under section [Manage Security](#).
4. Choose [Add](#).
5. Select [OAuth2 Credentials](#).
6. Specify the following fields in the [Add OAuth2 Credentials](#) dialog box.

Field Name	Description or Value
Name	Credential name
Grant Type	Client Credentials
Description	This field is optional.
Authentication URL	SAP Field Service Management Authentication URL, for example, <code>https://auth.coresuite.com/api/oauth2/v1/token</code>
Client ID	SAP Field Service Management Client ID
Client Secret*	SAP Field Service Management Client Secret

Field Name	Description or Value
Client Authentication	Send as Request Header
Include Scope	Checked
Scope	grant_type=password&username=<FSM Account>/<FSM User>&password=<FSM Password>
Content Type	Application/x-www-form-urlencoded

For more information about SAP Field Service Management Client ID and Client Secret, see <https://docs.coresystems.net/admin/generating-client-id.html> .

7. Choose *Deploy*.

3.3.3 Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data

Context

Before performing the following steps, create a communication user in your SAP S/4HANA Cloud system, and store the user credential in your SAP Cloud Platform Integration tenant as User Credential.

Procedure

1. Open the Web UI of SAP Cloud Platform Integration (for example, <https://<your SAP Cloud Platform Integration tenant URL>/itspaces>).
2. In the navigation tree, choose *Overview*.
3. Choose the *Security Material* tile under section *Manage Security*.
4. Choose *Add*.
5. Select *User Credentials*.
6. Specify the following fields in the *Add Users Credential* dialog box.

Field Name	Description or Value
Name	Credential name
Description	This field is optional.
User*	User alias name of the communication user
Password	Password of the communication user

7. Choose *OK*.

3.3.4 Upload Certificates of Email Server to SAP Cloud Platform Integration

Context

This part describes how to upload certificates of Email Server to the SAP Cloud Platform Integration system.

Procedure

1. Open the Web UI of SAP Cloud Platform Integration (for example, `https://<your SAP Cloud Platform Integration tenant URL>/itspaces`).
2. In the navigation tree, choose *Overview*.
3. Choose the *Connectivity Tests* tile under section *Manage Security*.
4. Choose the *SMTP* tab.
5. Set *Host* to the SMTP URL of the email server and *Port* to *587 (SMTP / STARTTLS)*.
6. Set *Protection* to *STARTTLS Optional*.
7. Set *Authentication* to *None*.
8. Deselect *Validate Server Certificate and Check Mail Address*.
9. Click *Send*.
10. After the connection is set up, click *Download* to save the email server certificates to your local computer.
11. In the navigation tree, choose *Overview*.
12. Choose the *Keystore* tile in section *Manage Security*.
13. Choose *Certificate* from the *Add* dropdown list.
14. Upload the certificates of the email server one by one.

3.3.5 Deploy a Credential Artifact by Using Email Address Data

Context

Before performing the following steps, create an email address in your email server, and store the email address credential in your SAP Cloud Platform Integration tenant as User Credential.

Procedure

1. Open the Web UI of SAP Cloud Platform Integration (for example, `https://<your SAP Cloud Platform Integration tenant URL>/itspaces`).
2. In the navigation tree, choose *Overview*.
3. Choose the *Security Material* tile under section *Manage Security*.
4. Choose *Add*.
5. Select *User Credentials*.
6. Specify the following fields in the *Add Users Credential* dialog box.

Field Name	Description or Value
Name	Credential name
Description	This field is optional.
User*	User alias name of the communication user
Password	Password of the communication user

7. Choose *Deploy*.

3.3.6 Configure and Deploy iFlows in the Integration Package

Context

This part describes how to configure and deploy iFlows in the *SAP S/4HANA Cloud Integration with SAP Field Service Management* integration package.

Procedure

1. Open the Web UI of SAP Cloud Platform Integration (for example, `https://<your SAP Cloud Platform Integration tenant URL>/itspaces`).
2. In the navigation tree, choose *Design*.
3. Select the *SAP S/4HANA Cloud Integration with SAP Field Service Management* package.
4. On the *Artifacts* tab, choose *Configure* under *Actions* for the artifact *Replicate Service Order from SAP S4HANA Cloud to SAP Field Service Management*.
5. On the *Receiver* tab, select *FSM_Create_Servicecall_with_Activities* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	FSM_Create_Servicecall_with_Activities
Adapter Type	HTTP
Address	https://*.coresystems.net/service-management/api/v2/composite-tree/service-calls (This address indicates the Service API URL of the SAP Field Service Management.)
Credential Name	Name created in Deploy a Credential Artifact by Using SAP Field Service Management Client Data [page 15]

6. On the *Receiver* tab, select *S4HANA_Query* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	S4HANA_Query
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This address indicates the O-data Service API URL of the SAP S/4HANA system.)
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .

7. On the *Receiver* tab, select *Email_Receiver* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Email_Receiver
Adapter Type	Mail
Address	smtp.xxx.com:587 (This address indicates the SMTP URL of the email server.)
Credential Name	Credential name of the email address and password
From	Email address for sending error messages
To	Email address for receiving error messages
Cc	Email address for cc
Bcc	Email address for bcc
Subject	Email subject

8. On the *More* tab, select *All Parameters* in the *Type* dropdown list and specify associated fields.

Field Name	Description or Value
Type	All Parameters
account	Account for login to SAP Field Service Management
Authorization	/token
autoCreateActivity	false
company	Company accessible in SAP Field Service Management

Field Name	Description or Value
Content-Type	application/json
user	User for login to SAP Field Service Management
X-Client-ID	Client ID obtained from SAP Field Service Management
X-Client-Version	Client version obtained from SAP Field Service Management

- On the *Artifacts* tab, choose *Configure* under *Actions* for the artifact *Notify Service Order Update from SAP Field Service Management to SAP S4HANA Cloud*.
- Specify associated fields on the *Sender* tab.

