



**PUBLIC**

SAP Data Services

Document Version: 4.2 Support Package 14 (14.2.14.0) – 2020-06-12

# Content Objects Summary

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# 1 Overview

We've identified a number of common scenarios that you are likely to perform with SAP Data Services. For each scenario, we've included a blueprint that is already set up to solve the business problem in that scenario. Each blueprint contains the necessary project, jobs, data flows, file formats, sample data, template tables, and custom functions to run the data flows in your environment with only a few modifications.

You can download the blueprint packages from the SAP Community Wiki. On the website, we periodically post new and updated blueprints, custom functions, best practices, whitepapers, and other content. You can refer to this site frequently for updated content and use the forums to provide us with any questions or requests you may have.

Instructions for downloading and installing the content objects are also located on the SAP Community Wiki.

## 1.1 Documentation set for SAP Data Services content objects

You should become familiar with all of the pieces of documentation that relate to the SAP Data Services blueprints and other content objects.

Document	What this document provides
<i>Content Objects Summary</i>	Lists all of the available blueprints and other content objects and the jobs and other objects that they contain.
<i>Content Objects What's New</i>	Highlights the new and enhanced blueprints and other content objects available for this release.
<i>Data Quality Management Custom Functions User's Guide</i>	Contains instructions for downloading and importing custom functions.
<i>Data Quality Management Match Blueprints User's Guide</i>	Contains a list of available Data Quality Management match blueprints and instructions for downloading, configuring, and running them.
<i>Data Quality Management Directory Expiration Blueprint User's Guide</i>	Contains instructions for downloading and using a blueprint that contains a job with a script that, when configured properly, can send you email notifications for address directories that are nearing their expiration date.
<i>Data Quality Management Microservices Blueprints User's Guide</i>	Contains a list of available Data Quality Management microservices blueprints and instructions for downloading, configuring, and running them.
<i>Data Quality Management Product Blueprints User's Guide</i>	Contains a list of available Data Quality Management product blueprints and instructions for downloading, configuring, and running them.
<i>Data Quality Management Regional Blueprints User's Guide</i>	Contains a list of available Data Quality Management regional blueprints and instructions for downloading, configuring, and running them.

## 1.2 SAP information resources

A global network of SAP technology experts provides customer support, education, and consulting to ensure maximum information management benefit to your business.

Useful addresses at a glance:

Address	Content
Customer Support, Consulting, and Education services <a href="https://support.sap.com/">https://support.sap.com/</a>	Information about SAP support programs, as well as links to technical articles, downloads, and online forums. Consulting services can provide you with information about how SAP can help maximize your information management investment. Education services can provide information about training options and modules. From traditional classroom learning to targeted e-learning seminars, SAP can offer a training package to suit your learning needs and preferred learning style.
Product documentation <a href="http://help.sap.com/bods/">http://help.sap.com/bods/</a>	SAP product documentation.
Product Availability Matrix (PAM) <a href="https://apps.support.sap.com/sap/support/pam/">https://apps.support.sap.com/sap/support/pam/</a>	Get information about supported platforms for SAP Data Services. Use the search function to search for Data Services. Click the link for the version of Data Services you are searching for.
SAP Data Services Community <a href="http://scn.sap.com/community/data-services">http://scn.sap.com/community/data-services</a>	Get online and timely information about SAP Data Services, including forums, tips and tricks, additional downloads, samples, and much more. All content is to and from the community, so feel free to join in and contact us if you have a submission.
Blueprints <a href="https://wiki.scn.sap.com/wiki/display/EIM/SAP+Data+Services+Blueprints">https://wiki.scn.sap.com/wiki/display/EIM/SAP+Data+Services+Blueprints</a>	Blueprints for you to download and modify to fit your needs. Each blueprint contains the necessary SAP Data Services project, jobs, data flows, file formats, sample data, template tables, and custom functions to run the data flows in your environment with only a few modifications.

## 2 Blueprint versions

The following table shows the version of the Data Quality Management blueprints that can be used for SAP Data Services. The blueprint version is displayed on the SAP Data Services Blueprints page of the SAP Community Wiki.

SAP Data Services version	Blueprint version	Blueprints available
4.2	4.2	Data Quality Management
4.1.1	4.1.1	Data Quality Management
4.1	4.1	Data Quality Management
XI 4.0	XI 4.0	Data Quality
XI 3.2	XI 3.2	Data Quality
XI 3.1	XI 3.0	Data Quality
XI 3.0	XI 3.0	Data Quality

## 3 Available blueprints

To help you compare the available blueprints and decide which to download, see the following table.

For instructions on downloading and setting up the blueprints and other tools, see the appropriate *User's Guide*.

### Data Quality Management regional blueprints

Blueprint	Description
Data Quality Management Blueprints – Brazil	Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in Brazil.
Data Quality Management Blueprints – China	Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in China.
Data Quality Management Blueprints – France	Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in France.
Data Quality Management Blueprints – Germany	Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in Germany.
Data Quality Management Blueprints – Global	Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data when the data consists of multiple countries.
Data Quality Management Blueprints – India	Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in India.
Data Quality Management Blueprints – Japan	Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in Japan.
Data Quality Management Blueprints – Mexico	Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in Mexico.
Data Quality Management Blueprints – South Korea	Contains a sample Global Address Cleanse transform configuration containing best practice settings for cleansing address data in South Korea. This transform configuration can only be used with version 4.2 SP2 or later.
Data Quality Management Blueprints – USA	Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in the United States.

## Data Quality Management Match blueprints

Blueprint	Description
Data Quality Management Blueprints – Match	Contains miscellaneous jobs configured to illustrate best practice settings for specific Data Quality Management matching use cases.

