SAP CLOUD PLATFORM | EXTERNAL

Technical Configuration Guide

Determine Business Scenario for Utilities

THE BEST RUN **SAP**

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Overview

This document provides technical information about what needs to be configured to run the Workflow Management Package *Determine Business Scenario for Utilities*. This document is intended to be read by technical personas, such as IT administrators or developers. The document describes what needs to be done to operate the solution. It mainly focuses on technical configurations, such as destinations for example, and less on business configuration that can be performed by a key user or a business process expert.

Involved Solution Components

This chapter provides an overview of the solution components involved in SAP Cloud for Utilities that are used to run the workflow management package *Determine Business Scenario for Utilities*
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- SAP Cloud Platform Integration
- SAP Cloud Platform Workflow Management (subscribed service)
- SAP Cloud Platform EDoM Retailer (subscribed service)
- SAP Cloud Platform Business Rule (subscribed service)
- SAP Cloud Platform Process Visibility (subscribed service)

General Prerequisites

This chapter provides an overview of the general prerequisites in SAP Cloud for Utilities that need to be met to run the Workflow Management Package *Determine Business Scenario for Utilities*.

Procedure

Before using the Workflow Management Package *Determine Business Scenario for Utilities*, make sure that following requirements are fulfilled:

1. Global account on SAP Cloud Platform
   - You have an enterprise account on the SAP Cloud Platform,
   - You have set up the subaccount and spaces on the Cloud Foundry environment.

2. SAP Cloud Platform Services
   - You have set up the Workflow Management Service in your SAP Cloud Platform cockpit
   - You have set up the SAP Cloud Platform Integration tenant
   - You have set up SAP Cloud Platform Process Visibility (subscribed service)
   - You have set up SAP Cloud Platform EDoM Retailer (subscribed service)
   - You have set up SAP Cloud Platform Enterprise Messaging (subscribed service)

3. Involved solution components
   - You have configured SAP Commerce Cloud with TUA

SAP Cloud Platform Integration Artifacts

This chapter provides an overview of the integration content in SAP Cloud for Utilities that can be used to run the workflow management package *Determine Business Scenario for Utilities*.

List of iflows are involved in the process:

Send SAP Commerce Cloud Payload to EDoM Container

Purpose

The purpose of the integration flow is to send an SAP Commerce Cloud payload to an Energy Domain Model (EDoM) container.

Integration Flow Steps

Below is a breakdown of the steps the integration flow takes:
- o The integration flow is triggered by a payload from POSTMAN.
- o The integration flow modifies the payload to a format that will be accepted by EDoM by converting the geographicSubAddress entity to an array.
- o The converted payload is sent to EDoM.

Link to the iflow integration guide for more details: [Integration Guide](#)

Trigger Order Orchestration Process

Purpose

The purpose of this integration flow is to trigger a Business Process Management (BPM) workflow by passing an Energy Domain Model (EDoM) UCCO Container ID received from Enterprise Messaging (EM).

Integration Flow Details

Below is a breakdown of the steps the integration flow takes:
- o The integration flow receives a payload via HTTPS.
- o The integration flow converts JSON to XML format.
- o The integration flow passes the value of the UCCO Container ID received as well as the Workflow Definition ID of the workflow that will be called into the payload that will be sent to BPM.
- o The integration flow triggers BPM by calling the workflow instance.
- o The integration flow gathers the responses returned by the workflow and creates a log.

View the SAP Help [Integration Guide](#) for more details.

Live Process Artifacts

The process consists of multiple tasks:

- Get the TUA structure from EDoM.
- Identify the business scenario process that should be triggered according to the order item type.
- Group order items according to their item type.
- Trigger the subsequent process for grouped order Items.

When this cycle is completed, data can be collected for the process. SAP Cloud for Utilities with intelligent Business Process Management can be used to manage these processes, pinpoint inefficiencies and identify opportunities for improvement.

This chapter provides an overview of the process artifacts in SAP Cloud for Utilities that are created to run the workflow management package *Determine Business Scenario for Utilities*.

Process: Determine Business Scenario

A process based on the SAP Cloud Platform workflow can be used to quickly orchestrate tasks that span across people, applications, and organizations. Table 1 represents the list of processes defined to group order items by business scenario and trigger the subsequent process for grouped order Items.

Table 1. Process.

