Install and Configure MySQL JDBC Driver on JBoss Wildfly

MySQL offers standard database driver connectivity for using MySQL with applications and tools that are compatible with industry standards ODBC and JDBC. Any system that works with ODBC or JDBC can use MySQL.

To learn more about the different MySQL connectors available, please visit **https://dev.mysql.com/downloads/connector/**

In this tutorial, we will install MySQL JDBC driver on Wildfly application server. We will be using Wildfly 17.0.1.Final for this tutorial.

Step 1 — Download and Extract MySQL Connector/J

The MySQL Connector/J is the official JDBC driver for MySQL. For the purpose of this tutorial, we will download the 8.0 version. MySQL Connector/J 8.0 is compatible with all MySQL versions starting with MySQL 5.5.

Download MySQL Connector/J 8.0 at ***'/opt'*** directory using below commands:

```
$ sudo cd /opt
$ sudo wget https://dev.mysql.com/get/Downloads/Connector-J/mysql-connector-java-8.0.17.tar.gz
```

Extract the tarball using below command:

```
$ sudo tar -xvzf mysql-connector-java-8.0.17.tar.gz
```

Step 2 — Setup MySQL JDBC Driver as a Wildfly Module

We need to setup MySQL JDBC driver as a Wildfly module so that it gets loaded once Wildfly starts.

To do this, we need to first create a module package directory (***com/mysql/main***) for our MySQL JDBC driver under ***WILDFLY_HOME/modules/system/layers/base***

Here ***WILDLFY_HOME*** is the directory where Wildfly is installed.

```
$ sudo mkdir -p WILDFLY_HOME/modules/system/layers/base/com/mysql/main
```

Inside the **/opt/mysql-connector-java-8.0.17.tar.gz/** directory that we extracted, there is a jar file by the name ***mysql-connector-java-8.0.17.jar.*** This jar file contains the required classes for the MySQL JDBC driver.

Copy this jar file to ***WILDFLY_HOME/modules/system/layers/base/com/mysql/main/*** directory.

Now create a module description file under ***WILDFLY_HOME/modules/system/layers/base/com/mysql/main/*** directory by the name ***module.xml.***

```
$ sudo nano module.xml
```

Copy below contents in **module.xml**.

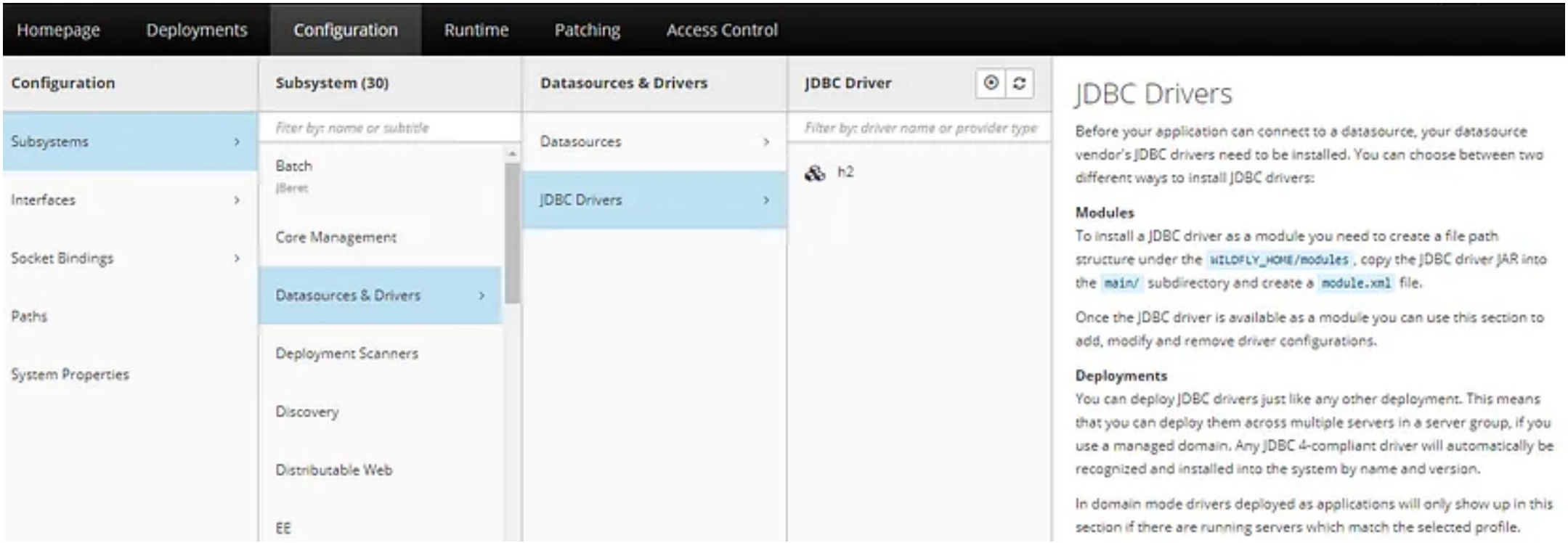
```
<module xmlns="urn:jboss:module:1.5" name="com.mysql">
    <resources>
        <resource-root path="mysql-connector-java-8.0.17.jar" />
    </resources>
    <dependencies>
        <module name="javax.api"/>
        <module name="javax.transaction.api"/>
    </dependencies>
</module>
```

