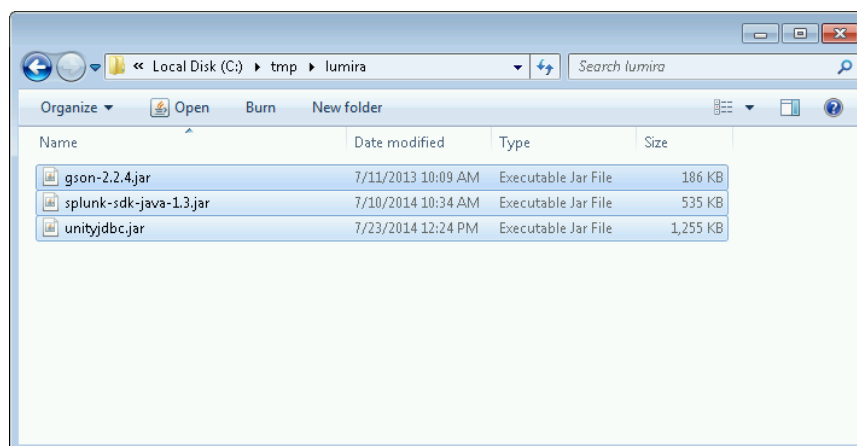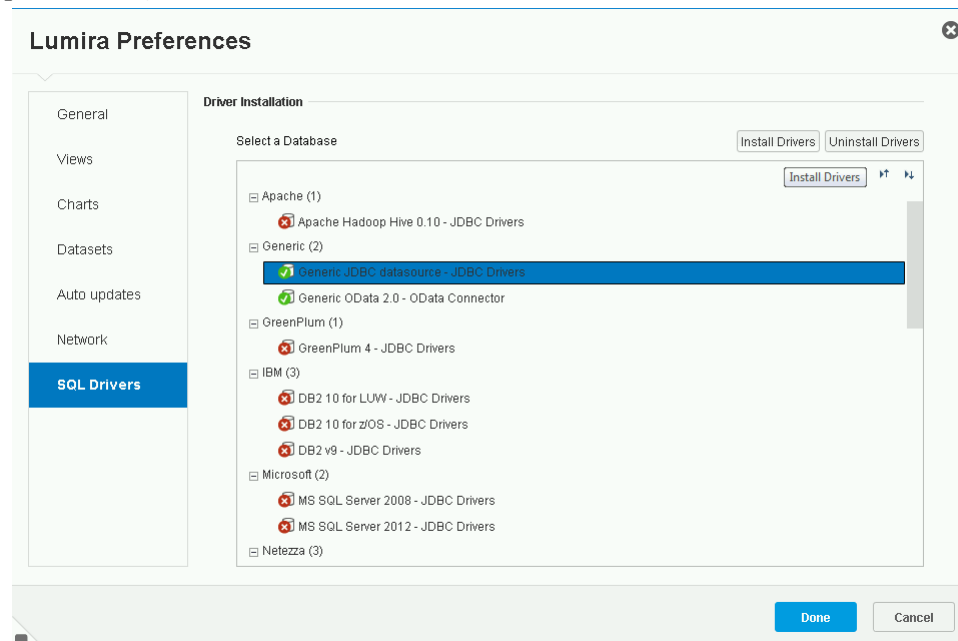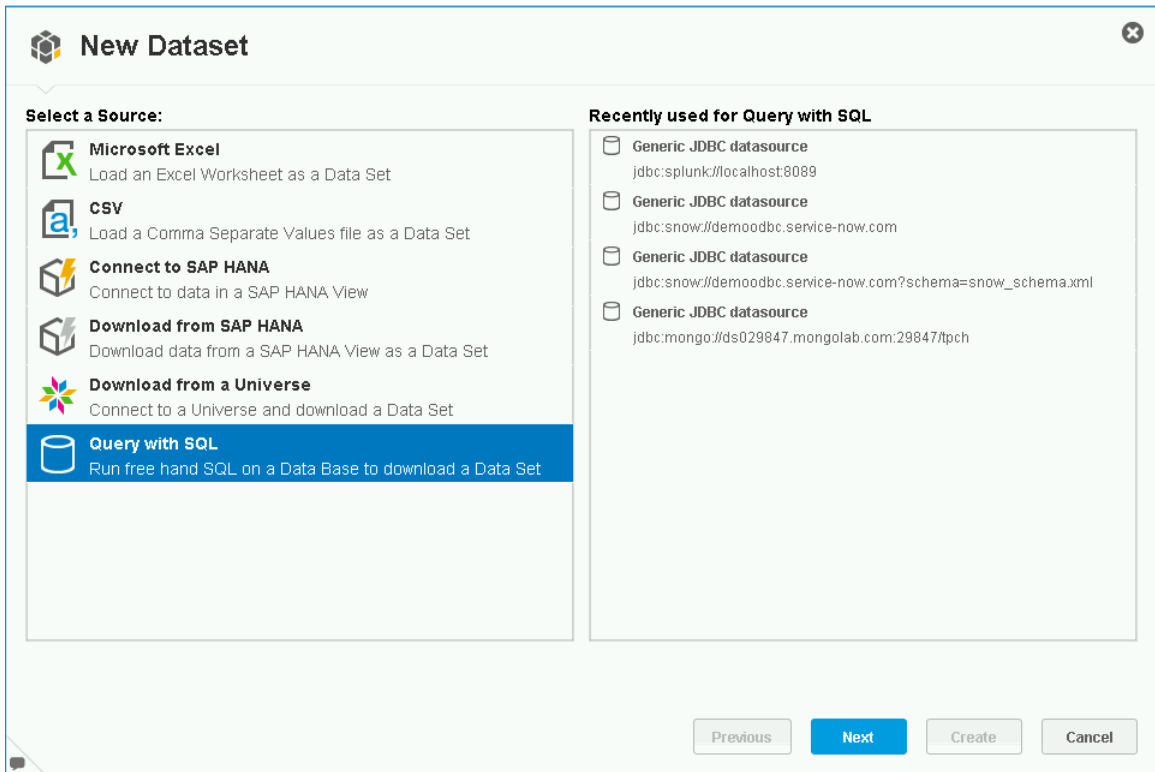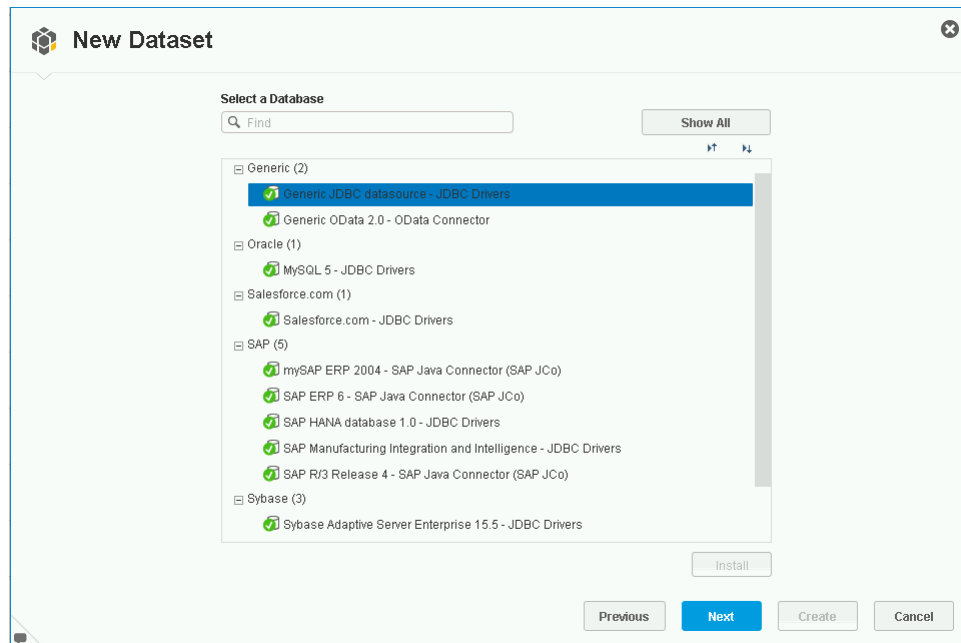# Splunk JDBC and UnityJDBC Driver Setup for SAP Lumira

