

SAP BUSINESS TECHNOLOGY PLATFORM | EXTERNAL

Technical Configuration Guide

Contract Termination for Utilities

THE BEST RUN 

Table of Contents

Overview	3
Involved Solution Components	4
General Prerequisites	5
Contract Termination for Utilities	6
SAP Integration Suite Artifacts	6
Integration Flows for Contract Termination for Utilities.....	6
Process Artifacts	6
Process for Assign Termination Process	7
Variants for Assign Termination Process.....	7
Business Rules for Contract Termination Process.....	8
Process for Terminate Order Item.....	8
Variants for Terminate Order Item	9
Visibility Scenario for Contract Termination for Utilities.....	10
Destinations.....	11
Communication System, Communication Arrangement	12
Roles / Authorizations	12
Parameters / Defaults	13
Determine Contract Termination Process.....	14
Determine Service Endpoint for Target Systems	14
Lifecycle Management.....	15

Overview

This document provides technical information about what needs to be configured to run the Workflow Management Package *Contract Termination 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 involved solution components in SAP Cloud for Utilities that are used to run the Workflow Management Package *Contract Termination for Utilities*.

- SAP Integration Suite
- SAP Workflow Management (subscribed service)
- SAP Cloud for Utilities Foundation (subscribed service)
- SAP S/4HANA Utilities
- SAP Subscription Billing

General Prerequisites

This chapter provides an overview of general prerequisites in SAP Cloud for Utilities that need to be met to make Workflow Management package *Contract Termination for Utilities* run.

Note! In an order-to-provisioning scenario, this artifact follows the “Determine Business Scenario” artifact.

Procedure

Before using the Workflow Management Package *Contract Termination for Utilities*, make sure that following requirements are fulfilled:

1. [Global account](#) on SAP Business Technology Platform

- You have an enterprise account in the SAP Business Technology Platform,
- You have setup 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 Integration Suite](#) tenant
- You have configured SAP Cloud for Utilities Foundation (subscribed service)

3. Target Systems as in use:

- You have configured SAP Subscription Billing
- You have configured SAP S/4 HANA Utilities

Contract Termination for Utilities

SAP Integration Suite Artifacts

This chapter provides an overview of integration content in SAP Cloud for Utilities that can be used to run the Workflow Management Packages *Contract Termination for Utilities*.

Integration Flows related to the process:

Integration Flows for Contract Termination for Utilities

Integration Flows serves to send/receive data to external systems. In Integration Flows it is possible to manipulate with data, for example, doing fields mapping. represents the list of Integration Flows to support *Terminate Order Item* process.

Table 1. Integration Flows .

Integration Flow Name	Integration Flow endpoint	Detailed Description
Terminate Non-Commodity Subscriptions in SAP Subscription Billing	/http/TerminateSubscription	The purpose of this integration flow is to create a terminate Subscription order in SAP Cloud for Utilities foundation and send the response to SAP Workflow Management.
Terminate Utility Sales Contracts in SAP S/4HANA	/http/TerminateUtility	The purpose of this integration flow is to create a terminate Utility/Regulated order in SAP Cloud for Utilities foundation and send the response to SAP Workflow Management.

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

Process Artifacts

The cycle consists of multiple subprocesses around the following steps:

- Request for Termination is documented
- Type of terminated item is defined
- Item is terminated

When this cycle is completed, the collection of data around the process is possible. SAP Cloud for Utilities with Workflow Management Service enables to manage these processes, pinpoint inefficiencies and identify opportunities for improvement.

This chapter provides an overview of process artifacts in SAP Cloud for Utilities that are created to

run the Workflow Management Package *Contract Termination for Utilities*.

Process for Assign Termination Process

A process based on the SAP Workflow Service allows to quickly orchestrate tasks that span across people, applications, and organizations. Table 1 represents the list of processes defined to support the *Assign Termination Process* artifact.

Table 1. Process.

Process	Detailed Description
Assign Termination Process	Process is used to determine the consecutive Terminate Order Item process scenario

Table 2 represents the list of process steps defined to support *Assign Termination Process* artifact.

Table 2. Process Steps.

Process Steps	Detailed Description
Assign Termination Process	This step is using a Business Rule to identify and split commodity and non-commodity items

Table 3 represents the list of attributes defined to support *Assign Termination Process* artifact.

Table 3. Process Attributes.

Process Attributes	Detailed Description
Order ID	Customer Order ID from Customer order

Variants for Assign Termination Process

The variants serve as extension points of the default process.

