



Informatica Data Quality Integration for
PowerCenter (Version 9.6.0)

User Guide

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Preface

The Informatica Data Quality Integration plug-in enables PowerCenter users to work with data quality maplets and mappings imported from the Informatica Model repository. The *Informatica Data Quality Integration for PowerCenter Guide* is written for PowerCenter users who must install the plug-in or work with data quality maplets and mappings in the PowerCenter repository. This guide assumes you are familiar with PowerCenter administration tools and can install applications on PowerCenter machines.

Informatica Resources

Informatica My Support Portal

As an Informatica customer, you can access the Informatica My Support Portal at <http://mysupport.informatica.com>.

The site contains product information, user group information, newsletters, access to the Informatica customer support case management system (ATLAS), the Informatica How-To Library, the Informatica Knowledge Base, Informatica Product Documentation, and access to the Informatica user community.

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Informatica Marketplace

The Informatica Marketplace is a forum where developers and partners can share solutions that augment, extend, or enhance data integration implementations. By leveraging any of the hundreds of solutions available on the Marketplace, you can improve your productivity and speed up time to implementation on your projects. You can access Informatica Marketplace at <http://www.informaticamarketplace.com>.

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The telephone numbers for Informatica Global Customer Support are available from the Informatica web site at <http://www.informatica.com/us/services-and-training/support-services/global-support-centers/>.

CHAPTER 1

Informatica Data Quality Integration

This chapter includes the following topics:

- [Data Quality Integration Overview, 1](#)
- [Data Quality Features and Functionality, 2](#)
- [Integration Installers, 2](#)
- [Object Import to PowerCenter, 3](#)
- [Reference Data Installation, 3](#)
- [Data Quality Transformations in PowerCenter, 3](#)
- [Concurrent Installations and Product Upgrades, 6](#)
- [Integration Matrix, 7](#)

Data Quality Integration Overview

Use objects created in Informatica Data Quality to analyze the content and structure of data and enhance data in ways that meet business objectives.

Informatica users can create and run mappings in Informatica Data Quality. The users save the mappings and other objects to the Model repository. Users can export the objects for use in PowerCenter. As a PowerCenter user, you can import the objects to the repository, and you can add the repository objects to sessions.

You can use objects created in Informatica Data Quality 9.6.0 with the following versions of PowerCenter:

- PowerCenter 9.6.0.
- PowerCenter 9.5.1.
- PowerCenter 9.1 with the latest HotFix installed.

If you use the current version of Data Quality and PowerCenter, you can import objects that originate in the Model repository without any additional installation. If you use an older of PowerCenter, you must install and register the current version of the Informatica Data Quality Integration plug-in.

Data Quality Features and Functionality

Informatica Data Quality uses Informatica applications to create objects, save objects to the Model repository, and run mappings.

You may need to install the Informatica Data Quality Plug-in for PowerCenter if you do not use the current product versions.

Use Informatica Data Quality to design and run mappings that achieve the following objectives:

- Profile data. Profiling reveals the content and structure of your data. Profiling is a key step in any data project, as it can identify strengths and weaknesses in your data and help you define your project plan.
- Create scorecards to review data quality. A scorecard is a graphical representation of the quality measurements in a profile.
- Standardize data values. Standardize data to remove errors and inconsistencies that you find when you run a profile. You can standardize variations in punctuation, formatting, and spelling. For example, you can ensure that the city, state, and ZIP code values are consistent.
- Parse records. Parse data records to improve record structure and derive additional information from your data. You can split a single field of freeform data into fields that contain different information types. You can also add information to your records. For example, you can flag customer records as personal or business customers.
- Validate postal addresses. Address validation evaluates and enhances the accuracy and deliverability of your postal address data. Address validation corrects errors in addresses and completes partial addresses by comparing address records against reference data from national postal carriers. Address validation can also add postal information that speeds mail delivery and reduces mail costs.
- Find duplicate records. Duplicate record analysis compares a set of records against each other to find similar or matching values in selected data columns. You set the level of similarity that indicates a good match between field values. You can also set the relative weight given to each column in match calculations. For example, you can prioritize surname information over forename information.
- Create and run data quality rules. Informatica provides pre-built rules that you can run or edit to suit your project objectives. You can create rules in the Developer tool.
- Collaborate with Informatica users. The rules and reference data tables you add to the Model repository are available to users in the Developer tool and the Analyst tool. Users can collaborate on projects, and different users can take ownership of objects at different stages of a project.
- Export mappings to PowerCenter. You can export mappings to PowerCenter to reuse the metadata for physical data integration or to create web services.

