



Installing the Information Self-Service Tool on a Cluster: Sharing the Same Settings Across all the Nodes

Revision 20200513

NOTE

This document is confidential and proprietary of **Denodo Technologies**. No part of this document may be reproduced in any form by any means without prior written authorization of **Denodo Technologies**.

Copyright © 2022
Denodo Technologies Proprietary and Confidential

1.1

1.2 INTRODUCTION

Note: This document applies to Denodo 6.0. For newer Denodo versions this configuration is performed from the web tool. Please read the document [Use an External Database for the Data Catalog](#)

This document explains how to configure the Information Self-Service Tool to store its settings on an external database.

By default, the Information Self-Service Tool stores certain settings for each user in a local database for example, “My Queries”, fields selected to display on a view, etc.

If Denodo is installed on a cluster environment and there is a Information Self-Service Tool installed on each node of the cluster, it is possible to configure all the Information Self-Service Tool servers to store and retrieve these settings from a common database. Otherwise, users will use different settings depending on the node the load balancer redirects them.

1.3 SETTING UP THE COMMON DATABASE

This section explains how to install the common database in which all the Information Self-Service Tool servers will store its settings.

1. Choose one node of the cluster where the database will run. Let’s call it “main node”.
2. Download the latest version of [the Apache Derby database](#). If running on Windows, download the file db-derby-XXX-bin.zip. If running on Linux, download the file db-derby-XXX-bin.tar.gz.
3. Select the directory to install Derby, copy the downloaded file there and decompress the file. For example,
 - On Windows, c:\Apache\
 - On Linux, /opt/apache/

The following steps assume that the file has been decompressed in these directories.

4. Define the environment variable DERBY_INSTALL pointing to the location where Derby is installed. For example,
 - On Windows, DERBY_INSTALL=c:\Apache\db-derby-10.12.1.1-bin
 - On Linux, DERBY_INSTALL=/opt/apache/db-derby-10.12.1.1-bin
5. In the directory bin of DERBY_HOME\db-derby-10.12.1.1-bin, create the file derby.properties and add these lines:

```
derby.drda.host=<IP address of the host>
```

```
derby.drda.portNumber=10000
```

- `derby.drda.host`: IP address of the node. The other nodes of the cluster will connect to this IP address.
- `derby.drda.portNumber`: the port in which Derby will listen to incoming connections.
Check that this port is not being used by another too by using the tool `netstat` of the operating system. If another application is using the port, enter another port.

6. Open a command line and execute the following:

- On Windows:

```
cd %DERBY_INSTALL%  
bin\startNetworkServer.bat
```

- On Linux:

```
cd $DERBY_INSTALL  
./bin/startNetworkServer
```

The common database is ready.

1.4 CONFIGURE THE INFORMATION SELF-SERVICE TOOL TO USE THE COMMON DATABASE

This section explains how to configure the Information Self-Service Tool to use the common database. This process involves stopping the Denodo web container. I.e. all the SOAP and REST web services and web administration tools will be stopped for a few seconds.

Follow these steps for each node of the cluster.

1. From the node where the common database is installed, copy the file `derbyclient.jar` from the `lib` directory of `c:\Apache\db-derby-10.12.1.1-bin` or `/opt/apache/db-derby-10.12.1.1-bin`.
2. Paste this file in the directory `<DENODO_HOME>/resources/apache-tomcat/webapps/information-self-service-tool/WEB-INF/lib`
3. Edit the file `<DENODO_HOME>/resources/apache-tomcat/webapps/information-self-service-tool/META-INF/context.xml`
 - a. Replace `org.apache.derby.jdbc.EmbeddedDriver` with `org.apache.derby.jdbc.ClientDriver`
 - b. Replace `jdbc:derby:${catalina.home}/../../metadata/self-service-database`

with this:

```
jdbc:derby://<IP address>:<Port Number>/self-service-database
```

<IP address> is the IP of the node where Apache Derby is installed as seen in the previous section.

<Port Number> is the port number set in the previous section, by default 10000.

Note: there are two occurrences of this string. In the second one, make sure to leave the suffix “;create=true” after the modified URL. For example,

```
jdbc:derby://10.2.5.12:2000/self-service-database;create=true
```

4. Execute the script <DENODO_HOME>/bin/webcontainer_shutdown
5. Open the Virtual DataPort Administration Tool and log in as an administrator user.
6. Open the VQL Shell and execute

WEBCONTAINER STATUS

In the first line of the result, the message “Web Container: stopped” should appear. If that is not the case and the web container is still started, wait for some time until the web container is stopped.

7. From the VQL Shell execute,

WEBCONTAINER START

This will start all the Denodo SOAP and REST web services.

8. Start the other web administration tools in use and the Information Self-Service Tool as usual.