CyberArk Application Identity Manager WebSphere ASCP

v9.1

WASASCP-009-1-0-1

Introduction

This guide describes how to configure the WAS ASCP for WebSphere v8.0 and v8.5. For instructions about configuring the WAS ASCP for previous versions, and for a more elaborate explanation of the WAS ASCP technology, please refer to the AIM Implementation Guide.

System Requirements

The AIM WAS ASCP wrapper is supported on the following WAS versions:

- 8.0
- 8.5

The AIM WAS ASCP wrapper is supported on the following databases:

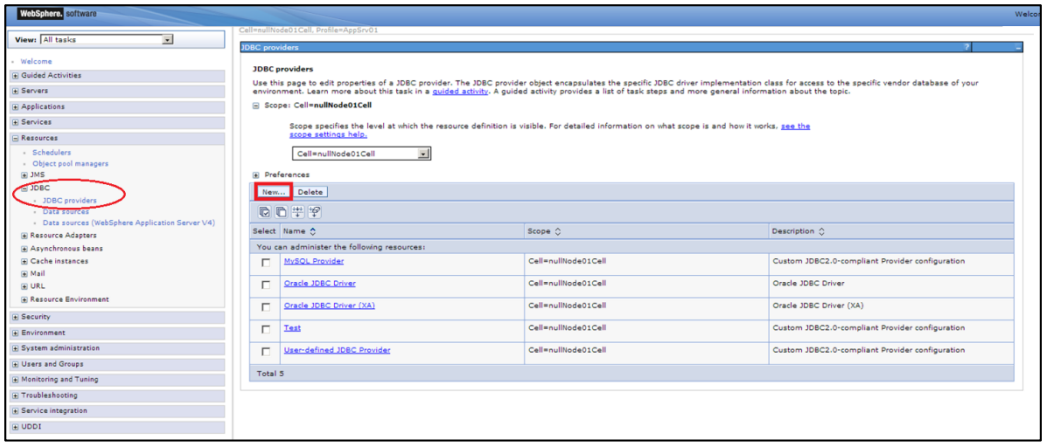
- Oracle Database 11g
- IBM DB2 version 10.1
- Microsoft SQL Server 2014
- Teradata 14 and 14.10

Installation

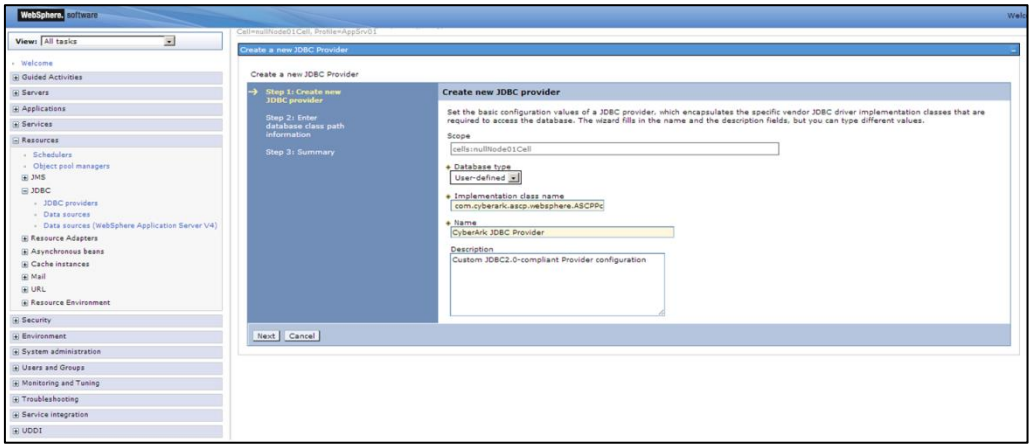
You will receive the WAS AIM ASCP wrapper installation package from your CyberArk representative.

To Install the Wrapper

1. From the installation package copy the following files to the WAS lib folder:
   - CACredWSWrapper.jar
   - JavaPasswordSDK.jar – This file is in the Provider SDK folder.
2. In the admin console, click **Resources**, then **JDBC**, and then **JDBC providers**.
3. Click **New**; the Create a new JDBC Provider page appears.