Integration Installers

If you use different versions of Data Quality and PowerCenter to create and store objects, install the Informatica Data Quality Plug-in for PowerCenter. Download the plug-in installers from Informatica.

Install the plug-in version for the version of PowerCenter that you want to use. The plug-in has Client and Server installers.

Run the Client installer on the PowerCenter client machine to view maplets and mappings in the repository and add them to sessions. Run the Server installer on the PowerCenter Integration Service machine to run the sessions in workflows.

After you install the plug-in on the Integration Service machine, register the plug-in with the PowerCenter repository.

Object Import to PowerCenter

Use the Developer tool to export objects such as mapplets and mappings from the Informatica Model repository. Use the PowerCenter Repository Manager to import XML objects to the PowerCenter repository.

- For information about exporting objects from the Informatica Model repository, see the *Informatica Developer User Guide*.
- For information about importing objects to the PowerCenter repository, see the *PowerCenter Repository Guide*.

Reference Data Installation

If a mapplet or mapping reads reference data files, install the reference data files on the PowerCenter Integration Service machine.

You can use the Developer tool to export reference data from the Model repository when you export a mapplet or mapping. The Developer exports the reference data as a compressed file. You extract the file and copy the reference data to the Integration Service machine.

You can also use the Data Quality Content Installer to add reference data to the Integration Service machine. Run the Content Installer to install address reference data files and identity population data files.

Data Quality Transformations in PowerCenter

When you import a data quality mapplet or mapping from the Model repository to the PowerCenter repository, the data quality transformations change.

All data quality transformations created in the Developer tool appear with the digit 9 added to their icons in PowerCenter Designer.

Multi-Strategy Transformations

You can define multiple data transformation strategies within each of the following transformations in the Developer tool:

- Case
- Classifier
- Decision
- Key Generator
- Labeler
- Match

- Merge
- Parser
- Standardizer

When you import a mapplet or mapping that contains a multistrategy transformation, each strategy converts to a separate transformation.

Conversion to Mapplets

The following transformations can convert to mapplets when imported to the PowerCenter repository:

- Consolidation
- Exception
- Key Generator
- Match

When you import a mapping that contains one or more of these transformations, PowerCenter converts each transformation to a mapplet that contains the expanded configuration.

When you import a mapplet that contains one or more of these transformations, PowerCenter expands the configuration of each transformation into multiple transformations.

PowerCenter may add transformations to the data quality transformation or mapplet expansion to complete the transformation logic. For example, PowerCenter expands the Match transformation with additional transformations.

Exception Transformation Considerations

PowerCenter version 9.5 or later cannot use an Exception transformation that originates in an earlier PowerCenter repository. If you upgrade a PowerCenter repository to version 9.5 or later and the repository contains a mapping with an Exception transformation, export the mapping again. Create the mapping again in the Developer tool if required.

When you run a mapping that includes an Exception transformation, you can update the bad record or duplicate record output tables in the Analyst tool. If you plan to update a bad record table in the Analyst tool, you must enable high precision on the session that runs the mapping.

Consolidation Transformation Considerations

Informatica Data Quality updates the default strategy setting on the Consolidation transformation in version 9.5.1. By default, the transformation selects the record with the highest row ID as the survivor record. In earlier releases, the Consolidation transformation used the most frequent nonblank value in a specified column to identify the survivor record.

