Building block Configuration Guide

CUSTOMER

Commercial Planning Send SAP S/4HANA prices to SAP Analytics Cloud Marketing model

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English

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Contents

1 Prerequisites

The package Commercial Planning contains SAP Analytics Cloud models for Sales and Marketing Planning, as well as corresponding SAP Integration Suite Integration Flows. These Integration Flows read (baseline quantity) data from IBP, read prices from SAP S/4HANA to write them into SAP Analytics Cloud. There are also Integration Flows to write the (planned drivers) data from SAP Analytics Cloud to SAP IBP for demand.

The Integration Flow “Send SAP S/4HANA prices to Analytics Cloud Marketing model” connects the content package model for Marketing Planning in SAP Analytic Cloud with S/4HANA’s “Condition Record for Pricing in Sales” Service. This flow sends prices from SAP S/4HANA into SAP Analytics Cloud.

This Integration Flow is a possible implementation approach. But it is necessary to check the individual business needs.

2 Documentation

The Integration Flow reads prices from the S/4HANA Service “Condition Record for Pricing in Sales” (API_SLSPRICINGCONDITIONRECORD_SRV), transforms the data and writes the data into SAP Analytics Cloud, into the Marketing planning model of the content package Commercial Planning.

2.1 Starting the flow

The Integration Flow is stated via API call. Externalized Parameter <SAPHDA_API_ENDPOINT>. The Externalized Parameter could be defined as /write2sac so that the Integration Flow can be called via the URL that can be found in the CI Monitor section.

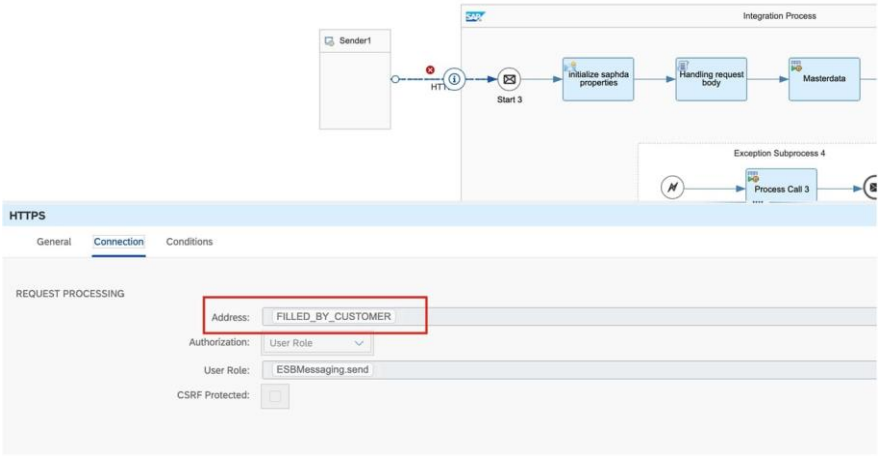

Figure 1 API endpoint definition

The payload that is expected to be sent with this call contains the SAP Analytics Cloud model ID and dates from when data is read as well as the time horizon that should be exported (calmonthFrom and calmonthTo are included int the boundaries). The date properties are filled by MultiAction parameter, which is why they need to be sent as array.

An example payload looks like:

```
{
  "modelID": "C9fcb403perikautboo52ik5u47",
  "calmonthFrom" : [["(all)","2024","202401"]],
  "calmonthTo" : [["(all)","2024","202412"]] }
```

2.2 Reading Master Data

The Integration Flow utilizes the following master data

- Salesorganisation <-> Company Code. This mapping is read from the S/4HANA API api_salesorganization_srv/A_SalesOrganization
- The date dimension from the target SAP Analytics Cloud model

2.3 Reading data from SAP S/4HANA

Fact data is read from SAP Analytic Cloud via oData API with the query filter stored in property saphda_pricequery. It reads from entity A_SlsPrcgCndnRecdValidity and expands to SlsPrcgConditionRecord.

By delivery the select is configured to

- SalesOrganization
- Customer
- Material
- ConditionValidityStartDate
- ConditionValidityEndDate
- to_SlsPrcgConditionRecord/ConditionRateValueUnit
- to_SlsPrcgConditionRecord/ConditionRateValue
- to_SlsPrcgConditionRecord/ConditionValidityEndDate
- to_SlsPrcgConditionRecord/ConditionValidityStartDate
- to_SlsPrcgConditionRecord/ConditionCurrency
- to_SlsPrcgConditionRecord/ConditionIsDeleted

The filter is set to

- ConditionType eq 'PPR0'
- DistributionChannel eq '10'
- The coding will also ignore ○ all customer specific prices
  - to_SlsPrcgConditionRecord/ConditionRateValueUnit that are %
  - to_SlsPrcgConditionRecord/ConditionCurrency needs to be the same as the SalesOrganization's one in SAC

2.4 Transformation

The transformation is processed in the method transform of groovy script saphda_logic.groovy. The transformation derives the Analytics Cloud payload from the SAP S/4HANA response

- SAP S/4HANA sends timestamps in the ISO 8601-1:2019 extended timestamp format (YYYY-MM-DDTHH:MM:SS) or as unix timestamp using json. SAP Analytics Cloud model is based on Calendar Weeks (YYYYMM), so this mapping is done in the method
- The SAP Analytics Cloud dimensions members for SAP_ALL_COMPANY_CODE are derived from Sales Organization
- Prices are defined for time ranges. These ranges are migrated into separate month values for SAP Analytics Cloud. If multiple prices are defined in one month, the last price is chosen

2.5 Writing into SAP Analytic Cloud

Data is written into SAC with the one click API, which handles the job creation and validation in the background automatically. Empty payloads are rejected. Please refer to the SAC Import API documentation for further details.