Field Name	Description or Value
Sender	SAP_FSM
Adapter Type	ProcessDirect
Address	/Cloud/ServiceOrder

- On the *Receiver* tab, select *Service_Order_Header_Reference_Object_Create* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Service_Order_Header_Reference_Object_Create
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This address indicates the O-data Service API URL of the SAP S/4HANA Cloud.)
Proxy Type	Internet
Authentication	Basic
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .
CSRF Protected	Checked
Enable Batch Process	Unchecked
Content Type	Atom
Content Type Encoding	UTF-8
Timeout (in min.)	1

- On the *Receiver* tab, select *Service_Order_Header_Reference_Object_Query* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Service_Order_Header_Reference_Object_Query
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This ad-

Field Name	Description or Value
	dress indicates the O-data Service API URL of the SAP S/4HANA Cloud.)
Proxy Type	Internet
Authentication	Basic
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .
CSRF Protected	Checked
Enable Batch Process	Unchecked
Content Type	Atom
Timeout (in min.)	1

13. On the *Receiver* tab, select *Service_Order_Item_Update* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Service_Order_Item_Update
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This address indicates the O-data Service API URL of the SAP S/4HANA Cloud.)
Proxy Type	Internet
Authentication	Basic
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .
CSRF Protected	Checked
Enable Batch Process	Unchecked
Content Type	Atom
Content Type Encoding	UTF-8
Timeout (in min.)	1

14. On the *Receiver* tab, select *Service_Order_Item_Reference_Object_Query* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Service_Order_Item_Reference_Object_Query
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This address indicates the O-data Service API URL of the SAP S/4HANA Cloud.)
Proxy Type	Internet

Field Name	Description or Value
Authentication	Basic
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .
CSRF Protected	Checked
Enable Batch Process	Unchecked
Content Type	Atom
Timeout (in min.)	1

15. On the *Receiver* tab, select *Service_Order_Item_Query* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Service_Order_Item_Query
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This address indicates the O-data Service API URL of the SAP S/4HANA Cloud.)
Proxy Type	Internet
Authentication	Basic
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .
CSRF Protected	Checked
Enable Batch Process	Unchecked
Content Type	Atom
Timeout (in min.)	1

16. On the *Receiver* tab, select *Service_Order_Header_Update* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Service_Order_Header_Update
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This address indicates the O-data Service API URL of the SAP S/4HANA Cloud.)
Proxy Type	Internet
Authentication	Basic
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .

Field Name	Description or Value
CSRF Protected	Checked

17. On the *Receiver* tab, select *Service_Order_Item_Reference_Object_Create* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Service_Order_Item_Reference_Object_Create
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This address indicates the O-data Service API URL of the SAP S/4HANA Cloud.)
Proxy Type	Internet
Authentication	Basic
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .
CSRF Protected	Checked
Enable Batch Process	Unchecked
Content Type	Atom
Content Type Encoding	UTF-8

18. On the *Receiver* tab, select *Service_Order_Header_Reference_Object_Delete* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Service_Order_Header_Reference_Object_Delete
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This address indicates the O-data Service API URL of the SAP S/4HANA Cloud.)
Proxy Type	Internet
Authentication	Basic
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .
CSRF Protected	Checked
Enable Batch Process	Unchecked
Content Type	Atom
Timeout (in min.)	1

19. On the *More* tab, select *All Parameters* in the *Type* dropdown list and specify associated fields.

Field Name	Description or Value
Type	All Parameters
ItemErrorInfo	Resource not found for segment 'A_ServiceOrderItemType'
OrderErrorInfo	Resource not found for segment 'A_ServiceOrderType'
ServiceProductItemCategory	SVPI

20. On the *Artifacts* tab, choose *Configure* under *Actions* for the artifact *Replicate Confirmed Service from SAP Field Service Management to SAP S4HANA Cloud*.

21. On the *Receiver* tab, select *Email_System* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Email_System
Adapter Type	Mail
Address	smtp.xxx.com:587 (This address indicates the SMTP URL of the email server.)
Credential Name	Credential name of the email address and password
From	Email address for sending error messages
To	Email address for receiving error messages

22. On the *Receiver* tab, select *Completed_Service_Confirmaion* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Completed_Service_Confirmaion
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This address indicates the O-data Service API URL of the SAP S/4HANA Cloud.)
Proxy Type	Internet
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .

23. On the *Receiver* tab, select *Create_Service_Confirmaion* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Create_Service_Confirmaion
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This address indicates the O-data Service API URL of the SAP S/4HANA Cloud.)

Field Name	Description or Value
Proxy Type	Internet
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .

24. On the *Receiver* tab, select *Query_Activity* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Query_Activity
Adapter Type	HTTP
Address	<code>https://*.coresystems.net/service-management/api/v2/composite-tree/service-calls/code=\${property.servicecall}/activities/code=\${property.activity}</code>
Credential Name	Name created in Deploy a Credential Artifact by Using SAP Field Service Management Client Data [page 15]

25. On the *Receiver* tab, select *Query_Expense_Item_Id* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Query_Expense_Item_Id
Adapter Type	HCIOData
Address	<code>https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV</code> (This address indicates the O-data Service API URL of the SAP S/4HANA Cloud.)
Proxy Type	Internet
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .

26. On the *More* tab, select *All Parameters* in the *Type* dropdown list and specify associated fields.

Field Name	Description or Value
Type	All Parameters
account	Account for login to SAP Field Service Management
company	Company accessible in SAP Field Service Management
user	User for login to SAP Field Service Management
X-Client-ID	Client ID obtained from SAP Field Service Management

27. On the *Artifacts* tab, choose *Configure* under *Actions* for the artifact *Update Service Order for Duplicate Activity from SAP Field Service Management to SAP S4HANA Cloud*.

28. On the *Receiver* tab, select *S4HANA_Cloud_Read* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	S4HANA_Cloud_Read
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This address indicates the O-data Service API URL of the SAP S/4HANA Cloud.)
Proxy Type	Internet
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .

29. On the *Receiver* tab, select *S4HANA_Cloud_Create* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	S4HANA_Cloud_Create
Adapter Type	HCIOData
Address	https://*.s4hana.ondemand.com/sap/opu/odata/sap/API_SERVICE_ORDER_SRV (This address indicates the O-data Service API URL of the SAP S/4HANA Cloud.)
Proxy Type	Internet
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .

30. On the *Receiver* tab, select *SAP_FSM_Update* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	SAP_FSM_Update
Adapter Type	HTTP
Address	https://*.coresuite.com/api/data/v4/Activity/{property.ActivityId} (This address indicates the Activity API URL of SAP Field Service Management.)
Query	account={{account}}&user={{user}}&company={{company}}&dtos=Activity.25&forceUpdate=true
account	Account for login to SAP Field Service Management
user	User for login to SAP Field Service Management
company	Company accessible in SAP Field Service Management
Expression	`\${property.HttpsMethod}`
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .

31. On the *More* tab, select *All Parameters* in the *Type* dropdown list and specify associated fields.

Field Name	Description or Value
Type	All Parameters
Authorization	/token
Content-Type	application/json
X-Client-ID	Client ID obtained from SAP Field Service Management
X-Client-Version	Client version obtained from SAP Field Service Management

32. On the *Artifacts* tab, choose *Configure* under *Actions* for the artifact *Notify Service Call Update from SAP S/4HANA Cloud to SAP Field Service Management*.

33. On the *Receiver* tab, select *SAP_FSM* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	SAP_FSM
Adapter Type	HTTP
Address	{{SAPFieldServiceManagementURL}}=\${property.serviceOrderId}
SAPFieldServiceManagementURL	https://*.coresystems.net/service-management/api/v2/composite-tree/service-calls/externalId (This address indicates the Service API URL of the SAP Field Service Management.)
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .

34. On the *Receiver* tab, select *Email_System* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Email_System
Adapter Type	Mail
Address	smtp.xxx.com:587 (This address indicates the SMTP URL of the email server.)
Credential Name	Credential name of the email address and password
From	Email address for sending error messages
To	Email address for receiving error messages
Subject	Email subject for sending error messages

35. On the *More* tab, select *All Parameters* in the *Type* dropdown list and specify associated fields.

Field Name	Description or Value
Type	All Parameters
account	Account for login to SAP Field Service Management
autoCreateActivity	false

Field Name	Description or Value
company	Company accessible in SAP Field Service Management
user	User for login to SAP Field Service Management User
X-Client-ID	Client ID obtained from SAP Field Service Management
X-Client-Version	Client version obtained from SAP Field Service Management

36. On the *Artifacts* tab, choose *Configure* under *Actions* for the artifact *Replicate Business Partners*.

37. On the *Receiver* tab, select *Email_Receiver* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	Email_Receiver
Adapter Type	Mail
Address	smtp.xxx.com:587 (This address indicates the SMTP URL of the email server.)
Credential Name	Credential name of the email address and password
From	Email address for sending error messages
To	Email address for receiving error messages
Cc	Email address for bcc
Bcc	Email address for bcc
Subject	Email subject

38. On the *Receiver* tab, select *FSM_Create_Business_Partner* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	FSM_Create_Business_Partner
Adapter Type	HTTP
Address	https://*.coresuite.com/api/data/v4/BusinessPartner/externalId/bulk
Query	account={{Account}}&user={{User}}&company={{Company}}&dtos=BusinessPartner.20&forceUpdate=true
account	Account for login to SAP Field Service Management
user	User for login to SAP Field Service Management
Company	Company for login in SAP Field Service Management
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16] .

39. On the *More* tab, select *All Parameters* in the *Type* dropdown list and specify associated fields

Field Name	Description or Value
Type	All Parameters

Field Name	Description or Value
X-Client-ID	Client ID obtained from SAP Field Service Management
X-Client-Version	Client version obtained from SAP Field Service Management

40. On the *Artifacts* tab, choose *Configure* under *Actions* for the artifact *Replicate Business Partner Address*.

41. On the *Receiver* tab, select *Email_Receiver* in the *Receiver* dropdown list and specify associated fields

Field Name	Description or Value
Receiver	Email_Receiver
Adapter Type	Mail
Address	smtp.xxx.com:587 (This address indicates the SMTP URL of the email server.)
Credential Name	Credential name of the email address and password
From	Email address for sending error messages
To	Email address for receiving error messages
Cc	Email address for cc
Bcc	Email address for bcc
Subject	Email subject

42. On the *Receiver* tab, select *FSM_Create_Business_Partner_Address* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	FSM_Create_Business_Partner_Address
Adapter Type	HTTP
Address	https://*.coresuite.com/api/data/v4/Address/externalId/bulk
Query	account={{Account}}&user={{User}}&company={{Company}}&dtos=Address.18&forceUpdate=true
account	Account for login to SAP Field Service Management
user	User for login to SAP Field Service Management
company	Company accessible in SAP Field Service Management
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16]