## Data Quality Management Microservices blueprints

Blueprint	Description
Data Quality Management Blueprints – Microservices	Contains a list of available Data Quality Management Microservices blueprints and instructions for downloading, configuring, and running them.

## Data Quality Management directory expiration blueprint

Blueprint	Description
Data Quality Management Directory Expiration Blueprint	Contains instructions for downloading and using a blueprint that contains a job with a script that, when configured properly, can send you email notifications for address directories that are nearing their expiration date.

## Data Quality Management product blueprints

Blueprint	Description
Data Quality Management Blueprints – Product	Contains sample jobs configured to illustrate how to cleanse product data using a custom cleansing package.

## Other tools

Blueprint	Description
Data Quality Management Custom Functions	Contains custom functions that perform additional manipulation of data that is common with the cleansing and matching of party data.

## Related Information

- [Data Quality Management regional blueprints \[page 9\]](#)
- [Data Quality Management Match blueprints \[page 20\]](#)
- [Data Quality Management Microservices blueprints \[page 23\]](#)
- [Data Quality Management product blueprints \[page 24\]](#)
- [Other tools \[page 25\]](#)



## 4 Data Quality Management regional blueprints

The following are the regional blueprints provided for common Data Quality Management use cases, and a list of the jobs and other objects that they contain.

For more information, see the *Regional Blueprints User's Guide*.

### 4.1 Data Quality Management Blueprints – Brazil

Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in Brazil.

This blueprints package includes the following jobs:

Job	Description
DqmBlueprintBrazil_AddressCleanse	Validates, cleanses, and standardizes address data.
DqmBlueprintBrazil_AddressCleanseGeo	Validates, cleanses, and standardizes address data and appends latitude and longitude coordinates.
DqmBlueprintBrazil_AddressDataCleanse	Cleanses address, name, title, firm, email, phone, and date data.
DqmBlueprintBrazil_CustomerValidation	Includes data quality validation rules to route records for remediation that fail the validation requirements.
DqmBlueprintBrazil_LoadDelta	Cleanses delta data and performs matching against a database, such as a CRM, to identify new records to be inserted and matching records to be updated in the database.
DqmBlueprintBrazil_LoadInitial	Performs an initial cleansing and removal of duplicates for a customer database, such as a CRM, storing the data in a way that provides for optimal matching in the future either with delta loads or with individual transactions.
DqmBlueprintBrazil_MatchAssociative	Cleanses party data and performs duplicate detection based on similar name and address, name and phone, or name and email, combining the three matching results to uncover hidden duplicates.
DqmBlueprintBrazil_MatchConsumer	Cleanses consumer data and performs duplicate detection based on similar name and address using fuzzy matching techniques.
DqmBlueprintBrazil_MatchConsumerHousehold	Performs hierarchical matching to identify matching consumers within the same household.
DqmBlueprintBrazil_MatchCorporateHousehold	Performs hierarchical matching to identify matching contacts within the same organization.
DqmBlueprintBrazil_RtAddressDataCleanse	Cleanses a single transaction that contains address, name, title, firm, email, phone, and date data.

Job	Description
DqmBlueprintBrazil_RtAddressSuggestions	Validates, cleanses, and standardizes address data given a partial address on input and drilling down by selecting from a pick list of valid addresses.
DqmBlueprintBrazil_RtGeocodePoi	Provides a list of points of interest (in this example, restaurants) within a specified proximity of an input address.
DqmBlueprintBrazil_RtMatchConsumer	Cleanses a single transaction and performs matching against a database, such as a CRM, to identify whether the record exists in the database.

This blueprints package includes the following additional objects:

- Two custom functions that prepare address data for optimal matching in order to identify accurate duplicate addresses in Brazil.
- A custom function that formats Brazilian phone numbers.
- A custom function that provides control of the prename for which the gender of a person is likely, defaulting to "Sr." and "Sra."
- A custom function that converts the information code from the address cleansing process to a description in English.

## 4.2 Data Quality Management Blueprints – China

Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in China.

This blueprints package includes the following jobs:

Job	Description
DqmBlueprintChina_AddressCleanse	Validates, cleanses, and standardizes address data.
DqmBlueprintChina_AddressDataCleanse	Cleanses address, name, title, firm, email, phone, and date data.
DqmBlueprintChina_AddressCleanseGeo	Validates, cleanses, and standardizes address data and appends latitude and longitude coordinates.
DqmBlueprintChina_CustomerValidation	Includes data quality validation rules to route records for remediation that fail the validation requirements.
DqmBlueprintChina_LoadDelta	Cleanses delta data and performs matching against a database, such as a CRM, to identify new records to be inserted and matching records to be updated in the database.
DqmBlueprintChina_LoadInitial	Performs an initial cleansing and removal of duplicates for a customer database, such as a CRM, storing the data in a way that provides for optimal matching in the future either with delta loads or with individual transactions.
DqmBlueprintChina_MatchAssociative	Cleanses party data and performs duplicate detection based on similar name and address, name and phone, or name and email, combining the three matching results to uncover hidden duplicates.

Job	Description
DqmBlueprintChina_MatchConsumer	Cleanses consumer data and performs duplicate detection based on similar name and address using fuzzy matching techniques.
DqmBlueprintChina_MatchConsumerHousehold	Performs hierarchical matching to identify matching consumers within the same household.
DqmBlueprintChina_MatchCorporateHousehold	Performs hierarchical matching to identify matching contacts within the same organization.
DqmBlueprintChina_RtAddressDataCleanse	Cleanses a single transaction that contains address, name, title, firm, email, phone, and date data.
DqmBlueprintChina_RtAddressSuggestions	Validates, cleanses, and standardizes address data given a partial address on input and drilling down by selecting from a pick list of valid addresses.
DqmBlueprintChina_RtMatchConsumer	Cleanses a single transaction and performs matching against a database, such as a CRM, to identify whether the record exists in the database.