2.6 Properties of the Integration Flow

All custom properties used in this Integration Flow are declared in the content modifier "initialize saphda properties".

3 Configuration steps on SAP Cloud Integration

3.1 Configure Receiver Adapter

Receivers are connecting SAP Analytics Cloud and SAP S/4HANA. If the flow should be used without adjustments, it is necessary to have the Content Packages Commercial Planning for SAP Analytics Cloud installed. In all systems user and authorizations needs to be granted. Please refer to the relevant documentation.

The following configuration is necessary

- Credential Artifacts
  - SAP Analytics Cloud with the credentials of an App Integration oAuth authorization. Externalized Parameter <SAPHDA_SAC_CREDENTIAL> ○ S/4HANA (Communication Scenario SAP_COM_0294 and SAP_COM_0087) Externalized Parameter <SAPHDA_S4_CREDENTIAL>
- URLs for the two Systems ○ SAP Analytics Cloud
  Externalized Parameter <SAPHDA_SAC_URL>
  Example: https://host.cloud.sap/api/v1/dataimport/
  Be aware that the URL ends with a slash
  - S/4HANA
    Externalized Parameter <SAPHDA_S4_URL>
    Example: https://host.com/sap/opu/odata/sap/
    Be aware that the URL ends with a slash

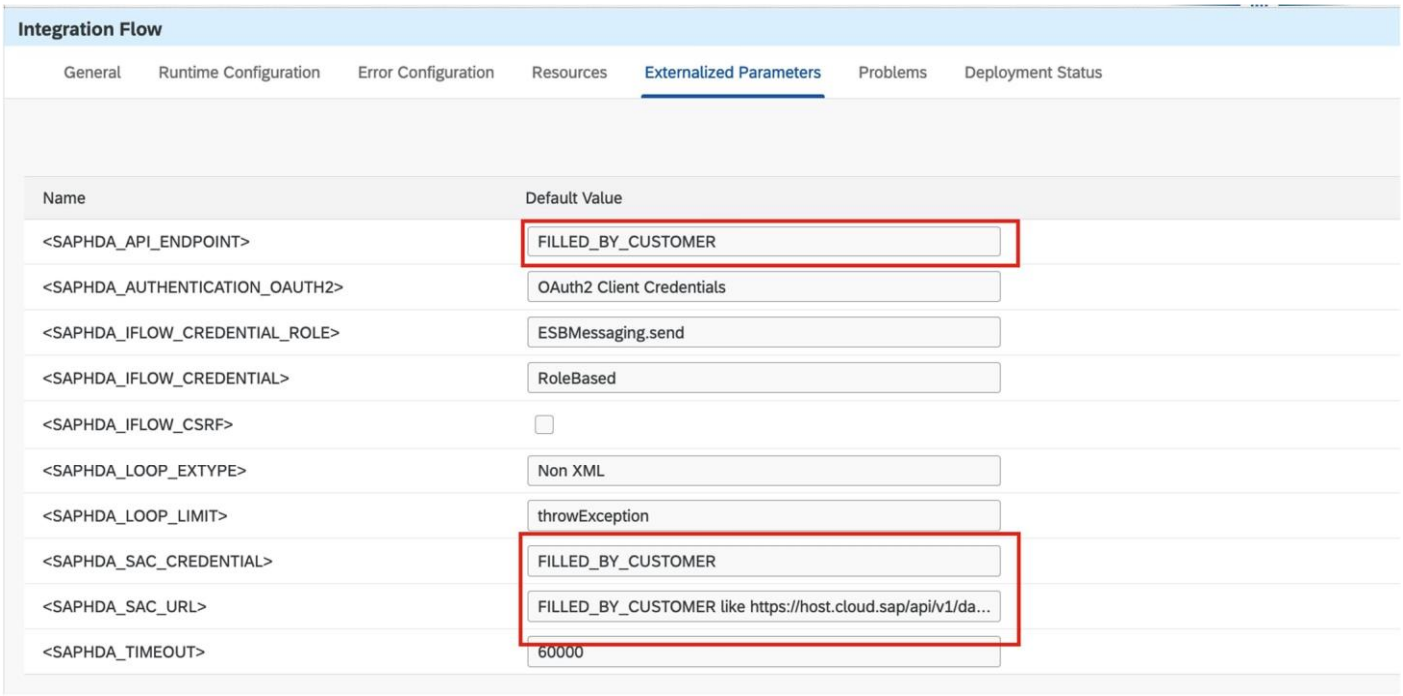

Figure 2 Configuration of the Externalized Parameter, like the SAC URL