



QEFileBrowser Widget

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QFileBrowser Widget Specification



Introduction

This document describes in detail the QFileBrowser widget provided by the EPICS Qt, aka the QE Framework.

This document was created as a separate widget specification document. The main reason for this is ease of maintenance and avoiding editing large and unwieldy word documents.

The QE Framework is distributed under the GNU Lesser General Public License version 3, distributed with the framework in the file LICENSE. It may also be obtained from here:

<http://www.gnu.org/licenses/lgpl-3.0-standalone.html>

The QFileBrowser widget provides EPICS-awareness via a single control Process Variable (PV), associated with a stringin/stringout record or a waveform record with FTVL set to CHAR.

Description

The QFileBrowser widget class inherits directly QEAbstractWidget which provides many of the standard QE properties (e.g. variableAsToolTip, userLevelEnabled) and indirectly from the QFrame class which which allows the QFileBrowser widget to have a border.

The QFileBrowser widget allows the user to browse existing files from a certain directory.

When connected to a QEFileImage it can be used to select the file being viewed. In this scenario, the QFileBrowser 'selected' signal is connected to the QEFileImage 'setImageFileName' slot. Note, this is only one method a QEFileImage widget can use to source its image.

QFileBrowser Widget Specification

Within Qt Designer, it has the following graphical representation (surrounded by a red rectangle):

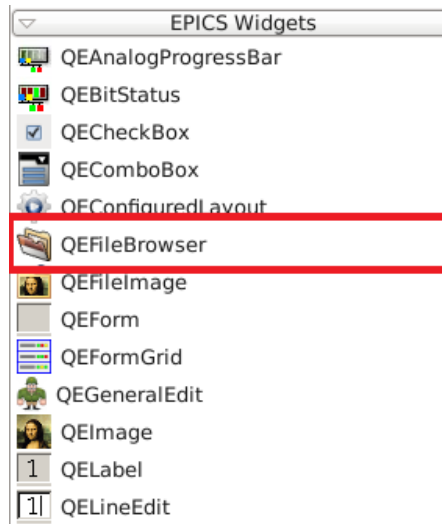


Figure 1 QFileBrowser within Qt Designer

Properties

The QFileBrowser has the following properties (that can be controlled by the user). Only the properties provided by QFileBrowser itself are described here:

- **variable**
Defines the process variable name used by the widget.
- **variableSubstitutions**
Defines the default (and lowest priority) variable name substitutions values used by the widget.
- **directoryPath**
Default directory where to browse files when QFileBrowser is launched for the first time.
- **showDirectoryPath**
Show/hide directory path line edit where the user can specify the directory to browse files.
- **showDirectoryBrowser**
Show/hide button to open the dialog window to browse for directories and files.

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- **showRefresh**
Show/hide button to refresh the table containing the list of files being browsed.
- **showTable**
show/hide table containing the list of files being browsed.
- **showColumnTime**
show/hide column containing the time of creation of files.
- **showColumnSize**
Show/hide column containing the size (in bytes) of files.
- **showColumnFilename**
Show/hide column containing the name of files.
- **showFileExtension**
show/hide the extension of files.
- **fileDialogDirectoriesOnly**
Enable/disable the browsing of directories-only when opening the dialog window.
- **fileCreationAllowed**
When set (and fileDialogDirectories is de-selected), the widget will use the file save dialog as opposed to the fileOpen dialog. This allows the selection/creation of new files, and also warns the user if the file already exists.
- **fileFilter**
Specify which files to browse. To specify more than one filter, please separate them with a ";".
Example: *.py;*.ui (this will only display files with an extension .py or .ui).
- **optionsLayout**
Change the order of the widgets. Valid orders are: TOP, BOTTOM, LEFT and RIGHT.
- **margin**
Set the margin between internal widgets and the QFileBrowser border.

QFileBrowser Widget Specification

The following figure illustrates the QFileBrowser widget in production:

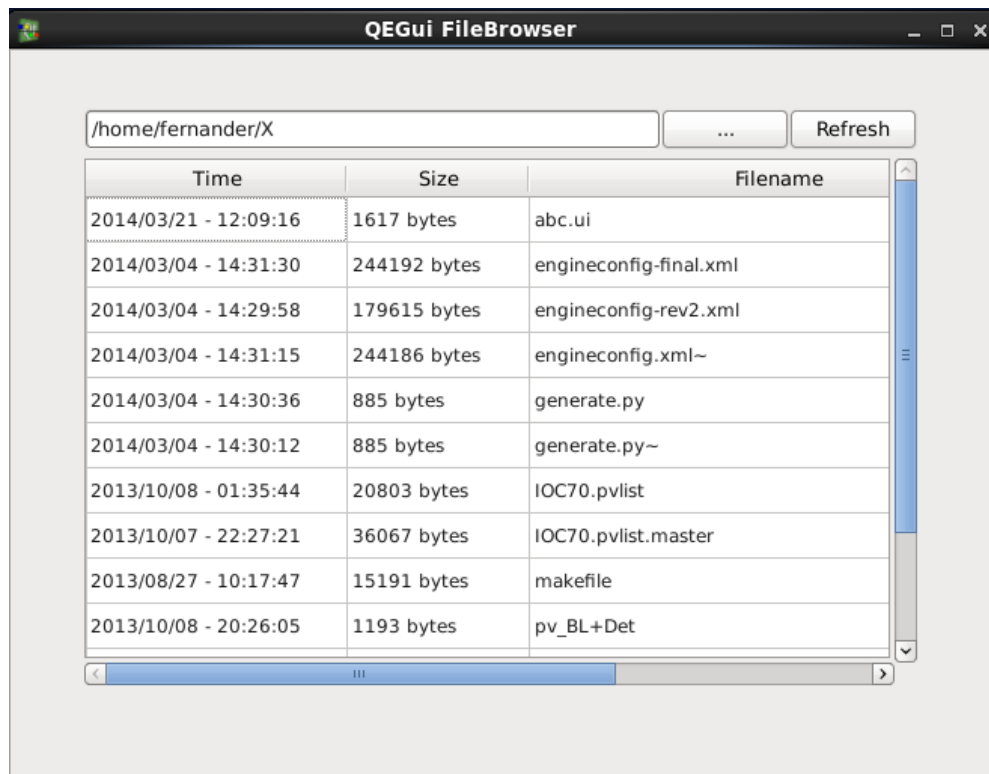


Figure 2 QFileBrowser displaying existing files in directory "/home/fernander/X"