PUBLIC

Integration Guide - Set Up Cloud Integration Package with CDQ

SAP Master Data Governance on SAP S/4HANA Cloud Private Edition

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The integration package *SAP Master Data Governance on SAP S/4HANA Cloud Private Edition Integration with Corporate Data Quality* (CDQ) enables you to map third party data provider content to the SAP Master Data Governance data model. This mapping facilitates the integration of Corporate Data Quality, a third-party data provider, with SAP Master Data Governance, enabling research and creation of business partners with trusted reference data. This document describes how to configure the Integration Package.

1. Integration Scenario

Data Provider Integration enables business users to use trusted data from CDQ to search for and populate validated data when creating new business partner records in the Manage Business Partner – Central Governance app.

This enhanced integration is facilitated by the SAP Cloud Integration platform, with external data sources accessed using a REST API from CDQ. The Integration Flow within the integration package defines two primary APIs (Lookup Business Partners and Fetch Business Partner) to search for and read reference data for Business Partners.

Lookup Business Partners API performs lookup operations across all available data sources supported by CDQ. The output of this operation is a list of Business Partners, each accompanied by their respective Data Sources and matching scores.

Fetch Business Partner API retrieves the Business Partner details based on the Lookup operation and returns the result of the single record.

Customers who have the necessary licensing agreements with Corporate Data Quality (CDQ) and meet the system prerequisites below, can benefit from a seamless integration experience using pre-packaged SAP Cloud Integration content designed for CDQ.

2. Preparation Steps

This chapter describes the requirements for enabling SAP Master Data Governance on SAP S/4HANA Cloud Private Edition integration with Corporate Data Quality.

2.1. Preparation for Corporate Data Quality

- Contract with CDQ AG for the use of CDQ First Time Right in place, see SAP Store

2.2. Preparation for SAP Cloud Integration

- For the integration content, an SAP Cloud Integration tenant on SAP BTP is required

2.3. Preparation for SAP S/4HANA

- Appropriate SAP Master Data Governance product version (SAP S/4HANA Cloud Private Edition 2025) in place
- Cloud-Ready Mode in MDG switched on

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3. Configuration Steps

3.1. Configure Corporate Data Quality

- For information on configuring CDQ see: https://developer.cdq.com/documentation/instructions/sap-s4hana-cloud-private-edition-setup

3.2. Configure SAP Cloud Integration

Add CDQ Credentials

- In your Integration Suite tenant, click at "Monitor" then "Integrations and APIs" and select the tile "Security Material" in the "Manage Security" section
- Click "Create" and then "OAuth2 Client Credentials"
- Enter the required information, especially pay attention to the following: Enter the required CDQ API key you got by following CDQ configuration guide above, specifically:
    - Token Service URL (verify correctness on the CDQ configuration guide above): https://id.cdq.com/auth/realms/cs/protocol/openid-connect/token
    - Scope: (enter a whitespace, keeping it empty or any other character will cause errors)
    - Content Type: application/x-www-form-urlencoded
- Click then "Deploy" and remember the Name for later

Configure Integration Package

- In your Integration Suite tenant, click at "Discover" and Copy “SAP Master Data Governance on SAP S/4HANA Cloud Private Edition Integration with Corporate Data Quality” package from the Discover area in Integration Suite
- Your package appears in the list in the Design area, click on it
- Click the "Artifacts" tab, then at the 3 dots in the "Actions" column and finally at "Configure"
- Configuration Dialog appears in the "Sender" tab. Click "Receiver" Tab and select either "CP_CDQ_Lookup" or "CP_CDQ_Fetch". Enter in the "Credential Name" field the previously created credential name.
- Click "Save" and then "Deploy"
- In your Integration Suite tenant, click at "Monitor" then "Integrations and APIs" and select the tile "All Started" in the "Manage Integration Content" section
- You should see your Integration Flow in status "Started" and the Endpoint under which it is reachable. Please remember this as you will need this later

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3.3. Configure SAP S/4HANA

Set Up Required Users and Role

Users working with the app Manage Business Partners – Central Governance need to have the business catalog Cloud-Ready Mode Central Governance – Business Partners SAP_CMD_BC_CRMDG_BPCS_GOV assigned to their business users. Create your own role and add the business role to the respective business user.

Set Up Technical Communication

(a) Create a HTTP Destination

- Open Transaction SM59 and choose Create
- A dialog box opens, in the dialog enter ID for the destination, select “Connection Type”
- G HTTP Connection to External Server.
- Choose Confirm.
- Open the “Technical Settings” tab and enter the Host (same as the Endpoint of the deployed Integration Flow), Port, and Path Prefix (it is recommended to use /http).
- Open the “Logon & Security” tab and under “Security Options” set SSL to Active.
- Select the imported Certificate you used for the SAP Cloud Integration tenant.
- Choose Save.

