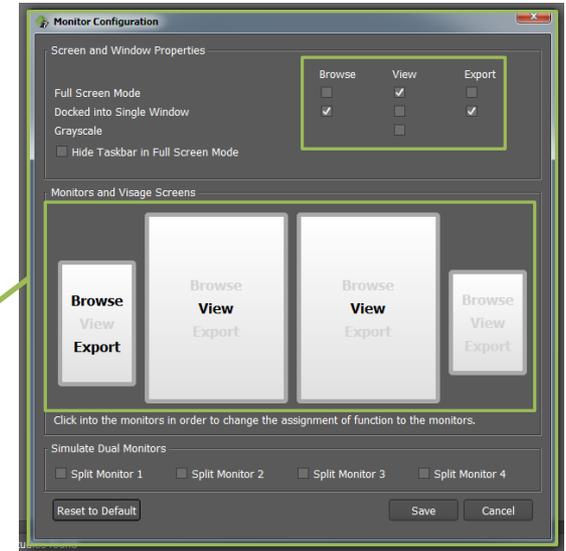
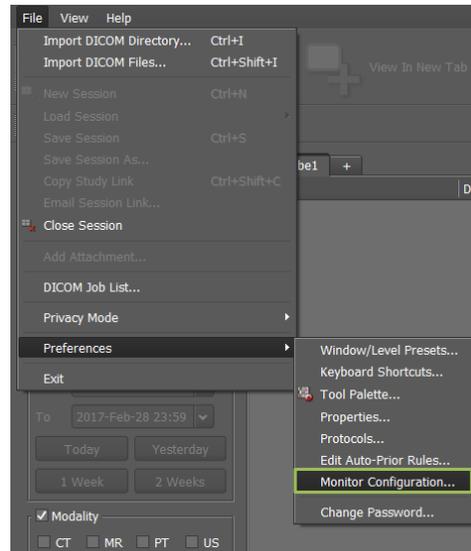


Initial Setup – Monitor Configuration

Visage will be started automatically from your worklist software. You will need to define the monitor configuration once per workstation. These settings will be remembered.

To set this up – select the File Menu > Preferences > Monitor Configuration.

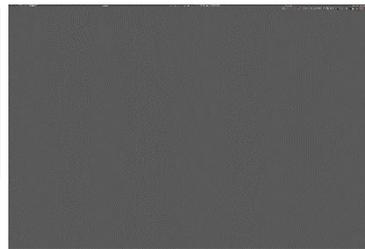
If you have a 3 or 4 monitor configuration, configure the monitors as shown.



Then position the “Study Browser” window to fill the top 2/3rds of the worklist monitor. This should remain behind the worklist application for general use, but be available if needed for searching.

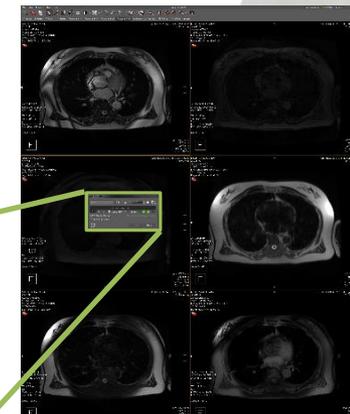
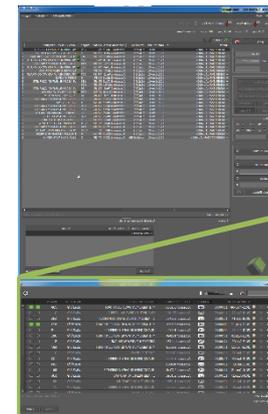


