

Converting Qt 5 Projects into Qt 6 Projects

Qt Design Studio supports creating UIs with Qt 6 in addition to Qt 5. However, to make a project that uses Qt 5 use Qt 6, you have to be aware of a few differences and issues that are discussed in this topic.

Font Loader

Projects that were **created** with Qt Design Studio 2.1 use `FontLoader` in a way that is not supported in Qt 6. Specifically, the `name` property is read-only in Qt 6. Therefore, you must modify the `Constants.qml` file to have fonts loaded correctly. You can either remove the `FontLoader` or switch to using the `source` property instead of the `name` property.

To remove the `FontLoader`, delete the following line from the `Constants.qml` file:

```
readonly property FontLoader mySystemFont: FontLoader { name: "Arial" }
```

Then, remove the following lines that contain references to `mySystemFont`:

```
readonly property font font: Qt.font({
    family: mySystemFont.name,
    pixelSize: Qt.application.font.pixelSize
})

readonly property font largeFont: Qt.font({
    family: mySystemFont.name,
    pixelSize: Qt.application.font.pixelSize * 1.6
})
```

Alternatively, you can keep the `FontLoader` and use the `source` property instead of the `name` property. If you are unsure about how to do this, you can replace the `Constants.qml` file with a new one that you create by using Qt Design Studio 2.2.

Qt Quick Studio Components

Qt Quick Studio Components are available in Qt 6, except for the **Iso Icon** component. It specifies an icon from an ISO 7000 icon library as a **Picture** component, which is not supported in Qt 6. Therefore, Iso Icon is also not supported in Qt

Qt Quick Studio Effects

2D Effects are only partially supported. The following 2D effects are not available in Qt 6:

- › Blend
- › Inner Shadow
- › Blur effects except:
 - › DirectionalBlur
 - › FastBlur
 - › **GaussianBlur**
 - › MaskedBlur
 - › RecursiveBlur
 - › RadialBlur
 - › ZoomBlur

Substitutes are provided for the obsolete effects to keep Qt 5 based applications working, but the effects will not be rendered as expected.

Qt Quick 3D

In Qt 6, you cannot use the `import QtQuick3D 1.15`, which imports a Qt 5 based Qt Quick 3D module. Qt 6 does not require a version for imports, and therefore it is not used by default. To turn a Qt 5 based project into a Qt 6 based project, you have to adjust the imports in all `.qml` files that use Qt Quick 3D by removing the version numbers.

For more information about changes in Qt Quick 3D, see the [changes file](#).

QML

For general information about changes in QML between Qt 5 and Qt 6, see:

- › [Obsolete types](#)
- › [Changes in Qt Quick](#)

The most notable change is that Qt 6 does not require a version for imports anymore.

Qt Design Studio

Projects that support only Qt 6 are marked with `qt6Project: true` in the `.qmlproject` file. This line is added if you choose **Qt 6** in the wizard when creating the project. If the project file does not contain this line, the project will use Qt 5 and a Qt 5 kit by default. You can change this in the project **Run Settings**, where you can select **Qt 6** instead.

Projects that use Qt 6 specific features will not work with Qt 5. This means that projects that are supposed to work with both Qt 5 and Qt 6 require versions for their imports.

Therefore, if you want to use Qt Quick 3D, using the same project with Qt 5 and Qt 6 is not possible.



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