Procedure

Before using the process variants to run the Workflow Management Package *Contract Termination for Utilities*, make sure that following requirements are fulfilled:

1. Configure Process Variants

- You have configured Process Variants using Process Flexibility cockpit
 - Open Workflow Management Package *Contract Termination for Utilities*,
 - Go-to Process Variants and create the process variant,
Note! There are mandatory steps already available.
 - Make the necessary changes by dragging-and-dropping available steps into variant editor.

2. Activate Process Variants using Process Flexibility cockpit

- Click *Save* and *activate* the Process Variant.

Table 4. Variants.

Variant	Workflow Definition Id	Detailed Description
Assign Termination Process	assignterminationprocess	The process variant defines item type and configures the process step in the variant

Business Rules for Contract Termination Process

SAP Business Rule 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 5 represents the list of rules used to create an order items grouping by business scenario and trigger an appropriated process.

Note: Please find more details on the Business Rules in the Parameters/Defaults section,

Table 5. Rules.

Rules	Detailed Description
Determine Contract Termination Process	A text rule used to identify a process ID that should be triggered based on the order item type, division, sales organization and distribution channel.
Determine Service Endpoint for Target System	Business Rule to determine the respective endpoint URL for the required target system.

Procedure

Before using the business rules to run the Workflow Management Package *Contract Termination for Utilities*, make sure that following requirements are fulfilled:

1. Configure Business Rules

- Configure business rules using Process Flexibility cockpit,
 - Open the Workflow Management Package *Contract Termination for Utilities*,
 - Go-to Decisions and choose the Decision you would like to adjust,
 - Go-to Rules section and click *Edit* to make the necessary changes.

2. Activate Decisions using Process Flexibility cockpit

- *Save* and *Release Version* of Decision.

Process for Terminate Order Item

A process based on the SAP Workflow Service allows to quickly orchestrate tasks that span across people, applications, and organizations. Table 6. Process. represents the list of processes defined to support the *Terminate Order Item* artifact.

Table 6. Process.

Process	Detailed Description
Terminate Order Item process	Process is used to execute Terminate Order Item process scenario

Table 7. Process Steps. represents the list of process steps defined to *Terminate Order Item* artifact.

Table 7. Process Steps.

Process Steps	Detailed Description
Terminate order item	Process step to terminate Commodity order item in SAP S/4HANA and to terminate Non-Commodity order item is terminated in SAP Subscription Billing.

Table 8. Process Attributes. represents the list of attributes defined to support *Terminate Order Item* artifact.

Table 8. Process Attributes.

Process Attributes	Detailed Description
Order ID	Customer Order ID from Customer order

Variants for Terminate Order Item

The variants serve as extension points of the default process.

Procedure

Before using the process variants to run the Workflow Management Package *Contract Termination for Utilities*, make sure that the following requirements are fulfilled:

1. Configure Process Variants

- You have configured Process Variants using Process Flexibility cockpit
 - Open Live Process Package *Contract Termination for Utilities*,
 - Go-to Process Variants and create the process variant,
Note! There are mandatory steps already available.
 - Make the necessary changes by dragging-and-dropping available steps into variant editor.

2. Activate Process Variants using Process Flexibility cockpit

- Click *Save* and *activate* the Process Variant.

Table 9. Variants.

Variant	Workflow Definition Id	Detailed Description
Terminate commodity order item	terminatecommodityorderitem	Process variant that terminates Commodity order item in SAP S/4 HANA Utilities
Terminate non-commodity subscription order item	terminatenoncommoditysubscriptionorderitem	Process variant that terminates Non-Commodity order item is terminated in SAP Subscription Billing

Visibility Scenario for Contract Termination for Utilities

SAP Process Visibility enables process excellence, process transparency and process transformation by providing one view of a process, regardless of where it runs – SAP or non-SAP, cloud or on-premise. Table 10. Visibility. represents the list of visibility scenarios to support *Terminate Order Item* process.

Table 10. Visibility.

Visibility Scenario	Detailed Description
Visibility Scenario for Contract Termination for Utilities	This visibility scenario ensures the process transparency layer to monitor what kind of items should be terminated and shows the related termination of a commodity order item or a non-commodity order item.

Procedure

Before using the process visibility to run the Workflow Management Package *Contract Termination for Utilities*, make sure that following requirements are fulfilled:

1. **Configure Process Visibility dashboard**
 - Configure Process Visibility dashboard using Process Flexibility cockpit
 - Open Workflow Management Package *Contract Termination for Utilities*.
 - Go-to Visibility Scenarios and choose the visibility scenario you would like to adjust,
 - Make the necessary changes.
2. **Activate Process Visibility dashboard using Process Flexibility cockpit**
 - *Save* and *activate* the Process Visibility dashboard.

