

Create a rendered image

In this module, you'll render static or animated images using your machine or Cloud resources.

Learning objectives:

- Create an in-canvas render.
- Create a rendered image.



The completed exercise

1. Continue with the *reciprocating saw.f3d* file from the previous module.

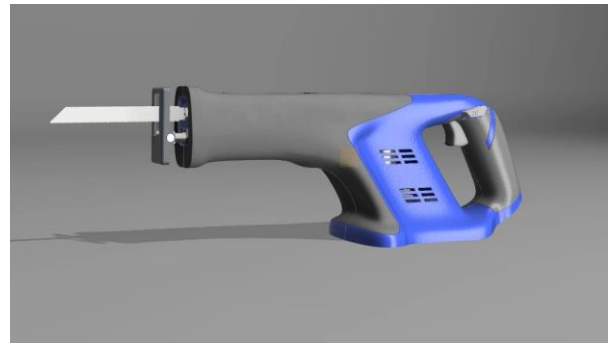


Figure 1. Continue with the file from the previous module

2. One way to create a render using Fusion 360 is to use the In-canvas Render. Click In-canvas Render > In-canvas Render Settings.



Figure 2. Open the In-canvas Render Settings

3. The options in the dialog allow you to choose between fast rendering or advanced rendering. Select the Advanced option. The dialog also has an option to lock the camera view; every time you rotate the model, the In-canvas Render must start over. Blocking the camera view prevents you from accidentally rotating the model. OK the dialog.

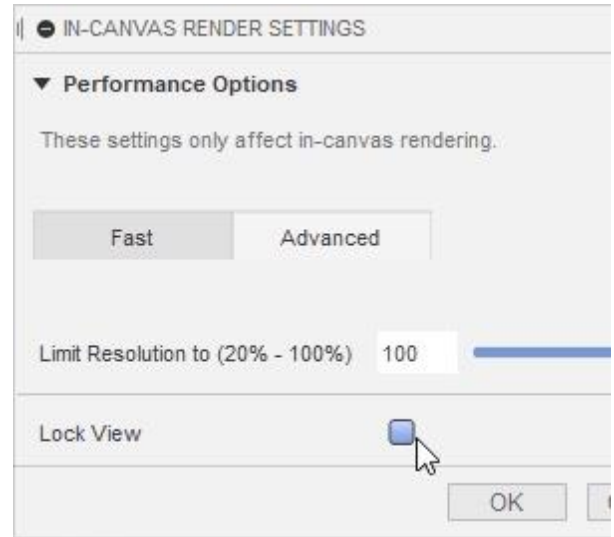


Figure 3. Inspect the In-canvas Render settings

4. Click In-canvas Render > In-canvas Render.

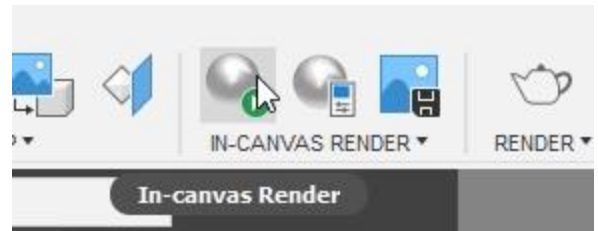


Figure 4. Open the In-canvas Render tool

5. At first the render will look very pixelated but the quality will steadily improve as the render is allowed to calculate the results.