If you upgrade a PowerCenter repository that contains a Consolidation transformation that uses the default settings, the upgrade maintains the most frequent nonblank value as the default setting. If you import a mapping that contains a Consolidation transformation that uses the default settings from a 9.5.1 Model repository, the transformation uses the highest row ID to identify the survivor record.

Partition Settings

When you run a session on a grid, the Data Transformation Manager process (DTM) distributes session threads across nodes of the grid. Some transformations are not partitionable across a grid. When a transformation is not partitionable across a grid, the DTM creates a single partition group for the transformation threads and it runs the threads on a single node.

The following table describes the partition settings for data quality transformations:

Transformation	Partition Setting
Address Validation	Across grid
Association	Not partitionable
AV Report	Locally partitionable
Case Converter	Across grid
Classifier	Locally partitionable
Cluster	Not partitionable
Comparison	Across grid
Consolidation	Not partitionable
Decision	Across grid
Exception	Not partitionable
Execution Point	Across grid
Key Generator	Not partitionable
Key Store	Not partitionable
Labeler	Across grid
Merge	Across grid
Pair Generator	Not partitionable
Parser (probabilistic analysis)	Locally partitionable
Parser	Across grid
Token Standardizer	Across grid
Weight Based Analyzer	Across grid

Concurrent Installations and Product Upgrades

You can export objects from different versions of Informatica Data Quality to different versions PowerCenter. Install the Integration plug-in for the version of Informatica Data Quality that created. In some cases, you must install more than one version of the plug-in.

Using Data Objects in the Informatica 9 Environment

Consider the following cases when you integrate Informatica Data Quality version 9 or later and PowerCenter version 9 or later:

- Do not install the Integration plug-in if the PowerCenter repository version matches the Model repository version.

For example, you can export data quality objects from the 9.5 Model repository to the PowerCenter 9.5 repository with no additional installation. To use data quality objects from Data Quality 9.5 in PowerCenter 9.1, install the Data Quality 9.5 Integration plug-in on the PowerCenter machine. After you install, register the 9.5 plug-in with the PowerCenter repository.
- You cannot run two Data Quality 9.x Integration plug-ins on the same PowerCenter machine. For example, if you install the Data Quality 9.5 Integration plug-in on a PowerCenter 9.1 machine, you can no longer import objects from the Data Quality 9.1 Model repository to the PowerCenter repository. You can continue to use any data quality object that you imported to the PowerCenter 9.1 repository prior to installation of the 9.5 plug-in.
- The 9.x versions of the Integration plug-in do not permit you to edit data quality mapplets or mappings. The plug-in permits you to import objects from the corresponding version of Informatica Data Quality, but not from other versions. The conditions also apply when a 9.x plug-in and an 8.6.2 plug-in are installed concurrently.
- PowerCenter 9.0 does not support mapplets and mappings created in Informatica Data Quality 9.0.1 or later. PowerCenter 9.0 users can upgrade to PowerCenter 9.0.1 or later to run mapplets and mappings created in Informatica Data Quality 9.0.1 or later.

The following components and objects are not compatible with an Informatica Data Quality 9.x Integration plug-in:

- The Informatica Data Quality 8.6.1 Integration plug-in or earlier Integration plug-ins.
- Mapplets or mappings that contain objects created in Informatica Data Quality 8.5.
- Mapplets or mappings that contain objects created in Informatica Data Quality 9.0.

Exporting Data Objects from Informatica 9.1 to PowerCenter 8.6.1

You can export data quality objects from the Data Quality 9.1 Model repository to a PowerCenter 8.6.1 repository. Install the 9.1 Integration plug-in on the PowerCenter machine, and register the plug-in with the PowerCenter repository. You cannot export data quality objects from later versions of the Model repository to a PowerCenter 8.6.1 repository

Using Data Quality 8 Objects in PowerCenter Repositories

You can export data quality objects from a Data Quality 8.6, 8.6.1, or 8.6.2 repository to a PowerCenter 8.6 or 8.6.1 repository. Install the Data Quality 8.6.2 Integration plug-in on the PowerCenter machine, and register the plug-in with the PowerCenter repository.