Save and exit the file.

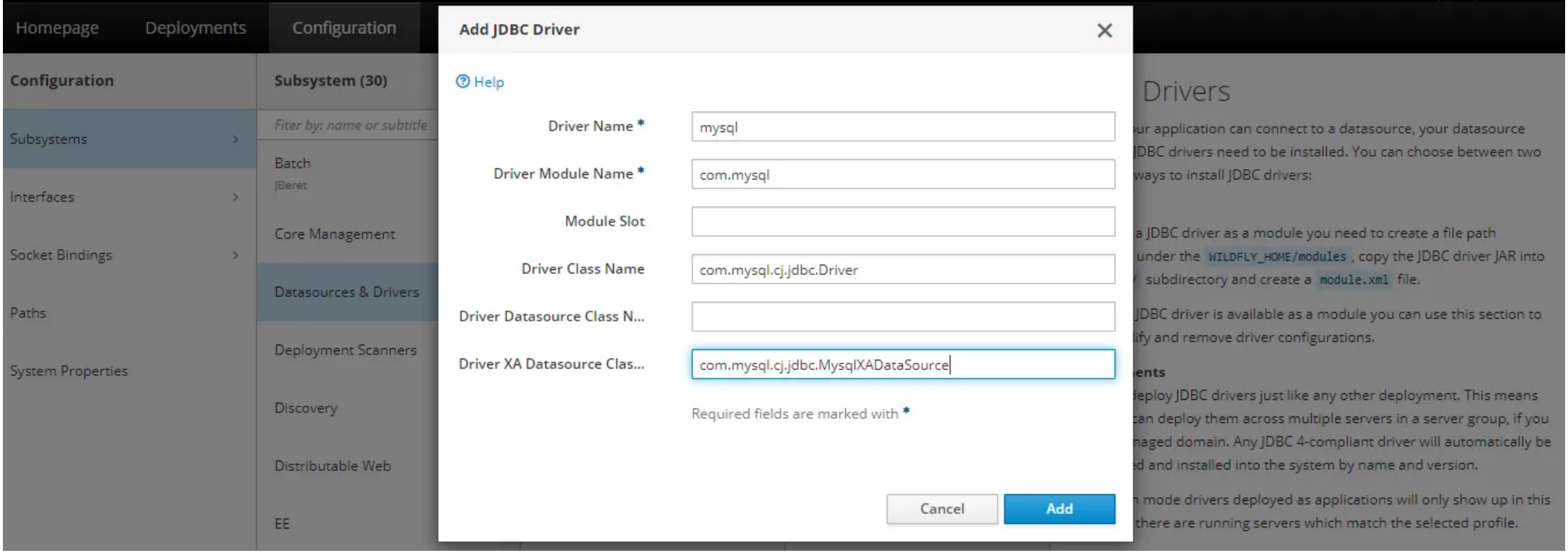
We now need to start/restart our Wildfly server so that our MySQL module is picked up and available.

