SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Technical Configuration Guide

Determine Business Scenario for Utilities

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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:*

- SAP Integration Suite
- SAP Workflow Management (subscribed service)
- SAP Business Rule (subscribed service)
- SAP 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 Business Technology Platform
   - You have an enterprise account on the SAP Business Technology Platform,
   - You have set up the subaccount and spaces on the Cloud Foundry environment.

2. SAP Business Technology Platform Services
   - You have set up the Workflow Management Service in your SAP Business Technology Platform cockpit
   - You have set up the **SAP Business Rule Service** in your SAP Business Technology Platform cockpit
   - You have set up the **SAP Process Visibility** in your SAP Business Technology Platform cockpit
   - You have set up the SAP Integration Suite tenant

Determine Business Scenario for Utilities

SAP Integration Suite 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 related to the process:

Create Customer Orders in SAP Cloud for Utilities Foundation Integration Flow

Purpose

The purpose of this integration flow is to create an order in SAP Cloud for Utilities foundation and send the response to SAP Workflow Management.

View SAP Help Integration Guide for more details.

Receive Transfer Document from SAP Market Communication for Utilities

Purpose

This integration flow receives Transfer documents from the SAP Market Communication for Utilities system and starts the Determine Business Scenario process.

View SAP Help Integration Guide for more details.

Process Artifacts

The process consists of multiple tasks:

- 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 SAP Workflow Management can be used to orchestrate 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 for Assign Business Scenario

A process based on the SAP 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
Assign Business Scenario	This process includes activities from order items grouped by scenario to the subsequent process start for grouped order items.

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

Table 2. Workflows.

Workflows	Detailed Description
determinebusscenario	Creates an order items grouping by business scenario and trigger the subsequent process for the grouped order items.

Table 3. Process Attributes 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
Order ID	Customer Order ID from Customer order

Variants for Determine Business Scenario

The variants are used as extension points to the default process.

Procedure

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

1. Create and configure process variants
   - You can create and configured process variants using the Process Flexibility cockpit.
     - Open the workflow management package *Determine Business Scenario for Utilities*.
     - 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.

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.

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.

Visibility Scenario for Determine Business Scenario for Utilities

SAP 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.

Visibility Scenario	Detailed Description
Visibility Scenario for Determine Business Scenario for Utilities	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.
     - Open the workflow management package *Determine Business Scenario for Utilities*.
     - Go to the visibility scenarios and choose the visibility scenario you would like to adjust.
     - 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 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
DetermineBusinessScenarioForCustomerOrder	A text rule used to identify a business scenario process that should be triggered based on the order item type.
DetermineBusinessScenarioForTransferDocument	A text rule used to identify a business scenario for transfer documents

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.
     - Open the workflow management package *Determine Business Scenario for Utilities.*
     - Go to Decisions and choose the decision you would like to adjust.
     - 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 Business Technology Platform
    - Configure destination using SAP 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 Integration Suite Services called ***CPI*** and specify the URL, such as *https://{cpi-tenant}.hana.ondemand.com*
    - Configure destinations using SAP Workflow Management 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 make the solution run.

Roles / Authorizations

In SAP Cloud for Utilities, business processes include an optional activity that is used to handle approval process. For further details on Roles and Authorizations visit 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).

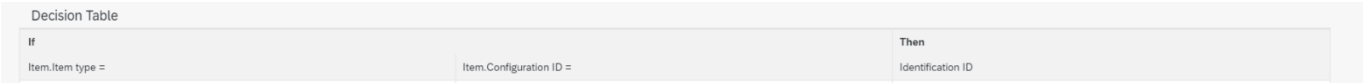
For additional help see Workflow Management Roles.

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

Determine Business Scenario for Customer Order



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, and configuration ID to values and in the result part process ID which is derived based on the condition values combination.

Below you can see visual representation of how the table could look like after maintenance:

Table 8. Decision Table Maintenance

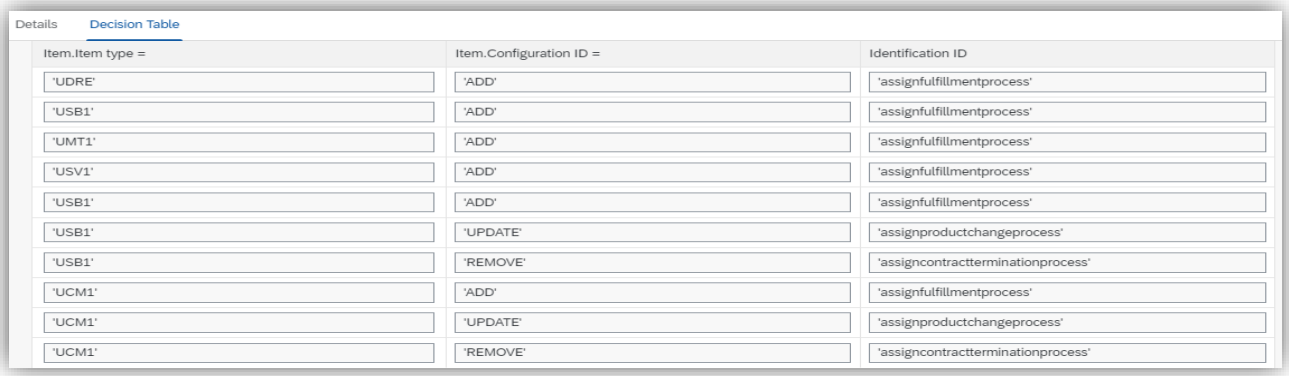
This is just an example how business rule can be filled. Input and result of business rule can be adjusted based on the customer requirement.

