Enabling and configure QCLE

1 Contents

1 Preface

This document describes steps necessary to create, configure and enable QCLE instances.

2 Prerequisites

In order to setup QCLE instances, the following requirements must be met:

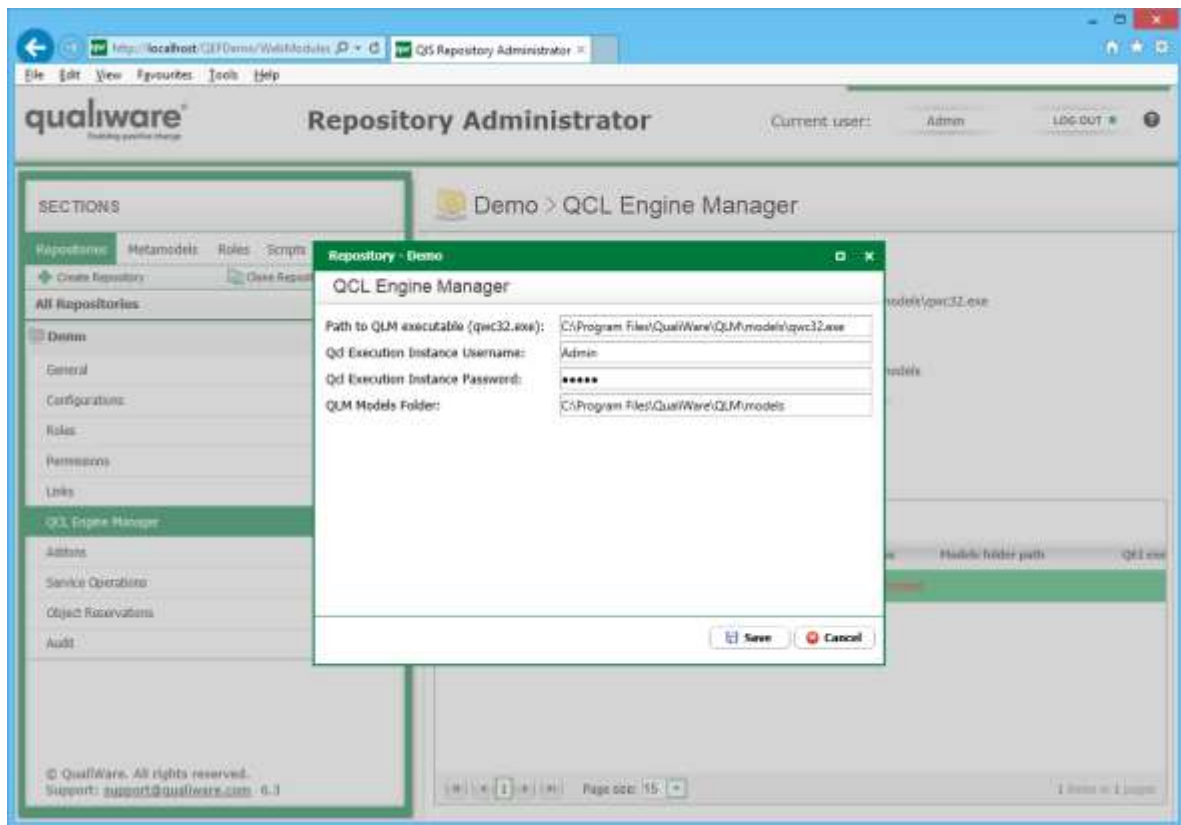- QIS module is installed and running;
- QCLE module is installed and running;
- RA module is installed and running.

3 Configuration of QCLE Execution Pool

1. Go to **RA -> Repositories -> {Repository} -> QCL Engine Manager**.
2. Click **Edit**.
3. Enter user login and password.

   Note: It is considered best practice to create a single separate user for QEI instances with QIS Administrator role in order to use it as a part of QEI publishing process, since it is generally operated via QualiWareSetup which is user-specific.