Destinations

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

Procedure

Before using the Workflow Management Package *Contract Termination for Utilities*, make sure that the following requirements are fulfilled:

1. Configure destinations in SAP Business Technology Platform

- Configure destination with SAP Subscription Billing called *SB* and use service instance details to make the connection <https://{sb-tenant}.hana.ondemand.com>
- Configure destination with Business Rules called *BR* and use service instance details to make the connection <https://{wfm-tenant}.hana.ondemand.com>
- Configure destination with SAP Integration Suite Services called *CPI* and specify the URL like <https://{cpi-tenant}.hana.ondemand.com>.
- Configure destination with SAP EDoM and use service instance called *EDoM_Retailer_BPM* details to make the connection <https://{edom-tenant}.hana.ondemand.com>

If required:

- Configure a destination for SAP Subscription Billing
- Configure a destination with SAP S/4 HANA Utilities

SAP Help [Link](#) on how to set up destinations.

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 communication system and arrangements in SAP Cloud for Utilities that needs to be configured to make the solution run.

Roles / Authorizations

In SAP Cloud for Utilities, business process includes 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 *Contract Termination for Utilities*, make sure that following roles are assigned to users (see table below).

For additional help see [Workflow Management Roles](#)

Table 11. Roles.

Role	Description
WMDeveloper	Permission to access Manage Packages that allows you to perform the following actions: <ul style="list-style-type: none">• 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: <ul style="list-style-type: none">• Discover and explore pre-delivered Workflow Management Packages• Import Workflow Management Packages Configure process variants, decisions, and visibility scenarios within Workflow Management Packages
WMAAdmin	Permission to access Manage Packages that allow you to perform the following actions: <ul style="list-style-type: none">• View Workflow Management Packages• Export and import packages• Delete Workflow Management Packages

Parameters / Defaults

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 12 represents the list of defaults that are set to support an order items grouping by specific preset of attributes and trigger the subsequent process for grouped or not 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*.

Determine Contract Termination Process

In this specific Business rule condition consist of input values of Item structure defined in Data Objects: order type, order sales org, order distribution channel, and order division values passed from the workflow context and result consists of Identification and grouped flag which value provides the Identification of the subsequent process that should be triggered after an execution of this Business rule.

Grouped flag can be set to true or false and by this process can be influenced to group or not to group similar items.

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. The “order.type” and “Identification” columns should not be changed. The remaining columns are configurable.

Table 12. Defaults.

Rules	Detailed Description					
Determine Contract Termination Process	Project Name		Determine Contract Termination Process			
	Project Id		5f7b3dc64b8a458ea73466cc87e24236			
	Rule Name		Determine Contract Termination Process			
	Rule Id		7781290f9cbc4fe79681659c08f4e2d5			
	Input				Result	
	order.type	order.salesOrg	order.distributionChannel	order.division	Identification	Grouped Flag
	= 'UCM1'	= 'U100'	= 'U1'	= '01'	'terminatecommodityorderitem'	false
	= 'USB1'	= 'U100'	= 'U1'	= '01'	'terminatenoncommoditysubscriptionorderitem'	true

Determine Service Endpoint for Target Systems

In this specific Business rule condition consist of input values of Item structure defined in Data Objects: item type and item action values passed from the workflow context and result consists of URL and system which will be used to execute the following steps of the process.

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. The “type is equal to” and “action is equal to” columns of the Input table and “url” column of the Result table should not be changed. The “system” column of the Result table is configurable.

Table 13. Defaults.

Rules	Detailed Description			
Determine Service Endpoint for Target System	Project Name		Determine Service Endpoint for Target Systems	
	Project Id		af355833cce64024899fa40c42398b93	
	Rule Name		Determine Service Endpoint for Target Systems	
	Rule Id		cbd39a2acf99491dba456f183ca9aa0f	
	Input			
	type is equal to (example values below)	action is equal to (examples vales below)	url (example values below)	system (example values below)
	'USB1'	'terminate'	'/http/TerminateSubscription'	'c4u-sb'
'UCM1'	'terminate'	'/http/TerminateUtility'	'C4U_340'	
'UDRE'	'terminate'	'/http/TerminateUtility'	'C4U_340'	

'USB1'	'terminate'	'/http/TerminateSubscription'	'c4u-sb'
'UCM1'	'terminate'	'/http/TerminateUtility'	'EMT_342'
'UDRE'	'terminate'	'/http/TerminateUtility'	'EMT_342'

Lifecycle Management

SAP recommends that you create additional accounts for testing, quality assurance, and production, so that you have distinctive separation of data and authorizations for each. 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.