This blueprints package includes the following additional objects:

- A custom function that removes "noise" from building names for optimal matching in order to identify accurate duplicate addresses in China.
- A custom function that formats Chinese phone numbers.
- A custom function that converts the information code from the address cleansing process to a description in Chinese.

## 4.3 Data Quality Management Blueprints – France

Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in France.

This blueprints package includes the following jobs:

Job	Description
DqmBlueprintFrance_AddressCleanse	Validates, cleanses, and standardizes address data.
DqmBlueprintFrance_AddressCleanseGeo	Validates, cleanses, and standardizes address data and appends latitude and longitude coordinates.
DqmBlueprintFrance_AddressDataCleanse	Cleanses address, name, title, firm, email, phone, and date data.
DqmBlueprintFrance_CustomerValidation	Includes data quality validation rules to route records for remediation that fail the validation requirements.
DqmBlueprintFrance_LoadDelta	Cleanses delta data and performs matching against a database, such as a CRM, to identify new records to be inserted and matching records to be updated in the database.

Job	Description
DqmBlueprintFrance_LoadInitial	Performs an initial cleansing and removal of duplicates for a customer database, such as a CRM, storing the data in a way that provides for optimal matching in the future either with delta loads or with individual transactions.
DqmBlueprintFrance_MatchAssociative	Cleanses party data and performs duplicate detection based on similar name and address, name and phone, or name and email, combining the three matching results to uncover hidden duplicates.
DqmBlueprintFrance_MatchConsumer	Cleanses consumer data and performs duplicate detection based on similar name and address using fuzzy matching techniques.
DqmBlueprintFrance_MatchConsumerHousehold	Performs hierarchical matching to identify matching consumers within the same household.
DqmBlueprintFrance_MatchCorporateHousehold	Performs hierarchical matching to identify matching contacts within the same organization.
DqmBlueprintFrance_RtAddressDataCleanse	Cleanses a single transaction that contains address, name, title, firm, email, phone, and date data.
DqmBlueprintFrance_RtAddressSuggestions	Validates, cleanses, and standardizes address data given a partial address on input and drilling down by selecting from a pick list of valid addresses.
DqmBlueprintFrance_RtGeocodePoi	Provides a list of points of interest (in this example, restaurants) within a specified proximity of an input address.
DqmBlueprintFrance_RtMatchConsumer	Cleanses a single transaction and performs matching against a database, such as a CRM, to identify whether the record exists in the database.

This blueprints package includes the following additional objects:

- A custom function that formats French phone numbers.
- A custom function that provides control of the prename for which the gender of a person is likely, defaulting to "M." and "Mme".
- A custom function that converts the information code from the address cleansing process to a description in English.

## 4.4 Data Quality Management Blueprints – Germany

Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in Germany.

This blueprints package includes the following jobs:

Job	Description
DqmBlueprintGermany_AddressCleanse	Validates, cleanses, and standardizes address data.

<b>Job</b>	<b>Description</b>
DqmBlueprintGermany_AddressCleansGeo	Validates, cleanses, and standardizes address data, and appends latitude/longitude coordinates.
DqmBlueprintGermany_AddressDataCleans	Cleanses address, name, title, firm, email, phone, and date data.
DqmBlueprintGermany_CustomerValidation	Includes data quality validation rules to route records for remediation that fail the validation requirements.
DqmBlueprintGermany_LoadDelta	Cleanses delta data and performs matching against a database, such as a CRM, to identify new records to be inserted and matching records to be updated in the database.
DqmBlueprintGermany_LoadInitial	Performs an initial cleansing and removal of duplicates for a customer database, such as a CRM, storing the data in a way that provides for optimal matching in the future either with delta loads or with individual transactions.
DqmBlueprintGermany_MatchAssociative	Cleanses party data and performs duplicate detection based on similar name and address, name and phone, or name and email, combining the three matching results to uncover hidden duplicates.
DqmBlueprintGermany_MatchConsumer	Cleanses consumer data and performs duplicate detection based on similar name and address using fuzzy matching techniques.
DqmBlueprintGermany_MatchConsumerHousehold	Performs hierarchical matching to identify matching consumers within the same household.
DqmBlueprintGermany_MatchCorporateHousehold	Performs hierarchical matching to identify matching contacts within the same organization.
DqmBlueprintGermany_RtAddressDataCleans	Cleanses a single transaction that contains address, name, title, firm, email, phone, and date data.
DqmBlueprintGermany_RtAddressSuggestions	Validates, cleanses, and standardizes address data given a partial address on input and drilling down by selecting from a pick list of valid addresses.
DqmBlueprintGermany_RtGeocodePoi	Provides a list of points of interest (in this example, restaurants) within a specified proximity of an input address.
DqmBlueprintGermany_RtMatchConsumer	Cleanses a single transaction and performs matching against a database, such as a CRM, to identify whether the record exists in the database.

This blueprints package includes the following additional objects:

- A custom function that formats German phone numbers.
- A custom function that provides control of the prename for which the gender of a person is likely, defaulting to "Hr." and "Fr."
- A custom function that converts the information code from the address cleansing process to a description in English.

## 4.5 Data Quality Management Blueprints – Global

Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data when the data consists of multiple countries.