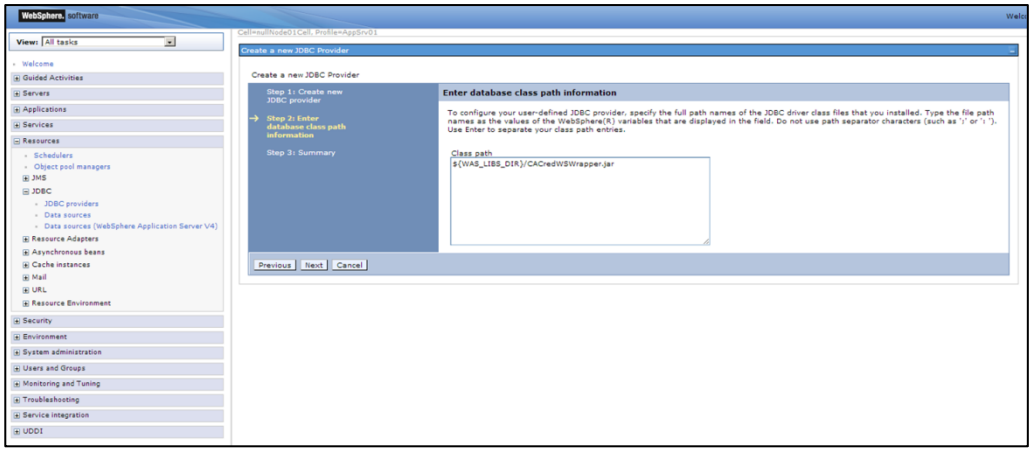


4. Define a new user-defined JDBC provider.



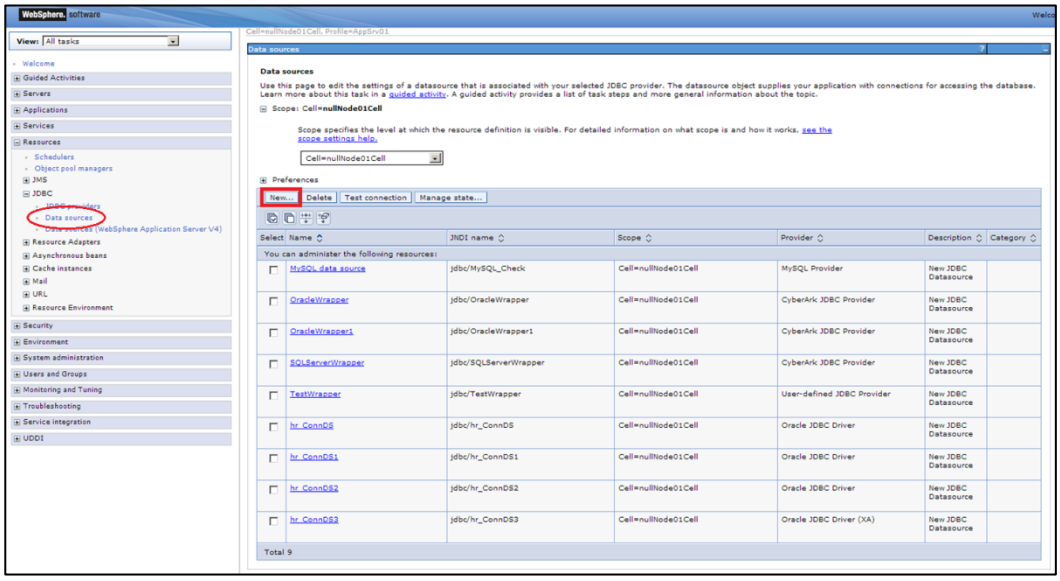
   i. From the Database type drop-down list, select **User-defined**.
   ii. In the Implementation class name field, specify the data source type. Specify either:
      - com.cyberark.ascp.websphere.ASCPPoolDataSource

      or
      - com.cyberark.ascp.websphere.ASCPXADataSource
   iii. In the Name field, specify **CyberArk JDBC Provider**.
   iv. Click **Next**; the Enter database class path information page appears.
   v. In the Class path, specify the location of the CACredWSWrapper.jar file you copied from the installation package to the WAS lib folder in step 1.



