Data Migration

1 Contents

1 Data Migration

Previous sections describe how to create new metamodels and repositories. In this section we will describe how to migrate data from other QualiWare installations.

Since all user data is contained in repositories, moving repositories is the main subject of this section.

Moving repositories may be used in the following cases:

- Moving one or more repositories to a different database server.
  Note that this operation might instead be done using backup and restore options on database server in many cases.
- Updating QualiWare systems from systems not based on QualiWare Integration Server (QIS). Normally QLM 5.2 or earlier.
- Fixing incorrectly created repositories (rare cases).

Moving repositories is not needed in the following cases:

- Upgrading a QualiWare system from another QIS based system.
- Moving QEF/QIS/QLM installation to a different server.

1.1 Move a Repository

When a repository is to be moved, only the content is actually moved. The new repository has to be created and configured manually first. Then data is dumped from the old repository, and finally loaded into the new repository.

1.1.1 Collect Information

When creating the new repository it is necessary to have basic information about the old repository ready. The following information should be ready:

- Repository ID.
- Metamodels used.
- All working languages of repository
- If migrating from non QIS versions of QLM, it is important to note the meaning of the special language none/0. That is the language actually used to name and describe objects of the none language.

1.1.2 Create and Configure the New Repository

The new repository is created as normal in QIS RA (see section "Creation of repositories"). It is not a strict requirement that the repository ID is the same as in the old repository, but it is recommended to do so if possible.

Note that it is important to match the old repository's language configuration correctly. In QIS versions of QualiWare, languages are defined by a text string with the format language-LOCATION. Examples are en-US, en-GB, nb-NO.

Here there are three cases:

- Migrating from newer QIS versions (5.5.10 – 6.0)
- Migrating from early QIS versions (5.5.7 – 5.5.10)
- Migrating from non QIS version of QLM

1.1.2.1 Migrating from Newer QIS Versions (5.5.10 – 6.0)

Please configure the languages of the new repository exactly as the languages for the old repository.

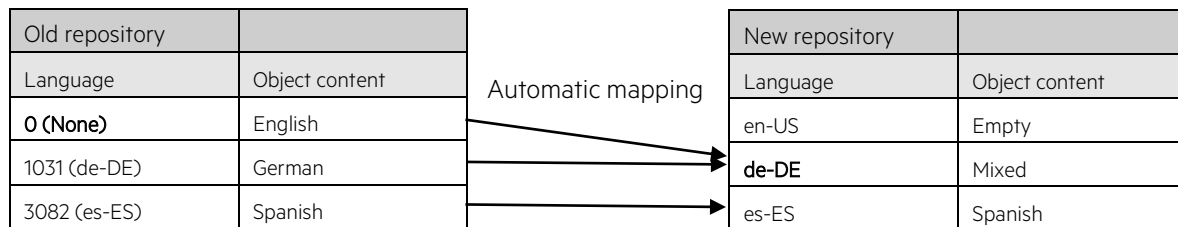### 1.1.2.2 Migrating from Early QIS Versions (5.5.7 – 5.5.10)

In early versions of QIS there existed some additional languages, without location. Examples are "en" and "de". These languages cannot be used with QualiWare 6.0.

Currently there exists no automatic system for resolving this case. Please contact QualiWare support for help if the languages in the old repository has this format.

