Directory structure

Introduction

In this section the (default) file and directory structure is described for the Quaestor external data management in order to organise all knowledge and data for knowledge-based systems. Please note that part of the described directories are created when the program is installed and part of the structure is created while working with the program. Below we have assumed that Quaestor has already been started for the first time, see Quaestor installation for directory creation at first time start-up and all other installation issues. Where possible the description includes the use by the knowledge system.

Please note that with the introduction of Quaestor version 2.47.2, in addition to this standard structure, ICT departments are able to create a dynamic root path definition for projects. This enables ICT departments to merge the standard Quaestor directory structure with a logic directory structure within an organisation. For explanation on the use of this feature [Click here].

See also the topic on General kbs root path for additional functionality to show available knowledge bases in a navigation window inside Quaestor.

A Quaestor knowledge based system can be divided into three parts:

1. The knowledge base: *.QKB;
2. A project file: *.QPF;
3. The Quaestor program;

Both the QKB and the QPF are binary files that can be saved anywhere. There default location for Quaestor is defined in the personal user settings found in the menu dialog Tools>Options>Files.
Quaestor is an executable (requiring some additional libraries) that is usually installed on the workstation. The knowledge based system can be started by double clicking a project file, a knowledge base file or the Quaestor program. The particular startup behaviour will depend on the user level and the knowledge base protection.

When working with project files, as an option the Quaestor project file database QDB can be used. This enables version management for project files and data management over all project files.

General directory structure

The general directory structure can be divided into a structure for the Quaestor system and one for the Knowledge base use:

1. General for Quaestor;
2. User specific, divided into:
    a. General for user;
    b. Specific for each knowledge base
    c. Specific for Satellite applications
    d. Specific for each project

Ad. 1.

All system files required for Quaestor. These are positioned in the installation directory, normally c:\Program Files\Qnowledge\Quaestor.

Ad. 2.

Ad. 2.1   The position of the settings files required as start-up. Please see Quaestor startup for a detailed description. This directory is either created at first start-up of Quaestor or defined in the Quaestor System settings file (QuaestorSystem.xml). By default this is \My Documents\My Knowledge\

Ad. 2.2   The position of the specific information for a knowledge base. The path of the knowledge base is defined in the personal settings file (the \Kbs\ directory). Below this path additional directories for each knowledge base are created in _[KnowledgeBaseName]. By default the knowledge base path is \My Documents\My Knowledge\Kbs\ and the specific information is stored in \My Documents\My Knowledge\Kbs_[KnowledgeBaseName].

Ad. 2.3   All satellite applications (external applications: *.exe, *.bat), spreadsheet (*.xls, *.xlt), document templates (*.rtf) that are used by the knowledge bases are by default expected to be found in the \Applic\ directory under the root path as defined in 2.1 above. The Applic directory in My Knowledge is created on its default location at the first start-up of Quaestor. Satellite applications dedicated to one particular knowledge base can be saved in the \Kbs_[KnowledgeBaseName]\Applic\ directory. This _[KnowledgeBaseName]\Applic\ directory is created the first time a knowledge base is saved in the \Kbs\ directory.

Ad. 2.4   All project related data is saved in the \Project_[KnowledgeBaseName]\[ProjectName]\ directory of the root as defined in 2.1. The \Project\ directory is created on its default location at the first start-up of Quaestor. The _[KnowledgeBaseName]\ directory in Projects is created the first time you save your knowledge base. The [ProjectName]\ in the \Project_[KnowledgeBaseName]\ directory is created when you save your project in this directory.

Sub-directory detail

More detail about the sub-directory structure can be given, assuming the default root directory.