Step 3 — Configure MySQL JDBC Driver

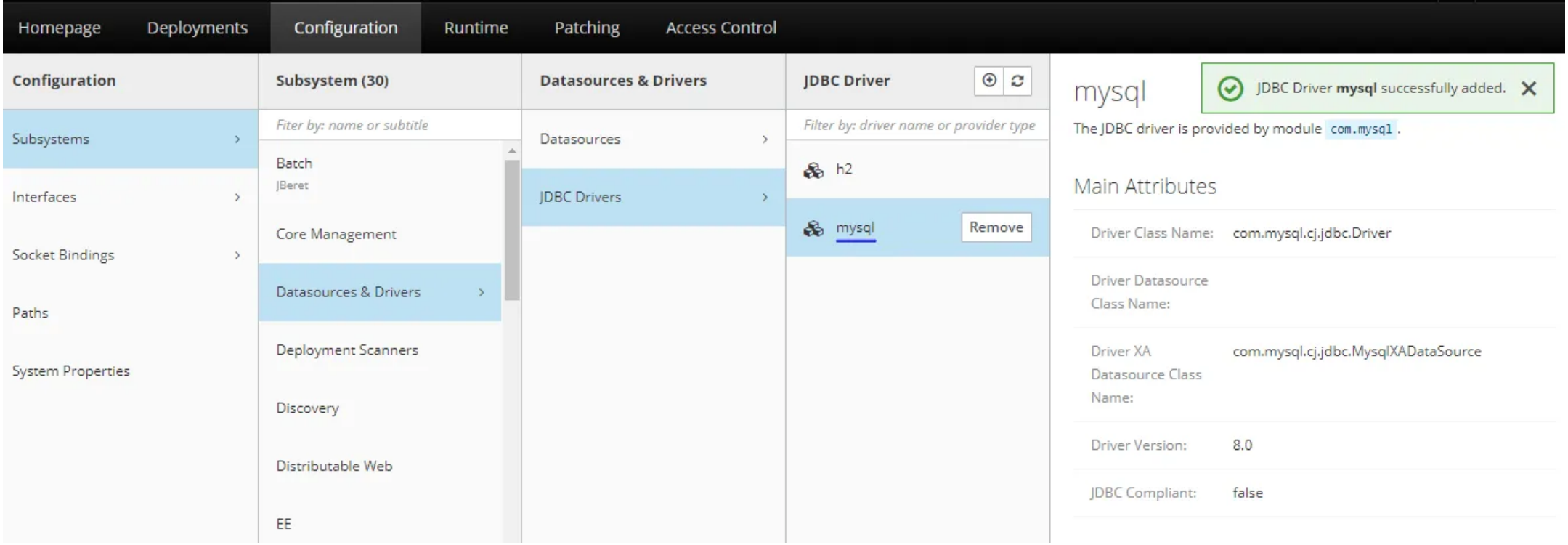
To configure a MySQL JDBC driver, access the Wildfly management console and go to ***Configuration -> Subsystems -> Datasources & Drivers -> JDBC Drivers***



Click on the '+' icon and enter the following details.



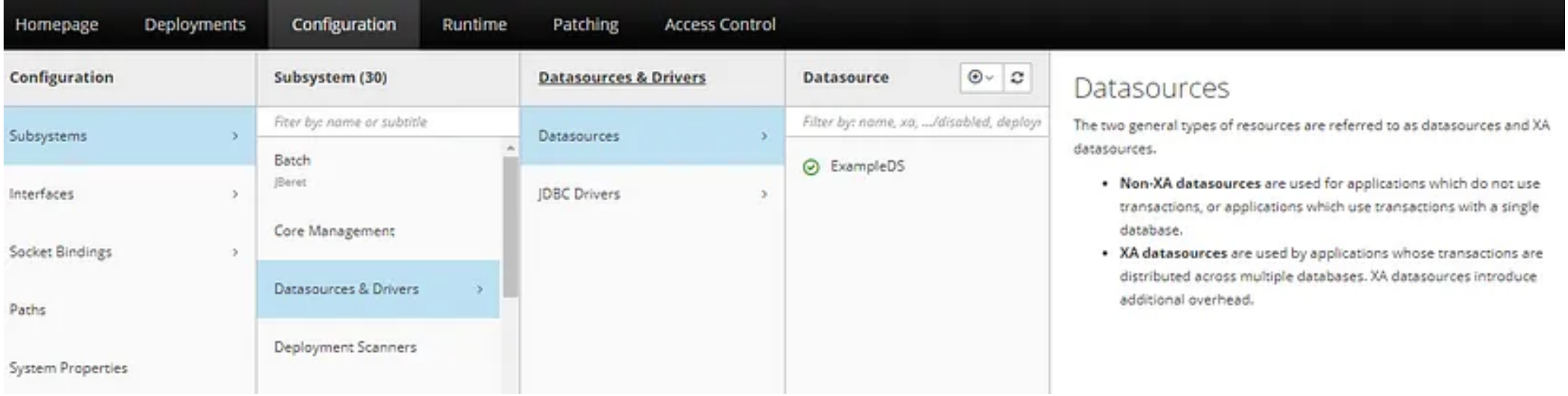
Click on **Add** and our MySQL driver is successfully added.