43. On the *More* tab, select *All Parameters* in the *Type* dropdown list and specify associated fields

Field Name	Description or Value
Type	All Parameters
X-Client-ID	Client ID obtained from SAP Field Service Management
X-Client-Version	Client version obtained from SAP Field Service Management

44. On the *Artifacts* tab, choose *Configure* under *Actions* for the artifact *Replicate Business Partner Contact*.
45. On the *Receiver* tab, select *Email_Receiver* in the *Receiver* dropdown list and specify associated fields

Field Name	Description or Value
Receiver	Email_Receiver
Adapter Type	Mail
Address	smtp.xxx.com:587 (This address indicates the SMTP URL of the email server.)
Credential Name	Credential name of the email address and password
From	Email address for sending error messages
To	Email address for receiving error messages
Cc	Email address for cc
Bcc	Email address for bcc
Subject	Email subject

46. On the *Receiver* tab, select *FSM_Create_Business_Partner_Contact* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	FSM_Create_Business_Partner_Address
Adapter Type	HTTP
Address	https://*.coresuite.com/api/data/v4/Contact/externalId/bulk
Query	account={{Account}}&user={{User}}&company={{Company}}&dtos=Contact.16&forceUpdate=true
account	Account for login to SAP Field Service Management
user	User for login to SAP Field Service Management
company	Company accessible in SAP Field Service Management
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16]

47. On the *More* tab, select *All Parameters* in the *Type* dropdown list and specify associated fields

Field Name	Description or Value
Type	All Parameters
X-Client-ID	Client ID obtained from SAP Field Service Management
X-Client-Version	Client version obtained from SAP Field Service Management

48. On the *Artifacts* tab, choose *Configure* under *Actions* for the artifact *Replicate Business Partner Relationships*.
49. On the *Receiver* tab, select *Email_Receiver* in the *Receiver* dropdown list and specify associated fields

Field Name	Description or Value
Receiver	Email_Receiver
Adapter Type	Mail
Address	smtp.xxx.com:587 (This address indicates the SMTP URL of the email server.)
Credential Name	Credential name of the email address and password
From	Email address for sending error messages
To	Email address for receiving error messages
Bcc	Email address for bcc
Cc	Email address for cc
Subject	Email subject

50. On the *Receiver* tab, select *FSM_Create_Business_Partner_Relationship* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	FSM_Create_Business_Partner_Relationship
Adapter Type	HTTP
Address	https://*.coresuite.com/api/data/v4/Contact/externalId/bulk
Query	account={{Account}}&user={{User}}&company={{Company}}&dtos=Contact.16&forceUpdate=true
account	Account for login to SAP Field Service Management
user	User for login to SAP Field Service Management
company	Company accessible in SAP Field Service Management
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16]

51. On the *More* tab, select *All Parameters* in the *Type* dropdown list and specify associated fields

Field Name	Description or Value
Type	All Parameters
X-Client-ID	Client ID obtained from SAP Field Service Management
X-Client-Version	Client version obtained from SAP Field Service Management

52. On the *Artifacts* tab, choose *Configure* under *Actions* for the artifact *Replicate Asset Central Equipment*.

53. On the *Receiver* tab, select *Email_Receiver* in the *Receiver* dropdown list and specify associated fields

Field Name	Description or Value
Receiver	Email_Receiver
Adapter Type	Mail

Field Name	Description or Value
Address	smtp.xxx.com:587 (This address indicates the SMTP URL of the email server.)
Credential Name	Credential name of the email address and password
From	Email address for sending error messages
To	Email address for receiving error messages
Cc	Email address for cc
Bcc	Email address for bcc
Subject	Email subject

54. On the *Receiver* tab, select *FSM_Create_Update_Equipment* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	FSM_Create_Update_Equipment
Adapter Type	HTTP
Address	https://*.coresuite.com/api/data/v4/Equipment/externalId/bulk
Query	account={{Account}}&user={{User}}&company={{Company}}&dtos=Equipment.19&forceUpdate=true
account	Account for login to SAP Field Service Management
user	User for login to SAP Field Service Management
company	Company accessible in SAP Field Service Management
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16]

55. On the *Receiver* tab, select *AIN-JWT* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	AIN-JWT
Adapter Type	HTTP
Address	https://ainmanufacturer.authentication.sap.hana.ondemand.com/oauth/token

56. On the *More* tab, select *All Parameters* in the *Type* dropdown list and specify associated fields

Field Name	Description or Value
Type	All Parameters
AIN_Client_Id	Client ID obtained from SAP Assert Central
AIN_Client_Secret	Client version obtained from SAP Assert Central

Field Name	Description or Value
Get_Equipment_Address	https://*.sap.hana.ondemand.com/ain/services/api/v1/equipment({property.EquipmentID})/header
X-Client-ID	Client ID obtained from SAP Field Service Management
X-Client-Version	Client version obtained from SAP Field Service Management

57. On the *Artifacts* tab, choose *Configure* under *Actions* for the artifact *Replicate Products*.

58. On the *Receiver* tab, select *Email_Receiver* in the *Receiver* dropdown list and specify associated fields

Field Name	Description or Value
Receiver	Email_Receiver
Adapter Type	Mail
Address	smtp.xxx.com:587 (This address indicates the SMTP URL of the email server.)
Credential Name	Credential name of the email address and password
From	Email address for sending error messages
To	Email address for receiving error messages
Cc	Email address for cc
Bcc	Email address for bcc
Subject	Email subject

59. On the *Receiver* tab, select *FSM_Create_Product* in the *Receiver* dropdown list and specify associated fields.

Field Name	Description or Value
Receiver	FSM_Create_Product
Adapter Type	HTTP
Address	https://*.coresuite.com/api/data/v4/Item/externalId/bulk
Query	account={{account}}&user={{user}}&company={{company}}&dtos=Item.21&forceUpdate=true
account	Account for login to SAP Field Service Management
user	User for login to SAP Field Service Management
company	Company accessible in SAP Field Service Management
Credential Name	Name created in Deploy a Credential Artifact by Using SAP S/4HANA Cloud Communication User Data [page 16]

60. On the *More* tab, select *All Parameters* in the *Type* dropdown list and specify associated fields

Field Name	Description or Value
Type	All Parameters

Field Name	Description or Value
X-Client-ID	Client ID obtained from SAP Field Service Management
X-Client-Version	Client version obtained from SAP Field Service Management

3.4 Configuration in SAP Field Service Management

This part describes the configuration in SAP Field Service Management.