1. The Qnowledge directory contains the following sub directories:

a. Qnowledge\Quaestor\ - contains Quaestor.exe, Quaestor.hlp, Q.hlp, Q.MAN, Qsyntax.xml (all system files), logo.gif, splashscreen.gif (used in HTML findows), Compact user manual.pdf (manual) and QnowledgeForm.dot (Macro to create templates)
   b. Qnowledge\Html\ - is the location used for data exchange as Hypertext mark-up language (Html) required by Quaestor (WILL BE REPLACED BY www.quaestor.org/wiki)
   c. Qnowledge\Html\Functions\ - contains Html documents describing the Quaestor function library (WILL BE REPLACED BY www.quaestor.org/wiki)
   d. Qnowledge\Html\Images\ - contains graphic images referred to in static Html documentation required by Quaestor (WILL BE REPLACED BY www.quaestor.org/wiki)
   e. Qnowledge\Html\Scripts\ - contains default Html scripts for Html documentation and html documents generated by Quaestor (WILL BE REPLACED BY www.quaestor.org/wiki)
   f. Qnowledge\Html\Styles\ - contains default Html styles for Html documentation and html documents generated by Quaestor (WILL BE REPLACED BY www.quaestor.org/wiki)
   g. Qnowledge\Html\Topics\ - contains technical background information in various formats (WILL BE REPLACED BY www.quaestor.org/wiki)
   h. Qnowledge\Html\Topics\Attributes\ - contains Html documentation of the attributes that can be used in Quaestor knowledge bases (WILL BE REPLACED BY www.quaestor.org/wiki)
   i. Qnowledge\Html\Topics\Glossary\ - contains Html documentation of a variety of subjects related to Quaestor (WILL BE REPLACED BY www.quaestor.org/wiki)
   j. Qnowledge\Html\Topics\Papers\ - contains Html and PDF documentation and papers related to Quaestor (WILL BE REPLACED BY www.quaestor.org/wiki)
   k. Qnowledge\Html\Topics\HTML Tutorials\ - contains tutorials to get familiar to knowledge engineering in Quaestor (WILL BE REPLACED BY www.quaestor.org/wiki).
2. The My knowledge directory contains the following subdirectories for the Knowledge base related data, programs and information:
   a. My Documents\My knowledge\Kbs\ - standard location of knowledge base files with either .qkb and .xml extensions; The knowledge base files (*.QKB) are by default saved in the KBS directory and will search for all external data and satellite programs in the Applic sub-directory of the directory with equal name saved in the Kbs directory (*My documents\My knowledge\Kbs_[KnowledgeBaseName]\Applic*)
   b. My Documents\My knowledge\Kbs_KnowledgeBaseName\ - standard location for all knowledge base specific files
   c. My Documents\My knowledge\Kbs_KnowledgeBaseName\Applic\ - standard location for all knowledge base specific satellites programs (please note this is a system folder, renaming will disable functionality). A KE can place knowledge base specific applications in this directory so that these programs will not be shared by other knowledge bases (which is the case if you place them in the *Applic* directory under the *My knowledge* node)
   d. My Documents\My knowledge\Kbs_KnowledgeBaseName\Html\ - standard location for all knowledge base specific HTML information (please note this is a system folder, renaming will disable functionality). Quaestor will use the sub-directories for its HTML explanation and illustration functionality. Furthermore, a KE can place knowledge base specific HTML files in the sub-directories.
   e. My Documents\My knowledge\Kbs_KnowledgeBaseName\Html\Images\ - standard location for specific knowledge base images
   f. My Documents\My knowledge\Kbs_KnowledgeBaseName\Html\Scripts\ - standard location for specific knowledge base scripts
   g. My Documents\My knowledge\Kbs_KnowledgeBaseName\Html\Styles\ - standard location for specific knowledge base styles
   h.
   i. My Documents\My knowledge\Kbs_KnowledgeBaseName\Html\Documents\ - standard location for dynamic knowledge base related HTML exchange data (pictures, html files)
   j. My Documents\My Knowledge\Vault - standard location for files used by the Quaestor Database Server. Not relevant for normal use of Quaestor (WILL BECOME OBSOLETE)
   k. My Documents\My Knowledge\Vault\Kbs - standard location for back-up knowledge base files used by the Quaestor Database Server. Not relevant for normal use of Quaestor(WILL BECOME OBSOLETE)
   l. My Documents\My Knowledge\Vault\Datasets - standard location for data files created by clients and used by the Quaestor Database Server. Not relevant for normal use of Quaestor (WILL BECOME OBSOLETE)
   m. My Documents\My Knowledge\Vault\Projects - standard location for back-up project files used by the Quaestor Database Server. Not relevant for normal use of Quaestor (WILL BECOME OBSOLETE)
3. The My knowledge directory contains the following sub directories for the project related data:
   a. My Documents\My knowledge\Projects\ -general location used to save project data. Project files (*.QPF) are connected to a specific knowledge base and are saved in the project sub-directory with equal name
   b. My Documents\My knowledge\Projects_KnowledgeBaseName\ - the location used to gather all project files (*.qpf) and project directories related to a specific knowledge base with equal name
   c. My Documents\My knowledge\Projects_KnowledgeBaseName\Solutions\ - the location used by the knowledge base to gather all files related to solutions created in this knowledge base when no specific project is used
   d. My Documents\My knowledge\Projects_KnowledgeBaseName_ProjectName\ - the location used to gather all project specific files (and directories) related to a specific project with equal name and using KnowledgeBaseName
   e. My Documents\My knowledge\Projects_KnowledgeBaseName\Images\ - standard location for specific knowledge base images used by all projects
   f. My Documents\My knowledge\Projects_KnowledgeBaseName\Scripts\ - standard location for specific knowledge base scripts used by all projects
   g. My Documents\My knowledge\Projects_KnowledgeBaseName\Styles\ - standard location for specific knowledge base styles used by all projects

