

SAP CLOUD PLATFORM | EXTERNAL

Technical Configuration Guide

Non-Commodity Subscription for Utilities

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Overview

This document provides technical information about what needs to be configured to make the live process package run. The main audience of this document are technical personas, like IT administrators or developers. The document tells what needs to be done to make the solution run. It mainly focusses on technical configuration like destinations for example, less on business configuration that can be done by a key user or business process expert.

Involved Solution Components

Involved solution components to make live process package run are following:

- SAP Cloud Platform and Services,
- SAP Commerce Cloud,
- SAP Subscription Billing,
- SAP S/4HANA On-Premise.

General Prerequisites

Procedure

Before using the live process package, make sure that following requirements are fulfilled:

- 1. Setup [Global Account](#) on SAP Cloud Platform**
 - An enterprise account in SAP Cloud Platform,
 - Subaccount and spaces in Cloud Foundry environment.
- 2. Setup SAP Cloud Platform Services**
 - SAP Cloud Platform Workflow Management Services,
 - [SAP Cloud Platform Integration](#).
- 3. Configure Involved Solution Components**
 - SAP Commerce Cloud with TUA
 - [SAP Subscription Billing](#).

Note! Make sure you have contacted SAP Utilities and got into the group of customers allowed to be part of the restricted shipment.

SAP Cloud Platform Integration Artifacts

This chapter gives an integration overview that could be used to make live process package run end-to-end across involved solution components.

Replicate Subscription Provisioning Request from SAP Commerce Cloud to SAP Subscription

Purpose

This integration flow replicates provisioning request data to SAP Subscription Billing for an order that is placed in SAP Commerce Cloud.

Procedure

Before using this integration flow, make sure that following requirements are fulfilled:

1. Configure Integration Flow Defaults

- Setup integration flow similarly as described in [SAP Commerce Integration with SAP Subscription Billing](#) except **Receiver** settings,
- Create a security material to execute SAP Cloud Platform Workflow Services in Cloud Foundry environment,
- Open integration flow and add a **Message Body** in local integration process **Create Subscription Order** before **Request-Reply**,

```
{
  "definitionId": "noncommsubscription.non_commodity_subscription",
  "context": {
    "ProvisioningRequestManagement": {
      "request": "${in.body}"
    }
  }
}
```

- Change externalized parameters **SAP Subscription Billing Credential Name** and **SAP Subscription Billing Host URL** to security material that executes SAP Cloud Platform Workflow Services,
- Change **Receiver** by replacing the editable link with `/workflow-service/rest/v1/workflow-instances`.

2. Deploy Integration Flow

- Deploy integration flow using **Actions** column in the **Artifacts** tab,
- Check if integration flow changes its status to **Started** and is visible under **Monitor Manage > Integration Content**.

Update Bill Closing Method in SAP Subscription Billing

Note! Integration content does not exist and is pure custom SAP Cloud Platform Integration development.

Purpose

The purpose of this integration flow is to set the bill closing method (PATCH on `/bills/{identifier}/closing`) in SAP Subscription Billing.

Procedure

Before starting to use Live process package, make sure that following requirements are fulfilled:

1. Create Integration Flow

- Create or reuse an existing [Content Package](#) in SAP Cloud Platform Integration tenant,
- Create integration flow in [Artefacts > Add > Integration Flow](#) and open to do the editing,
- Configure [Sender](#) by choosing HTTPS as your adapter type and configuring [Address](#) to `/update-closing-method`,
- Use SAP Cloud Platform Integration features like [Content-Modifier](#) and [Request-Reply](#) to model integration flow,

Note! Input payload is in application/json format and contains bill identifier and closing method.

```
{
  "id": "758952CF-8608-4808-A712-5917B0048067",
  "closing": {
    "method": "MANUAL"
  }
}
```

- Format [Receiver](#) by calling [PATCH](#) on `/bills/{identifier}/closing` to update bill closing method in SAP Subscription Billing,

Note! Refer to [API Business hub](#) for more details.

- Save integration flow.