3.4.1 Enable SAP Field Service Management Connector

Context

To trigger SAP Cloud Platform Integration, set status of the SAP Field Service Management Connector to *true*.

i Note

For more information about how to connect a customer system to SAP Cloud Platform Integration, see relevant topics under <https://help.sap.com/viewer/368c481cd6954bd0435479fd4eaf/Cloud/en-US/7cfe913ba85d463a9c5fce101c3ae460.html> on SAP Help Portal.

Procedure

1. Enter the URL of the SAP Field Service Management (for example, `https://*.coresystems.net/admin/login/auth`) in the address bar.
2. Select *Sign In with User*, and specify *Account Name*, *User Name*, and *Password*.
3. Select one company under *Companies*.
4. Click *Settings* in the navigation tree.
5. Search for *CoreSystems.FSM.Connector.Enabled* and click it.
6. Under *Setting*, click *Edit*.
7. Under *Edit Setting*, set *Value* to *true*.
8. In the navigation tree, choose **Messages** **FSM Connector**.
9. Under *Current configuration*, specify relevant fields for the FSM Connector.

Field Name	Description or Value
Enabled	On
Extended Logs enabled	On
Url	<code>https://{SAP Cloud Platform Integration URL}/http/connector</code>
Auth method	BASIC
Auth user	User for logon to SAP Cloud Platform Integration
Auth password	Password for logon to SAP Cloud Platform Integration
Integration Type	S4

3.4.2 Set User Groups of Company Under the Client Which Cannot Be Accessed

Context

To get SAP Field Service Management token, you need to set which user groups of company can be accessed.

Procedure

1. Enter the URL of the SAP Field Service Management (for example, `https://*.coresystems.net/admin/login/auth`) in the address bar.
2. Select *Sign In with User* and specify *Account Name*, *User Name*, and *Password*.
3. Select the client under *Clients*.
4. Click the *Edit* button.
5. Set the User Groups of Company which can be accessed. You could set default as User Groups.
6. Click the *Update* button to save the settings.

3.5 Configuration in Asset Centric Foundation

Procedure

1. Create a new technical user in SAP cloud platform tenant.
2. Configure newly created technical user into asset central federator.
3. Configure SAP cloud platform end point in asset central federator.

Related Information

<https://help.sap.com/viewer/f90a444330144d5db63d345e298b5cff/1906/en-US/557d5f2b0da447679c007c9bfae05713.html>

4 Employee Replication

Context

This section describes the employee replication from S/4HANA to SAP Field Service Management

Procedure

1. Make sure that the user has been assigned the business role `SAP_BR_BUPA_MASTER_SPECIALIST` to export business partner master data.
2. Choose tab *Mass Maintenance for business partner master*.
3. Choose tab *Export Master Data Business Partner*.
4. Click on *Select Specified Fields*.
5. Select fields `BUT000-NAME_FIRST`, `BUT000-NAME_LAST`, and `BUT000-PARTNER_GUID`.
6. In the `Select Business Partner` include, select *Business Partner Type (BUT000-BPKIND)* equals to partner type *Employee*.
7. Specify file format to *Office Open XML (*.xlsx)*.
8. Click the *Export* button.
9. Change the field names according to the following table:

SAP S/4HANA Cloud	SAP Field Service Management (People)
<code>NAME_FIRST</code>	<code>firstName</code>
<code>NAME_LAST</code>	<code>lastName</code>
<code>SOURCE_ID</code>	<code>Id</code>
<code>PARTNER_GUID</code>	<code>username</code>

10. Save the modified file in the `.csv` format.
11. Go to `https://*.coresystems.net/dataloader/#/dataloader/`.
12. Choose *People* from the *Select the data object type* dropdown list.
13. Click the *CONTINUE* button.
14. Select the modified `.csv` file from the computer.
15. Click the *IMPORT DATA* button.

5 Equipment Replication

Context

This section describes the equipment replication from S/4HANA Cloud to SAP Field Service Management.

There are two options to replicate equipment to SAP Field Service Management:

- If the equipment data comes from Asset Centric Foundation, see step 52 to step 56 in [Configure and Deploy iFlows in the Integration Package \[page 18\]](#).
- If the equipment data comes from the S/4HANA Cloud system, follow the below steps.

Procedure

1. Make sure that the user has been assigned role `SAP_BR_MAINTENANCE_PLANNER` to export the equipment data.
2. Choose the *Technical Object* tab.
3. Click the *Find Technical Object* tile.
4. Choose *Equipment* from *Technical Object Type*.
5. Filter content based on many parameters such as `plant section` and `maintenance plant`.
6. Export data in the `.xlsx` format.
7. Go to `https://*.coresystems.net/dataloader/#/dataloader/`.
8. Choose *Equipment* from the *Select the data object type* dropdown list.
9. Click on *DOWNLOAD TEMPLATES(CSV)*.
10. Modify the file according to downloaded equipment template.
11. Save the file in `.csv` format.
12. Go to `https://*.coresystems.net/dataloader/#/dataloader/`.
13. Choose *Equipment* from the *Select the data object type* dropdown list.
14. Click the *CONTINUE* button.
15. Select the modified file from the computer.
16. Click the *IMPORT DATA* button.