If you upgrade a PowerCenter 8.6.1 repository to a PowerCenter 9.x repository, and the upgraded repository contains Data Quality 8.6.x objects, install the 8.6.2 Integration plug-in on the upgraded PowerCenter 9.x system. Download the current 8.6.2 Integration plug-in installer from Informatica.

Note: Verify that the Data Quality 8.6.2 Integration plug-in is installed and registered on the PowerCenter 8.6.1 machine before you upgrade PowerCenter 8.6.1.

The 8.6.2 Integration plug-in contains a Client installer that you run on the PowerCenter client machine and a Server patch that you apply to the PowerCenter Integration Service machine. When you run the Server patch on PowerCenter version 9.1 or later, remove the `libstdc++.so` file from the `$ATHANOR_HOME/bin` directory.

Run the Client installer and apply the Server patch before you register the plug-in.

Address Validation Considerations

You cannot use Data Quality 8.6, 8.6.1, or 8.6.2 address validation components in PowerCenter 9.x. To perform address validation operations in PowerCenter 9.x, create a mapping in the corresponding version of Data Quality and export the mapping to PowerCenter.

Integration Matrix

The data quality objects you can use depend on the Data Quality version that created the objects and the PowerCenter version that uses the objects. You can export objects and reference data from Data Quality to PowerCenter. You cannot export objects or reference data from PowerCenter to Data Quality.

The following table shows the product versions that you can integrate:

	Power-Center 9.6.0	Power-Center 9.5.1	Power-Center 9.5	Power-Center 9.1	Power-Center 9.0.1	Power-Center 9.0	Power-Center 8.6.1
Data Quality 9.6.0	Integration is supported. No additional installation needed.	Integration is supported. Install the client and server Integration plug-ins.	Integration is not supported.	Integration is supported. Install the client and server Integration plug-ins.	Integration is not supported.	Integration is not supported.	Integration is not supported.
Data Quality 9.5.1	Integration is not supported.	Integration is supported. No additional installation needed.	Integration is supported. Install the client and server Integration plug-ins.	Integration is supported. Install the client and server Integration plug-ins.	Integration is not supported.	Integration is not supported.	Integration is not supported.
Data Quality 9.5	Integration is not supported.	Integration is not supported.	Integration is supported. No additional installation needed.	Integration is supported. Install the client and server Integration plug-ins.	Integration is supported. Install the client and server Integration plug-ins.	Integration is not supported.	Integration is not supported.

	Power-Center 9.6.0	Power-Center 9.5.1	Power-Center 9.5	Power-Center 9.1	Power-Center 9.0.1	Power-Center 9.0	Power-Center 8.6.1
Data Quality 9.1	Integration is not supported.	Integration is not supported.	Integration is not supported.	Integration is supported. No additional installation needed.	Integration is supported. Install the client and server Integration plug-ins.	Integration is not supported.	Integration is supported. Install the client and server Integration plug-ins.
Data Quality 9.0.1	Integration is not supported.	Integration is not supported.	Integration is not supported.	Integration is not supported.	Integration is supported. No additional installation needed.	Integration is not supported.	Integration is supported. Install the client and server Integration plug-ins.
Data Quality 9.0	Integration is not supported.	Integration is not supported.	Integration is not supported.	Integration is not supported.	Integration is not supported.	Integration is supported. No additional installation needed.	Integration is supported. Install the client and server Integration plug-ins.
Data Quality 8.6.2	Integration is not supported.	Integration is not supported.	Integration is not supported.	Integration is not supported.	Integration is not supported.	Integration is not supported.	Integration is supported. Install the client and server Integration plug-ins.