(b) Configure Data Provider Subscription

- Open transaction V_MDQDPI_DEST.
- Choose “New Entries”.
- Enter new “Subscription ID” and the previously created HTTP Destination.
- Choose Save.

(c) Manage External Master Data Provider

- Open transaction V_MDQDPI_PROV
- Choose “New Entry” and enter the following data:
- “Data Provider ID”: Enter a unique identifier for the data provider.
- “ID Type”: Select the appropriate ID Type for linking the provider with external data.
- “Subscription ID”: Choose the Subscription ID previously used in transaction V_MDQDPI_DEST
- “HTTP Path”: Enter the path to your integration flow, this can be found in the Integration Flow under Configure -> Sender -> Connection. Remove the * at the end of the path, if applicable.
- Choose Save to finalize the creation of the data provider

Set Up Technical Job SAP_MDQDPI_TEMP_DATA_CLEANER

The job SAP_MDQDPI_TEMP_DATA_CLEANER deletes reference record buffer entries that are older than 24 hours. The job is run daily by default.

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- Activate the scope-dependent job. To activate the job in the SAP Implementation guide, navigate to ABAP Platform -> Application Server -> System Administration -> Activation of Scope-Dependent Background Job Definitions.
- Schedule the job according to the documentation here Technical Job Repository. To run technical jobs in your SAP S/4HANA system, a user needs the authorization object MDQDPI_BP assigned to their user.
- Transaction SJOBREPO shows a green Job Status for SAP_MDQDPI_TEMP_DATA_CLEANER.

3.4. Configure SAP Cloud Integration Tenant

Set Up Process Integration Runtime Instance and Service Key

Official References (SAP Help Portal)

Creating Service Instance and Service Key for Inbound Authentication

Client Certificate Authentication for Integration Flow Processing

Create Integration Runtime Instance

- In your BTP cockpit, click on “Instances and Subscriptions” and select “Create”
- On the “Basic Info” page, under “Service” select “Process Integration Runtime”
- Under “Plan” select “integration-flow”
- Under “Runtime Environment” select “Cloud Foundry”
- Under “Space” select your Cloud Foundry space
- Under “Instance Name” enter your own value
- Choose Next and navigate to “Parameters”
- Under “Form: Roles” keep ESBMessaging.send (or enter your custom role defined in Integration Suite)
- Under “Grant-types” choose “Client Credentials”
- Choose Create
- Wait until status is updated to “Created”

Create Service Key and Import Certificate on BTP Subaccount

- In your SAP S/4HANA System, open transaction SM59
- Search for the HTTP destination previously created in step 3.3
- Display the HTTP destination
- Choose Connection Test
- In case a warning appears, confirm it
- Under Test Results, you should receive HTTP Response Status 401
- Choose the tab Response Text
- The text contains a certificate in the following text format: Client certificate: ‘certificate’

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- Copy the client certificate, i.e. the string between the two apostrophes, into your clipboard for later
- Switch to the respective BTP subaccount
- Select “Instances and Subscriptions”
- Create or select an instance with the Service: *Process Integration Runtime* and Plan: *integration-flow* (see: Create Integration Runtime Instance)
- Use action “Create Service Key”; or in the “Service Key” section, choose “Create”
- The “New Service Key” dialogue opens
- Under “Service Key Name”, provide a name identifying the ABAP system and selected certificate in the Communication System
- Under “Key Type”, select “External Certificate”
- Under “External Certificate” (only applicable for Key Type - External Certificate), paste the previously copied certificate text
- Choose “Create”

4. Field Mapping

This chapter describes how the data is mapped between SAP Master Data Governance on SAP S/4HANA Cloud Private Edition with Corporate Data Quality.

Lookup Business Partners request:

SAP Master Data Governance on SAP S/4HANA Cloud Private Edition – Source Field	Corporate Data Quality – Destination Field
SearchField	businessPartner/names/value
BPLastNameSearchHelp	businessPartner/names/value
BPFirstNameSearchHelp	businessPartner/names/value
OrganizationBPName1	businessPartner/names/value
OrganizationBPName2	businessPartner/names/value
CountryForDisplay	businessPartner/addresses/country/shortName
CityForDisplay	businessPartner/addresses/localities/value
PostalCodeForDisplay	businessPartner/addresses/postCodes/value
StreetDisplayName	businessPartner/addresses/thoroughfares/value
BPIdentificationNumber	businessPartner/identifiers/value
BPTaxNumber	businessPartner/identifiers/value

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Lookup Business Partners response:

Corporate Data Quality - Source Field	SAP Master Data Governance on SAP S/4HANA Cloud Private Edition - Destination Field
businessPartner/jsonRecord/addressData/organizationPostalAddress/houseNumber	HouseNumber
businessPartner/jsonRecord/addressData/organizationPostalAddress/country/code	Country
businessPartner/jsonRecord/addressData/organizationPostalAddress/postCode	PostalCode
cdqId	BPReferenceRecordExternalID
businessPartner/jsonRecord/addressData/organizationPostalAddress/street/name	StreetName
businessPartner/jsonRecord/addressData/organizationPostalAddress/town/name	CityName
matchingProfile/matchingScores/overall/value	BPRefRecordProviderScoreValue
businessPartner/jsonRecord/organization/nameDetails/formattedOrgName	BusinessPartnerFullName
businessPartner/identifiers/value	BPIdentificationNumber
businessPartner/status/type/technicalKey	BPRefRecordStatusIsInactive
businessPartner/status/type/name	BPReferenceRecordStatusText

Fetch Business Partner response:

Corporate Data Quality - Source Field	SAP Master Data Governance on SAP S/4HANA Cloud Private Edition - Destination Field
businessPartner/jsonRecord/addressData/organizationPostalAddress/houseNumber	_BusinessPartnerAddress/HouseNumber
businessPartner/jsonRecord/addressData/organizationPostalAddress/street/name	_BusinessPartnerAddress/StreetName
businessPartner/jsonRecord/addressData/organizationPostalAddress/streetPrefix1	_BusinessPartnerAddress/StreetPrefixName
businessPartner/jsonRecord/addressData/organizationPostalAddress/houseNumberSupplement	_BusinessPartnerAddress/HouseNumberSupplementText
businessPartner/jsonRecord/addressData/organizationPostalAddress/streetSuffix1	_BusinessPartnerAddress/StreetSuffixName
businessPartner/jsonRecord/addressData/organizationPostalAddress/streetSuffix2	_BusinessPartnerAddress/AdditionalStreetSuffixName
businessPartner/jsonRecord/addressData/organizationPostalAddress/streetPrefix2	_BusinessPartnerAddress/AdditionalStreetPrefixName

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businessPartner/jsonRecord/addressData/organizationPostalAddress/town/name	_BusinessPartnerAddress/HomeCityName
businessPartner/jsonRecord/addressData/organizationPostalAddress/district/name	_BusinessPartnerAddress/DistrictName
businessPartner/jsonRecord/addressData/organizationPostalAddress/postCode	_BusinessPartnerAddress/PostalCode
businessPartner/jsonRecord/addressData/organizationPostalAddress/town/name	_BusinessPartnerAddress/CityName
businessPartner/jsonRecord/addressData/organizationPostalAddress/country/code	_BusinessPartnerAddress/Country
businessPartner/jsonRecord/addressData/organizationPostalAddress/primaryRegion/code	_BusinessPartnerAddress/Region
businessPartner/jsonRecord/identifications/identificationNumber	_BusinessPartnerIdentification/BPIdentificationNumber
businessPartner/jsonRecord/identifications/identificationType/code	_BusinessPartnerIdentification/BPIdentificationType
businessPartner/jsonRecord/identifications/institute	_BusinessPartnerIdentification/BPIdnNmbrIssuingInstitute
businessPartner/jsonRecord/identifications/country/code	_BusinessPartnerIdentification/Country
businessPartner/jsonRecord/identifications/region/code	_BusinessPartnerIdentification/Region
businessPartner/jsonRecord/taxNumbers/taxNumber	_BusinessPartnerTaxNumber/BPTaxLongNumber
businessPartner/jsonRecord/taxNumbers/taxNumberType/code	_BusinessPartnerTaxNumber/BPTaxType
businessPartner/jsonRecord/organization/nameDetails/formattedOrgNameLine1	OrganizationBPName1
businessPartner/jsonRecord/organization/nameDetails/formattedOrgNameLine2	OrganizationBPName2
businessPartner/jsonRecord/organization/nameDetails/formattedOrgNameLine3	OrganizationBPName3
businessPartner/jsonRecord/organization/nameDetails/formattedOrgNameLine4	OrganizationBPName4
businessPartner/jsonRecord/organization/legalForm/code	LegalForm
businessPartner/jsonRecord/addressData/emailAddresses/address	_BusinessPartnerAddress/_BusinessPartnerEmailAddress/EmailAddress
businessPartner/jsonRecord/addressData	_BusinessPartnerAddress
businessPartner/jsonRecord/addressData/emailAddresses	_BusinessPartnerAddress/_BusinessPartnerEmailAddress
cdqId	BPReferenceRecordExternalID

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Const value 2	BusinessPartnerCategory
businessPartner/status/type/technicalKey	BPRefRecordStatusIsInactive
businessPartner/status/type/name	BPReferenceRecordStatusText

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