Monitor 1
Study Browser



Monitors 2 and 3
Image Viewers

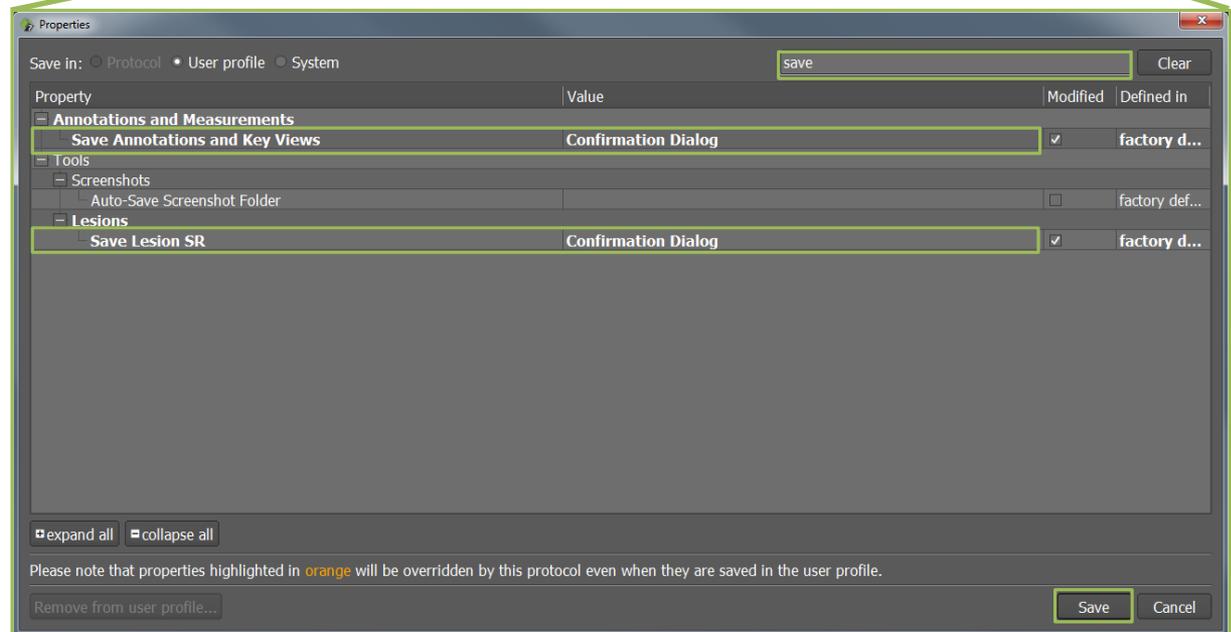
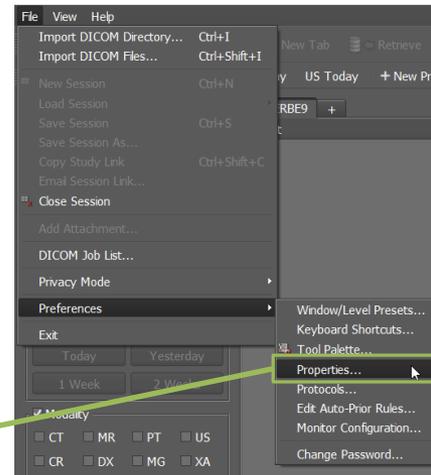
After loading an image re-size and re-position the Study Navigator (i.e. Patient Jacket) to fill the lower 1/3rd of the worklist monitor. This should be visible always.



Key Images and Presentation States

Key Images/Screenshots:
Additional image(s) saved to the study with the annotation burned in.

Presentation States:
Overlay of the annotation that can be viewed in the original data.



When you make an annotation or measurement in Visage, the application can create both a screenshot and/or a presentation state.

To set the default behavior you would select the File menu > Preferences > Properties.

In the Properties dialog, search for “save” and set the properties to *Confirmation dialog* to get a pop-up confirmation window.

Then choose “Save”.

Please note that properties highlighted in orange will be overridden by this protocol even when they are saved in the user profile.

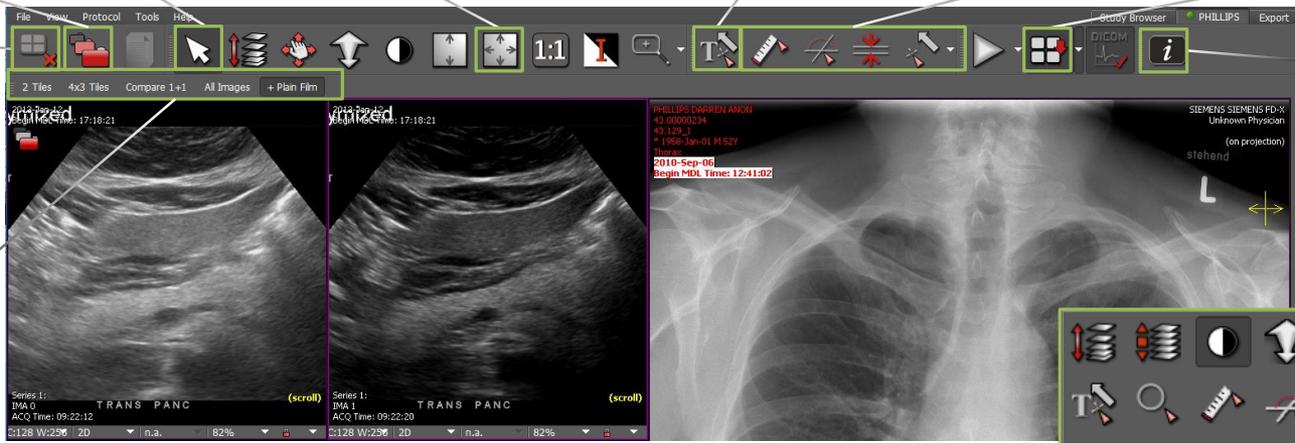
Remove from user profile...