CHAPTER 2

Installation

This chapter includes the following topics:

- [Installation Overview, 9](#)
- [System Requirements, 9](#)
- [Before You Install, 10](#)
- [Installing the Server Plug-in, 10](#)
- [Installing the Client Plug-in, 11](#)
- [Registering the Plug-In with PowerCenter, 12](#)

Installation Overview

You can install the Data Quality 9.5.1 Integration plug-in on PowerCenter 9.5 and 9.1 machines.

Complete the following steps to install and register the plug-in:

1. Run the Server installer on the PowerCenter Integration Service machine.
2. Run the Client installer on the PowerCenter Client machine. This enables PowerCenter to display the data quality objects in the repository.
3. Register the `IDQZIntegration.xml` file with the PowerCenter repository.

System Requirements

The Informatica Data Quality Integration plug-in has the same system requirements as the PowerCenter applications and services to which it installs.

For information about PowerCenter prerequisites and system requirements, consult the PowerCenter installation documentation.

Before You Install

Consider the following installer behavior if you use reference data in PowerCenter.

The Integration plug-in installer writes property files to the PowerCenter Integration Service machine. The property files specify the locations of the reference data files that data quality mappings can read.

The installer writes the following files:

- AD50.cfg. Stores configuration properties for address reference data.
- CLASSIFIER.properties. Stores configuration properties for classifier model data.
- IDQTx.cfg. Stores configuration properties for identity population data.
- NER.properties. Stores configuration properties for probabilistic model data.

The installer adds the files to the following directory:

```
[PowerCenter_installation]/server/bin]
```

If the installer finds a property file in the `bin` directory, it creates a backup copy of the file and installs a new file. To keep the current reference data configuration after you install, merge the contents of the old and new files.

If you install PowerCenter 9.5.1 or a later version, the server installation process adds the property files to the `bin` directory by default.

Address Reference Data Prerequisite

Before you install address reference data, stop the PowerCenter Integration Service. Restart the service after you install the data.

Installing the Server Plug-in

The Informatica Data Quality Integration Server plug-in installer adds data quality transformation application files to the PowerCenter Integration Service directory structure.

Installing on Windows

Run the Windows Server installer to add the plug-in to a PowerCenter Integration Service machine on a Windows platform.

Close all applications before installing.

1. Log in to the machine with a system user account.
2. Extract the Integration Server file for Windows.
3. Browse to the directory where you extracted the files and run `install.exe`.
4. Select a language and click **OK**.
5. On the **Welcome** screen, click **Next**.
6. Verify that PowerCenter services are not running and click **OK**.
7. Specify the path to the PowerCenter installation directory. The installer provides a default path to this directory. To select another path, click **Choose**.
8. Click **Next**.

9. Review the pre-installation summary. Click **Previous** to fix any error.
10. Click **Install**.
11. Review the post-installation summary.
For more information about installation tasks and to view configuration properties for the installed components, view the installation log files.
12. Click **Done**.

Installing on UNIX

Run the UNIX Server installer to add the plug-in to a PowerCenter Integration Service machine on a UNIX platform.

1. Log in to the machine with a system user account.
2. Close all other applications.
3. Extract the Integration Server file for UNIX.
4. Open a UNIX shell and navigate to the directory where you extracted the installation files.
5. Enter `sh install.bin`.
6. To accept English as the installation language, press **Enter**.
7. Read the Welcome text and press **Enter**.
8. Type an absolute path to the PowerCenter installation directory, or press **Enter** to accept the default path.
9. Review the pre-installation summary. To fix any error, type `back` and press **Enter**.
10. Press **Enter** to start the installation.
11. Review the post-installation summary.
For more information about installation tasks and to view configuration properties for the installed components, view the installation log files.
12. Press **Enter** to complete the installation process.

Installing the Client Plug-in

Run the Data Quality Integration Client installer on PowerCenter Client machines.

1. Close all other applications.
2. Extract the Integration Client file.
3. Open the directory where you extracted the files.
4. Run `install.exe`.
5. On the **Welcome** screen, click **Next**.
The installer displays a prompt to close PowerCenter client applications before continuing the installation.
6. Verify that no PowerCenter client applications are running and click **OK**.
7. Specify the path to the PowerCenter Client directory. The installer provides a default path to this directory. To select another path, click **Choose**.

