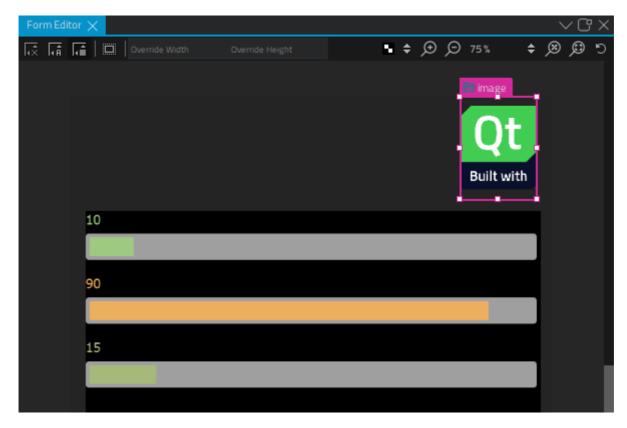




Qt Design Studio Manual > 2D

## 2D

You design applications in the **2D** view by opening component files and placing instances of 2D components and assets into them.



When you select component instances in the **2D** view, markers appear around their edges and in their corners. Depending on the shape of the cursor, you can apply the following actions to the component instances by dragging them:

- Move
- Resize
- Rotate

## Summary of 2D View Buttons

The **2D** view toolbar contains the following buttons and fields.

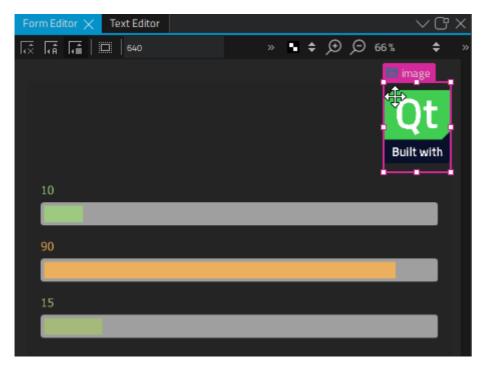
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4 Å	Anchors the component instance to the component instances that it is snapped to.	Snapping to Parent and Sibling Components
<b>4 ■</b>	Snaps component instances to their parent or siblings when you align them.	Snapping to Parent and Sibling Components
	Hides and shows component instance boundaries.	Hiding Component Boundaries
Override Width	Shows a preview of the component using the specified width.	Previewing Component Size
Override Height	Shows a preview of the component using the specified height.	Previewing Component Size
<b>8</b>	Sets the color of the the <b>2D</b> view working area.	Setting Canvas Color
ூ	Zooms in.	Zooming
Д	Zooms out.	Zooming
Zoom level	Sets the zoom level that you select from the list.	Zooming
<u>@</u>	Zooms to fit all content.	Zooming
,O	Zooms to fit the current selection.	Zooming
Ö	Refreshes the contents of the <b>2D</b> view.	Refreshing 2D View Contents

# **Moving Components**

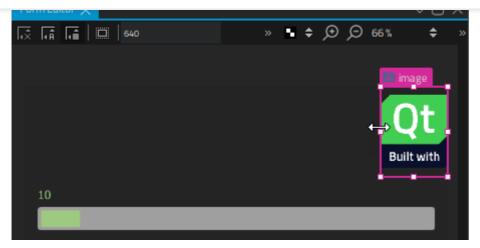
When the move cursor is displayed, you can move the selected component instance to any position in the **2D** view.



For more information about alternative ways of positioning component instances in UIs, see Scalable Layouts.

# Resizing 2D Components





To have the resizing done from the center of the selected component instance rather than from its edges, press **Alt** (or **Opt** on macOS).