This blueprints package includes the following jobs:

Job	Description
DqmBlueprintGlobal_AddressCleanse	Validates, cleanses, and standardizes address data.
DqmBlueprintGlobal_AddressCleanseGeo	Validates, cleanses, and standardizes address data, and appends latitude/longitude coordinates.
DqmBlueprintGlobal_AddressDataCleanse	Cleanses address, name, title, firm, email, phone, and date data.
DqmBlueprintGlobal_CustomerValidation	Includes data quality validation rules to route records for remediation that fail the validation requirements.
DqmBlueprintGlobal_LoadDelta	Cleanses delta data and performs matching against a database, such as a CRM, to identify new records to be inserted and matching records to be updated in the database.
DqmBlueprintGlobal_LoadInitial	Performs an initial cleansing and removal of duplicates for a customer database, such as a CRM, storing the data in a way that provides for optimal matching in the future either with delta loads or with individual transactions.
DqmBlueprintGlobal_MatchAssociative	Cleanses party data and performs duplicate detection based on similar name and address, name and phone, or name and email, combining the three matching results to uncover hidden duplicates.
DqmBlueprintGlobal_MatchConsumer	Cleanses consumer data and performs duplicate detection based on similar name and address using fuzzy matching techniques.
DqmBlueprintGlobal_MatchConsumerHousehold	Performs hierarchical matching to identify matching consumers within the same household.
DqmBlueprintGlobal_MatchCorporateHousehold	Performs hierarchical matching to identify matching contacts within the same organization.
DqmBlueprintGlobal_RtAddressDataCleanse	Cleanses a single transaction that contains address, name, title, firm, email, phone, and date data.
DqmBlueprintGlobal_RtAddressSuggestions	Validates, cleanses, and standardizes address data given a partial address on input and drilling down by selecting from a pick list of valid addresses.
DqmBlueprintGlobal_RtGeocodePoi	Provides a list of points of interest (in this example, restaurants) within a specified proximity of an input address.
DqmBlueprintGlobal_RtMatchConsumer	Cleanses a single transaction and performs matching against a database, such as a CRM, to identify whether the record exists in the database.

This blueprints package includes the following additional objects:

- Two custom functions that prepare address data for optimal matching in order to identify accurate duplicate addresses in multiple countries.
- Four custom functions that format phone numbers in Brazil, Germany, France, and Mexico.

- Four custom functions that provide control of the prename for which the gender of a person is likely, defaulting to “Sr.” and “Sra.” in Brazil, “Hr.” and “Fr.” in Germany, “M.” and “Mme” in France, and “Sr.” and “Srta.” in Mexico.
- A custom function that converts the information code from the address cleansing process to a description in English.

## 4.6 Data Quality Management Blueprints – India

Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in India.

This blueprints package includes the following jobs:

Job	Description
DqmBlueprintIndia_AddressCleanser	Validates, cleanses, and standardizes address data.
DqmBlueprintIndia_AddressDataCleanser	Cleanses address, name, title, firm, email, phone, and date data.
DqmBlueprintIndia_CustomerValidation	Includes data quality validation rules to route records for remediation that fail the validation requirements.
DqmBlueprintIndia_LoadDelta	Cleanses delta data and performs matching against a database, such as a CRM, to identify new records to be inserted and matching records to be updated in the database.
DqmBlueprintIndia_LoadInitial	Performs an initial cleansing and removal of duplicates for a customer database, such as a CRM, storing the data in a way that provides for optimal matching in the future either with delta loads or with individual transactions.
DqmBlueprintIndia_MatchAssociative	Cleanses party data and performs duplicate detection based on similar name and address, name and phone, or name and email, combining the three matching results to uncover hidden duplicates.
DqmBlueprintIndia_MatchConsumer	Cleanses consumer data and performs duplicate detection based on similar name and address using fuzzy matching techniques.
DqmBlueprintIndia_MatchConsumerHousehold	Performs hierarchical matching to identify matching consumers within the same household.
DqmBlueprintIndia_MatchCorporateHousehold	Performs hierarchical matching to identify matching contacts within the same organization.
DqmBlueprintIndia_RtAddressDataCleanser	Cleanses a single transaction that contains address, name, title, firm, email, phone, and date data.
DqmBlueprintIndia_RtAddressSuggestions	Validates, cleanses, and standardizes address data given a partial address on input and drilling down by selecting from a pick list of valid addresses.
DqmBlueprintIndia_RtMatchConsumer	Cleanses a single transaction and performs matching against a database, such as a CRM, to identify whether the record exists in the database.

This blueprints package includes the following additional objects:

- An India-specific Global Address Cleanse transform preconfigured with best practice settings and output fields to cleanse Indian address data.
- An India-specific Data Cleanse transform preconfigured with best practice settings and output fields to cleanse Indian person, title, firm, email, phone, and date data.
- Two custom functions that prepare address data for optimal matching in order to identify accurate duplicate addresses in India.
- A custom function that formats Indian phone numbers.
- A custom function that converts the information code from the address cleansing process to a description in English.

## 4.7 Data Quality Management Blueprints – Japan

Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in Japan.