8. Click **Next**.
9. Review the pre-installation summary. Click **Previous** to fix any error.
10. Click **Install**.
11. Review the post-installation summary.
For more information about installation tasks and to view configuration properties for the installed components, view the installation log files.
12. Click **Done**.

Registering the Plug-In with PowerCenter

Register the plug-in with any PowerCenter repository that you want to contain data quality objects.

The Integration installer writes `IDQZIntegration.xml` to the `$INFA_HOME\server\bin\native` directory on the PowerCenter Integration Service machine. Verify that you can access this file. If required, copy or FTP this file to the PowerCenter Integration Service machine.

If you do not have the correct privileges to register the plug-in, contact the PowerCenter Repository Service administrator.

1. Open the PowerCenter Administration Console.
2. In the Navigator, select the repository you want to use for data quality objects.
3. Run the Repository Service in exclusive mode.
4. Click the **Plug-ins** tab.
5. Click the **Register Repository Service plug-in** link.
6. Click **Browse** to find the `IDQZIntegration.xml` file.
7. To overwrite the registration of an older Integration plug-in, select the option to update the plug-in registration.
8. Enter your repository user name and password.
9. Click **OK**.

The Repository Service registers the plug-in with the repository. The results of the registration operation appear in the activity log.

10. Run the Repository Service in normal mode.

CHAPTER 3

Reference Data Requirements

This chapter includes the following topics:

- [Reference Data Overview, 13](#)
- [Reference Data File Requirements, 14](#)
- [Address Reference Data Requirements, 15](#)
- [Identity Population Data Requirements, 16](#)
- [Probabilistic Model and Classifier Model Requirements, 17](#)

Reference Data Overview

Data quality transformations can read reference data. If any transformation in the PowerCenter repository reads reference data, verify that the reference data files are present in the PowerCenter environment.

Data quality transformations in PowerCenter can use the following types of reference data:

Reference data files

Text files that contain the standard versions of business terms and alternative versions of the terms. You can edit reference data files.

Address reference data files

Data files that contain complete data for all postal addresses in a country. You install address reference data files on the PowerCenter Integration Service machine. You cannot edit address reference data files.

Identity population files

Data files that define different types of identity and contain algorithms used by the Match transformation. You install population files on the PowerCenter services machine. You cannot edit population files.

Content sets

Data files that contain reference data specified by one or more transformations. When you export a mapping that reads content sets, the export process exports the content set data with the transformation metadata. In the case of classifier and probabilistic model files, the process exports the file data from the Data Quality directory structure.

Reference Data File Requirements

A data quality mapping can read reference data objects that are defined in the Model repository.

When an Informatica Data Quality user exports a mapping that reads a reference data object, the export process writes the reference data to the file system as one or more reference data files. When you use the mapping in PowerCenter, you must verify that the files are installed at a location that the Integration Service can read.

You specify the file location for the reference data files when you export the mapping. Export the files into the PowerCenter directory structure, or export the files to the file system and copy the files to the PowerCenter Integration Service machine.

The reference data file locations in the PowerCenter directory structure must correspond to the reference table locations in the Model repository structure. The directory structure must follow this format:

```
<PowerCenter_Root_Directory>\services\<Model_Repository_Project_Name>\<Model_Repository_Project_Folder_Name>
```

Note: PowerCenter reads reference data files in UTF-8 format. The Developer tool exports reference data to PowerCenter in UTF-8 format.

Installing Reference Data from the Data Quality Content Installer

The Data Quality Content Installer file set includes reference data files that it to the PowerCenter directory structure.

You identify the PowerCenter installation directory when you run the Content Installer. By default, the Content Installer appends the following path to the root:

```
\services\DQContent\INFA_Content\
```

Edit the path to match the Model repository structure, or copy the reference data files to the required path after you run the Content Installer.

