

# Lidar Online Instructions



Click the zoom slider button to zoom in or out on the map.



Click the Toggle to pan or rotate in 3D button to switch between pan or rotate action. Alternatively, pan and rotate the scene using a two-button mouse.



The Home button widget is automatically enabled when the app starts. Clicking the widget resets the map extent to the map's initial extent.



Click the Compass button on the scene to reorient your scene north. Alternatively, press N on your keyboard.



Click the Full Screen button to open full-screen mode. Exit full-screen mode by clicking exit full screen  or pressing Esc on your keyboard.



Click the convert coordinates widget to open the widget. Click the expand arrow to display the Add conversions menu. Select the Add conversion pulldown menu to display conversion options. Click on the system name to add the conversion.

Click the capture mode button  to identify coordinates of a map location.

Click the input coordinates button  to manually enter or paste known coordinates. Check the Go to location box and click convert to zoom to the coordinates position.



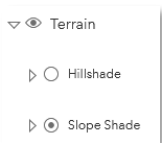
Click the Overview Map button to open the widget. Click the expand icon  to temporarily maximize the overview map. Adjust the overview map scale by clicking on the map and zooming in or out.



Click the Search tool button to open and expand the widget. Type a placename, address, or point of interest in the search box, suggestions will appear as you type.



Click the Layer List widget to display map layers. Click the eyeball icon to turn layer visibility on and off in the scene. Click the small triangle in front of the layer name to expand or collapse layer groups.





Click the Measure tools button to open the measurement options menu.

Click the Measure line button  to activate distance measurement. Start to measure by clicking in the scene to place your first point. A horizontal laser line is drawn to indicate the height at the current pointer position. This line can help in analyzing the heights of objects relative to each other and the terrain. A second laser line shows the intersection of the scene with the vertical plane that passes through the checkered line. The widget labels the direct, horizontal, and vertical orange distance lines and displays the same values in the user interface panel.

Click the Measure area button  to activate area and perimeter measurement. Start to measure by clicking in the scene to place your first point. When starting the area measurement, a horizontal laser line is drawn that indicates the height at the current pointer position. This line can help in analyzing the heights of objects relative to each other and the terrain.



Click the Slides widget to open the slides pane. Click a slide to change the view of the scene.



Click the Elevation Profile tool button to open the new profile window. In the scene, click to start a line and continue clicking to create additional segments. Double-click or click Done to finish drawing the line. The Elevation Profile tool displays an elevation profile chart with statistics. Interact with the chart to display elevation values and profile locations.

If necessary, you can move or edit the line horizontally with the handles, and the elevation profile chart dynamically changes.

- Drag the large orange disc to move the line.
- Drag the line handles to move individual vertices or create vertices in the center of segments.



Click the Basemap widget to toggle between two basemap options.

## Scene Viewer requirements (from ESRI Website)

You can use Scene Viewer on mobile devices and in desktop web browsers that support WebGL, a web technology standard for rendering 3D graphics. For best results, verify that your [mobile device](#), [browser](#), and [hardware](#) meet the Scene Viewer requirements.

## Browser requirements

For best performance, 64-bit browsers are recommended. Adjust the [performance and quality settings](#) in your browser to optimize performance or quality in your scene.

Scene Viewer supports the latest versions of the following [browsers](#):

- Google Chrome
- Microsoft Edge

- Mozilla Firefox
- Safari\*

\*Safari doesn't have WebGL implementation optimized for memory-intensive applications and may not work reliably when opening certain scenes.

The latest versions of the most common desktop browsers have built-in WebGL. To test whether your browser has WebGL enabled, open [get.webgl.org](https://get.webgl.org). To troubleshoot WebGL-related issues, visit [WebGL troubleshooting](#). Be sure you keep your browser up to date, because WebGL is an evolving technology, and each browser version brings improvements that Scene Viewer uses for optimal performance. To use Scene Viewer, your browser should have [hardware acceleration enabled](#).

## Hardware requirements

For best performance, it is recommended that your browser have a minimum of 8 GB system memory and modern graphics hardware for 3D.