This blueprints package includes the following jobs:

Job	Description
DqmBlueprintJapan_AddressCleanse	Validates, cleanses, and standardizes address data.
DqmBlueprintJapan_AddressDataCleanse	Cleanses address, name, title, firm, email, phone, and date data.
DqmBlueprintJapan_CustomerValidation	Includes data quality validation rules to route records for remediation that fail the validation requirements.
DqmBlueprintJapan_LoadDelta	Cleanses delta data and performs matching against a database, such as a CRM, to identify new records to be inserted and matching records to be updated in the database.
DqmBlueprintJapan_LoadInitial	Performs an initial cleansing and removal of duplicates for a customer database, such as a CRM, storing the data in a way that provides for optimal matching in the future either with delta loads or with individual transactions.
DqmBlueprintJapan_MatchAssociative	Cleanses party data and performs duplicate detection based on similar name and address, name and phone, or name and email, combining the three matching results to uncover hidden duplicates.
DqmBlueprintJapan_MatchConsumer	Cleanses consumer data and performs duplicate detection based on similar name and address using fuzzy matching techniques.
DqmBlueprintJapan_MatchConsumerHousehold	Performs hierarchical matching to identify matching consumers within the same household.
DqmBlueprintJapan_MatchCorporateHousehold	Performs hierarchical matching to identify matching contacts within the same organization.
DqmBlueprintJapan_RtAddressDataCleanse	Cleanses a single transaction that contains address, name, title, firm, email, phone, and date data.
DqmBlueprintJapan_RtAddressSuggestions	Validates, cleanses, and standardizes address data given a partial address on input and drilling down by selecting from a pick list of valid addresses.



Job	Description
DqmBlueprintJapan_RtMatchConsumer	Cleanses a single transaction and performs matching against a database, such as a CRM, to identify whether the record exists in the database.

This blueprints package includes the following additional objects:

- A custom function that formats Japanese phone numbers.
- A custom function that converts the information code from the address cleansing process to a description in Japanese.

## 4.8 Data Quality Management Blueprints – Mexico

Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in Mexico.

This blueprints package includes the following jobs:

Job	Description
DqmBlueprintMexico_AddressCleanse	Validates, cleanses, and standardizes address data.
DqmBlueprintMexico_AddressCleanseGeo	Validates, cleanses, and standardizes address data and appends latitude and longitude coordinates.
DqmBlueprintMexico_AddressDataCleanse	Cleanses address, name, title, firm, email, phone, and date data.
DqmBlueprintMexico_CustomerValidation	Includes data quality validation rules to route records for remediation that fail the validation requirements.
DqmBlueprintMexico_LoadDelta	Cleanses delta data and performs matching against a database, such as a CRM, to identify new records to be inserted and matching records to be updated in the database.
DqmBlueprintMexico_LoadInitial	Performs an initial cleansing and removal of duplicates for a customer database, such as a CRM, storing the data in a way that provides for optimal matching in the future either with delta loads or with individual transactions.
DqmBlueprintMexico_MatchAssociative	Cleanses party data and performs duplicate detection based on similar name and address, name and phone, or name and email, combining the three matching results to uncover hidden duplicates.
DqmBlueprintMexico_MatchConsumer	Cleanses consumer data and performs duplicate detection based on similar name and address using fuzzy matching techniques.
DqmBlueprintMexico_MatchConsumerHousehold	Performs hierarchical matching to identify matching consumers within the same household.
DqmBlueprintMexico_MatchCorporateHousehold	Performs hierarchical matching to identify matching contacts within the same organization.
DqmBlueprintMexico_RtAddressDataCleanse	Cleanses a single transaction that contains address, name, title, firm, email, phone, and date data.

Job	Description
DqmBlueprintMexico_RtAddressSuggestions	Validates, cleanses, and standardizes address data given a partial address on input and drilling down by selecting from a pick list of valid addresses.
DqmBlueprintMexico_RtGeocodePoi	Provides a list of points of interest (in this example, restaurants) within a specified proximity of an input address.
DqmBlueprintMexico_RtMatchConsumer	Cleanses a single transaction and performs matching against a database, such as a CRM, to identify whether the record exists in the database.

This blueprints package includes the following additional objects:

- A Mexico-specific Global Address Cleanse transform preconfigured with best practice settings and output fields to cleanse Mexican address data.
- A custom function that formats Mexican phone numbers.
- A custom function that provides control of the prename for which the gender of a person is likely, defaulting to "Sr." and "Srta."
- A custom function that converts the information code from the address cleansing process to a description in English.

## 4.9 Data Quality Management Blueprints – USA

Contains sample jobs configured to illustrate best practice settings for common Data Quality Management use cases involving party data in the United States.

This blueprints package includes the following jobs:

Job	Description
DqmBlueprintUSA_AddressCleanse	Validates, cleanses, and standardizes address data.
DqmBlueprintUSA_AddressCleanseGeo	Validates, cleanses, and standardizes address data, and appends latitude/longitude coordinates.
DqmBlueprintUSA_AddressDataCleanse	Cleanses address, name, title, firm, email, phone, and date data.
DqmBlueprintUSA_CustomerValidation	Includes data quality validation rules to route records for remediation that fail the validation requirements.
DqmBlueprintUSA_LoadDelta	Cleanses delta data and performs matching against a database, such as a CRM, to identify new records to be inserted and matching records to be updated in the database.
DqmBlueprintUSA_LoadInitial	Performs an initial cleansing and removal of duplicates for a customer database, such as a CRM, storing the data in a way that provides for optimal matching in the future either with delta loads or with individual transactions.
DqmBlueprintUSA_MatchAssociative	Cleanses party data and performs duplicate detection based on similar name and address, name and phone, or name and email, combining the three matching results to uncover hidden duplicates.