Using an Environment Variable to Define the reference data File Location

You can define an *INFA_CONTENT* environment variable on the PowerCenter Integration Service machine to set the path that the Integration Service uses to read reference data files.

Use this environment variable if you cannot install the reference data files in the required location on the PowerCenter Integration Service machine. Install the files in a location that the PowerCenter Integration Service can read, and create the *INFA_CONTENT* environment variable with the installed path.

Address Reference Data Requirements

A mapping that performs address validation reads address reference data. You purchase and download address reference data from Informatica. Copy the data files to the PowerCenter Integration Service machine.

The following table describes the types of address reference data you can install:

Type of Reference Data	When To Use
Batch	Use for general address validation operations.
CAMEO	Use to add consumer demographic data to the address records.
Certified	<p>Use to verify that address records meet the certification standards that a mail carrier defines.</p> <p>The following countries define certification standards:</p> <ul style="list-style-type: none">- Australia. Certifies mail according to the Address Matching Approval System (AMAS) standard.- Canada. Certifies mail according to the Software Evaluation And Recognition Program (SERP) standard.- France. Certifies mail according to the National Address Management Service (SNA) standard.- New Zealand. Certifies mail according to the SendRight standard.- United States. Certifies mail according to the Coding Accuracy Support System (CASS) standard.
Suggestion list	Use to find alternative valid versions of an incomplete address record. Use suggestion list data when you configure an address validation mapping to process single address records in real time.
Geocode	Use to add latitude coordinates and longitude coordinates to the address records.
Supplementary	<p>Use to identify the geographical area or population area that contains an address.</p> <p>The Address Validator transformation can add supplementary data to address records from the following countries:</p> <ul style="list-style-type: none">- Japan. Identifies the urban district that contains the address.- Serbia. Identifies the street-level postal code for the address.- United Kingdom. Adds a delivery point identifier to the address.- United States. Identifies the population center that contains the address.

You can also use the Data Quality Content Installer to install the address reference data. Run the Server Content Installer on the PowerCenter Integration Service machine to install the files.

The Data Quality Content Installer creates an `/av/` directory in the PowerCenter directory structure and writes address reference data to that directory. The PowerCenter Integration Service reads the path to the address reference data from the `AD50.cfg` configuration file.

The PowerCenter installer writes the `AD50.cfg` file to the following path:

```
[PowerCenter_Installation]/server/bin
```

When you install address reference data, verify the following properties are set in `AD50.cfg`:

Reference Data Location

Enter the path to the address reference data in the `ReferenceDataLocation` property.

License Key Data

Enter license data in the `LicenseKey` property. If you have more than one license, enter each license in a comma-separated string.

Preload Values

Enter at least one country abbreviation as a preload value for each type of reference data that a mapping reads. Enter ALL to apply a preload setting for all countries.

The Integration Service can use a different method to load data for each country. For example, you can specify full preload for United States batch/interactive data and partial preload for United Kingdom batch/interactive data. The Integration Service can also use a different preload method for each type of data. For example, you can specify full preload for United States batch/interactive data and partial preload for United States geocoding data.

Full preload settings supersede partial preload settings, and partial preload settings supersede settings that indicate no data preload. For example, if you enter ALL for no data preload and enter USA for full preload, the Integration Service loads all United States data into memory and does not load data for any other country. If you do not have a preload requirement, enter ALL for no data preload for any type of reference data that you plan to use.

You do not specify a preload value for Supplementary data.

You can optionally edit other properties in `AD50.cfg`.

Note: Informatica Data Quality 9.x does not read the `AD50.cfg` file. Informatica Data Quality 9.x users enter the reference data location, license key information, and preload values through the Administrator tool.

Identity Population Data Requirements

A mapping that performs identity match analysis reads reference data files called identity populations. You purchase and download identity population files from Informatica. Copy the identity population files to the PowerCenter Integration Service machine.

You can also use the Data Quality Content Installer to install the identity population files. Run the Server Content Installer on the PowerCenter Integration Service machine to install the files.