Rules	Detailed Description
Determine Business Scenario for Customer Order	

Project Name	Determine Business Scenario
Project Id	cec10661552542d48778dce58173cdc6

Rule Name	Determine Business Scenario for Customer Order
Rule Id	30a2b6f3b4384987a849d91757bb4248

Input		**Result**
Item.Item.type (example values below)	**Item.Configuration ID** (example values below)	**Identification ID** (example values below)
'UDRE'	'ADD'	'assignfulfillmentprocess'
'USB1'	'ADD'	'assignfulfillmentprocess'
'UMT1'	'ADD'	'assignfulfillmentprocess'
'USV1'	'ADD'	'assignfulfillmentprocess'
'USB1'	'ADD'	'assignfulfillmentprocess'
'USB1'	'UPDATE'	'assignproductchangeprocess'
'USB1'	'REMOVE'	'assigncontractterminationprocess'
'UCM1'	'ADD'	'assignfulfillmentprocess'
'UCM1'	'UPDATE'	'assignproductchangeprocess'
'UCM1'	'REMOVE'	'assigncontractterminationprocess'



Details | Decision Table

Item.Item type =	Item.Configuration ID =	Identification ID
'UDRE'	'ADD'	'assignfulfillmentprocess'
'USB1'	'ADD'	'assignfulfillmentprocess'
'UMT1'	'ADD'	'assignfulfillmentprocess'
'USV1'	'ADD'	'assignfulfillmentprocess'
'USB1'	'ADD'	'assignfulfillmentprocess'
'USB1'	'UPDATE'	'assignproductchangeprocess'
'USB1'	'REMOVE'	'assigncontractterminationprocess'
'UCM1'	'ADD'	'assignfulfillmentprocess'
'UCM1'	'UPDATE'	'assignproductchangeprocess'
'UCM1'	'REMOVE'	'assigncontractterminationprocess'

To create a new process variant please follow the SAP Help page. Link

Rule: Determine Business Scenario for Transfer Document

If	Then
Message =	ProcessID

In order for the Business Rule to execute the decision table correctly, it 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*.

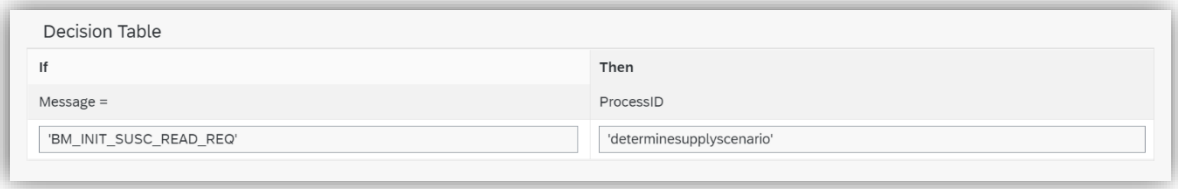
In this specific Business rule condition consist of input values of Item structure defined in Data Objects: message from the workflow context and result consists of ProcessID which value provides the ID of the subsequent process that should be triggered after an execution of this Business rule. The decision table should be maintained in a way, that in the condition part there are provided possible combinations of item type, and configuration ID to values and in the result part process ID which is derived based on the condition values combination.

Below you can see visual representation of how the table should look like after maintenance:

Note! This is just an example how business rule can be filled. Input and result of business rule can be adjusted based on the customer requirement.

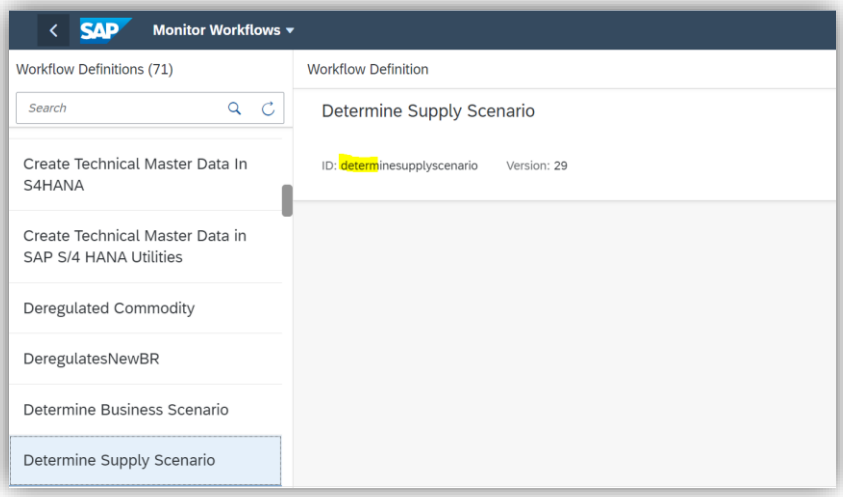
Table 9

<table>
<tr><th>Rules</th><th>Detailed Description</th></tr>
<tr><td>Determine Business scenario for transfer documents</td><td>
<table>
<tr><td>Project Name</td><td>Determine Business Scenario</td></tr>
<tr><td>Project Id</td><td>cec10661552542d48778dce58173cdc6</td></tr>
</table>
<table>
<tr><td>Rule Name</td><td>Determine Business Scenario for Transfer Document</td></tr>
<tr><td>Rule Id</td><td>616c7f06057e4941915d4b1d3744dcd7</td></tr>
</table>
<table>
<tr><td>Input</td><td>Result</td></tr>
<tr><td>Message</td><td>ProcessID</td></tr>
<tr><td>'BM_INIT_SUSC_READ_REQ'</td><td>'determinesupplyscenario'</td></tr>
</table>
</td></tr>
</table>



The ProcessID is a configuration. This is the definition ID from the app Monitor Workflows.

Example:



To create a new process variant please follow the SAP Help page.

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 Business Technology Platform accordingly.