eUnity™ 7.0 Enterprise Quick Start Guide

This document is not intended to be comprehensive. It is intended only as a quick reference or as a training support. Please see the eUnity User Guide for the complete product documentation.

eUnity™ is a zero-footprint diagnostic imaging viewing application for accessing full quality medical images on any web browser. Log in from a worklist manager or directly through a URL depending on your site’s configuration. For example: http://localhost.
Series Tray (horizontal)

1 Series thumbnail view
Click the series thumbnail or drag it into a viewport to open it. The active series is outlined in orange. The series in view but not active are outlined in blue. The folded corner means at least one image was viewed in the series.

2 Study folder
Each rectangular folder represents a study that is available for the patient. The lighter gray background is the study that is currently active in the Series Tray.

3 Presentation States indicator
Presentation States available for the study. Click to select a Presentation State.

4 Study position indicator
Study position on the screen. If no indicator is shown, the study is not in view.

5 Pin the Series Tray
Pin the Series Tray in position or unpin it so that it is hidden when it is not active.

6 Reposition the Series Tray horizontally or vertically (HTML5 only)
Reposition the Series Tray at the top, bottom, left, or right of the screen.

Default mouse actions

- **Scroll wheel**
  - Roll up and down to scroll images
  - Drag to zoom
  - Drag + Ctrl + Shift to reposition series
  - Double-click to enlarge viewport

- **Left-click**
  - Drag up and down to scroll images
  - Drag + Ctrl + Shift to reposition series
  - Double-click to enlarge viewport

- **Right-click**
  - Drag left and right to change Window Width
  - Drag up and down to change Window Level
  - Drag then Ctrl for fine Window Level
  - Shift then drag to pan
  - Click to show context menu

View keyboard / mouse shortcuts

- To see the keyboard shortcut for a specific tool, hover your cursor over the tool on the toolbar.
- To see a list of all your keyboard shortcuts, in the upper-right corner of the viewer, click ➤ List Keyboard / Mouse Shortcuts.

Commonly used / default keyboard shortcuts

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Tools

Home

Study List (if available)
Open a panel containing information grouped into the following tabs: Study List, Study Details, Report, and Notifications.

Report / Comments
Open the study report in the Study Information panel, if available.

Navigate
Navigate study images using the mouse wheel, a left-click drag, touch drag, touch pad drag, or the up and down cursor keys.

Zoom / Pan
Zoom in or pan an image in the selected viewport.

Window Level
Change the Window Level for the selected image.

Reset Window Level
Reset the images to their original Window Level settings.

Window Level Presets
Select a predefined Window Level.

Image Sharpening Presets
Click to apply a preset sharpening algorithm on an image in a viewport. Presets are configurable by the system administrator.

Invert Brightness
Click to apply a monochrome inversion to the selected series.

Toggle Demographics
Hide or show demographics in the viewport.

Triangulation
Navigate to a selected point in orthogonal series.

Toggle Reference Lines
Show or hide overlay lines when using triangulation or scout images.

Toggle Cine mode / Play video
Play a series of images in succession (like a movie) or play a video.

Series Reposition
Swap series between viewports.

Link Series
Link series together to use zoom, pan, scroll, and optionally Window Level across multiple series.

Magnifying Glass
Click to enable the Magnifying Glass tool and magnify an area of an image. You can have up to four magnifying glasses open at a time.

Revert to Original
Revert a series to its original presentation.

Share this Session
Share your screen with other participants across all supported eUnity™ platforms (desktop web browser and mobile devices).

Screen Layout
Access Study Compare mode or change the layout of each monitor.
Markup

To draw markups, either left-click and drag or left-click to start the markup and left-click again to end the markup.

Eraser
Erase a measurement or annotation.

Measurement tools

Linear Measurement
Measure length in mm or measure time and velocity for echo ultrasound. Time doppler ultrasound regions will create peak velocity with a single click.

Perpendicular tool
Use the perpendicular tool to draw two lines that intersect at a 90° angle and provide a measurement of each line.