Process	Detailed Description
Determine Business Scenario	This process includes activities from order items that are grouped by scenario to the subsequent process start for grouped order items.

Table 2 represents the list of process steps defined to support an order items grouping by business scenario and trigger the subsequent process for grouped order items.

Table 2. Process Steps.

Process Steps	Detailed Description
Determine Business Scenario	Create an order items grouping by business scenario and trigger the subsequent process for the grouped order items.

Table 3 represents the list of attributes defined to support an order items grouping by business scenario and to trigger the subsequent process for the grouped order items.

Table 3. Process Attributes.

Process Attributes	Detailed Description
containerId	UCCO container ID

Variants for Determine Business Scenario

The variants are used as extension points to the default process. Table 4 represents the list of predefined variants used to support an order items grouping by business scenario and trigger the subsequent process for the grouped order items.

Table 4. Variants.

Variant	Detailed Description
Determine Business Scenario	This process variant defines the default activities from the order items grouping by scenario to the subsequent process start for the grouped order items.

Procedure

Before using the process variants to run the workflow management package *Determine Business Scenario for Utilities*, make sure that following requirements are fulfilled:

1. Configure process variants

    - You have configured process variants using the Process Flexibility cockpit.

        o Open the workflow management package *Determine Business Scenario for Utilities*.

        o Go to Process Variants and create the process variant.

        Note! Mandatory steps are already available.

2. Activate the process variants using the process flexibility cockpit

    - Click *Save* and *activate* the process variant.

Visibility for Determine Business Scenario

SAP Cloud Platform Process Visibility enables process excellence, process transparency and process transformation by providing a single view of a process, regardless of where it runs – SAP or non-SAP, cloud or on-premise. Table 5 represents the list of visibility scenarios used to support an order items grouping by business scenario and trigger the subsequent process for the grouped order items.

Table 5. Visibility.

Rules	Detailed Description
Determine Business Scenario	This visibility scenario provides the process transparency layer from the order items grouping by scenario to the subsequent process start for the grouped order items.

Procedure

Before using the process visibility to run the workflow management package *Determine Business Scenario for Utilities*, make sure that following requirements are fulfilled:

1. Configure the process visibility dashboard
   - Configure the process visibility dashboard using the process flexibility cockpit.
     o Open the workflow management package *Determine Business Scenario for Utilities*.
     o Go to the visibility scenarios and choose the visibility scenario you would like to adjust.
     o Make the necessary changes.
2. Activate the process visibility dashboard using the Process Flexibility Cockpit
   - *Save* and *activate* the process visibility dashboard.

Business Rules for Determine Business Scenario

SAP Cloud Platform business rules can be used to simplify the management of decision logic across SAP solutions, encapsulate the business logic. They also support the reuse of decision logic across different business processes. Table 6 represents the list of rules used to create an order items grouping by business scenario and trigger an appropriated process for the grouped order Items.

Table 6. Rules.

Rules	Detailed Description
Determine Business Scenario	A text rule used to identify a business scenario process that should be triggered based on the order item type.

Procedure

Before using the business rules to run the workflow management package *Determine Business Scenario for Utilities*, make sure that following requirements are fulfilled:

1. Configure business rules
   - Configure business rules using the Process Flexibility cockpit.
     o Open the workflow management package *Determine Business Scenario for Utilities.*
     o Go to Decisions and choose the decision you would like to adjust.
     o Go to the Rules section and click *Edit* to make the necessary changes.
2. Activate decisions using the Process Flexibility Cockpit
   - *Save* and *Release the version* of the decision.

Destinations

This chapter provides an overview of the destinations in SAP Cloud for Utilities that are used to run the Workflow Management Package *Determine Business Scenario for Utilities*.

Procedure

Before using the Workflow Management Package *Determine Business Scenario for Utilities*, make sure that following requirements are fulfilled:

1. **Configure destinations in SAP Cloud Platform**

   - Configure destination using SAP Cloud Platform Business Rules called *BR* and use the service instance details to make the connection, such as *https://bpmruleruntime.{wfm-tenant}.hana.ondemand.com*

   - Configure destination using SAP Cloud Platform Integration Services called *CPI* and specify the URL, such as *https://{cpi-tenant}.hana.ondemand.com*

   - Configure a destination with SAP Cloud Platform EDoM retailer called *EDoM_Retailer_BPM* and use service instance details to make the connection, such as *https://{edom-tenant}.hana.ondemand.com*

   - Configure destinations using SAP Cloud Platform Workflow Service called **BPM** use service instance details to make the connection, *https://{wfm-tenant}.hana.ondemand.com*

SAP Help Portal Link how to set up a destination.