<b>Job</b>	<b>Description</b>
DqmBlueprintUSA_MatchConsumer	Cleanses consumer data and performs duplicate detection based on similar name and address using fuzzy matching techniques.
DqmBlueprintUSA_MatchConsumerHousehold	Performs hierarchical matching to identify matching consumers within the same household.
DqmBlueprintUSA_MatchCorporateHousehold	Performs hierarchical matching to identify matching contacts within the same organization.
DqmBlueprintUSA_RtAddressDataCleanse	Cleanses a single transaction that contains address, name, title, firm, email, phone, and date data.
DqmBlueprintUSA_RtAddressSuggestions	Validates, cleanses, and standardizes address data given a partial address on input and drilling down by selecting from a pick list of valid addresses.
DqmBlueprintUSA_RtGeocodePoi	Provides a list of points of interest (in this example, restaurants) within a specified proximity of an input address.
DqmBlueprintUSA_RtMatchConsumer	Cleanses a single transaction and performs matching against a database, such as a CRM, to identify whether the record exists in the database.

This blueprints package includes the following additional object:

- A custom function that removes special characters in order to identify accurate duplicate firms.
- A custom function that capitalizes the first letter of name prefixes (for example, changing “van” to “Van”).

# 5 Data Quality Management Match blueprints

The following are the Match blueprints provided for common Data Quality Management use cases, and a list of the jobs and other objects that they contain.

For more information, see the *Match Blueprints User's Guide*.

## 5.1 Data Quality Management Blueprints – Match

Contains miscellaneous jobs configured to illustrate best practice settings for specific Data Quality Management matching use cases.

This blueprints package includes the following jobs:

Job	Description
DqmBlueprintMatch_AddrBlankIfFirm	Illustrates how to configure a data flow to use a specific match option that identifies two firm records as a match even though they have different addresses, in which one is a street address and the other is a postal address.
DqmBlueprintMatch_AddrIgnoreFirmIfName	Illustrates how to configure a data flow to use a specific match option that identifies two firm records as a match even though they have different firm names, as long as the two records have matching person name and address data.
DqmBlueprintMatch_AddrResidentRrNoBox	Illustrates how to configure a data flow to use a specific match option that considers multiple records with data such as "Current Resident, RR 2" as non-matching records.
DqmBlueprintMatch_AddrStreetAndRrOrBox	Illustrates how to configure a data flow to use a specific match option that identifies two records as a match, as long as either the street or rural addresses match or the postal addresses match.
DqmBlueprintMatch_MatchDNB	Inputs a data source and identifies matches to Dun & Bradstreet (DNB) data, enriching matching records with DUNS data.
DqmBlueprintMatch_MatchDNBPrep	Illustrates cleansing and preparing Dun & Bradstreet (DNB) data, outputting it to a database that is prepared for optimal matching.
DqmBlueprintMatch_SuppressDMA	Inputs a customer data list and identifies matches to Direct Marketing Association (DMA) data, suppressing matching records from the resulting mailing list.
DqmBlueprintMatch_SuppressDMAPrep	Illustrates cleansing and preparing Direct Marketing Association (DMA) data, outputting it to a database that is prepared for optimal matching.

<b>Job</b>	<b>Description</b>
DqmBlueprintMatch_MatchReview1After	After review and remediation of suspect match groups formed in the MatchReview1Before job in Information Steward Match Review, this job creates best records by performing data consolidation within match groups.
DqmBlueprintMatch_MatchReview1Before	Identifies matching records that have similar firm and address data, and routes results to a staging table for the purpose of review and remediation of the suspect matches through SAP Information Steward Match Review.
DqmBlueprintMatch_MatchReview2After	Joins the staging table that contains the best records and non-matching records from the MatchReview2Before job, and the staging table that contains the results of the review and remediation, along with best record creation, through SAP Information Steward Match Review.
DqmBlueprintMatch_MatchReview2Before	Identifies matching records that have similar firm and address data, and separates high-confidence match groups and suspect match groups. High-confidence match groups are routed to receive best record creation by performing data consolidation within match groups, and the best records together with non-matching records are stored in a staging table. Suspect match groups are routed to a staging table for the purpose of review and remediation, along with best record creation, through SAP Information Steward Match Review.
DqmBlueprintMatch_MatchReviewPrep	Creates staging tables and a job status table, without inserting any data, in preparation for running the DqmBlueprintMatch_MatchReview1Before and BlueprintMatch_MatchReview2Before jobs. Note that this is simply a preliminary step to running the subsequent blueprints, since the best practice in production is not to create these tables with SAP Data Services.

This blueprints package includes the following additional objects:

- A custom function that prepares address data for optimal matching in order to identify accurate duplicate addresses in a multi-country data source.
- A custom function that forms words commonly found in firm names in varying formats into a base word in order to identify accurate duplicate firms.

## 6 Data Quality Management directory expiration blueprint

The following is the directory expiration blueprint provided for common Data Quality Management use cases, and the job and other objects that it contains.

For more information, see the *Data Quality Management Directory Expiration Blueprint User's Guide*.

### 6.1 Data Quality Management Blueprints – Directory Expiration

This blueprint package includes the following job:

Job	Description
DataQualityMgmtBlueprintsSMTP	Contains a job that includes a script that follows a data flow. The script reads the logs looking for directory expiration messages, and if it finds one, it sends an email notification.

# 7 Data Quality Management Microservices blueprints

The following are the Microservices blueprints provided for common Data Quality Management use cases, and a list of the jobs and other objects that they contain.

For more information, see the *DQM Microservices Blueprints User's Guide*.

## 7.1 Data Quality Management Blueprints – Microservices

Contains miscellaneous jobs configured to illustrate examples for how to configure common use cases involving the DQM microservices process.