These QIS versions also had support for valid languages (en-US etc.). In this case, simply continue like described in previous section.
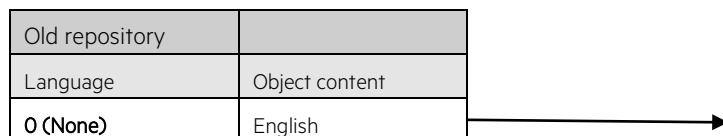
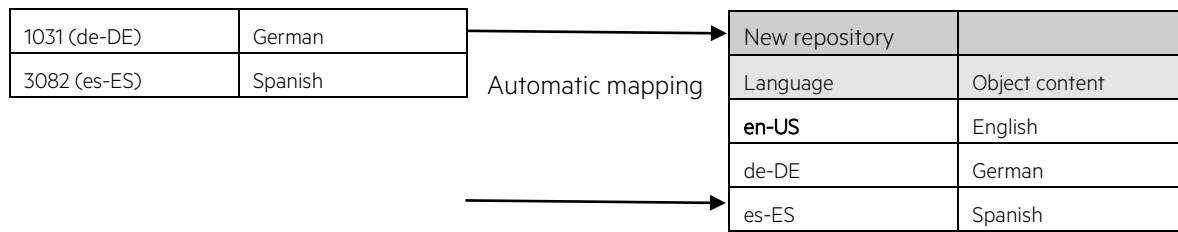### 1.1.2.3 Migrating from non QIS Version of QLM

In non QIS versions of QLM, language is defined by a number. This number is automatically translated when loading dump file into QIS version. However in these versions there was a special language called "none" with the number 0, which was always default. When loading the dump, this language is translated to the default language of the new repository. This can lead to a conflict in case the chosen default language in the new repository also exists explicitly in the old repository:

Old repository	
Language	Object content
0 (None)	English
1031 (de-DE)	German
3082 (es-ES)	Spanish

Automatic mapping

New repository	
Language	Object content
en-US	Empty
de-DE	Mixed
es-ES	Spanish

The above illustration shows an example of such a conflict. The default languages are written in bold. Because both 1031 and none will both be mapped to de-DE in the new repository, the conflict arises and the load will fail.

The key insight here is that the default language in the new repository should be chosen as the language that none represented in the old repository (English in above example). The correct language configuration for the new repository is shown below:

Old repository	
Language	Object content
0 (None)	English

1031 (de-DE)	German
3082 (es-ES)	Spanish

Automatic mapping

New repository	
Language	Object content
en-US	English
de-DE	German
es-ES	Spanish

1.1.3 Dump Data from the Old Repository

Finally make a dump from the old repository.

In non QIS versions of QLM this is done from inside Repository Administrator (RA):

- Select repository on the graph.
- Go to tools -> Import and Export -> Dump data from selected repository.

In QIS versions of QLM (5.5 and newer) connect to repository with QLM, then go to:

- File -> Import and Export-> Copy repository to dump file

This will create a file with the repository contents, and possibly a folder. The folder contains some special large objects, used for the QualiWare Document Manager (QDM) system.
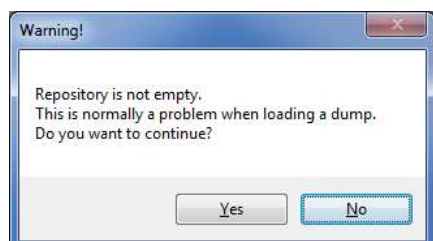
1.1.4 Load Dump in the New Repository

Before starting the dump load following should be checked:

- The new repository is empty
- The new repository is in offline state
- There is a user will all permissions for the repository as defined in QIS RA

To load the dump in the new repository, open the special dump load tool.

If the load process is started directly on the server where QLM is installed, the dump load tool can be started from the "QLM Dump Loader" shortcut in the QualiWare section in the start menu. If the load process is started on a different PC, please run the executable "QlmDumpLoad.exe" from the QLM models folder.

This will prompt you to login to the new repository. Once connected, the tool will check that the repository is empty. If the repository is not empty it will show a warning dialog:

It is highly recommended to only load dumps into empty repositories. If the repository is not empty, it can be emptied by deleting and creating the data storage in the Data Storage Settings for the repository in QIS RA.

The dump loader tool will ask for a dump file to load. Please choose the dumpfile and press open.

If everything is ok, the load will now run. Please note that loading dumps can be very long running operations. The dump loader tool will notify you when it is finished.