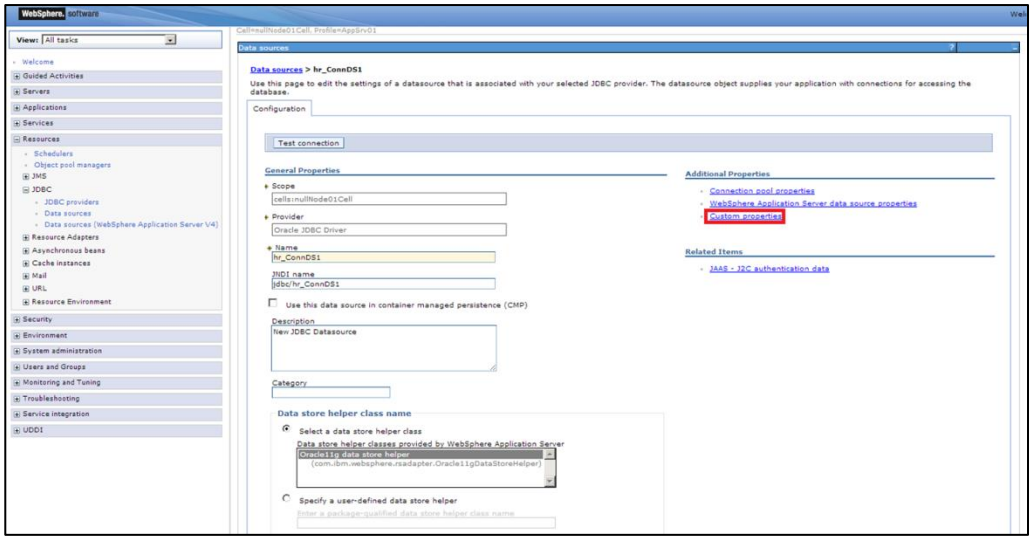
vi. Click **Next** and then click **Finish**; the new JDBC Provider is created.

5. Click **Resources**, then **JDBC**, and then **Data sources**.
6. Click **New**; the New Data Source wizard appears.



7. Define a new data source that uses the newly defined JDBC provider.
   i. Specify the name of the data source and the JNDI name of the data source, then click **Next** to move to the next step of the wizard.
   ii. Select the JDBC CyberArk provider you configured in step 4, then click **Next** to move to the next step of the wizard.
   iii. Specify the general data store helper: com.ibm.websphere.rsadapter.GenericDataStoreHelper. Choose whether you would like to use this data source in CMP (leave the default selection).
   iv. Click **Next** to move to the next step of the wizard.
   v. In Setup security aliases, click **Next** to move to the final step of the wizard.
   vi. Click **Finish**.

8. Click **Resources**, then **JDBC**, and then **Data sources**; a list of configured data sources is displayed.
9. Select the data source you configured in the previous step; the Data sources page displays the details of the selected data source.



10. Click **Custom properties**; the custom properties page for the selected data source is displayed.

    Note: All the parameters on this page are case sensitive and must begin with a lower case letter.

11. Add the following parameters:

Parameter	Description
appId	The AppID to use with the ASCP.
query	The query that will retrieve the account.
internalDataSourceUrl	The URL for the database. For example: ▪ **Oracle** – jdbc:oracle:thin:@10.10.1.200:1521:provider ▪ **MS SQL Server** – jdbc:sqlserver://10.10.3.209;databaseName=provider; To configure DB2 or TeraData, refer to the next steps.
vendorFactory	The vendor factory that is used to create the vendor data source. For example: ▪ **Oracle** - oracle.jdbc.pool.OracleDataSourceFactory ▪ **MS SQL Server** – com.microsoft.sqlserver.jdbc.SQLServerDataSourceObject Factory ▪ **DB2** – com.ibm.db2.jcc.DB2DataSourceFactory ▪ **TeraData** - com.teradata.jdbc.TeraObjectFactory For more information, refer to *Examples*, below.

internalDataSource	The wrapped data source class. For example: ▪ **Oracle** - oracle.jdbc.pool.OracleConnectionPoolDataSource oracle.jdbc.xa.client.OracleXADataSource ▪ **MS SQL Server** – com.microsoft.sqlserver.jdbc.SQLServerConnectionPoolDataSource com.microsoft.sqlserver.jdbc.SQLServerXADataSource ▪ **DB2** – com.ibm.db2.jcc.DB2ConnectionPoolDataSource com.ibm.db2.jcc.DB2XADataSource ▪ **TeraData -** com.teradata.jdbc.TeraConnectionPoolDataSource For more information, refer to *Examples*, below.
connectionTimeout	The password SDK connection timeout.
connectionPort	The password SDK connection port.
reason	The password retrieving reason.
traceLevel	The trace level for logs. Specify one of the following: ▪ FL for flow trace ▪ PR for parameters trace ▪ FL;PR for both flow trace and parameters trace
internalDataSource Parm<1-20>	Enables users to set internal data source parameters. Specify the name of the parameter, its type and value as follows: parameter_name=type::value For example: timerLevelForQueryTimeOut =Integer::30 The default type is String. When specifying a String value, the type can be omitted. **Note:** This parameter is also used to configure DB2 data sources. For more information, refer to the next step.
internalDataSource ParmList	Enables users to set additional internal data source parameters if all internalDataSourceParm<1-20> are used. Specify the parameters as described above and separate each parameter with ;; as follows: parameter_name=type::value;;parameter_name=type::value