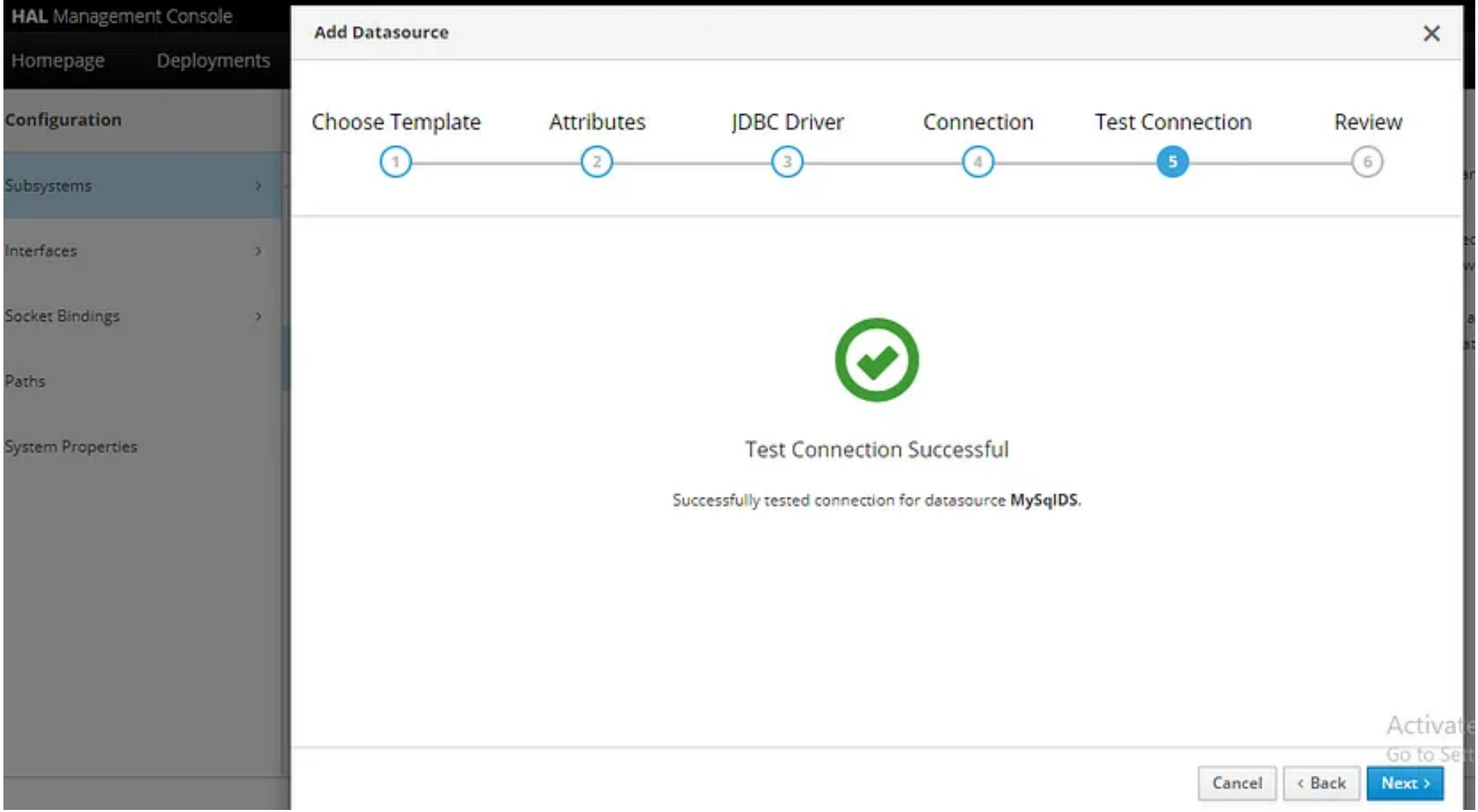
Once the MySQL JDBC driver is installed and configured, we can set up a data source to verify that our MySQL JDBC driver is properly working.

To do this, access the Wildfly management console and go to ***Configuration -> Subsystems -> Datasources & Drivers -> Datasources***

Click on the '+' icon and create a new non-XA data source.



Enter the required database connection details and go to ***Test Connection*** tab. Click on ***Test Connection*** button and if everything is configured properly you should get the following.



This concludes our tutorial on installing MySQL JDBC driver on Wildfly.