Directory creation

Quaestor will create directories in the following process:

When saving a knowledge base:

1. Quaestor will create a sub-directory with the name of the knowledge base, together with all additional sub-directories as mentioned above in both the My Documents\My knowledge\Kbs\ and My Documents\My knowledge\Projects\ directories
2. All files available in the .\Qnowledge\Html\ directory will be copied to the \Kbs_KnowledgeBaseName\Html\ sub-directory
3. In the Project directory, Quaestor will make a sub-directory with the name of the knowledge base (.\Project_KnowledgeBaseName\), together with all sub-directories in this _[KnowledgeBaseName] directory as mentioned for the project related data above

4. All files available in the Html sub-directory of the knowledge base (.\Kbs_KnowledgeBaseName\Html) will be copied to the relevant sub-directories in the project directory (\Project_KnowledgeBaseName*.*), possibly overwriting the files previously copied from the Qnowledge\Html\ directory
5. Finally, the directory \Project_KnowledgeBaseName\Solutions is created for the data exchange during the solution.

When saving a project:

1. Depending on user rights 1 to 5 above will be carried out. When the knowledge base is protected it cannot be changed so is not saved and 1 to 5 are skipped. When you choose to save a knowledge base as project, both 1 to 5 and below will be carried out:
2. In \Project_KnowledgeBaseName\, Quaestor will make a sub-directory with the name of the project (\Project_KnowledgeBaseName_ProjectName\)
3. Finally, the project file is saved in the \Project_KnowledgeBaseName\ directory.

Remarks

Please note that the locations for Projects and Satellite applications are stored in the knowledge base on saving and are read from the knowledge base on loading into Quaestor. If you want to use locations dedicated to a knowledge base, you should set this directory before saving the knowledge base. Furthermore, as mentioned above, if you make the Satellite directory (Applic) equal to the knowledge base directory (Kbs) (using the Tools>Options>Files dialogue). And store the programs and templates in the Applic sub-directory below your _KnowledgeBaseName sub-directory in Kbs satellite directory. You can use different programs (version) and templates with the same name for different knowledge bases (which is especially important for knowledge engineers).

We realise that the directory structure looks complex. However, it has important advantages and is necessary for flexible use of external programs, processes and files. One of the advantages is for instance that by following the remark about the Satellite directory above, you only need to copy the knowledge base with its sub directory to make the knowledge base work somewhere else. Moreover, all project related data (dynamic data for a particular user/solution/project etc.) is contained in one sub-directory and a project file. This makes data storage and protection of dynamic data relatively easy.