

Importing PowerExchange Nonrelational Data Objects into Informatica Developer

Abstract

This article describes how to import PowerExchange data maps into the Developer tool as nonrelational data objects. You can then use the tables that the nonrelational data object contains in mappings, mapplets, and profiles.

Supported Versions

- PowerExchange 9.0.1
- Informatica Developer 9.0.1

Table of Contents

Introduction.	2
Task Flow.	2
Step 1. Install PowerExchange.	3
Step 2. Modify the PowerExchange Configuration Files.	3
Step 3. Create a Connection.	4
Step 4. Import a Nonrelational Data Object.	5
Step 5. View the Source Data.	6
Step 6. Create a Mapping, Mapplet, or Profile.	6

Introduction

You can import PowerExchange data maps for nonrelational data sources into Informatica Developer (the Developer tool) as nonrelational data objects. You can then use the tables that the nonrelational data object contains in mappings, mapplets, and profiles.

You can import nonrelational data objects for the following types of connections in the Developer tool:

- IMS
- Sequential
- VSAM

Use the PowerExchange Navigator to create data maps for nonrelational data sources. When you import a nonrelational data object, the Developer tool reads the metadata for the object from its data map. A data map maps nonrelational records to relational tables so that the product can use the SQL language to access the data.

In the Developer tool, a relational table representation of a nonrelational record is referred to as a nonrelational operation. You can include a nonrelational operation in a mapping, mapplet, or profile.

Task Flow

Before you import nonrelational data objects into the Developer tool, complete the following tasks:

- Install and configure PowerExchange on the Windows machine that will run the PowerExchange Navigator and on the nonrelational source system.
- From the PowerExchange Navigator, create the data maps that you plan to import.
- Install and configure the Informatica platform.

To import nonrelational data objects into the Developer tool, complete the following tasks:

1. Install PowerExchange on the Developer tool machine and the Data Integration Service machine.
2. Modify the PowerExchange configuration files.
3. Create a connection object.
4. Import the data maps.
5. View the source data.
6. Create the mapping, mapplet, or profile.

Step 1. Install PowerExchange

Install PowerExchange on the following machines:

- Developer tool machine. (If you are already running the PowerExchange Navigator on this machine, skip this step.) The Developer tool connects to a PowerExchange Listener to import metadata for the physical data objects that you define.
- Data Integration Service machine. The Data Integration Service connects to a PowerExchange Listener to extract, load, or preview data.

For more information, see the *PowerExchange Installation Guide*.

Step 2. Modify the PowerExchange Configuration Files

For each PowerExchange Listener, define a NODE statement in the PowerExchange configuration file, `dbmover.cfg`, on the Developer tool machine and on the Data Integration Service machine. The NODE statements specify the information that PowerExchange uses to connect to the Listeners that access the data maps and source or target databases or files.

In the NODE statement, the `node_name` parameter corresponds to the Location value that you define for the connection in the Developer tool.

To add PowerExchange nodes in the `dbmover.cfg` file:

1. Open the `dbmover.cfg` file in a text editor.

The file is located in the PowerExchange root directory by default.

2. Define a NODE statement for each PowerExchange Listener that you want to connect to. Use the following format:

```
NODE=(node_name,TCPIP,hostname_or_ipaddress,port_number)
```

The `node_name` is a logical name used to reference the PowerExchange Listener. The `hostname_or_ipaddress` and `port_number` are the host name or IP address and the port number that PowerExchange uses to contact the PowerExchange Listener process.

3. Save your changes.

The following example shows NODE statements in a `dbmover.cfg` file:

```
/* *****  
/* PowerExchange Configuration File  
/* *****  
NODE=(MVS1_VSAM,TCPIP,MVS1,5539)  
NODE=(MVS2_IMS,TCPIP,10.3.4.5,5538)
```

Step 3. Create a Connection

Create a connection for the nonrelational data source.

To create a connection, you must first start the Developer tool and connect to a repository.

1. Click **Window > Preferences**.
2. Select **Informatica > Connections**.
3. Expand the domain.
4. Expand the Non-relational folder, and select the **IMS, Sequential**, or **VSAM** folder.
5. Click **Add**.
6. Enter a connection name.
7. Optionally, enter a connection description.
8. Verify that the correct connection type is selected in the Type list, and click **Next**.

The next page of the wizard prompts you for connection details, as shown in the following figure:

New NonRelational Connection

NonRelational Connection

Provide connection details

Location:

User Name:

Password:

Code Page: UTF-8 encoding of Unicode

Network

Encryption Type: None Level: 1

Pacing Size: 0 ☐ Interpret as Rows

☐ Compression

Performance

Offload Processing: AUTO

Worker Threads: 0 Maximum: 64

Array Size: 25 Between 25 and 100000

Write Mode: CONFIRMWRITEON

? Test Connection < Back Next > Finish Cancel

9. At **Location**, specify the node name of the PowerExchange Listener. The node name is the first parameter of the NODE statement in the dbmover.cfg configuration file.

