How to Export a Mapping Specification as a Virtual Table
Abstract
Analysts and developers can export logic defined in a mapping specification to a virtual table and run SQL queries against the data. This article describes how to export a mapping specification from the Analyst tool as a virtual table that you can query through ODBC.

Supported Versions
- Informatica Analyst 9.1.0 HotFix 1 - 9.5.1

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Overview
When you export a mapping specification as a virtual table in the Analyst tool, you can immediately perform data integration tasks and access the information you need on your own. Developers can access the logic you export in the Developer tool. Cross-tool collaboration between the Analyst and Developer tools provides agile data integration to increase productivity.

You can create a virtual database or select an existing virtual database when you export a mapping specification as a virtual table. The Analyst tool creates a virtual table in the virtual database and displays the JDBC URL for the virtual table. You can view the virtual database as an application for the Data Integration Service in the Administrator tool. You can use a JDBC client tool to run SQL queries against the virtual table.

The mapping specification logic displays as a logical data object in the Developer tool. The developer can edit a copy of the logical data object. You can view the edited logical data object in the Analyst tool, and use it as a source for a mapping specification. The developer can create a mapping that uses the logical data object in the Developer tool to load the mapping specification results to a target. Or, you can use the Analyst tool to load the mapping specification results to a target.

To export a mapping specification as a virtual table that you can query, complete the following tasks:
1. Validate the mapping specification.
2. Export the mapping specification as a virtual table.
3. Configure a new system ODBC DSN.
4. Connect to the virtual database with a JDBC or ODBC client tool.
5. Notify the developer that a new logical data object appears in the Developer tool.
Example

An analyst is responsible for generating weekly reports that contain the current revenue data for each branch of a financial organization. The analyst uses the Analyst tool to map the business logic and export the logic to a target table that contains the revenue data for each branch.

The analyst follows these high-level steps to generate current revenue data for each branch in the financial organization:

1. Creates a mapping specification that contains the business logic.
2. Exports the mapping specification as a virtual table to a Data Integration Service.
3. Connects to the database and runs reports against the virtual table.

The financial organization opens a new branch. The analyst needs the current revenue data for the new branch added to the virtual table. The analyst contacts the developer and asks the developer to add revenue data for the new branch to the logic.

The developer accesses the mapping specification created by the analyst in the Developer tool. The logic displays as a logical data object in the Developer tool. The developer incorporates the data for the new branch into the logical data object. The mapping specification in the Analyst tool reflects the update.

The analyst views the updated mapping specification. The analyst exports the mapping specification as a virtual table and runs reports that accurately reflect the current revenue data for all branches in the organization.

Before You Begin

Before you export a mapping specification as a virtual table, determine if the machine you use to access the Analyst tool meets the system and software requirements.

Before you export a mapping specification as a virtual table, verify the following software and system requirements:

- You have an Informatica Data Services license.
- The Informatica data services driver is installed on your machine.
- An ODBC client tool is installed on your machine.
- The Analyst tool is connected to the Data Integration Service where you can access the virtual table.

The Informatica data services driver and an ODBC compliant client tool enable access to the exported virtual table. You can contact your Informatica administrator for the driver. The administrator can assist you with the driver installation and the Analyst tool connection to the Data Integration Service.

Step 1. Validate the Mapping Specification

After you develop or import a mapping specification in the Analyst tool, validate the mapping specification. Resolve any errors if they exist.

To validate the mapping specification, use the Validate Mapping Specification option in the Actions menu.

Step 2. Export the Mapping Specification as a Virtual Table

Export the mapping specification as a virtual table that you can query.

Before you export the mapping specification as a virtual table, verify that the mapping specification displays the Column Mapping view.

1. Click Actions > Export.
   
   The Export window appears.

2. Select Virtual table.
3. Click Next.
The Export: Step 2 of 3 window appears.
4. Select one of the following choices:
   - Select an existing virtual database.
   - Click New virtual database to create another virtual database and enter a name and an optional description and click OK.
5. Optionally, click Properties to view the virtual database properties.
6. Click Next.
7. Enter the name and an optional description for the virtual table.
8. Click Finish.

   The Export - Information window appears and displays the JDBC URL with the following message:
   The virtual table has been exported to the virtual database: The virtual database uses the following JDBC URL: <JDBC URL>
9. Select Copy URL and close. Use the JDBC URL to configure the ODBC DSN.

After you export the mapping specification as a virtual table, you can edit the mapping specification and export the logic to the same virtual table in the same virtual database. The Analyst tool updates the existing virtual table in the virtual database with the modified logic of the mapping specification.

**Step 3. Configure the ODBC DSN**

Configure the ODBC DSN for the Informatica data services ODBC driver.

1. Open the Administrative Tools from the Windows Control Panel.
2. Open the Data Sources (ODBC) shortcut.
   The ODBC Data Source Administrator appears.
3. Select the System DSN tab.
4. Click Add.
   The Create New Data Source window appears.
5. Select the Informatica Data Services ODBC Driver.
6. Click Finish.
7. Configure the following options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect String</td>
<td>Paste the system generated JDBC URL in this field.</td>
</tr>
<tr>
<td>Location for INFADSJDBC.JAR</td>
<td>Enter the location of the Informatica data services ODBC driver.</td>
</tr>
<tr>
<td></td>
<td>For example, the driver is typically stored in &lt;Informatica install location&gt;&lt;product version&gt;\clients\tools\jdbcdrv\infadsjdbc.jar</td>
</tr>
<tr>
<td>Multi-threaded application</td>
<td>Enable this option.</td>
</tr>
</tbody>
</table>

8. Test the connection and click OK. If you encounter any connection issues, contact the Informatica developer.
Step 4. Connect to the Virtual Database

You can use an ODBC compliant tool to connect to the virtual database and query the virtual table you exported from the Analyst tool.

How you connect to the virtual database depends on the tool you use. For more information about connecting to a virtual database from a third-party tool, see the *Informatica Data Services User Guide* at https://communities.informatica.com/docs/DOC-7074.

Step 5. Notify the Developer

After you export a mapping specification as a virtual table, a developer can view the export as a logical data object in the Developer tool and as a virtual table in Informatica Administrator.

Communicate your plans and goals for the data with the developer. If the developer deletes the table, the logic is also deleted from the Analyst tool.

Author

Bridget Bevens
Technical Writer