6 Field Mapping

This section describes the mapping of data of S/4HANA Cloud to the data of SAP Field Service Management.

Mapping of data of a service order to data of a service call

SAP S/4HANA Cloud Service Order	SAP Field Service Management
A_ServiceOrder/A_ServiceOrderType/ShipToParty	serviceCall/businessPartner/externalId
A_ServiceOrder/A_ServiceOrderType/RequestedServiceEndDateTime	serviceCall/dueDateTime
A_ServiceOrder/A_ServiceOrderType/RequestedServiceStartDateTime	serviceCall/earliestStartDateTime
A_ServiceOrder/A_ServiceOrderType/to_ReferenceObject/ A_ServiceOrderRefObjectType /ServiceReferenceEquipment	serviceCall/equipments/externalId
A_ServiceOrder/A_ServiceOrderType/ServiceOrder	serviceCall/externalId
A_ServiceOrder/A_ServiceOrderType/ServiceDocument-Priority:	serviceCall/priority:
<ul style="list-style-type: none"> • 9 • 5 • 3 • 1 	<ul style="list-style-type: none"> • LOW • MEDIUM • HIGH • HIGH
A_ServiceOrder/A_ServiceOrderType/to_ReservedMaterial/ ServiceOrder / A_ServiceOrder/A_ServiceOrderType/ to_ReservedMaterial/ServiceOrderItem	serviceCall/responsibles/externalId
A_ServiceOrder/A_ServiceOrderType/to_ReservedMaterial/ Product	serviceCall/reservedMaterials/item/externalId
A_ServiceOrder/A_ServiceOrderType/to_ReservedMaterial/ Quantity	serviceCall/reservedMaterials/quantity
A_ServiceOrder/A_ServiceOrderType/to_PersonResponsible/ A_ServiceOrderPersonRespType/PersonResponsible	serviceCall/responsibles/externalId
-2 (Ready to Plan)	serviceCall/status
A_ServiceOrder/A_ServiceOrderType/ServiceOrderDescription	serviceCall/subject

Mapping of data of a service order item to data of a service activity

SAP S/4HANA Cloud Service Order Item	SAP Field Service Management Activity
to_Item/A_ServiceOrderItemType/PlannedServiceEndTime	activities/dueDateTime

SAP S/4HANA Cloud Service Order Item	SAP Field Service Management Activity
to_Item/A_ServiceOrderItemType/Quantity	activities/durationInMinutes
to_Item/A_ServiceOrderItemType/QuantityUnit	
to_Item/A_ServiceOrderItemType/ServiceOrderItemCategory	
to_Item/A_ServiceOrderItemType/PlannedServiceStartDateTime	activities/earliestStartDateTime
to_Item/A_ServiceOrderItemType/to_ReferenceObject/A_ServiceOrderItemRefObjectType/ ServiceReferenceEquipment	activities/equipment/externalId
to_Item/A_ServiceOrderItemType/ServiceOrder /	activities/externalId
to_Item/A_ServiceOrderItemType/ServiceOrderItem	
to_Item/A_ServiceOrderItemType/ServiceOrderItemDescription	activities/subject

Mapping of data of a service confirmation item to data of the time effort

SAP S/4HANA Cloud Service Confirmation Item	SAP Field Service Management Time Effort
to_Item/A_ServiceConfirmationItemType /Quantity	activity/timeEfforts/startDateTime
	activity/timeEfforts/endDateTime
	activity/timeEfforts/breakInMinutes
to_Item/A_ServiceConfirmationItemType/QuantityUnit	H
to_Item/A_ServiceConfirmationItemType/ActualServiceDuration	activity/timeEfforts/startDateTime
	activity/timeEfforts/endDateTime
	activity/timeEfforts/breakInMinutes
to_Item/A_ServiceConfirmationItemType/ActualServiceDurationUnit	H
to_Item/A_ServiceConfirmationItemType/ExecutingServiceEmployee	activity/responsibles/externalId
to_Item/A_ServiceConfirmationItemType/ReferenceServiceOrder	serviceCall/externalId
to_Item/A_ServiceConfirmationItemType/ReferenceServiceOrderItem	activity/unifiedIdentifier/externalId
to_Item/A_ServiceConfirmationItemType/ActualServiceStartDateTime	activity/timeEfforts/startDateTime
to_Item/A_ServiceConfirmationItemType/ActualServiceEndDateTime	activity/timeEfforts/endDateTime

Mapping of data of a service confirmation item to data of a spare part

SAP S/4HANA Cloud Service Confirmation Item	SAP Field Service Management Spare Part
to_Item/A_ServiceConfirmationItemType/Quantity	activity/materials/quantity
to_Item/A_ServiceConfirmationItemType/ExecutingServiceEmployee	activity/responsibles/externalId
to_Item/A_ServiceConfirmationItemType/ReferenceServiceOrder	serviceCall/externalId
to_Item/A_ServiceConfirmationItemType/ReferenceServiceOrderItem	activity/materials/reservedMaterials/externalId