Enter the database **User Name** and **Password**, and specify additional connection details, or accept the defaults. For more information, see the *Informatica Developer User Guide*.

10. Click **Test Connection** to verify that you entered the connection properties correctly and that you can connect to the database.

If the test fails, verify that you defined the NODE statement properly.

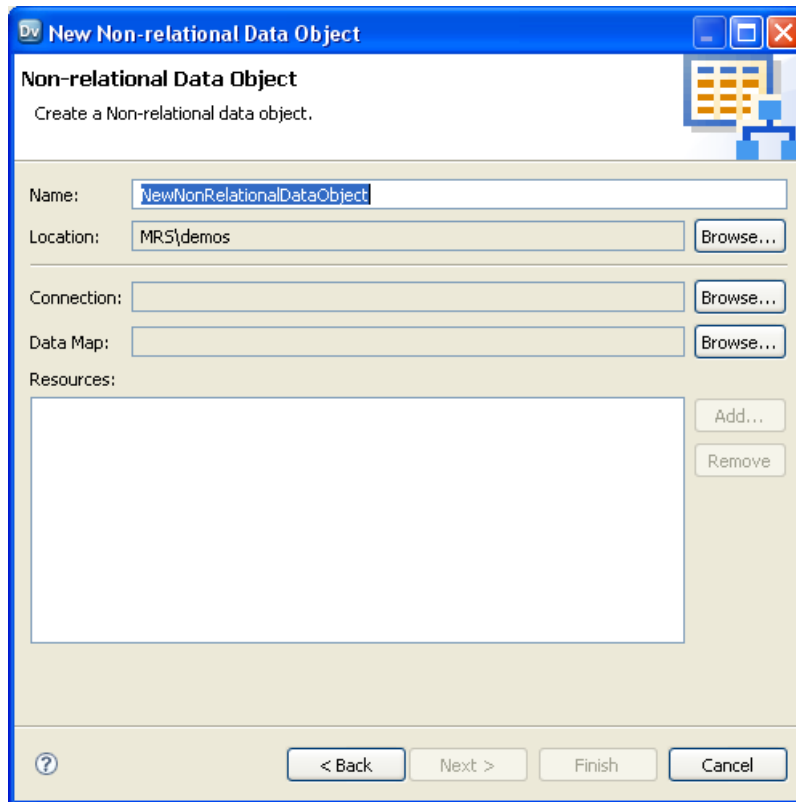
11. Click **Finish**.

Step 4. Import a Nonrelational Data Object

Import a nonrelational data object.

1. Select a project or folder in the **Object Explorer** view.
2. Click **File > New > Data Object**.
3. Select **Non-Relational Data Object** and click **Next**.

The first page of the **New Non-Relational Data Object** wizard appears, as shown in the following figure:

The image shows a Windows-style dialog box titled "New Non-relational Data Object". The subtitle is "Non-relational Data Object" with the instruction "Create a Non-relational data object." below it. The dialog has several input fields: "Name:" with the text "NewNonRelationalDataObject", "Location:" with "MRS\demos" and a "Browse..." button, "Connection:" with an empty field and a "Browse..." button, and "Data Map:" with an empty field and a "Browse..." button. Below these is a "Resources:" section with a large empty list box and "Add..." and "Remove" buttons to its right. At the bottom are navigation buttons: "< Back", "Next >", "Finish", and "Cancel". A help icon (?) is on the bottom left.

4. Click **Browse** next to the **Connection** option, select a connection, and click **OK**.
5. Click **Browse** next to the **Data Map** option, select the data map that you want to import, and click **OK**.
The tables that the data map defines appear in the **Resources** area, and the data map name appears in the **Name** area.
6. Optionally, specify a different name for the physical data object.
7. Click **Finish**.

The data object appears under Data Object in the project or folder in the **Object Explorer** view. You can expand the data object to see the tables that the data map defines.

Step 5. View the Source Data

After you import a nonrelational data object, you can view source data for a table that the nonrelational data object contains.

1. In the **Object Explorer** view, double-click the data object.
2. In the **Outline** view, expand the **Data Object Operations** folder and select the table that you want to view.
3. Click the **Data Viewer** view.
4. Click **Run**.

The Data Integration Service reads the data and shows the results in the **Data Viewer** view.

Step 6. Create a Mapping, Maplet, or Profile

You can include a table that a nonrelational data object contains in a mapping, maplet, or profile.

To create a new mapping, maplet, or profile, use one of the following commands:

- **File > New > Mapping**
- **File > New > Maplet**
- **File > New > Profile**

To include a table from a nonrelational data object in the mapping, maplet, or profile, expand the nonrelational data object in the Object Explorer, and select the table. If you hover over the table, the object type is displayed as Non-relational Data Operation.

For more information about creating mappings, maplets, and profiles, see the *Informatica Developer User Guide*.

Author

Jim Middleton
Principal Technical Writer