Onboarding 2.0 Furnish Equipment integration to External Application

Implementation Design Principles

SAP SE
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Abstract

This document provides the equipment requisition process integration for Onboarding 2.0 with any procurement or ticketing system. Onboarding offers the task of creating a request for equipment. Once the request is created, an intelligent service event is triggered. This event could be used for creating a request in the ticketing/procurement application. Tracking of the status of the request is not part of the onboarding system, It can be tracked in the procurement system. This document describes the possible solutions for this process.

Business Requirements

As part of the onboarding program, one of the activity is to make sure that new hire has all the equipment that is needed on the first day of work.

Examples of equipment are phones, Laptops, monitors, etc.

Typically the hiring manager or a specific group of people are responsible for ordering the equipment. The task for requesting equipment should be integrated into ticketing or a procurement system for further processing.
**Possible Solutions**

*Onboarding 2.0 provides “Change of Equipment Request Status” as an intelligent event.* This event is triggered when the status of the equipment task changes.

The solution of integrating Onboarding 2.0 with a procurement system can be done via 2 solutions

- Solution 1: Procurement/Ticketing system subscribes to the intelligent service event

- Solution 2: Integration center getting triggered based on an intelligent service event
  - 2.1 Creating a file-based output
  - 2.2 Using SOAP/REST Endpoint
Solution 1: Procurement / Ticketing system subscribes to the intelligent service event
**Solution 1:** Procurement/Ticketing system subscribes to the intelligent service event - High Level Scenario

Change of Equipment Request Status field (equipmentStatus Field) triggers the event.

*Note: This is an event that is triggered by the system and not from a business rule.*
**Events Architecture**

SAP Successfactors publishes significant changes as events so that customers can build custom business scenarios based on Intelligent Services events. SAP Successfactors Provides APIs to access and update the critical data that allows access data in the cloud.
Solution Details

Prerequisites

• Intelligent Services is enabled.

• Below permissions are set for the solution 1
  • To set up role-based permissions for the Event Notification Subscription tool, check the Access to Event Notification Subscription box.
  • To set up role-based permissions for the Event Notification Audit Log, check the Access to Event Notification Audit Log.
Configuration Step 1: Adding a Subscriber

1. Go to Admin Center > Event Notification Subscription > Subscriber tab.
2. Select the Edit Subscriber button.
3. Select the Add Subscriber button to configure your third-party application as a subscriber.
4. Enter the Subscriber ID field and Complete any remaining fields as needed.
5. Select Save to finish.
Configuration Step 2: Setting up Subscriptions (Events) to Publish

Go to Admin Center > Event Notification Subscription > SEB External Event.

Choose Add Topic and select the event change of Equipment request Status.

Choose Add Subscription to begin configuring a subscription to the event.

Configure the event notification subscription by completing all of the required fields.

- In the Subscriber field, select from the subscribers you have configured on the Subscribers tab.
- After you have chosen a subscriber, enter the Endpoint URL and Protocol settings.
- Configure the Authentication settings.
**Event Payload Fields**

Once the event is triggered the payload contains the value of the following fields (not all are mentioned):

<table>
<thead>
<tr>
<th>Field ID</th>
<th>Field Name</th>
<th>Example Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>activityId</td>
<td>Activity ID</td>
<td>27584EF97A6B4559AE8E2FCD5DAB53FF</td>
</tr>
<tr>
<td>processId</td>
<td>Process ID</td>
<td>D7685411F690412BBB275300615F4658</td>
</tr>
<tr>
<td>startDate</td>
<td>New Hire Start Date</td>
<td>2019-12-30</td>
</tr>
<tr>
<td>personIdExternal</td>
<td>Person ID External</td>
<td>103235</td>
</tr>
<tr>
<td>userId</td>
<td>User ID</td>
<td>103235</td>
</tr>
<tr>
<td>assignmentIdExternal</td>
<td>Assignment ID External</td>
<td>103235</td>
</tr>
<tr>
<td>rcmCandidateId</td>
<td>RCM Candidate ID</td>
<td>1471</td>
</tr>
<tr>
<td>equipmentType</td>
<td>Equipment Type</td>
<td>PHONE</td>
</tr>
<tr>
<td>equipmentValue</td>
<td>Equipment Value</td>
<td>LENX1</td>
</tr>
<tr>
<td>equipmentStatus</td>
<td>Equipment Status</td>
<td>REQUESTED</td>
</tr>
</tbody>
</table>
Configuration Step 3: Relevant API

• If the 3rd party system needs more data than what is provided in the payload of the event then other APIs can be used to retrieve more data.