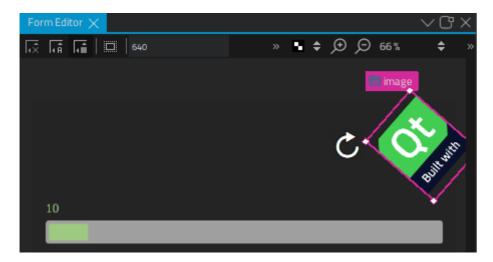
To preserve the image aspect ratio while resizing when using the corner markers, press **Shift**. This also works on component instances that are anchored using left, right, top, or bottom anchors.

To both resize from the center of the component instance and preserve the aspect ratio, press **Alt+Shift** (or **Opt+Shift** on macOS).

For more information about alternative ways to specify the size of a component or component instance in a UI, see 2D Geometry.

## **Rotating 2D Components**

When the rotation cursor  $^{\textcircled{}}$  is displayed in one of the corners of a component instance, you can drag clockwise or counter-clockwise to freely rotate the component instance around its origin.

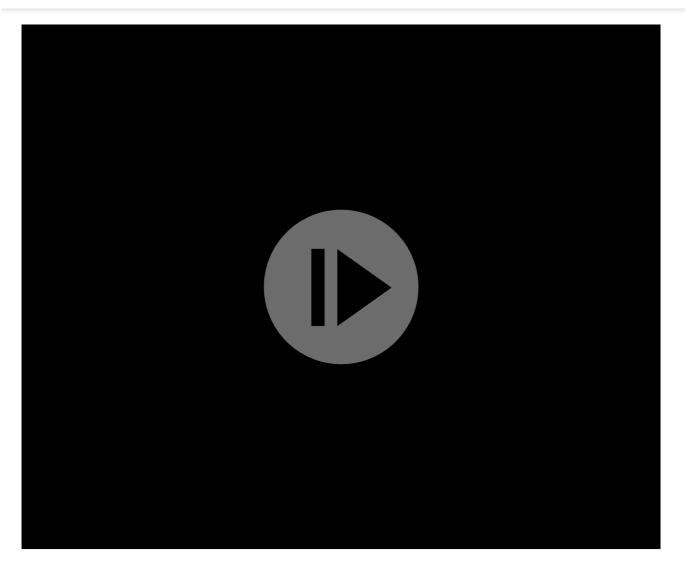


Additionally, press **Shift** or **Alt** (or **Opt** on macOS) to rotate component instances in steps of 5 or 45 degrees, respectively.

You can set the origin in Properties > **Geometry - 2D** > **Origin**. There, you can also enter the value of the **Rotation** property in degrees.

## Zooming



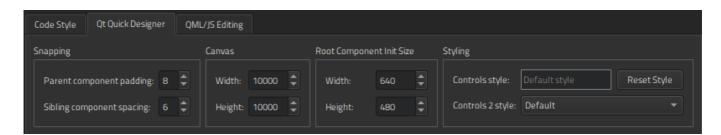


## Snapping to Parent and Sibling Components

You can use snapping to align component instances in the **2D** view. Select the **1** button to have the component instances snap to their parent or siblings. Snapping lines automatically appear to help you position the component

instances. Click the hat you snap to. Only one snapping button can be selected at the time. Selecting one snapping button automatically deselects the others.

Choose **Edit** > **Preferences** > **Qt Quick** > **Qt Quick Designer** to specify settings for snapping. In the **Parent component padding** field, specify the distance in pixels between the parent and the snapping lines. In the **Sibling component spacing** field, specify the distance in pixels between siblings and the snapping lines.

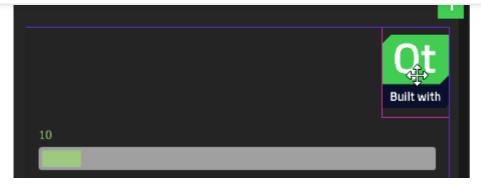


The following image shows the snapping lines (1) when Parent component padding is set to 5 pixels.









For alternative ways of aligning and distributing component instances by using the Properties view, see Aligning and Distributing Components.

