

Configure a Scripted SQL resource

Version Warning

The content below is for Apache Syncope <= 1.2 - for later versions the [Reference Guide](#) is available.

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Introduction

The Scripted SQL connector provides great flexibility in the interaction with a database resource. A different Groovy script can be configured for each operation.

This wiki page shows all the steps needed to configure a Scripted SQL resource identified by the following connection parameters:

```
Host: localhost
Port: 3306
Database: HR
JDBC Driver: com.mysql.jdbc.Driver
JDBC Connection URL: jdbc:mysql://%h:%p/%d
User: root
User Password: password
```

In order to link a Scripted SQL resource there are pre-requisites and configuration steps to be satisfied.

Pre-Requisites

1. Download JDBC driver (MySQL JDBC driver in this case) and include it into your JEE container classpath
2. [Install OpenICF ScriptedSQL connector bundle](#)
3. [Implement custom Groovy SQL scripts](#)

Install OpenICF ScriptedSQL connector bundle

Warning

A bug in the current stable version of this connector bundle makes `sync()` not working: a patch for this was [already provided](#) but not yet part of any standard release.
A temporary workaround is to perform full reconciliation on the related [synchronization task\(s\)](#).

Scripted SQL connector bundles can be added at run-time just performing the following two steps.

1. Download Scripted SQL connector bundle JAR file from [OpenICF site](#)
2. Copy downloaded JAR file into the connector bundles directory specified into the configuration parameter `bundles.directory`

Implementation of custom Groovy SQL scripts

Every action script receives a set of parameters and an attribute map. The set of parameters varies for each action.

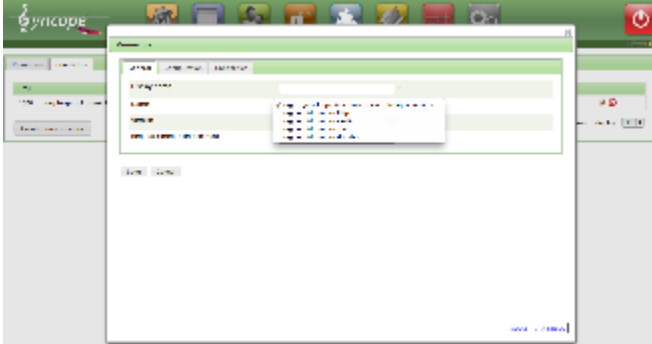
- [CreateScript.groovy](#)
- [UpdateScript.groovy](#)
- [DeleteScript.groovy](#)
- [SearchScript.groovy](#)
- [SyncScript.groovy](#)

Configuration steps

Configure Scripted SQL connector instance

Use this page as example for your configuration.

1. Open your browser and access to the Syncope administration console (<http://host:port/syncope-console>).
2. Log into the interface by providing the following credentials:
 1. Login: admin
 2. Password: password
3. Click on the *Resources* tab.
4. Click on the *Connectors* sub-tab.
5. Click on *Create new Connector* button (configuration modal page appears).



6. Click on tab *General*.
 1. Provide *Display name* (e.g. 'Sql Scripted Connector').
 2. Select the correct *Bundle name* (`org.forgerock.openicf.connectors.scriptedsql.ScriptedSQLConnector`).
 3. Select the correct *Bundle version* (`1.1.0.1`).
7. Click on tab *Configurations* and provide connector instance configuration.

User: **root**

Password: **password**

Host: **localhost**

TCP Port: **3306**

Database: **HR**

JDBC Driver: **com.mysql.jdbc.Driver**

JDBC Connection URL: **jdbc:mysql://%h:%p/%d**

clearTextPasswordToScript: **true**

reloadScriptOnExecution: **true**

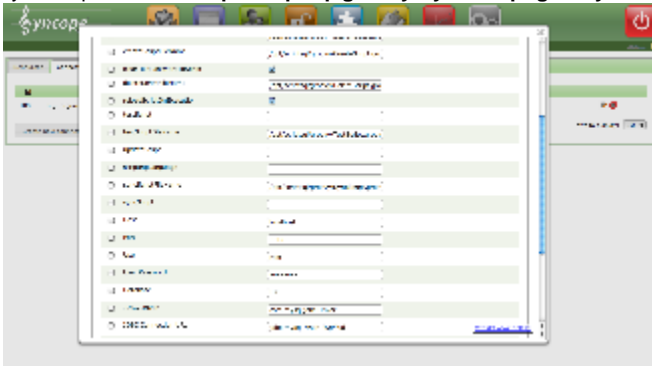
createScriptFileName: **/opt/scriptsql/groovy/CreateScript.groovy**

