

# Using SHRINE Data Steward with Oracle or SQL Server

**DISCLAIMER:** These notes are written by a SHRINE developer to provide assistance to users of database systems that are not currently officially supported within the SHRINE test infrastructure.

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## Oracle

I was able to make this work with AWS RDS Oracle SE One 11.2.0.4.v4 .

## Schema

Find **oracle.ddl** for the adapter and qep audit schemas, and the DSA schema:

<https://open.med.harvard.edu/stash/projects/SHRINE/repos/shrine/browse/adapter/adapter-service/src/main/sql/oracle.ddl?at=tags/1.20.1&raw>

<https://open.med.harvard.edu/stash/projects/SHRINE/repos/shrine/browse/qep/service/src/main/sql/oracle.ddl?at=tags/1.20.1&raw>

<https://open.med.harvard.edu/stash/projects/SHRINE/repos/shrine/browse/apps/steward-app/src/main/sql/oracle.ddl?at=tags/1.20.1&raw>

Add the oracle DB driver .jar from <http://www.oracle.com/technetwork/apps-tech/jdbc-112010-090769.html> to **/opt/shrine/tomcat/lib/** (We can't ship this due to Oracle's licensing incompatibility with open source support.)

## Tomcat db connection pool

Replace tomcat's db connection pool config for the qep and adapter audit databases from **mysql** to **oracle** in **/opt/shrine/tomcat/conf/Catalina/localhost/shrine.xml** as follows:

```
<Resource name="jdbc/adapterAuditDB" auth="Container" type="javax.sql.DataSource"
maxActive="100" maxIdle="30" maxWait="10000"
username="CHANGE_ME" password="CHANGE_ME" driverClassName="oracle.jdbc.OracleDriver"
url="jdbc:oracle:thin:@CHANGEDNSNAME:1521:ORCL"
testOnBorrow="true" validationQuery="SELECT 1 FROM DUAL"/>

<Resource name="jdbc/qepAuditDB" auth="Container" type="javax.sql.DataSource"
maxActive="100" maxIdle="30" maxWait="10000"
username="CHANGE_ME" password="CHANGE_ME" driverClassName="oracle.jdbc.OracleDriver"
url="jdbc:oracle:thin:@CHANGEDNSNAME:1521:ORCL"
testOnBorrow="true" validationQuery="SELECT 1 FROM DUAL"/>
```

Replace tomcat's db connection pool config for the DSA from **mysql** to **oracle** in **/opt/shrine/tomcat/conf/Catalina/localhost/steward.xml** as follows:

```
<Resource name="jdbc/stewardDB" auth="Container" type="javax.sql.DataSource"
maxActive="100" maxIdle="30" maxWait="10000"
username="CHANGE_ME" password="CHANGE_ME" driverClassName="oracle.jdbc.OracleDriver"
url="jdbc:oracle:thin:@CHANGEDNSNAME:1521:ORCL"
testOnBorrow="true" validationQuery="SELECT 1 FROM DUAL"/>
```

## Slick driver

Change the slick profile in **/opt/shrine/tomcat/lib/shrine.conf** by setting the properties

```
shrine.queryEntryPoint.audit.database.slickProfileClassName = "freeslick.OracleProfile$"

shrine.adapter.audit.database.slickProfileClassName = "freeslick.OracleProfile$"
```

Change the slick profile in **/opt/shrine/tomcat/lib/steward.conf** by setting the property

```
shrine.steward.database.slickProfileClassName = "freeslick.OracleProfile$"
```

## mssqlserver

I was able to make this work with AWS RDS Microsoft SQL Server Express 11.00.5058.0.v1

## Schema

Find **mssql.ddl** for the adapter and qep audit schemas, and the DSA schema:

<https://open.med.harvard.edu/stash/projects/SHRINE/repos/shrine/browse/adapter/adapter-service/src/main/sql/mssql.ddl?at=tags/1.20.1&raw>

<https://open.med.harvard.edu/stash/projects/SHRINE/repos/shrine/browse/qep/service/src/main/sql/mssql.ddl?at=tags/1.20.1&raw>

<https://open.med.harvard.edu/stash/projects/SHRINE/repos/shrine/browse/apps/steward-app/src/main/sql/sqlserver.ddl?at=tags/1.20.1&raw>

Add the **jtids-1.2.7.jar** from <http://sourceforge.net/projects/jtids/files/jtids/1.2.7/> to **/opt/shrine/tomcat/lib/**

## Tomcat db connection pool

Replace tomcat's db connection pool config for the qep and adapter audit databases from **mysql** to **mssqlserver** in **/opt/shrine/tomcat/conf/Catalina/localhost/shrine.xml** as follows:

```
<Resource name="jdbc/adapterAuditDB" auth="Container" type="javax.sql.DataSource"
maxActive="100" maxIdle="30" maxWait="10000"
username="CHANGE ME" password="CHANGE ME" driverClassName="net.sourceforge.jtids.jdbc.Driver"
url="jdbc:jtids:sqlserver://CHANGEDNSNAME:1433/adapterAuditDB"
testOnBorrow="true" validationQuery="SELECT 1"/>
<Resource name="jdbc/qepAuditDB" auth="Container" type="javax.sql.DataSource"
maxActive="100" maxIdle="30" maxWait="10000"
username="CHANGE ME" password="CHANGE ME" driverClassName="net.sourceforge.jtids.jdbc.Driver"
url="jdbc:jtids:sqlserver://CHANGEDNSNAME:1433/qepAuditDB"
testOnBorrow="true" validationQuery="SELECT 1"/>
```

Replace tomcat's db connection pool config for the DSA from **mysql** to **mssqlserver** in **/opt/shrine/tomcat/conf/Catalina/localhost/steward.xml** as follows:

```
<Resource name="jdbc/stewardDB" auth="Container" type="javax.sql.DataSource"
maxActive="100" maxIdle="30" maxWait="10000"
username="CHANGE ME" password="CHANGE ME" driverClassName="net.sourceforge.jtids.jdbc.Driver"
url="jdbc:jtids:sqlserver://CHANGEDNSNAME:1433/stewardDB"
testOnBorrow="true" validationQuery="SELECT 1"/>
```

## Slick driver

Change the slick profile in **/opt/shrine/tomcat/lib/shrine.conf** by setting the properties

```
shrine.queryEntryPoint.audit.database.slickProfileClassName = "freeslick.MSSQLServerProfile$"
```

```
shrine.adapter.audit.database.slickProfileClassName = "freeslick.MSSQLServerProfile$"
```

Change the slick profile in **/opt/shrine/tomcat/lib/steward.conf** by setting the property

```
shrine.steward.database.slickProfileClassName = "freeslick.MSSQLServerProfile$"
```