This blueprints package includes the following jobs:

Job	Description
DqmBlueprintMicroservices_AddressCleanse	Validates, cleanses, and standardizes address data by sending requests to the DQM microservices service in the cloud.
DqmBlueprintMicroservices_AddressCleanse-Config	Validates, cleanses, and standardizes address data by sending requests to the DQM microservices service in the cloud. What makes this job unique is that the DQM Microservices transform references a configuration.
DqmBlueprintMicroservices_AddressCleanse-Geo	Validates, cleanses, and standardizes address data by sending requests to the DQM microservices service in the cloud, and also appends latitude and longitude coordinates.
DqmBlueprintMicroservices_AddressCleanseHybrid	Validates, cleanses, and standardizes address data for one country on premise with the Global Address Cleanse transform, and address data for all other countries by sending requests to the DQM microservices service in the cloud.
DqmBlueprintMicroservices_RtReverseGeo	A real-time job that sends a single request that contains latitude and longitude coordinates to the DQM microservices service in the cloud. The response contains a list of addresses near the geolocation point.

# 8 Data Quality Management product blueprints

The following are the product blueprints provided as an example to illustrate how a data flow can be configured to cleanse product data when using a custom cleansing package designed for product data in a particular industry.

For more information, see the *Product Blueprints User's Guide*.

## 8.1 Data Quality Management Blueprints – Product

Contains miscellaneous jobs configured to illustrate best practice settings for specific Data Quality Management product use cases.

This blueprints package includes the following jobs:

Job	Description
DqmBlueprintProduct_Financial	Cleanses financial product data using a custom cleansing package.
DqmBlueprintProduct_Glove	Cleanses glove product data using a custom cleansing package, and performs duplicate detection based on the parsed product components.
DqmBlueprintProduct_Paper	Cleanses paper product data using a custom cleansing package.
DqmBlueprintProduct_Papier	Cleanses French paper product data using a custom cleansing package.
DqmBlueprintProduct_Pharma	Cleanses pharmaceutical product data using a custom cleansing package.



## 9 Other tools

The following are other tools provided for common SAP Data Services use cases, and a list of objects that they contain.

### 9.1 Data Quality Management custom functions

Contains custom functions that perform additional manipulation of data that is common with the cleansing and matching of party data.

For more information, see the *Custom Functions User's Guide*.

This package includes the following custom functions:

Custom function	Description	Example
CF_AddressInfoCodeDescriptionCN	Generates a description in Chinese for the Global Address Cleanse information code.	Converts "3010" to "路名或者小区不存在于参照数据中".
CF_AddressInfoCodeDescriptionEN	Generates a description in English for the Global Address Cleanse information code.	Converts "3010" to "Locality, region, and postcode are valid. Unable to match primary name to directory".
CF_AddressInfoCodeDescriptionJP	Generates a description in Japanese for the Global Address Cleanse information code.	Converts "3010" to "入力された丁目、番地が照合結果、不合".
CF_AddressMatchPrepBuildingName	Removes characters to generate a building name field for the matching process.	Removes words such as "号" and "大厦" from Chinese building names.
CF_AddressMatchPrepFloorUnit	Concatenates the floor and unit numbers to generate a secondary number field for the matching process.	For an address that includes Floor 4 and Unit 10, generates a field that contains "4 10".
CF_AddressMatchPrepNumberField	Removes characters to generate a primary or secondary number field for the matching process.	For a field that contains "5 - 7", generates a field that contains "5 7".
CF_AddressStatusCodeDescriptionCN	Generates a list of the address elements changed in the Data Quality Management process in Chinese.	Converts "S3500" to "数据质量纠正了以下的地址部分：国家，邮编，区县，路名".

Custom function	Description	Example
CF_AddressStatusCodeDescriptionEN	Generates a list of the address elements changed in the Data Quality Management process in English.	Converts "SC200" to "Data Quality corrected the following address components: region, locality, primary type".
CF_AddressStatusCodeDescriptionJP	Generates a list of the address elements changed in the Data Quality Management process in Japanese.	Converts "SC400" to "Data Quality が下記の住所構成要素を訂正：都道府県, 市区町村, 丁目・番地".
CF_ContentDomainSequence	Generates a dynamic Content Domain Sequence based on the country for the Data Cleanse PERSON_FIRM cleansing package.	Generates "EN_US GLOBAL" when the country is "US"; generates "DE GLOBAL" when the country is "DE"; generates "PT_BR GLOBAL" when the country is "BR"; and so on.
CF_FirmFormBaseWordsEN	Converts words in English firm names to a base form to generate a field to form break groups for the matching process.	Converts variations such as Consultancy, Consultant, Consultants, Consultation, and Consulting to the base word "Consult".
CF_FirmRemoveNoise	Uses the language-specific FirmRemoveNoise functions to remove noise words from multi-national firm data to generate a firm field for the matching process.	Removes words such as "Inc." and "and" for countries where firm names are primarily in English, removes words such as "GmbH" and "und" for countries where firm names are primarily in German, removes words such as "S.A. de C.V." and "y" for countries where firm names are primarily in Spanish, removes words such as "株式会社" and "特例有限会社" for countries where firm names are primarily in Japanese, and so on.