Minimum requirements are a high-performance graphics card with at least 512 MB of video memory. For the best performance, it is recommended that you have a graphics card with at least 1 GB of video memory, especially for working with larger or more memory-intensive 3D scenes. High-performance, stand-alone graphics cards typically have better performance than integrated graphics cards. To get more detailed information about WebGL requirements, visit the [khr.org WebGL wiki](https://khr.org/webgl/wiki) page.

## Mobile requirements

Scene Viewer offers mobile support for the following:

- iOS Safari on iPhone XS, iPhone 11, iPhone 12, iPhone 13, iPad Pro 11-inch (2018) and later
- Android Chrome on Samsung S10, Samsung S20, Samsung S21, Samsung Tab S4 and later

If you're using a mobile device other than those listed above, your device should have a minimum of 4 GB of RAM, a powerful multicore CPU and GPU, and the latest Android or iOS version installed.

## Troubleshoot rendering problems

Scene Viewer requires optimal browser functionality to perform properly. You will see a message that states there is a problem loading Scene Viewer when Scene Viewer detects that rendering in your browser is compromised. The error message gives additional details as to the nature of the problem:

- [Your browser isn't using hardware acceleration for rendering](#)
- [Your browser doesn't seem to support WebGL](#)

Additionally, Scene Viewer may open without an error message, but the [rendering quality is still compromised](#).

## Your browser isn't using hardware acceleration for rendering

When Scene Viewer doesn't detect hardware acceleration in your browser, this message appears. Common reasons the hardware acceleration isn't enabled can be that your [browser settings](#) aren't configured properly or the browser has [blocked your graphics card](#).

## **Configure hardware acceleration in your browser settings**

Each browser has its own configuration options, and the hardware acceleration may be disabled. To enable hardware acceleration for rendering in your browser, see below.

For Chrome, do the following:

1. In the browser menu, go to Settings > Advanced > System.
2. Click the Use hardware acceleration when available toggle button.
3. Click Relaunch to restart your browser.

For Firefox, do the following:

1. In the browser menu, go to Menu > Options > System.
2. Click General.
3. Under Performance, check the Use recommended performance settings check box.
4. Restart your browser.

For Microsoft Edge, do the following:

1. In the browser menu, go to Settings > System.
2. Click the Use hardware acceleration when available toggle button.
3. Click Restart to restart your browser.

## **Your browser has blocked your graphics card**

Some browsers determine that a specific graphics card doesn't meet the requirements of the browser and block the graphics card. In this case, you still have the option to bypass the browser's decision to block your graphics card. Although this is not always recommended, it may resolve the issue in Scene Viewer.

For Chrome, do the following:

1. Type chrome://flags in the address bar.
2. Click Enable under Override software rendering list.
3. Restart your browser.

For Firefox do the following:

1. Type about:config in the address bar.
2. Type webgl.force-enabled in the search bar.
3. Set the value to true.
4. Restart your browser.

## Your browser doesn't seem to support WebGL

This message appears when Scene Viewer doesn't detect WebGL in your browser. A good way to confirm this is to go to [get.webgl.org](http://get.webgl.org). You should see a spinning cube to confirm WebGL is available in your browser. Otherwise, the website indicates your browser doesn't support WebGL. If you don't see a spinning cube, you can try the following:

1. Ensure WebGL is enabled through your browser settings.
2. Ensure that your browser and hardware meet the Scene Viewer requirements.

## Scene Viewer opens but the rendering quality is compromised

Sometimes Scene Viewer opens without an error message, but you still may experience a problem. Some examples are as follows:

- All icons and labels are missing, but they display in another browser or device.
- Rendering artifacts (for example, atmosphere and shadows rendering in black or geometry rendering with dots).
- Major color problems exist in the scene (for example, all colors are inversed, or all colors render green or black).

If you are experiencing any of the above issues, confirm the following:

- Your browser has [hardware acceleration enabled](#).
- Your browser has [WebGL enabled](#).
- Your browser and computer meet all the Scene Viewer requirements.

If you still see an issue in Scene Viewer, try switching to another browser. Another option is to update your video driver. It is recommended that you go to the vendor's website to download the latest driver. Finally, if all the above suggestions haven't fixed the problem, report your problem in the [Esri Community](#) forums or contact [Esri Technical Support](#) for additional help.

Scene viewer requirements link:

<https://doc.arcgis.com/en/arcgis-online/reference/scene-viewer-requirements.htm>