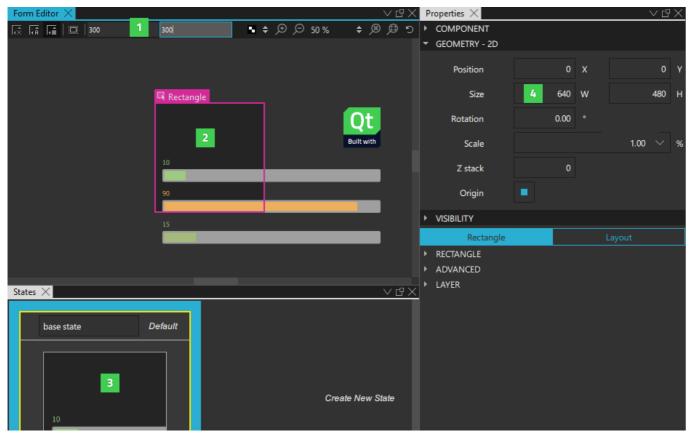
## **Hiding Component Boundaries**

The **2D** view displays the boundaries of component instances. To hide them, select the button.

## **Previewing Component Size**

The width and height of the root component in a UI file determine the size of the component. You can reuse components, such as buttons, in different sizes in other UI files and design UIs for use with different device profiles, screen resolution, or screen orientation. The component size might also be zero (0,0) if its final size is determined by property bindings.

To experiment with different component sizes, enter values in the **Override Width** and **Override Height** fields (1) on the toolbar. The changes are displayed in the **2D** view (2) and in the **States** view (3), but the property values are not changed permanently in the UI file. You can permanently change the property values in the **Properties** view (4).





To set the initial size of the root component, select **Edit** > **Preferences** > **Qt Quick** > **Qt Quick Designer** and specify the component width and height in the **Root Component Init Size** group.

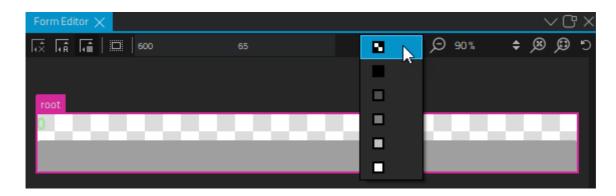
# Specifying Canvas Size

To change the canvas size, select **Edit** > **Preferences** > **Qt Quick** > **Qt Quick Designer** and specify the canvas width and height in the **Canvas** group.

## **Setting Canvas Color**

If you set the background of the root component transparent, the color of the working area can make it difficult to see the component instance you are working on. To make component instances more visible, you can select the

canvas color in the 🖬 list. By default, the color is transparent. Setting the canvas color does not affect the background color of your root component or component instances in any way.



### Refreshing 2D View Contents

When you open a UI file, the component defined in the file and the component instances it contains are drawn in the **2D** view. When you edit component instance properties in Properties, the code and its representation in the **2D** view might get out of sync. For example, when you change the position of a component instance within a column or a row, the new position might not be displayed correctly in the **2D** view.

To refresh the contents of the 2D view, press R or select the (Reset View) button.

### Context Menu

The following table summarizes the **Navigator** and **2D** views context menu items and provides links to more information about them.

To Learn About	Go To
Arrange	Arranging Components
Edit	Showing and Hiding Components
Anchors	Setting Anchors and Margins
Group To Learn About	Organizing Components Go To



Layout	USING LAYOULS	
Stacked Container	Lists and Other Data Models	
Timeline	Creating a Timeline	
Event List	Simulating Events	
Edit Color	Editing Properties Inline	
Edit Annotation	Annotating Designs	
Merge File with Template	Merging Files with Templates	
Move Component Instances into Separate Files	Turning Component Instances into Custom Components	
Add New Signal Handler	Adding Signal Handlers	
Go to Implementation	Using UI Files	
Go into Component	Moving Within Components	

< Design Views 3D >











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