Custom function	Description	Example
CF_FirmRemoveNoiseAR (Middle Eastern)	Removes language-specific noise words from firm data to generate a firm field for the matching process.	
CF_FirmRemoveNoiseBG (Bulgarian)		
CF_FirmRemoveNoiseCS (Czech)		
CF_FirmRemoveNoiseDA (Danish)		
CF_FirmRemoveNoiseDE (German)		
CF_FirmRemoveNoiseEL (Greek)		
CF_FirmRemoveNoiseEN (English)		
CF_FirmRemoveNoiseES (Spanish)		
CF_FirmRemoveNoiseET (Estonian)		
CF_FirmRemoveNoiseFI (Finnish)		
CF_FirmRemoveNoiseFR (French)		
CF_FirmRemoveNoiseHU (Hungarian)		
CF_FirmRemoveNoiseIT (Italian)		
CF_FirmRemoveNoiseJA (Japanese, both in Latin script and in Japanese scripts)		
CF_FirmRemoveNoiseMS (Malay)		
CF_FirmRemoveNoiseNL (Dutch)		
CF_FirmRemoveNoiseNO (Norwegian)		
CF_FirmRemoveNoisePL (Polish)		
CF_FirmRemoveNoisePT (Portuguese)		
CF_FirmRemoveNoiseRO (Romanian)		
CF_FirmRemoveNoiseSK (Slovak)		
CF_FirmRemoveNoiseSL (Slovenian)		
CF_FirmRemoveNoiseSR (Serbian)		
CF_FirmRemoveNoiseSV (Swedish)		
CF_FirmRemoveNoiseZH (Chinese)		
CF_FirmStandardizeWordsEN	Performs data standardization to English firm words additional to Data Cleanse.	Converts a common misspelling such as "Internacional" to "International".
CF_GeoInfoCodeDescriptionEN	Generates a description in English for the Geocoder information code.	Converts "004" to "The input data is insufficient or incorrect to match the reference data".
CF_PersonInitCapPrefix	Capitalizes the first letter of each person name prefix.	Converts "van Helsing" to "Van Helsing", and converts "de los Angeles" to "De Los Angeles".

<b>Custom function</b>	<b>Description</b>	<b>Example</b>
CF_PhoneFormatBR	Formats Brazilian phone numbers.	+55 (11) 3074-2404
CF_PhoneFormatCN	Formats Chinese phone numbers.	+86 (0)21 66861350, +86 18957205580
CF_PhoneFormatDE	Formats German phone numbers.	+49 (0)30 8959760 +49 (0)711 7317020
CF_PhoneFormatFR	Formats French phone numbers.	+33 (0)1 41 92 70 74
CF_PhoneFormatIN	Formats Indian phone numbers.	+91 (0)33 2283 4487 +91 (0)4347 233 465
CF_PhoneFormatJP	Formats Japanese phone numbers.	+81 3-5655-7650 +81 862-54-4877
CF_PhoneFormatMX	Formats Mexican phone numbers.	+52 (55) 56-69-03-70 +52 (614) 429-61-15
CF_PrenameConvertDA	Generates the Danish prenames Hr. and Fr.	Hr. Børge Jensen Fr. Susanne Petersen
CF_PrenameConvertDE	Generates the German prenames Hr. and Fr.	Hr. Hans Müller Fr. Anne Katrin Schmid
CF_PrenameConvertES	Generates the Spanish prenames Sr. and Srta.	Sr. Juan Fernández Srta. Ana Luisa Torres
CF_PrenameConvertFR	Generates the French prenames M. and Mme.	M. Jean Claude Rousseau Mme Evelyne Breton
CF_PrenameConvertHU	Generates the Hungarian prenames Úr and Úrnő.	Nagy Benci Úr Szabó Annabella Julia Úrnő
CF_PrenameConvertIT	Generates the Italian prenames Sig. and Sig.ra.	Sig. Antonio Boscolo Sig.ra Giuseppina Francesca Romanò
CF_PrenameConvertNL	Generates the Dutch prenames dhr. and mevr.	dhr. Hans Budjawan mevr. Petronella IJpenberg
CF_PrenameConvertPL	Generates the Polish prenames Pan and Pani.	Pan Piotr Kowalski Pani Maria Magdalena Wisniewska

<b>Custom function</b>	<b>Description</b>	<b>Example</b>
CF_PrenameConvertPT	Generates the Portuguese pre- names Sr. and Sra.	Sr. João Lopes  Sra. Renata Macedo
CF_PrenameConvertSV	Generates the Swedish prenames hr. and fr.	hr. Erik Åström  fr. Karin Lindberg
CF_RemoveDiacriticalCharacters	Converts letters with diacritical characters to the equivalent letter(s) without diacritics.	Converts "beschränkter" to "bes- chraenkter".
CF_RemoveProfanityEN	Removes English profanity words.	Converts "@&%!# Automaker Corp." to "Automaker Corp."
CF_RemoveSpecialCharacters	Removes special characters from a string.	Converts "C-H-R Automaker Corp. (Group)" to "CHR Automaker Corp Group".
CF_RemoveSpecialCharactersSpace	Removes special characters from a string and leaves a space in their place.	Converts "C-H-R Automaker Corp. (Group)" to "C H R Automaker Corp Group".

# 10 Glossary



<b>Entity Extraction</b>	The process of discovering and presenting specific entities and facts that occur in unstructured text.
<b>linguistic analysis</b>	Natural-language processing (NLP) capabilities, such as segmentation, stemming, and tagging, among other things. Entity Extraction analyzes unstructured text, in multiple languages from any text data source, and automatically identifies and extracts key entity types, including people, dates, places, organizations, or other information, from the text.
<b>text data processing</b>	Software that lets you perform linguistic analysis of and extraction of content from unstructured text.
<b>topic</b>	In linguistic analysis, represents what a sentiment or request is about.
<b>voice of the customer content</b>	A set of rules in SAP Data Services text data processing software that address requirements for extracting customer sentiments and requests. You can use this content to retrieve specific information about your customers' needs and perceptions when processing and analyzing text.

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