



# Accessing MS SQL Server using Windows Authentication

Revision 20200611

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## 1 GOAL

This document describes how to use Windows Authentication to access SQL Server using a JDBC data source. The configuration with the jTDS and the Microsoft drivers will be explained.

## 2 CONTENT

### 2.1 USING THE JTDS JDBC DRIVER

Before creating a data source to a MS SQL Server database from Virtual DataPort using the JTDS driver and Windows Authentication follow these steps:

1. Download the latest jTDS driver version from [here](#)
2. Extract from the distribution `jtds-xxx-dist.zip` the file `ntlmauth.dll`. Extract the file that matches the target architecture. For instance, for a 64-bit operating system, extract the file under `x64/SSO`.
3. Copy the file under `<DENODO_HOME>/extensions/thirdparty/dll`.
4. Create a new JDBC data source in the Virtual DataPort Administration Tool or the Web Design Studio.
5. Select DB Adapter: MS SQL Server 2000/2005/2008/2008R2/2012 (JTDS).
6. Database URI:

```
jdbc:jtds:sqlserver://host:port/database;useNTLMv2=true;domain=domain
```

7. Login/Password (Windows login and associated pass)

The screenshot shows the configuration window for a new JDBC data source named 'new\_jdbc\_datasource'. The 'CONFIGURATION' tab is active, and the 'Connection' sub-tab is selected. The configuration is as follows:

Property	Value
Name	ds_sqlserver_winauth
Database adapter	Microsoft SQL Server 2012 (JTDS)
Database URL	jdbc:jtds:sqlserver://localhost:1433/denodo;useNTLMv2=true;domain=denodo
Transaction isolation	Database Default
Authentication	Use Login and Password
User	denodo
Password	.....
Use other type of authentication to create base views	<input type="checkbox"/>

The option Pass-through session credentials can also be selected.

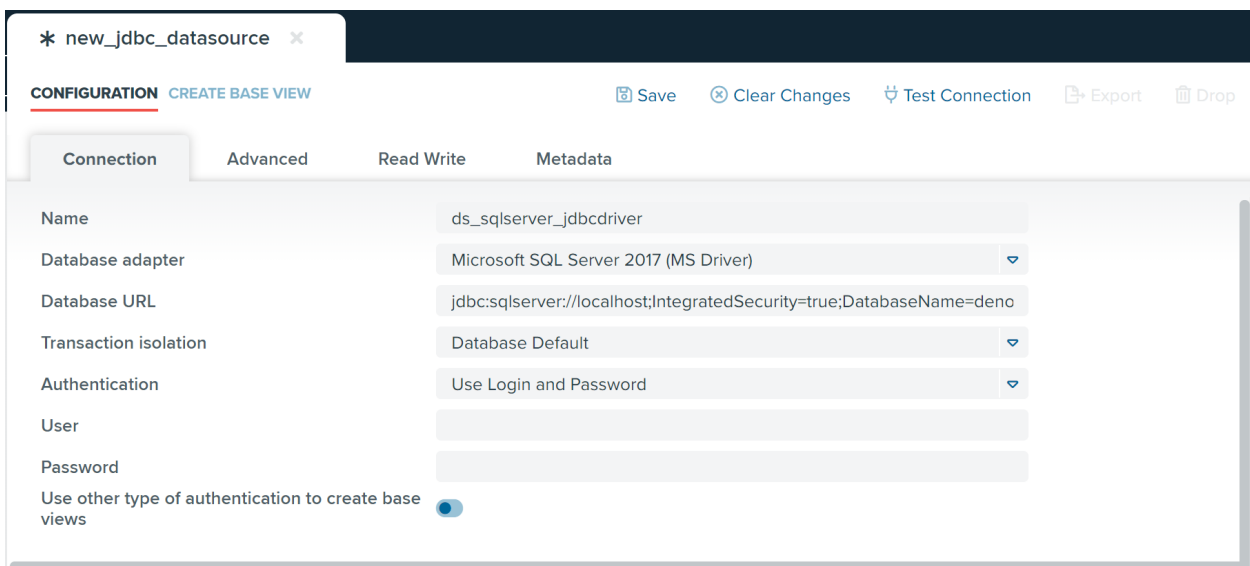
### 2.2 USING THE MICROSOFT JDBC DRIVER

To access MS SQL Server from VDP using the Microsoft driver and Windows Authentication:

1. Download the driver from <http://www.microsoft.com/en-us/download/details.aspx?displaylang=en&id=11774>
2. Unzip the distribution file and copy sqljdbc\_xx./enu/auth/x86|x64/sqljdbc\_auth.dll under <DENODO\_HOME>/extensions/thirdparty/dll.
3. For Denodo 7 and newer versions, skip steps 3 and 6. For Denodo 6 and older versions, copy the 'mssql-jdbc-6.x'.jar file to DENODO\_HOME/extensions/thirdparty/lib. If your Virtual DataPort server is running, restart the server so the new driver is added to the classpath. If you do not restart the server an additional configuration property will have to be set when creating the JDBC data source.
4. Create a new JDBC data source in the Virtual DataPort Administration Tool or the Web Design Studio.
5. Select DB Adapter: MS SQL Server 2000/2005/2008/2008R2/2012/2014/2016/2017 (MS Driver)
6. For Denodo 7 and newer versions skip this step. If you did not restart the server, browse to the folder where you saved the jar file and select it as Driver class path (optional). If you did restart the server after adding the driver just leave this field blank.
7. Database URI:

```
jdbc:sqlserver://host;IntegratedSecurity=true;DatabaseName=database
```

8. No login or password is needed. Virtual DataPort will use credentials of the logged Windows user.
9. As the Microsoft driver is provided in Denodo 7 and newer versions, you could skip step 3 and 6 when connecting MS SQL Server in recent Denodo versions.



The screenshot shows the 'new\_jdbc\_datasource' configuration window in Denodo. The 'CONFIGURATION' tab is active, and the 'Connection' sub-tab is selected. The configuration fields are as follows:

- Name: ds\_sqlserver\_jdbcdriver
- Database adapter: Microsoft SQL Server 2017 (MS Driver)
- Database URL: jdbc:sqlserver://localhost;IntegratedSecurity=true;DatabaseName=deno
- Transaction isolation: Database Default
- Authentication: Use Login and Password
- User: (empty field)
- Password: (empty field)
- Use other type of authentication to create base views:

When using the Microsoft Diver, the URI parameter `IntegratedSecurity=true` indicates that Windows credentials will be used by SQL Server to authenticate the user of the application.

If "true" the JDBC driver searches the local computer credential cache for credentials that have already been provided at the computer or network logon. If "false" the username and password must be supplied.

This means that the credentials used to authenticate to SQL Server will be the credentials used to log in the machine where the VDP Server is installed or the credentials used to run the VDP Server as a Windows Service.