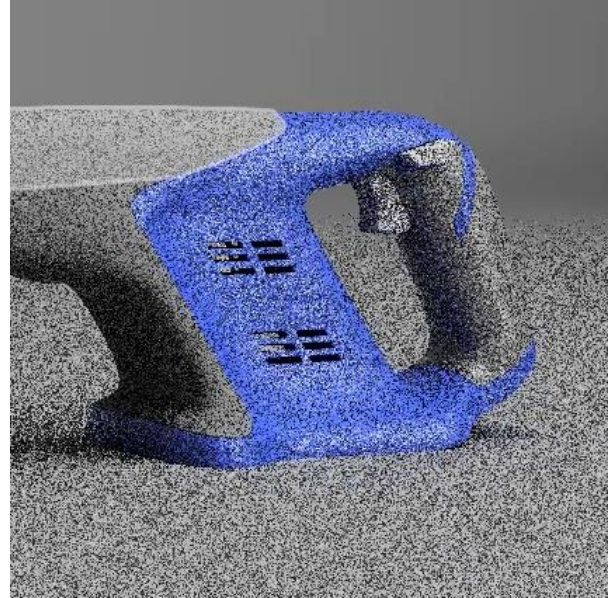


Figure 5. Inspect the In-canvas Render

6. The render quality will increase after a few seconds.

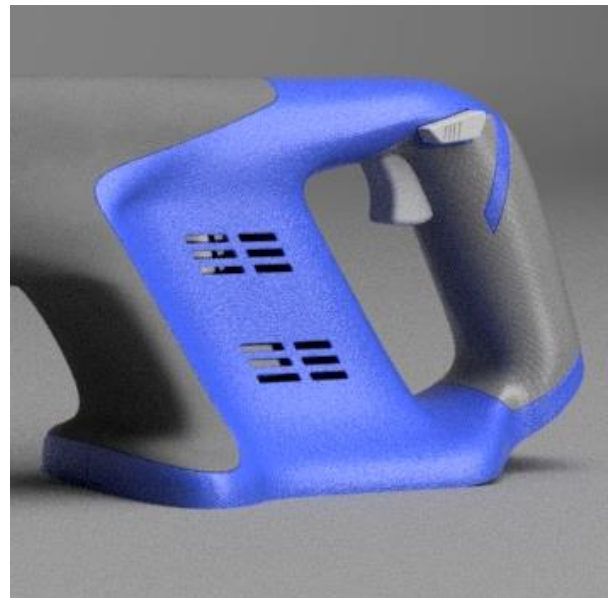


Figure 6. Allow the In-canvas Render to calculate the results

7. Rotate the model and notice that the In-canvas Render must restart its calculations. Activating the Lock View option can keep you from accidentally restarting the render.

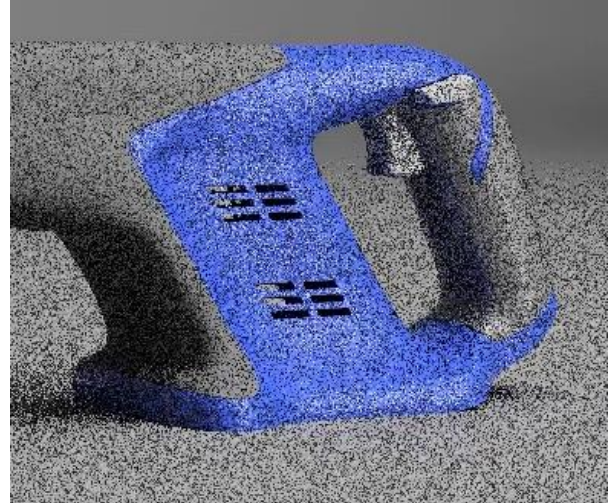


Figure 7. Rotate the model

8. The slider in the window's bottom right corner allows you to choose the render quality. The pause button next to the scale allows you to pause the render.