1.  Download and install UnityJDBC.  Use either: 1) the `splunk_unityjdbc_full.jar` from the installation directory or 2) `unityjdbc.jar` and `gson-2.2.4.jar` and `splunk-sdk-java-1.3.jar` from the subdirectory `drivers\Splunk`.
2.  Place the three JAR files in a directory.  For example: `C:\tmp\lumira`
3.  Start SAP Lumira.  Under `File` menu select `Preferences`. Select `SQL Drivers`. Select `Generic JDBC datasource` and click `Install Drivers`.
4.  Select the three jar files for the driver in the directory where they were placed (e.g. `C:\tmp\lumira`).

5. Create a **New Dataset** using the `File` menu by selecting `New`. Select `Query with SQL`. Note that this option is only available in the standard edition of SAP Lumira. Click `Next`.



6. In the next window, select `Generic JDBC datasource` and click `Next`.

7. Add the JDBC connection information.  For Splunk, a sample JDBC URL is:

| User Name | `admin` |
|-----------|---------|
| Password | `admin` |
| JDBC URL | `jdbc:splunk://localhost:8089` |
| JDBC Class | `splunk.jdbc.SplunkDriver` |



8. Click the `Connect` button to verify the connection. If you have errors, then check the user name and password as well as the JDBC URL.  SAP Lumira provides limited error messages for diagnosis.  More details can be found in the log whose location is configured in the file `BO_trace.ini` (see `log_dir` setting).  A default location is:
`C:\Users\<username>\AppData\Local\Temp\sapvi\logs`

9. To make the driver go into debug mode and provide more details add the parameter `debug=true` to the URL like this:

| JDBC URL | `jdbc:splunk://localhost:8089?debug=true` |
|----------|-------------------------------------------|

10. Now enter a query for your data set.  On the right side you can browse the tables in your Splunk database.  In the Query box you can enter a query.  Note that with the trial version of the driver you are limited to 100 results.  Add LIMIT 100 if you encounter errors. For more details see: https://www.unityjdbc.com/splunk/splunk_jdbc.php  **Also note that SAP Lumira incorrectly replaces spaces with + in table names.  Please remove each + and replace with a space.**  The JDBC driver will display each saved search and index that has data.  Indexes are prefixed with "`idx_`".  The default main index is "`idx_main`".  SQL syntax supported includes WHERE filters, expressions, aggregate functions, ORDER BY, and joins.



11. Click `Create` and SAP Lumira will load the data set.  If an error occurs during load, check the log for the issue.  Lumira does not provide details in the user interface why a load failed.

12. Now the data is loaded you can use SAP Lumira to create powerful visualizations and manipulations of your data set.