

# Getting started with Teiid Designer 7.0

## Create, deploy and execute VDB

### Install JBoss AS, Teiid & Teiid Designer

- 1) Install Jboss AS Server 5.1 (or greater)
- 2) Install Teiid 7.0 into the “./server/default” directory
- 3) Drop your JDBC driver jars into “./server/default/lib” directory. This will include the jars you used to Select while importing and creating JDBC Sources in 6.3 Designer's JDBC Importer.
- 4) Install Teiid Designer 7.0 into JBDS or Eclipse 3.5.1
- 5) Open console window, navigate to AS install directory's “bin” directory
- 6) Start the server with ./run.sh

### Designer

#### Create Relational Model

- 1) Launch Eclipse, open “**Designer**” perspective and create **New > Model Project**
- 2) Select “**File >Import**” and select “**Metadata from JDBC**” option
- 3) Select “**Connection Profiles...**” button to launch create **Connection Profile (CP)** wizard (DTP).
  1. *Note you can also create CP's in DTP's **Database Development Perspective**.*
  2. *You'll need to get familiar with this perspective because it is the view where you will create Teiid JDBC Source connections to your VDB's in order to query data (replaces SQL Explorer).*
  3. *Each CP will required setting selecting the “Driver” jar(s) similar to MMX & 6.3 Designer. They should be the same jars you dropped into Teiid's intall “/lib” folder during Teiid installation.*
- 4) After creating or selecting existing CP, hit “Next” and continue with importing as usual
- 5) After importing, The model will be modified to include the connection profile properties used during import.
  1. Note: You can change the model's connection profile info by selecting a model then right-click select “**Modeling > Set Connection Profile**” action.

#### Create Teiid server Instance

- 1) Right-click in Teiid view and select “**New Teiid Instance**”
- 2) Provide URL: mm://<hostname>:<port1>
  1. *Default for Teiid is “mm://localhost:31443”*
- 3) Default user-name is “admin”
- 4) Default password is “admin”
- 5) Hit finish
- 6) Initial **Teiid View** should contain your new Teiid server instance.

1. The Teiid view default contents will include any VDB's deployed to this server instance and any of your specific "workspace" Data Sources.
2. Data Sources are the "JCA-compatible Connection Factory" xml configuration components required for Teiid to create the necessary connections to query data at run-time.
3. The "Show Translators/Hide Translators" toolbar button does just that. Translators (or their names) are a required property in VDB's for each source model
4. The "Show All Data Sources/Show All My Data Sources" toolbar button allows filtering out any Data Sources

## Create Data Source connection in Teiid

- 1) In order for a VDB to be executable, a Data Source (Connection Factory) needs to be deployed in the ".../server/default/deploy" directory. This will be in the form of "xxxx-ds.xml". You can manage these items via JON/JOPR
- 2) We've provided an action, "**Modeling > Create Data Source**" to assist you in quickly creating compatible DS's on your local Teiid Server.
  1. When PREVIEW DATA mode is completed, you will not need to perform this action. *(unless a connection profile has not been set on a source model)*. Designer will automatically generate these artifacts on your Default server when required to Preview.
- 3) This action should result in a new DS artifact deployed to Teiid and will show up in your Teiid view as a DB-typed object named "**My Parts Oracle:PartsSupplier**" (Connection Profile name : Source Model Name)

## Create VDB

- 1) Select Relational Model and choose "**New > Virtual Database**"
  1. This will automatically add the Model to the VDB (new little feature)
  2. You can still select project or nothing and create Empty VDB.
- 2) VDB Editor opens and contains your model (or empty)
- 3) Add model if empty
- 4) Should have one row in the top table and have the "Translator" name and "JNDI" names populated.
- 5) If Translator name is empty, enter an appropriate name from your Teiid view reflecting the DB your imported from ("oracle", "sqlserver", "derby", etc..) or select table row for model and right-click select the "**Change Translator**" action. This will display a simple tree view of your servers containing available Translators. Select a Translator and hit **OK**.
- 6) Next you need to supply a JNDI name for a Data Source (Connection Factory) on the server you wish to deploy your VDB to.
  1. If you used the "Create Data Source" option above for your local Teiid, it'll be named something like: 8d9b22ab-f4ab-48c0-a6cd-b4d4501b81a5\_\_TestProj\_B\_PartsSupplier.
  2. Select the table row for the source model and right-click select "**Change JNDI Data Source**" action. Select the appropriate Data Source and hit **OK**. The "generated JNDI name" described above will be set in the JNDI Name property.
  3. If you wish, you can also look in "...server/default/deploy" folder for the generated xxxx-ds.xml file. The file name will contain the Test Project name, folder names and end with the Model Name + -ds.xml. Copy all but the -ds.xml and paste into the JNDI name field for

- your source model
- 7) Save the VDB

## Deploy VDB

- 1) Select VDB in Model Explorer and Drag it to the Server object in Teiid View
  1. Or right-click select “**Modeling > Deploy**” action.
    1. *Note: This action will deploy the VDB to the “Default” server. If you have more than one server, the user is required to keep only one of the servers as the Default. You can change it by selecting a non-default Teiid server and right-click select “Set As Default” action.*

## Create VDB Connection Profile and Connect

- 1) Open DTP's **Database Development Perspective**.
- 2) Select Database Connections folder in the tree and select “**New**” action
- 3) Select the “**Teiid**” connection profile type and hit “**Next**”
- 4) Provide VDB name (“PartsVdb”).
  1. *DO NOT include the “.vdb file extension”*
- 5) Provide Host = “**localhost**”, Port = “**31000**”, Username = “**admin**”, PWD = “**teiid**”
  1. In case these defaults don't work for you, when AS starts it will log these host/port properties for you. Check there and try those values out if different.
- 6) Hit “**Finish**” and you should be connected to Teiid

## Querying your VDB

- 1) Select your new Teiid Connection
- 2) Right-click select “**Open SQL Scrapbook**”
- 3) Enter “Select \* FROM PARTS” (or your favorite table), add criteria, whatever.
  1. Note: if you are federating data with multiple sources or have similarly named tables, you'll need to fully qualify the table names (I.e. SELECT \* FROM PartsView.PARTS)
- 4) Select the text and right-click select “**Execute Selected Text**”
- 5) **Results View** should be opened and result shown in the “**Results1**” tab on the bottom right.