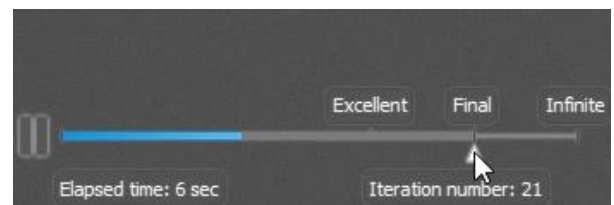


Figure 8. Adjust the render's settings

9. Once you are happy with the In-canvas Render's results, click In-canvas Render > Capture Image.

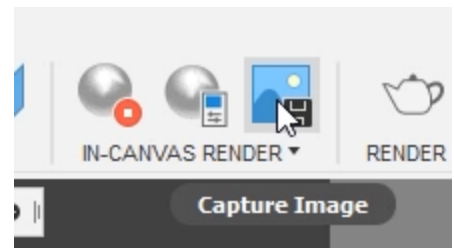


Figure 9. Capture the rendered image

10. Configure the Image Options dialog's options the way you want, then OK the dialog.

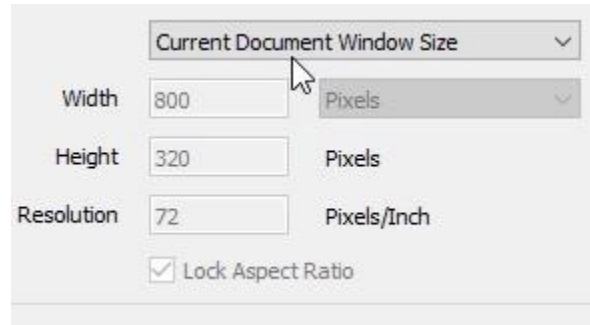


Figure 10. Customize the captured image

11. To stop the render, click In-canvas Render> In-canvas Render Stop.



Figure 11. Stop the render

12. Click Render> Render.

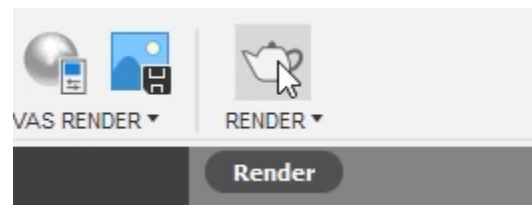


Figure 12. Open the Render tool

13. The options in the Render Settings dialog allow you to customize your rendered image. There are tabs with presets for Web, Mobile, Print, Video, or you can create your custom settings and the Custom tab.

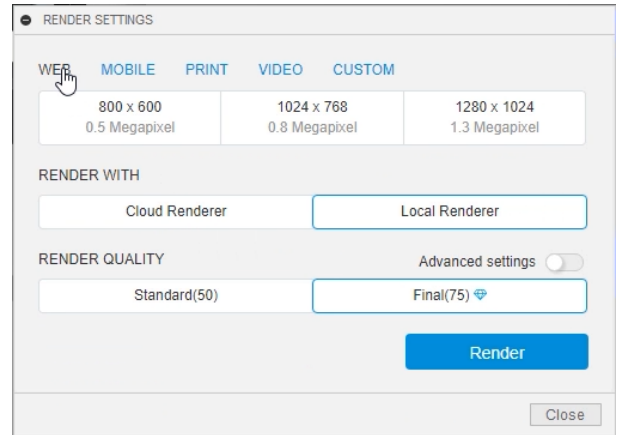


Figure 13. Explore the options in the Render Settings dialog

14. Navigate to the Custom tab and activate the Advanced settings option. The Render Quality slider allows you to choose the render's quality. Move the slider to the quality you want.

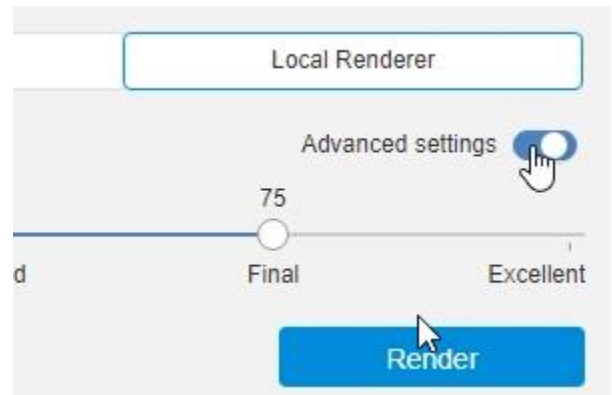


Figure 14. Explore the advanced settings

15. Fusion 360 can render your image using two different methods: you can use your local machine, or you can use Fusion 360's cloud servers. You can render the image on your machine for free, but this will tie up your system's resources. Rendering the image on the cloud frees up your system to continue working on other tasks but the render costs you Cloud Credits. Larger, higher-quality renders will cost more Cloud Credits.