Note! Destination types are HTTP supported and based on OAuth 2.0 Client Credentials or Basic Authentication.

Communication System, Communication Arrangement

This chapter provides an overview of the communication system and arrangements in SAP Cloud for Utilities that need to be configured to run the solution.

Roles / Authorizations

In SAP Cloud for Utilities, business processes include an optional activity that is used to handle approval process.

Authorization Configuration - SAP Help Portal

Procedure

Before using the process defined to run the workflow management package *Determine Business Scenario for Utilities*, make sure that following roles are assigned to users (see table below).

The following roles are required to access Workflow Management. To see more information, click this link.

Table 7. Roles

Role	Description
WMDeveloper	Permission to access Manage Packages that allows you to perform the following actions: • View Workflow Management Packages • Create, edit, save, and activate Workflow Management Packages • Export and import Workflow Management Packages • Delete Workflow Management Packages
WMBusinessExpert	Permission to access Process Flexibility Cockpit that allows you to perform the following actions: • Discover and explore pre-delivered Workflow Management Packages • Import Workflow Management Packages Configure process variants, decisions, and visibility scenarios within Workflow Management Packages

WMAdmin	Permission to access Manage Packages that allow you to perform the following actions:
	• View Workflow Management Packages
	• Export and import packages
	• Delete Workflow Management Packages

Parameters / Defaults

Decision Table			Add Row ∨ Delete Row Copy Row Cut Row Paste Row ∨ ⚙
If			**Then**
☐ Item.Item type =	Item.Reference item =	Item.Valid To =	Identification ID

In order for Business Rule to execute correctly the decision table should be maintained in the rule itself. A decision table expression sequentially processes business rules based on a set of inputs. At runtime, the input data that is supplied to the decision table is compared against the defined conditions, starting with the first row. All cells are evaluated by checking the column value against a number of range comparisons. For each cell, a boolean result is returned. If all cells in a row are evaluated as true, the evaluation stops, and the expression returns the result associated with the current conditions. Otherwise, processing continues with the next table row until either a matching set of conditions is found, or the end of the table is reached.

Table 8. Decision Table Maintenance represents the list of defaults that are set to support an order items grouping by business scenario and trigger the subsequent process for grouped order items. See chapter *Business Rules* for more information.

The Decision table of the rule consists of 2 parts – Condition part described by "If" part of the statement and result part described by "Then" part of the statement. The result will be returned in case if specific condition is evaluated as *true*.

In this specific Business rule condition consist of input values of Item structure defined in Data Objects: Item type, Reference item and Valid To values passed from the workflow context and result consists of Identification ID which value provides the ID of the subsequent process that should be triggered after an execution of this Business rule.

The decision table should be maintained in a way, that in the condition part there are provided possible combinations of item type, reference item and valid to values and in the result part process ID which is derived based on the condition values combination.
For example, the values of Item Type, Reference Item and Valid To should be 'subscriptionItem', false, true accordingly for next process to be 'assignprocess'
Below you can see visual representation of how the table should look like after maintenance:

Table 8. Decision Table Maintenance

Decision Table			Add Row ∨ Delete Row Copy Row Cut Row Paste Row ∨ ⚙
If			**Then**
Item.Item type =	Item.Reference item =	Item.Valid To =	Identification ID
'subscriptionItem'	false	true	'assignprocess'
'physicalItem'	false	false	'assignprocess'
'serviceItem'	false	false	'assignprocess'
'subscriptionItem'	false	false	'assignprocess'
'subscriptionItem'	true	false	'assignchangeprocess'
'subscriptionItem'	true	true	'assignterminationprocess'
'utilityItem'	false	false	'assignprocess'
'utilityItem'	true	false	'assignchangeprocess'
'utilityItem'	true	true	'assignterminationprocess'

Lifecycle Management

SAP recommends that you create additional accounts for testing, quality assurance, and production, so that you have a defined separation of data and authorizations for each of these areas. Ideally, this setup follows the same separation that you use on your back-end system, minimizing external exposure of production data. New accounts are not preconfigured, so you will need to set up the SAP Cloud Platform accordingly.