updateScriptFileName: **/opt/scriptsql/groovy/UpdateScript.groovy**

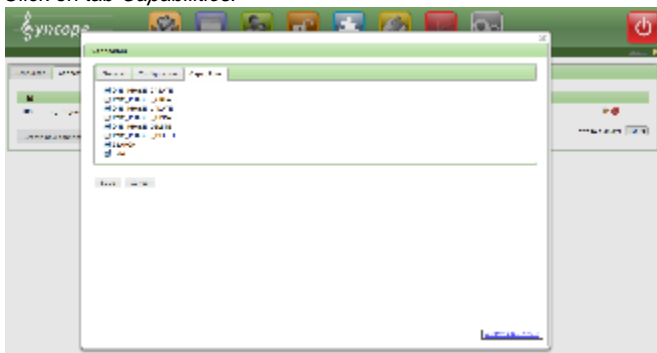
deleteScriptFileName: **/opt/scriptsql/groovy/DeleteScript.groovy**

searchScriptFileName: **/opt/scriptsql/groovy/SearchScript.groovy**

syncScriptFileName: **/opt/scriptsql/groovy/SyncScript.groovy**



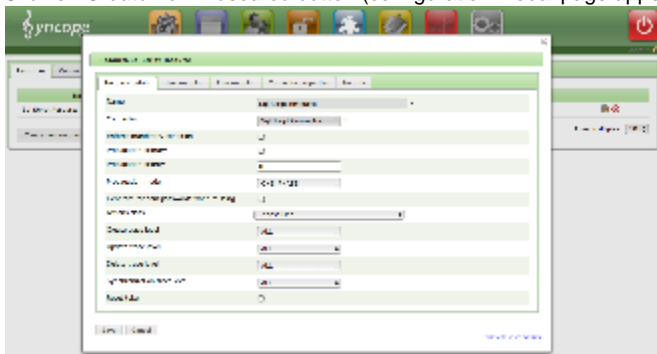
8. Click on tab *Capabilities*.



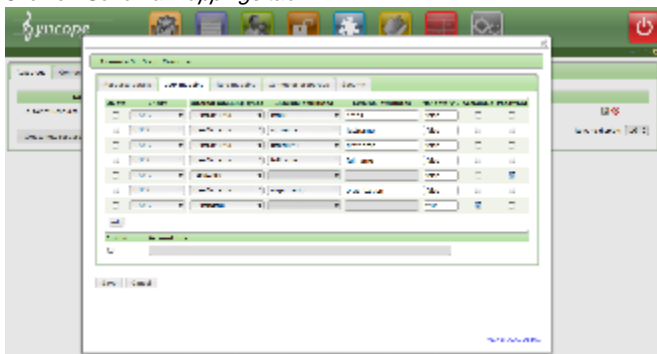
- 9. Check needed capabilities as shown at Connector instance configuration.
- 10. Click on *Save* button.

Configure Scripted SQL resource

- 1. Click on the *Resources* tab.
- 2. Click on the *Resources* sub-tab.
- 3. Click on *Create new Resource* button (configuration modal page appears).



- 4. Click on *Resource Details* tab.
- 5. Choose from the list the correct *Connector* instance name.
- 6. Provide the following information
 - 1. Name: *Sql Scripted Resource*
 - 2. Connector: *Sql Scripted Connector*
- 7. Click on *Schema Mappings* tab.



- 8. Click on *Add* button to insert attributes mapping.
- 9. Click on *Save* button.

Schema mapping

Internal mapping types	Internal mapping	External Attributes	Mandatory condition	Account Id	Password
Username			true	X	
Password			true		X

UserSchema	surname	lastname	false		
UserSchema	firstname	firstname	false		
UserSchema	fullname	fullname	false		
UserSchema	email	email	false		
UserSchema	organization	organization	false		