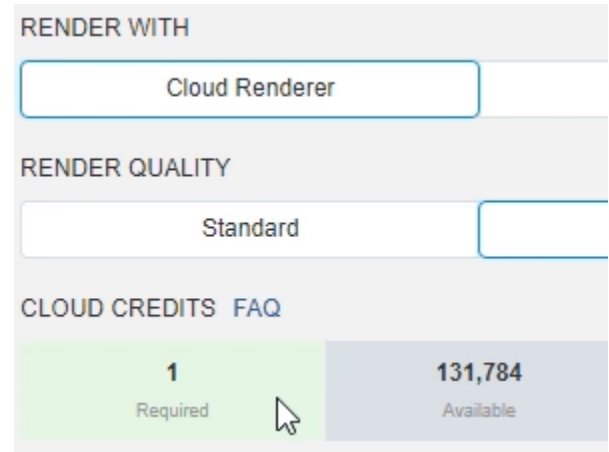


Figure 15. Explore the differences between rendering locally or on the cloud

16. After the configuring the render the way you want, click the dialog's Render to begin the render.

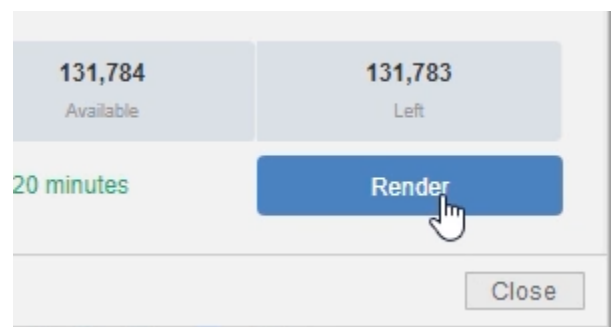


Figure 16. Begin rendering the image

17. The render will be displayed in the window's Rendering Gallery. The render's thumbnail will be visible in the Rendering Gallery after the render finishes.

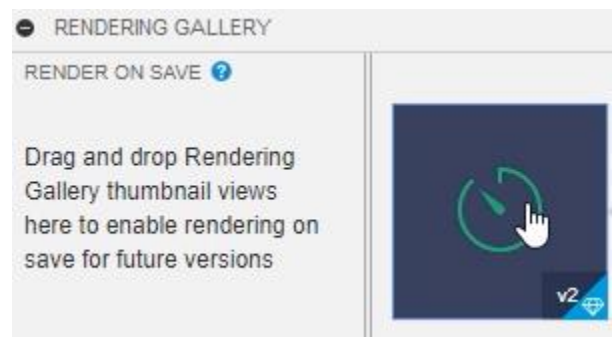


Figure 17. Inspect the Rendering Gallery

18. Rotate the model and begin another render by clicking Render> Render. Use the Render Settings dialog to customize your render, then click the dialog's Render.

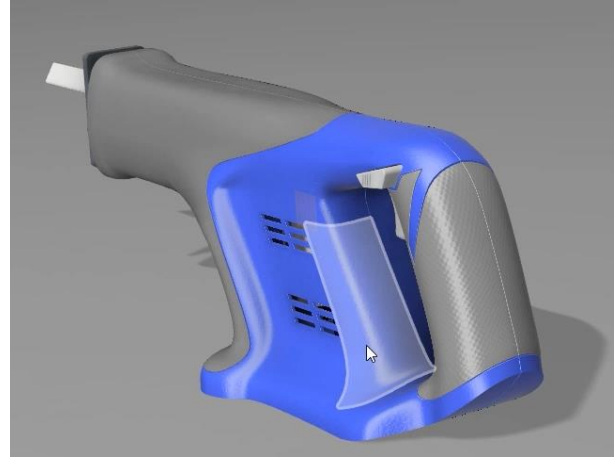


Figure 18. Begin a new render

19. The new render is also added to the Rendering Gallery.

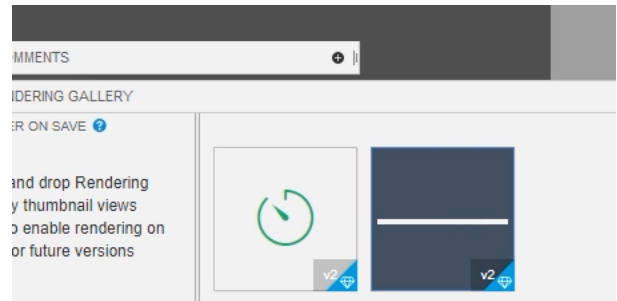


Figure 19. Inspect the Rendering Gallery

20. Notice the render thumbnails are visible in the Rendering Gallery after the render is complete. Click one of the thumbnails to open it in the Rendering Gallery dialog.