Mapping of data of a service confirmation item to data of expense

SAP S/4HANA Cloud Service Confirmation Item	SAP Field Service Management Expense
to_Item/A_ServiceConfirmationItemType/Product:	activity/expenseType:
<ul style="list-style-type: none"> EXP_FSM_ACCOM EXP_FSM_MEALS EXP_FSM_TRAVEL EXP_FSM_OTHER 	<ul style="list-style-type: none"> -3 -1 -2 -4
to_Item/A_ServiceConfirmationItemType/ExecutingServiceEmployee	activity/responsibles/externalId
to_Item/A_ServiceConfirmationItemType/ReferenceServiceOrder	serviceCall/externalId
to_Item/A_ServiceConfirmationItemType/ReferenceServiceOrderItem	activity/expenses/expenseItemId
/to_Item/A_ServiceConfirmationItemType/to_PricingElement/ A_ServiceConfItemPriceElementType/ConditionType	PMPO
to_Item/A_ServiceConfirmationItemType/to_PricingElement/ A_ServiceConfItemPriceElementType/ConditionRateValue	activity/expenses/externalAmount/amount or activity/expenses/internalAmount/amount
to_Item/A_ServiceConfirmationItemType/to_PricingElement/ A_ServiceConfItemPriceElementType/ConditionCurrency	activity/expenses/externalAmount/currency or activity/expenses/internalAmount/currency

Mapping of data of business partner

SAP S/4HANA Cloud	SAP Field Service Management
InternalID	ExternalID
FirstLineName	Name
RoleCode	Type
<ul style="list-style-type: none"> FLVN01 FLCU00 BUP004 FLCU01 	<ul style="list-style-type: none"> SUPPLIER CUSTOMER COMPANY CUSTOMER

SAP S/4HANA Cloud	SAP Field Service Management
CountryCode	Country
CurrencyCode	Currency
URI	EmailAddress
Facsimile/FormattedNumberDescription	Fax
BusinessPartner/Identification/PartyIdentifierTypeCode	groupCode
BusinessPartner/AddressInformation/Address/CommunicationPreference/ CorrespondenceLanguageCode	language
Telephone/FormattedNumberDescription	MobilePhone
Note	Remarks
Web/URIs	Website

Mapping of data of business partner address

SAP S/4HANA Cloud	SAP Field Service Management
HouseID	Block
BuildingID	Building
CityName	City
CountryCode	Country
UUID	ExternalID
True (Constant)	defaultAddress
false (Constant)	Inactive
FloorID	Floor
FirstLineName	Name
InternalID	Object/Object/externalId
BUSINESSPARTNER (Constant)	ObjectType
POBoxPostalCode	PostOfficeBox
RoomID	Room
RegionCode	State
StreetName	Street
StreetPostalCode	Zipcode

Mapping of data of business partner contact

SAP S/HANA Cloud**SAP Field Service Management**

InternalID	ExternalID
BirthDate	birthDate
Email/URI	EmailAddress
Facsimile/FormattedNumberDescription	fax
Name/GivenName	firstName
GenderCode	gender
FamilyName	lastName
Telephone/FormattedNumberDescription	officePhone
AddressNote/Note	remarks
SalutationText	title

Mapping of data of business partner relationship

SAP S/4HANA Cloud**SAP Field Service Management**

RelationshipBusinessPartnerInternalID	ExternalID
BusinessPartnerInternalID	Contact/CP/object/objectId/externalId
BUSINESSPARTNER (Constant)	ObjectType

Mapping of data of product to item

SAP S/4HANA Cloud (Product)**SAP Field Service Management (Item)**

ProductTypeCode	groupName
BatchManagementRequiredIndicator	managedByBatches
SerialIdentifierAssignmentProfileCode	managedBySerialNumbers
ProductInternalID	ExternalID
Description	Name
SAPScriptLineText	remarks
SerialIdentifierAssignmentProfileCode	serialNumberItem
BaseMeasureUnitCode	unitOfMeasure

7 Value Mapping

Category	Item on SAP S/4HANA Cloud	Item on SAP Field Service Management
Priority mapping between service orders and service calls	1	HIGH
	3	HIGH
	5	MEDIUM
	9	LOW
Expense type mapping between service calls and service confirmations	EXP_FSM_ACCOM	-3
	EXP_FSM_MEALS	-1
	EXP_FSM_TRAVEL	-2
	EXP_FSM_OTHER	-4
Gender mapping between SAP S4HANA Cloud and SAP Field Service Management	3	UNKNOWN
	2	MALE
	1	FEMALE
Role mapping between SAP S4HANA Cloud and SAP Field Service Management	FLVN01	SUPPLIER
	FLCU00	CUSTOMER
	BUPO04	COMPANY
Product Type mapping between SAP S4HANA and SAP Field Service Management	SERV	Service
	ERSA	Spare Part
	DIEN	Service
Product UOM mapping between SAP S4HANA and SAP Field Service Management	PCE	Piece
	HUR	Hours
	µM	Micrometer
	µL	Microliter
	µGQ	Microgram/cubic meter
	µGL	Microgram/liter
	µF	Microfarad
	µA	Microampere
	lth	US Pound/1000 Horsepower Hr.
	lht	US Pound/100,000 Hp Hr
	EA	Each
	D	Days

Category	Item on SAP S/4HANA Cloud	Item on SAP Field Service Management
	Day	Days
	PC	Piece
	"	Inch
	"2	Square inch
	"3	Cubic inch
	%	Percentage
	%0	Per Mile
	000	Meter/Minute
	002	Length in Meters per Unit
	ACR	Acre
	AU	Activity Unit
	BAG	Bag
	BT	Bottle
	Bqm	Becquerel/Cubic Meter
	C3S	Cubic Centimeter/second
	CAN	Canister
	CAR	Carton
	CCK	Cubic Centimeters per Kilogram
	CCM	Cubic centimeter
	CD3	Cubic decimeter
	CL	Centiliter
	CM	Centimeter
	CM2	Square centimeter
	CMS	Centimeter/second
	COP	Copies
	CRT	Crate
	CV	Case
	DEG	Degree
	DGP	ADR DG Exemption Points
	DM	Decimeter
	DR	Drum
	DZ	Dozen
	EML	Enzyme Units/Milliliter