2. Deploy the integration flow

- Deploy integration flow using [Actions](#) column in the [Artefacts](#) tab,
- Check if integration flow changes its status to [Started](#) and is visible under [Monitor Manage > Integration Content](#).

Replicate Billing Document from SAP Subscription Billing to SAP S/4HANA as Billable Item

Purpose

The purpose of this integration flow is to replicate billing documents from Subscription Billing to a defined S/4HANA system.

Procedure

Before using integration flow, make sure that following requirements are fulfilled:

1. Configure Integration Flow Defaults

- Configure integration flow like described in [Configuring the Replicate Billing Documents from SAP Subscription Billing to SAP S/4HANA Integration Flow](#).

2. Deploy the integration flow

- Deploy integration flow using [Actions](#) column in the [Artifacts](#) tab,
- After deployment, integration flow changes its status to [Started](#) and is visible under [Monitor Manage > Integration Content](#).

Live Process Artifacts

The order to invoice processes in starts when a customer makes a purchase through the company’s order processing system. The cycle consists of multiple activities from order placement to the invoice creation. When this cycle is completed, the collection of data around the process is possible. Intelligent Business Process Management enables you to manage these processes, pinpoint inefficiencies and identify opportunities for improvement.

Process

Process based on the SAP Cloud Platform Workflow allows to quickly orchestrate tasks that span across people, applications, and organizations. Table 1. represents the list of processes defined to support Order to Invoice for Non-Commodity Subscription process.

Table 1. Process.

Name	Description
Non-Commodity Subscription	<p>Process This process includes activities from the order placement in SAP Commerce Cloud to the invoice creation in SAP S/4HANA On-Premise for Non-Commodity Subscription product in SAP Cloud for Utilities.</p> <p>Process Steps</p> <p><i>Create Subscription</i> Create a non-commodity subscription in SAP Subscription Billing.</p> <p><i>Get Bill</i> Get bill for a non-commodity subscription in SAP Subscription Billing.</p> <p><i>Approve Net Amount</i> Approve net amount for a non-commodity subscription in SAP Subscription Billing.</p> <p><i>Get Transferrable Bill</i> Get transferrable bill for a non-commodity subscription in SAP Subscription Billing.</p> <p><i>Get Successor Documents</i> Get successor documents (reference document in SAP S/4HANA) for a non-commodity subscription in SAP Subscription Billing.</p> <p>Process Attributes <i>Customer</i> <i>Market</i> <i>Valid From</i> <i>Subscription</i> <i>Created At</i></p>

	<i>Bill</i> <i>Billing Date</i> <i>Billing Status</i> <i>Closing Method</i> <i>Transfer Status</i> <i>Amount</i> <i>Currency.</i>
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Variants

The variants serve as extension points of the default process. Table 2. represents the list of predefined variants to support Order to Invoice for Non-Commodity Subscription process.

Table 2. Variants.

Name		Description
Non-Commodity without Approval	Subscription	<p>This process variant defines the default activities from order placement in SAP Commerce Cloud to the invoice creation in SAP S/4HANA On-Premise for Non-Commodity Subscription product in SAP Cloud for Utilities.</p> <p>Process Steps</p> <p><i>Create Subscription</i> Create a non-commodity subscription in SAP Subscription Billing.</p> <p><i>Get Bill</i> Get bill for a non-commodity subscription in SAP Subscription Billing.</p> <p><i>Get Transferrable Bill</i> Get transferrable bill for a non-commodity subscription in SAP Subscription Billing.</p> <p><i>Get Successor Documents</i> Get successor documents (reference document in SAP S/4HANA) for a non-commodity subscription in SAP Subscription Billing.</p>
Non-Commodity with Approval	Subscription	<p>This process variant defines the default and additional activities from order placement in SAP Commerce Cloud and subscription amount approval to the invoice creation in SAP S/4HANA On-Premise for Non-Commodity Subscription product in SAP Cloud for Utilities.</p> <p>Process Steps</p> <p><i>Create Subscription</i> Create a non-commodity subscription in SAP Subscription Billing.</p> <p><i>Get Bill</i> Get bill for a non-commodity subscription in SAP Subscription Billing.</p>