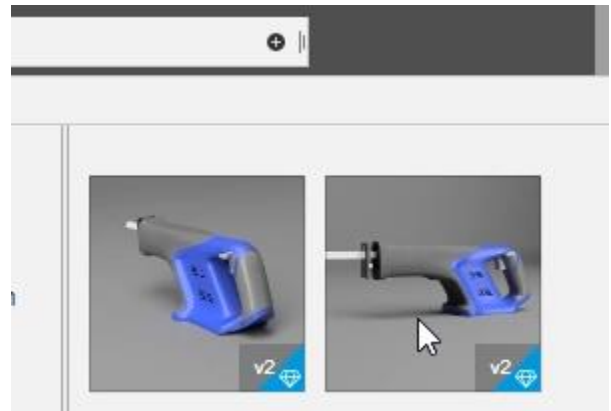


Figure 20. Inspect the Rendering Gallery

21. The navigation arrows on either side of the dialog can be used to cycle through the rendered images.

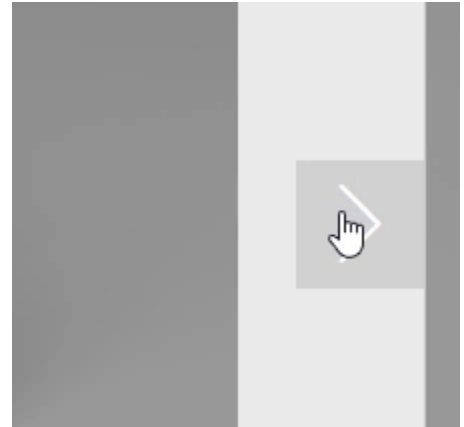


Figure 21. Cycle through the rendered images

22. If an image is rendered on the cloud, the Post-processing tools are available. Click Post-processing if you rendered your image on the cloud.

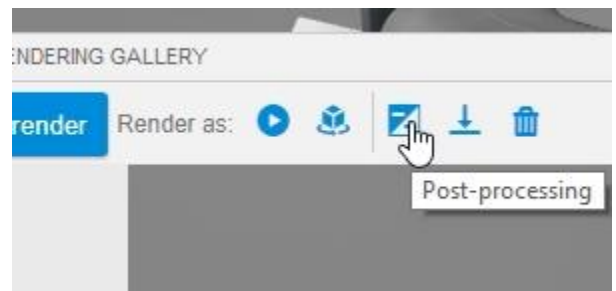


Figure 22. Open the Post-processing tools

23. Use the options in the Post-processing dialog, then click Apply after you're satisfied with the settings.

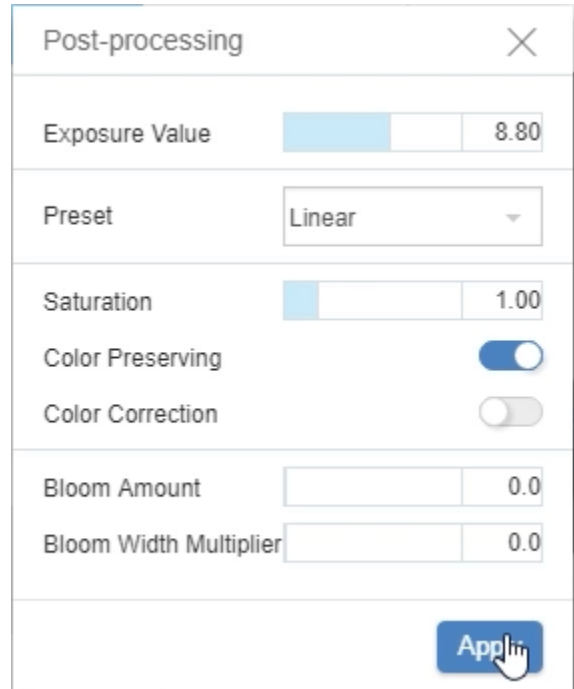


Figure 23. Customize and apply the Post-processing settings

24. Notice at the top of the Rendering Gallery dialog that you have the option to render as a Motion Study or Turntable render. The Motion Study option is only available if the design already has a Motion Study created. Click the Turntable option.

