

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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