	<p><i>Approve Net Amount</i> Approve net amount for a non-commodity subscription in SAP Subscription Billing.</p> <p><i>Get Transferrable Bill</i> Get transferrable bill for a non-commodity subscription in SAP Subscription Billing.</p> <p><i>Get Successor Documents</i> Get successor documents (reference document in SAP S/4HANA) for a non-commodity subscription in SAP Subscription Billing.</p>
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Procedure

Before using the live process package, make sure that following requirements are fulfilled:

1. Configure Process Variants

- Open live process package in Process Flexibility Cockpit,
- Go-to [Process Variants](#) and create new process variant,
Note! There are mandatory steps already available.
- Make necessary changes by dragging-and-dropping available steps into variant editor.

2. Activate Process Variants

- [Save](#) and [Activate](#) Process Variant.

Visibility

SAP Cloud Platform 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 3. represents the list of visibility scenarios to support Order to Invoice for Non-Commodity Subscription process.

Table 3. Visibility.

Rules	Detailed Description
Non-Commodity Subscription Dashboard for Utilities	This visibility scenario ensures the process transparency layer from order placement in SAP Commerce Cloud to the invoice creation in SAP S/4HANA On-Premise for Non-Commodity Subscription product in SAP Cloud for Utilities.

Procedure

Before using the live process package, make sure that following requirements are fulfilled:

1. Configure Process Visibility

- Open live process package in Process Flexibility Cockpit,

- Go-to [Visibility Scenario](#) and choose scenario you want to adjust,
- Make necessary changes.

2. Activate Process Visibility

- a. [Save](#) and [Activate](#) Visibility Scenario.

Business Rules

SAP Cloud Platform Business Rules allows to simplify management of decision logic across SAP solutions, encapsulate the business logic and supports the reuse of decision logic across different business processes. Table 4. represents the list of rules to support Order to Invoice for Non-Commodity Subscription process.

Table 4. Rules.

Rules	Detailed Description
Net Amount Approval	Decision table rule to determine if net amount and currency approval is required. If net amount exceeds USD 25, then approval is set to true.
Interval Frequency Update	Text rule by which frequency interval is updated for bill that is in processing. If bill is open and/or closed but not transferred, then frequency interval is set to 10 minutes.

Procedure

Before using the live process package, make sure that following requirements are fulfilled:

1. Configure Decisions

- Open live process package in Process Flexibility Cockpit,
- Go-to [Decisions](#) and choose business rule that you want to adjust,
- Make necessary changes by adjusting the [Priority](#) or [Business Rule](#).

Note! If [Draft](#) is not available, use action [Copy to Draft](#) to make the necessary changes.

3. Activate Decisions

- a. [Save](#) and [Release Version](#) Decision.

Destinations

Systems and services to make live process package run are following:

- SAP Subscription Billing (SB),
- SAP Cloud Platform Business Rules (BR),
- SAP Cloud Platform Integration (CPI).

Procedure

Before using the live process package, make sure that following requirements are fulfilled:

1. Create Destination

- Create a [Destination](#) and enter all fields in the destination configuration section with the information,
- Save destination.

2. Check Destination

- Click on [Check Connection](#) on the newly created [Destination](#) to see if everything works.

Note! All destinations are HTTP based and based on either Basic Authentication or Client Credentials.

Note! Do not use a full URL path, e.g., the URL for SAP Cloud Platform Integration should be <https://<cpi-tenant>.hana.ondemand.com>.

Communication System, Communication Arrangement

Roles / Authorizations

Procedure

Before using the live process package, make sure that following requirements are fulfilled:

1. Define Role Collection

- Create role collection `SubscriptionBillingSpecialist` in your SAP Cloud Platform,
- Assign role `WorkflowParticipant` to the role collection.

2. Setup Trust Configuration

- Assign role collection `SubscriptionBillingSpecialist` via default identity provider.

Note! This role collection should be assigned to users who are responsible who should process user task.

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 Cloud Platform accordingly.

Support

If you encounter errors with the live process package, please open a customer ticket on BCP component `IS-U-C4U`.