Ratio tool
Use the ratio tool to draw two separate lines and provide a measurement of each line as well as the ratio of the length of the first line (x) to the second line (y). That is, x/y.

Angle Measurement
Left-click to create the vertex. The next two left-clicks set the other points of the angle.

Cobb Angle Measurement
Measure angles using two separate, disjoint lines.

Toggle Markup
Hide or show markup on images including markup on Presentation States.

ROI tools

Display the Area, Perimeter, Radius, Average and Standard Deviation of the region of interest (modality-specific). The following additional values can be configured to display: ROI Pixel Count, ROI Size, ROI Minimum SUV, ROI Maximum SUV, ROI Updated SUV Parameters, ROI Min and Max values. Hounsfield (HU) is displayed for CT. SUV measurement is displayed for PET / CT.

Ellipse ROI
Draw an ellipse region of interest.

Circle ROI
Draw a circular region of interest.

Rectangle ROI
Draw a rectangular region of interest.

Freeform ROI / Doppler Envelope
Draw a freeform region of interest. For cardiology, peak and mean velocity and peak and mean gradient are shown.

Point Tool
Measures the value of a specific point.

Annotation tools

Arrow
Add an arrow annotation.

Freehand
Add a freehand annotation.

Line
Add a line annotation.

Polygon
Add a polygon annotation.

Rectangle
Add a rectangle annotation.

Circle
Add a circle annotation.

Ellipse
Add an ellipse annotation.
Spine Labeling
Add spine-related labels to images.

Toggle Spine Labeling Markup
Hide or show spine labels.

Delete All Spine Labels
Delete all spine labels in the study.

Text Annotation
Click the location that the text should start.

Export
Export image to JPEG / PNG
Export an image to your local device in JPEG or PNG format.

Paper Print
Print reports, images, or a set of images.

Flip and Rotate
Flip (Horizontally)
Click to flip the image horizontally in the viewport.

Flip (Vertically)
Click to flip the image vertically in the viewport.

Rotate Left
Click to rotate the image counter-clockwise in the viewport.

Rotate Right
Click to rotate the image clockwise in the viewport.

Free Rotate by Drawn Angle
Rotate the image by a custom amount in the viewport. Draw a line to rotate the image.

Other tools
These tools may not be available by default.

Manual Calibration
If the modality-provided calibration is not sufficient, manually set a calibration value for measurements.

Multiphase Tool
Split a multiphase series into multiple phase-based series or sort a multiphase series by phase.

Series Page Backward
Move to the previous series page.

Series Page Forward
Move to the next series page.

Clone Series
Clone a series so that you can see a copy of the series and the original series in the viewer at the same time. As a shortcut, right-click and drag a series from the Series Tray into the viewing area to clone it.

Close Clones Series
Close the cloned series and remove it from the Series Tray.

Switch Studies
Select a study to switch to. If you switch away from a study and then switch back to it, it is reopened to the state in which you left it.

DICOM Header
Show the DICOM header data for the selected series or image.
Advanced Visualization (if available)

**Advanced Visualization modes**
Select Advanced Visualization modes such as 3D, MPR, Advanced MPR, Curved MPR, and Fusion.

**Advanced Visualization layouts**
Once you are in an Advanced Visualization mode, select a layout.

**MPR**

**Create oblique**
To generate new planes, drag the controls corresponding to the color of the viewport you wish to change until desired orientation is achieved.

**Curved MPR**

**Create Curved MPR**
Click along curved anatomy in any of the 2D viewports and the perpendicular reconstruction is created in the CMPR viewport.

**3D**

**Clip Box**
Cut away some of the volume so that you can better see underlying anatomy. Drag down to move the plane into the volume (cut more). Drag up to move the plane out of the volume (cut less).

**Cut Plane**
Use the Cut Plane tool to cut away some of the volume at a custom rotation.

**Scalpel Tool**
Remove or isolate a section of an image by dragging the mouse along the border of the area to segment then clicking on the region you would like to keep.