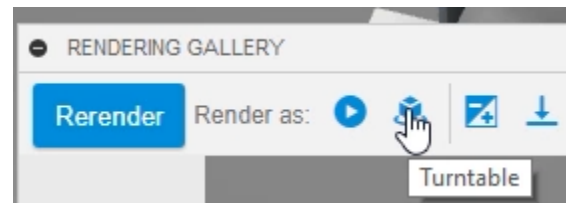


Figure 24. Notice the additional types of renders available

25. The Turntable render allows you to render either six or 36 frames so that it appears the model is rotating in space. The 36-frame Turntable option cost more Cloud Credits to render. Configure the Turntable render the way you want, then click the dialog's Render.

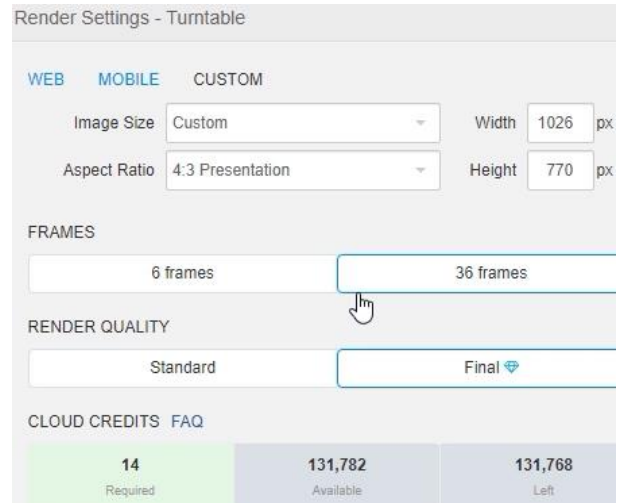


Figure 25. Configure the Turntable render and begin rendering

26. Once the Turntable render is complete, a different icon is added to the thumbnail. Click on the 2 in the upper right corner of this thumbnail to expand the thumbnail's folder.

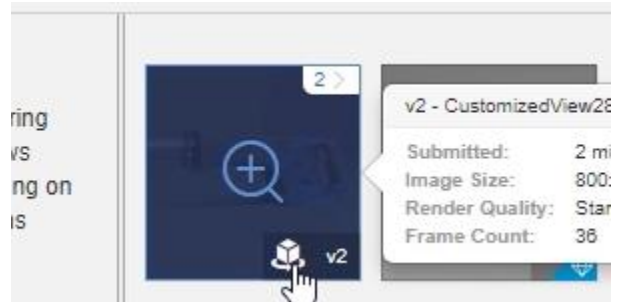


Figure 26. Expand the thumbnail's folder

27. Notice that there are two images inside the folder: a static render and the Turntable render. The Turntable render thumbnail has the Turntable icon. Click the Turntable render to open it in the Rendering Gallery dialog.

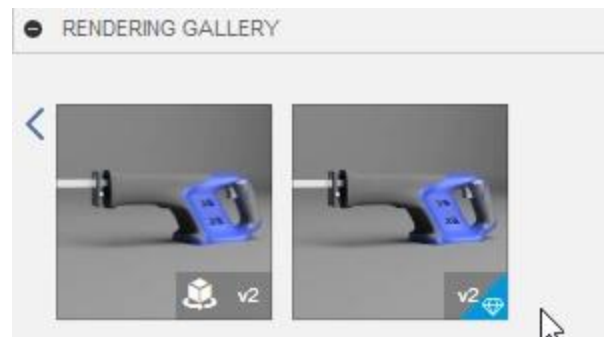


Figure 27. Inspect the rendered images

28. Watch the rendered model rotate 360°.



Figure 28. Watch the Turntable animation

29. Clicking and dragging the Turntable render allows you to control the rotation.



Figure 29. Click and drag the Turntable render

30. The rendered images can be downloaded as various file types. To download a rendered image, click the dialog's Download. Close the Rendering Gallery dialog after you finish watching the animation. Save the file.

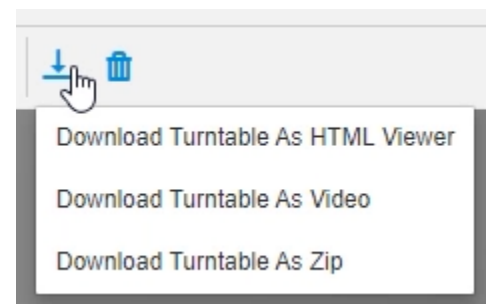


Figure 30. Download a rendered image