4. Optionally, enter path to QLM models folder. It must be an absolute path on the server, where QCLE module is running. In case it is absent, default path will be used.
5. Optionally, enter path to QLM executable file. It can be absolute or relative. In case it is absent, default path will be used.
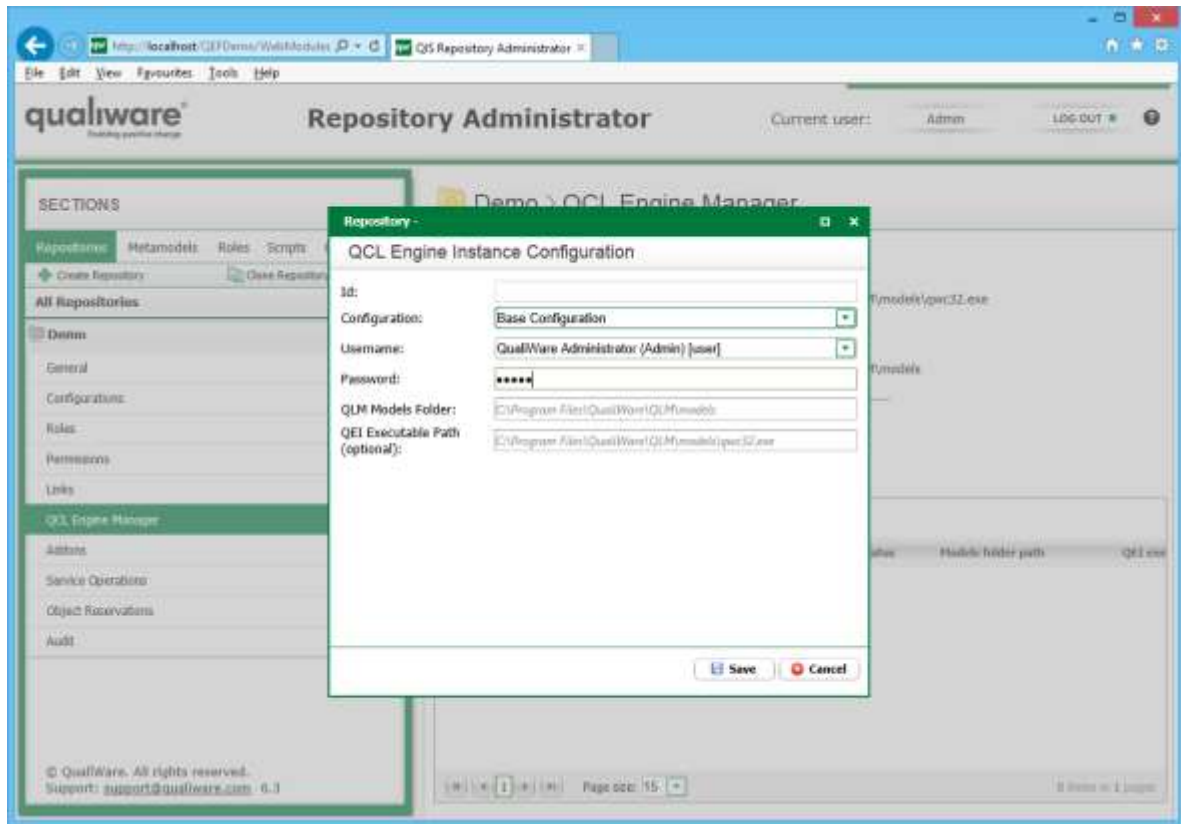6. Click **Save**.

4 Configuration of QCLE Instances

In order to add or edit QCLE instance, follow the steps:

1. Go to **RA -> Repositories -> {Repository} -> QCL Engine Manager**.
2. To add a new QCLE instance, click **Add**, or to edit existing QCLE instance, select specific instance and click **Edit**.
3. Select configuration to connect to.
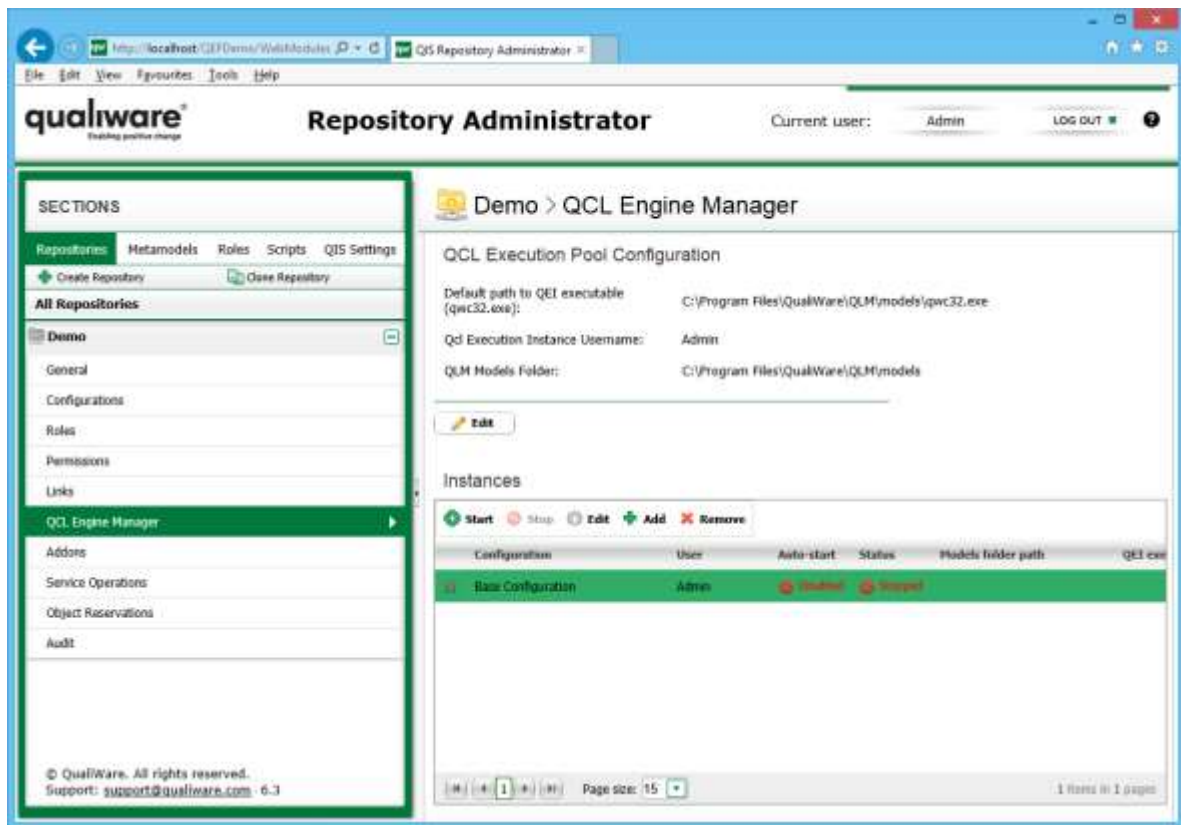4. Enter user login and password.

    Note: It is considered best practice to create a single separate user for QEI instances with QIS Administrator role in order to use it as a part of QEI publishing process, since it is generally operated via QualiWareSetup which is user-specific.

5. Optionally, enter path to QLM models folder. It must be an absolute path on the server, where QCLE module is running. In case it is absent, default path will be used.
6. Optionally, enter path to QLM executable file. It can be absolute or relative. In case it is absent, default path will be used.
7. Click **Save**.

In order to delete QCLE instance, follow the steps:

1. Go to **RA -> Repositories -> {Repository} -> QCL Engine Manager**.
2. Select specific instance and click **Remove**.

5 Working with QCLE Instances

QCLE instances may be either enabled or disabled. Whenever QCLE instance is enabled, QCLE module will automatically restart the specified instance upon unexpected crashes. Disabled instances are stopped by QCLE module and are not run.

QCLE module also monitors QCLE instances for configuration changes (e.g. user password change) and will automatically stop/start erroneous/correct instances in case they are in "enabled" state.

In order to enable QCLE instance, follow the steps:

1. Go to **RA -> Repositories -> {Repository} -> QCL Engine Manager**.
2. Select specific instance and click **Start**.

After these steps, the following is expected:

- Instance "Auto-start" property is set to "Enabled"
- Instance "Status" property is set to either "Starting" or "Running"
- After several seconds upon page refresh, instance status should say "Running". If it is not so, see General Troubleshooting.