The PowerCenter Integration Service can read the location of the installed population files from the `IDQTx.cfg` configuration file or the `SSAPR` environment variable. The Integration Service looks for the location in `IDQTx.cfg`. If `IDQTx.cfg` does not specify the location, the Integration Service looks for the location in the `SSAPR` environment variable.

The PowerCenter installer writes the `IDQTx.cfg` file to the following path:

```
[PowerCenter_Installation]/server/bin
```

The file uses the `IdentityReferenceDataLocation` property to specify the location of the population files. By default, the property is not set. You must update the property with the current location when you install identity population files

The following path identifies the default location for identity population files on a PowerCenter Integration Service machine:

```
C:\Informatica\9.5.1\services\DQContent\INFA_Content\identity
```

If you enter a relative path for the property, add the `IDQTx.cfg` configuration file to the path and start the path in the directory that contains the `IDQTx.cfg` file.

If you do not set the property, PowerCenter looks for the location in the SSAPR environment variable.

IDQTx.cfg Properties

When you set the IdentityReferenceDataLocation property in the IDQTx.cfg file, you can also set the following properties:

IdentityCacheDir

Default path to the directory that stores temporary data files created when the mapping runs. The path identifies a parent directory. The Integration Service writes the temporary files to directories below the location. The property has the following default setting:

```
./identityCache
```

IdentityIndexDir

Default path to the directory that contains the temporary index files created when the mapping runs. Identity match analysis uses the index to sort records into groups prior to match analysis. The property has the following default setting:

```
./identityIndex
```

The path identifies a parent directory. The Integration Service writes the index files to directories below the location.

The mapping developer can set the cache directory and index directory paths in the Match transformation. The Integration Service uses the paths defined in IDQTx.cfg file if the Match transformation does not specify the paths.

Probabilistic Model and Classifier Model Requirements

Probabilistic models and classifier models are reference data files that identify the types of information in a data string. Before you run a mapping that reads a probabilistic model or classifier model file, you configure PowerCenter to read the files.

Perform the following configuration tasks:

- Verify the model file locations in the PowerCenter directory structure.
- Update the Java memory allocation on the PowerCenter Integration Service.

Probabilistic Model and Classifier Model File Locations

When you export a mapping that reads probabilistic model or classifier model data, you specify a directory location for the exported model data file. Export the file to the PowerCenter directory structure, or export the file to the file system and copy it to the PowerCenter services machine.

By default, the PowerCenter Integration Service reads the model files from the following directory:

```
[PowerCenter_Installation]/server/bin
```

If the files are not in the default location, the PowerCenter Integration Service reads the file locations from property files. You update the property files with the paths to the model files.

The following table describes the property files:

File Name	Description
CLASSIFIER.properties	Contains the <i>ClassifierFileLocation</i> property. Update the property to identify the path to the classifier model files.
NER.properties	Contains the <i>NERFileLocation</i> property. Update the property to identify the path to the probabilistic model files.

The PowerCenter Integration Service reads the property files from the following directory:

```
[PowerCenter_Installation]/server/bin
```

You can set an absolute path or a relative path to identify the model file locations in each property file. If you set a relative path, the PowerCenter Integration Service adds the path to the following directory:

```
[PowerCenter_Installation]/server/bin
```

Note: Use forward slashes to define the directory paths to the model files on all platforms.

PowerCenter Integration Service Memory Allocation

A PowerCenter Integration Service uses large amounts of memory to read a classifier model file or a probabilistic model file. If the PowerCenter Integration Service cannot access the required memory, it fails to read the model file and it cannot process the data.

Review the memory allocation on the PowerCenter Integration Service. If you run sessions that reference a classifier model file or a probabilistic model file, set the minimum memory allocation to 512 MB.

Use the *Java SDK Maximum Memory* process property to allocate the memory. To review or update the property, log in to the Administrator tool and select the PowerCenter Integration Service that runs the session tasks. You find the *Java SDK Maximum Memory* property on the **Processes** view.