12. To configure a DB2 DataSource, specify the following internalDataSourceParm<#> attributes in the custom properties:
    - The name of the DB2 database.
    - The type of the DB2 driver. Specify either **2** or **4**.
    - The name of the DB2 server.
    - The number of the DB2 port.

13. To configure a TeraData DataSource, specify the DSName attribute as a custom property. Its value should contain the IP address or hostname used to connect to the database.

    Note: If you specify the above parameters for a DB2 or TeraData DataSource, remove the url field that you specified in the previous step.

    The following example shows how to specify the above attributes:

☐	internalDataSourceParm1	driverType=4
☐	internalDataSourceParm10	serverName=10.10.3.231
☐	internalDataSourceParm11	portNumber=50000
☐	internalDataSourceParm12	databaseName=provider

Examples

The following examples show the configuration files for configured data sources.

Oracle

```
         name="appId" type="java.lang.String" value="ASCPDB"
required="false"
         name="query" type="java.lang.String" value="object=oracleDB"
required="false"
         name="url" type="java.lang.String"
value="jdbc:oracle:thin:@10.10.1.200:1521:provider" required="false"
         name="internalDataSource" type="java.lang.String"
value="oracle.jdbc.pool.OracleConnectionPoolDataSource"
required="false"
         name="vendorFactory" type="java.lang.String"
value="oracle.jdbc.pool.OracleDataSourceFactory" required="false"
         name="traceLevel" type="java.lang.String" value="FL;PR"
required="false"
```

DB2

```
        name="appId" type="java.lang.String" value="ASCPDB"
required="false"
        name="internalDataSource" type="java.lang.String"
value="com.ibm.db2.jcc.DB2ConnectionPoolDataSource" required="false"
        name="query" type="java.lang.String" value="object=oracleDB"
required="false"
        name="vendorFactory" type="java.lang.String"
value="com.ibm.db2.jcc.DB2DataSourceFactory" required="false"
        name=" Db2ServerName" type="java.lang.String"
value="127.0.0.1"  required="false" ignore="false"
confidential="false" supportsDynamicUpdates="false"
        name=" Db2DatabaseName" type="java.lang.String"
value="provider" required="true" ignore="false" confidential="false"
supportsDynamicUpdates="false"
        name=" Db2PortNumber" type="java.lang.Integer" value="50000"
required="false"
        name=" Db2DriverType" type="java.lang.Integer" value="4"
required="true" ignore="false" confidential="false"
supportsDynamicUpdates="false"
```

MSSQL

```
         name="appId" type="java.lang.String" value="TestASCP"
required="false"
     name="connectionPort" type="int" value="" description=""
required="false"
         name="connectionTimeout" type="int" value="" description=""
required="false"
     name="credFilePath" type="java.lang.String" value=""
description="" required="false"
         name="internalDataSource" type="java.lang.String"
value="com.microsoft.sqlserver.jdbc.SQLServerConnectionPoolDataSource
" required="false"
         name="logWriter" type="java.io.PrintWriter" value=""
description="" required="false"
     name="loginTimeout" type="int" value="" description=""
required="false"
         name="query" type="java.lang.String"
value="Safe=TestAIM;Object=provider" required="false"
         name="reason" type="java.lang.String" value=""
description="" required="false"
     name="traceLevel" type="java.lang.String" value="FL;PR"
required="false"
     name="url" type="java.lang.String"
value="jdbc:sqlserver://10.10.3.209;databaseName=provider;"
required="false"
     name="vendorFactory" type="java.lang.String"
value="com.microsoft.sqlserver.jdbc.SQLServerDataSourceObjectFactory"
required="false"
```