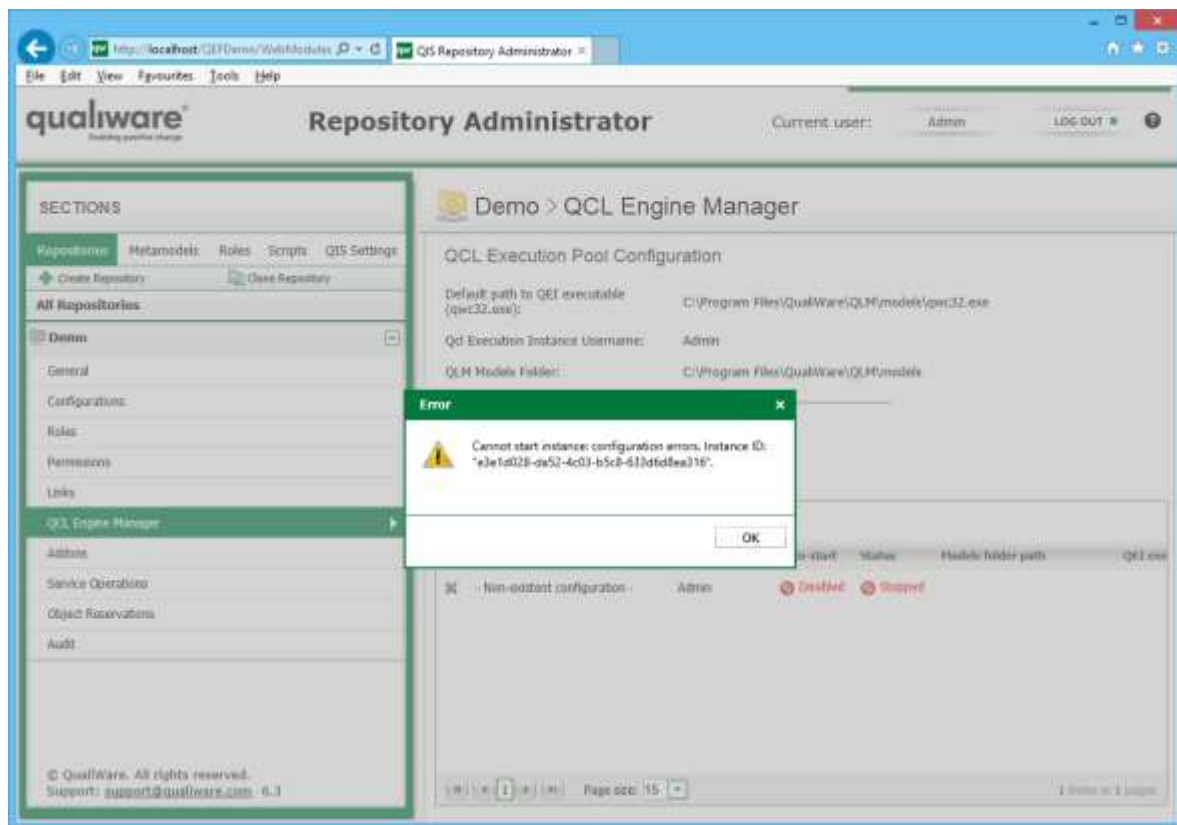In order to disable QCLE instance, perform the following steps:

1. Go to **RA -> Repositories -> {Repository} -> QCL Engine Manager**.
2. Select specific instance and click **Stop**.

After these steps, the following is expected:

- Instance "Auto-start" property is set to "Disabled"
- Instance "Status" property is set to either "Stopping" or "Stopped"
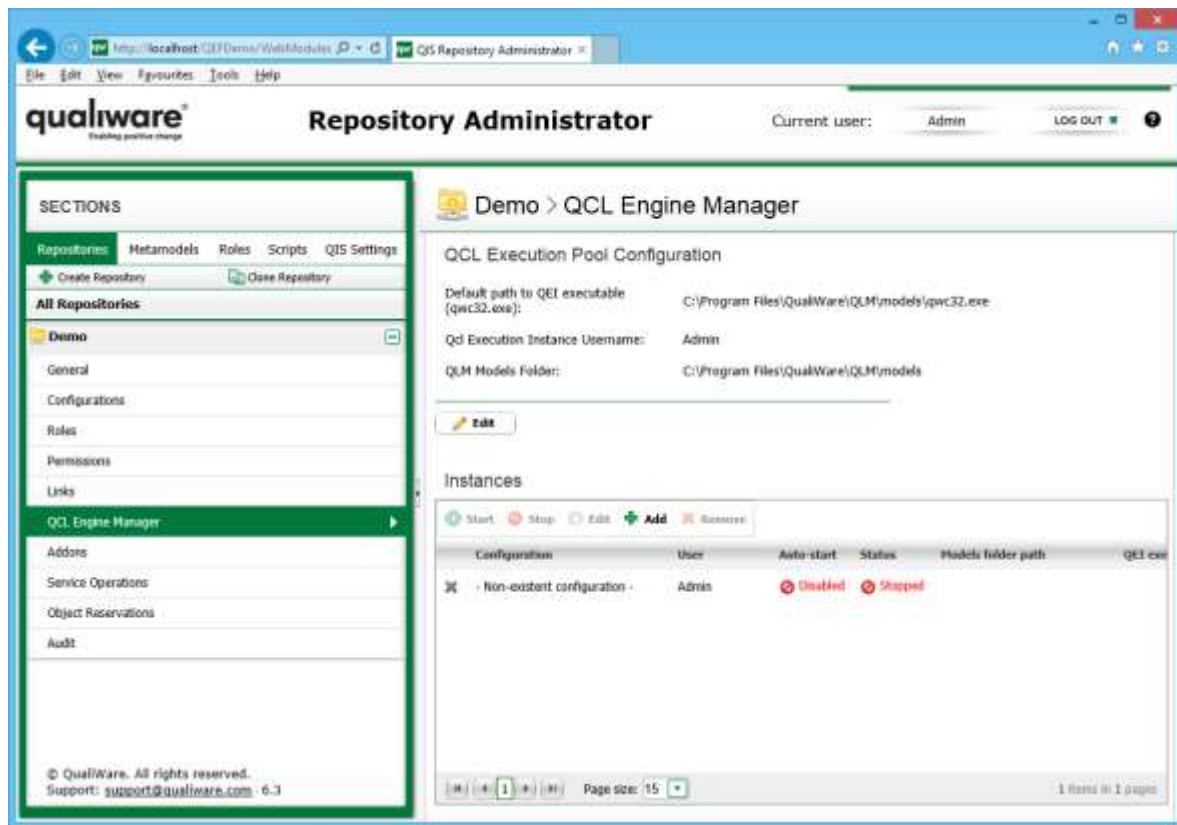- After several seconds upon page refresh, instance status should say "Stopped".