• ONB2EquipmentActivity allows Query and update, That allows the 3rd party application to read more information than that of the data coming out of the event payload.

• Update operation can be used to update “equipmentComment”, “equipmentStatus” and “notNeededComment” fields only to update equipment activity. Possible values of the “equipmentStatus” field (this is an enumerated field and not a picklist and can not be extended) are "NOT_NEEDED“, "NOT_STARTED“, "REQUESTED“, "APPROVED“, "DELIVERED“ and "REJECTED"

• Please note that the only user interface for this object is when the responsible person requests for equipment.

• Please read the guides HXM OData API and EC ODATA API if more fields are required for the external application.
Solution 2.1: Integration center getting triggered based on intelligent service event consumed by REST/SOAP server
**Solution 2: Integration center getting triggered based on intelligent service event - High Level Scenario**

Hiring Manager or Responsible Group

ONB Task to Request Equipment

MDF Object (ONB2EquipmentActivity)

Change of Equipment Request Status field (equipmentStatus Field) triggers the event.

Integration Center generates a file output / XML consumable by SOAP/REST End Point

*Note: that this is a event that is triggered by the system and not from business rule.*
Solution 2.1: Integration center getting triggered based on intelligent service event - Architecture

Intelligent Service event triggering a file output

Based on the configured fields and filters data is extracted

File output generated
**Configuration Step 1: Create integration from Intelligent service center**

- Go to the transaction Intelligent service center
- Click on the flows integration button on the right
- Click on the create new integration button.
**Configuration Step 2:** Choose the destination type and format

- Choose the destination type as SFTP and format of your choice
- In the example, we have chosen CSV format
- Click on Create
Configuration Step 3: Build Integration

ONB2EquipmentActivity allows Query and upsert, that allows the 3rd party application to read more information than that of the data coming out of the event payload.

• Choose the name of the integration.
• Enter a description of the integration.
**Configuration Step 4: Configure required fields that should be part of the file**

- Choose the required fields for the integration.
- You could use the Add button to add as many fields that are required.
- You can navigate from subjectUser to User and then to empInfo etc.
- In the next tab, you could add any filtering options if applicable.
Configuration Step 5: SFTP server, file name etc.

- Enter the SFTP details like the SFTP server host address, port, SFTP user, SFTP username, File name and folder.
- Save the integration.
- The integration will be run when the intelligent service is triggered.

- Once the integration is run, you can check the SFTP server to see if the file is created with the data.
- The file can be used by the consumer application like the ticketing system/procurement system.
Solution 2.2: Integration center getting triggered based on intelligent service event consumed by REST/SOAP server
Solution 2.2: Integration center getting triggered based on intelligent service event - Architecture

Intelligent Service event triggering a file output | Based on the configured fields and filters data is extracted | XML generated that can be consumed by the REST/SOAP end point
**Configuration Step 1: Create Integration of type REST/SOAP**

- Go to the transaction integration center
- Click on more integration types
- Choose the trigger type as Intelligent Services
- In the example, we have chosen XML format
- Click on Create
Configuration Step 2: Select the Event

- Select the Intelligent event
- Click on select to continue
Configuration Step 3: Select the fields to be added

- Choose the required fields for the integration
- You could use this tab to add sibling nodes or child nodes with fields.
- In the next tab, you could add any filtering options if applicable.
- Check the implementation handbook for more details
Configuration Step 4: Configure the REST server settings

- Enter a REST API URL, Authentication type, user name and password (if basic authentication).
- Enter the Operation URI and Operation name.
- Check the implementation handbook for more details.
Configuration Step 5: Add integration from Intelligent service center to the event

- Since the integration was already created from the integration center that can be now added in the event center
- Go to the transaction Intelligent service center. Click on the flows integration button on the right
- Click on the add integration button to select the integration
- This completes the setup
References

- SAP SuccessFactors Community - Onboarding 2.0
- Intelligent Services Overview
- Event Notification Subscription tool
- Integration Center
- Implementation design principles of using APIs for custom integration
- Implementation design Principle : CPI and Integration center
Thank you.

Document Owner: SuccessFactors Center of Expertise – Product Management