Category	Item on SAP S/4HANA Cloud	Item on SAP Field Service Management
	EU	Enzyme Units/Milliliter
	FT	Feet
	FOZ	Fluid Ounce US
	FT3	Cubic foot
	G	Gram
	G/L	Gram Active Ingredient/Liter
	GAI	Gram Active Ingredient
	GAL	US Gallon
	GAU	Gram Gold
	FT2	Square foot
	GJ	Gigajoule
	GLI	Gram/liter
	GM	Gram/Mole
	GM2	Gram/square meter
	GM3	Gram/Cubic Meter
	GOH	Gigaohm
	GPH	Gallons per hour (US)
	GPM	Gallons per mile (US)
	GRO	Gross
	H	Hour
	HA	Hectare
	HL	Hectoliter
	JKG	Joule/Kilogram
	JKK	Spec. Heat Capacity
	JMO	Joule/Mole
	KAI	Kilogram Active Ingredient
	KD3	Kilogram/cubic decimeter
	KG	Kilogram
	KGM	Kilogram/Mole
	KGS	Kilogram/second
	KGV	Kilogram/cubic meter
	KIK	kg Active Ingredient/kg
	KJK	Kilojoule/kilogram

Category	Item on SAP S/4HANA Cloud	Item on SAP Field Service Management
	KJM	Kilojoule/Mole
	KM	Kilometer
	KM2	Square kilometer
	KMH	Kilometer/hour
	KML	Kilomol
	KMN	Kelvin/Minute
	KMS	Kelvin/Second
	KPA	Kilopascal
	KT	Kiloton
	KVA	Kilovoltampere
	L	Liter
	LB	US pound
	LHK	Liter per 100 km
	LMI	Liter/Minute
	LMS	Liter/Mole Second
	LPH	Liter per hour
	M	Meter
	M-2	1/Square Meter
	M/H	Meter/Hour
	M/M	Mole per Cubic Meter
	M/S	Meter/second
	M2	Square meter
	M2S	Square meter/second
	M3	Cubic meter
	M3D	Cubic meter/day
	M3H	Cubic meter/Hour
	M3S	Cubic meter/second
	MEJ	Megajoule
	MG	Milligram
	MGL	Milligram/liter
	MGO	Megohm
	MGQ	Milligram/cubic meter
	MHV	Megavolt

Category	Item on SAP S/4HANA Cloud	Item on SAP Field Service Management
	MI	Mile
	MI2	Square Mile
	MIN	Minute
	MIS	Microsecond
	ML	Milliliter
	MLI	Milliliter Active Ingredient
	MM	Millimeter
	MM2	Square millimeter
	MM3	Cubic millimeter
	MN	Meganewton
	MNM	Millinewton/meter
	MON	Months
	MPG	Miles per gallon (US)
	MPL	Millimole per Liter
	MPS	Millipascal seconds
	MS2	Meter/Square Second
	MSC	Microsiemens per centimeter
	MSE	Millisecond
	MVA	Megavoltampere
	MWH	Megawatt hour
	NA	Nanoampere
	NAM	Nanometer
	NI	Kilonewton
	NM	Newton/meter
	NMM	Newton/Square Millimeter
	NS	Nanosecond
	OCM	Specific Electrical Resistance
	OM	Specific Electrical Resistance
	OZ	Ounce
	P	Points
	PAA	Pair
	PAC	Pack
	PAL	Pallet

Category	Item on SAP S/4HANA Cloud	Item on SAP Field Service Management
	PAS	Pascal second
	PDA	Consultant Days
	PF	Pikofarad
	PMI	1/minute
	PMR	Permeation Rate SI
	PPB	Parts per billion
	PPM	Parts per million
	PPT	Parts per trillion
	PRC	Group proportion
	PRM	Permeation Rate
	PRS	Number of Persons
	PS	Picosecond
	PT	Pint, US liquid
	QT	Quart, US liquid
	R-U	Nanofarad
	RF	Millifarad
	RHO	Gram/Cubic Centimeter
	ROL	Roll
	S/M	Siemens per meter
	TEU	Twenty-Foot Equivalent Uni
	TO	Ton
	TOM	Ton/Cubic Meter
	TON	US Ton
	TS	Thousands
	VAL	Value-Only Material
	VAM	Voltampere
	WK	Weeks
	WKY	Evaporation Rate
	WMK	Heat Conductivity
	YD	Yards
	YD2	Square Yard
	YD3	Cubic yard
	YR	Years

Category	Item on SAP S/4HANA Cloud	Item on SAP Field Service Management
	dBA	Decibels (A Weighting)
	dBC	Decibels (C Weighting)
	kgb	Kilogram/US Barrel
	lhh	US Pound/Horsepower Hour
	HR	Hours

i Note

Both priorities 1 and 3 for service orders on SAP S/4HANA Cloud map to priority HIGH for service calls on SAP Field Service Management.

8 More Information



- For more information about SAP Field Service Management, see <https://docs.coresystems.net/help-index.html> or <https://www.sap.com/products/field-service-management.html>.
- For more information about Service APIs on SAP Field Service Management, see <https://docs.coresystems.net/api/service-api.html>.
- For more information about APIs on SAP S/4HANA Cloud, see <https://help.sap.com/viewer/6d57d4ab71e5408581e2018320a0ce49/1911.500/en-US/eb1fe2b8f0c34accbbe0ed8cb4a5fb62.html> on SAP Help Portal.

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