6 General Troubleshooting

Q: Whenever QCLE instance is started, it gives the following message:

Additionally, the instance icon is grey.

A: Icon to the left is used to show whether the configuration for the specific instance is correct. In case of correct configuration green mark will be seen; otherwise, it is gray:

Incorrect instance configuration may mean one of the following:

- Specified user and/or password are invalid.
- Specified configuration no longer exists in the repository.
- Current repository is in offline mode.

In order to proceed, please verify that these parameters are correct and refresh the page.

Q: Instance is always in "Starting" state.

A: This may be caused by several reasons:

- Instance has exited right after start due to misconfiguration or crash;
- Instance cannot maintain contact with either QEF, QIS or QCLE module.

Please verify that QEF address and port are correctly configured for QCLE instance executable.

Try to start it manually and connect to the particular repository and configuration pair using QCLE instance credentials.

If that does not help, please check for errors in either QEF Log or Windows Event Log.

Q: QCLE module is stopped when started together with QIS.

A: QIS upon start takes some time to prepare metamodels and compile scripts; if it does not respond in 30 seconds timeframe, QCLE module shuts down. Restarting the module will fix the problem.

7 Appendix A. Error Messages

These error messages may appear in QEF log or in RA.

Message	Meaning
"QCL Engine Instance with ID='...' did not respond in timely fashion and was stopped."	QCLE Instance couldn't connect to QCLE module. Please verify QCLE module configuration or Windows Error Log for unexpected errors. It may be also that incorrect executable is started, which doesn't maintain connection to QCLE module.
Error checking hanging QCL Engine Instance with ID='...'	Generic error. Please see error description for additional info.
Error executing operation.	Generic error when starting/stopping QCLE instances when their configuration has changed (e.g. user password was changed – QCLE instance configuration became erroneous). Please see error description for additional info.
Could not stop QCL Engine Instance with erroneous configuration.	QCLE module was unable to stop QCLE instance which had configuration change to erroneous. Please see error description for additional info.
Error starting QCL Engine Instance having correct configuration	QCLE module was unable to start QCLE instance which had configuration change to correct. Please see error description for additional info.
Error checking hanging QCL Engine Instance with ID='...'	Error happened when QCLE module was checking up on hanging QCLE instances.
Cannot start instance: repository is offline.	QCLE module is unable to start instance for offline repositories. Please set repository to online mode.
Instance is already running.	QCLE module can't start already running instance. If instance is not currently running, please restart QCLE module.
Cannot start instance: configuration errors.	QCLE instance has erroneous configuration. Please check whether repository is online, configuration exists and is accessible with specified credentials.
Cannot modify running instance.	QCLE instance can't be modified when it's enabled. Please, disable QCLE instance and perform the modification.
File path does not exist. File: ...	Specified QCLE instance executable path is incorrect or inaccessible. Please verify that path exists and is accessible by QCLE module.
QCL Engine Instance with id = '...' exited right after the start. Check QEF logs to see if there is anything wrong.	QCLE instance exited right after start. Please refer to General Troubleshooting section.

Couldn't auto-start QCL Engine Instance with ID = '...'	QCLE module couldn't restart some instances upon start. Please see error description for additional info.