Save Cancel

Viewing X-Ray/US

- List all studies of current patient
- Reset left mouse to default navigation (F1)
- Resize image to best fit in active viewer
- Create arrow/text annotation
- Perform measurements
- Enable/Disable page by page scrolling

Close session

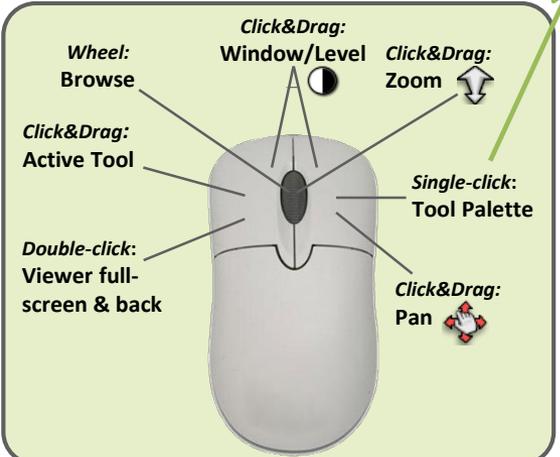


View study information

User manual available via Help menu

Change layout

 Measure distance/diameter	 Reset viewer layout
 Screenshot active viewer	 Default data window
 Create arrow/text annotation	 Custom data window
 Inverse display	 DICOM data window
 Spacebar	Hide annotations, text and lines (de-identify)



Configure Tool Palette:

Choose **File → Preferences → Tool Palette** and drag respective tool from list to palette



Be sure to add 'Configure Tool Palette' to your tool palette for quick access

Viewing CT/MR



Browse Slices



Show corresponding point in other viewers



Reset slice orientation



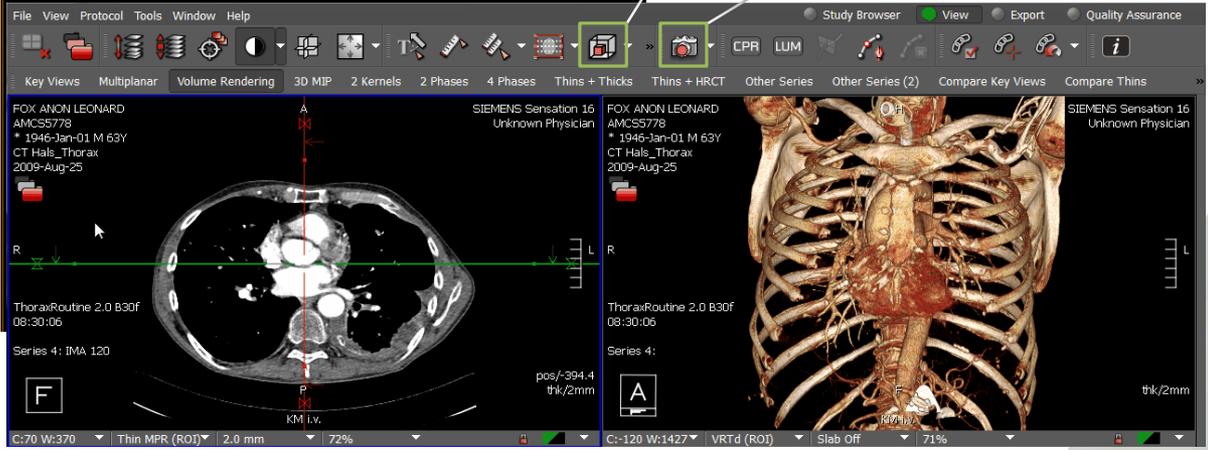
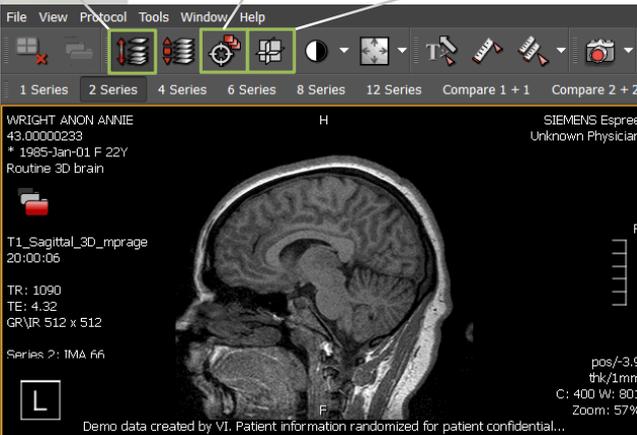
Automatically link scrolling in all corresponding 2D viewers of the same study



Cut outer parts of volume in 3D viewer



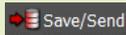
Make a screenshot of the active viewer



Screenshots are sent to Export screen 



Buttons act on selected screenshots:

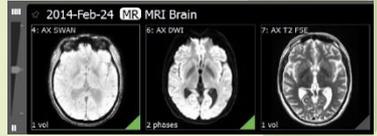
-  **Send screenshots to your server or other DICOM servers**
-  **Save screenshots to local or network PC**
-  **Print screenshots**
-  **Delete screenshots**

Double-click in screenshot to open screenshot viewer

Additional keyboard shortcuts for 3D display

	Cine play/pause		
	Toggle thin/thick slice display; slab on/off		 Anterior/posterior image orientation
	Toggle MIP, MinIP, AvIP		 Left/right image orientation
	Toggle partial/full crosshair		 Head/foot image orientation

Drag&Drop series from Thumbnail Browser into viewer for display



Automatic Linking Tool



The “Automatic Linking” tool will link all series that have the same DICOM frame of reference.

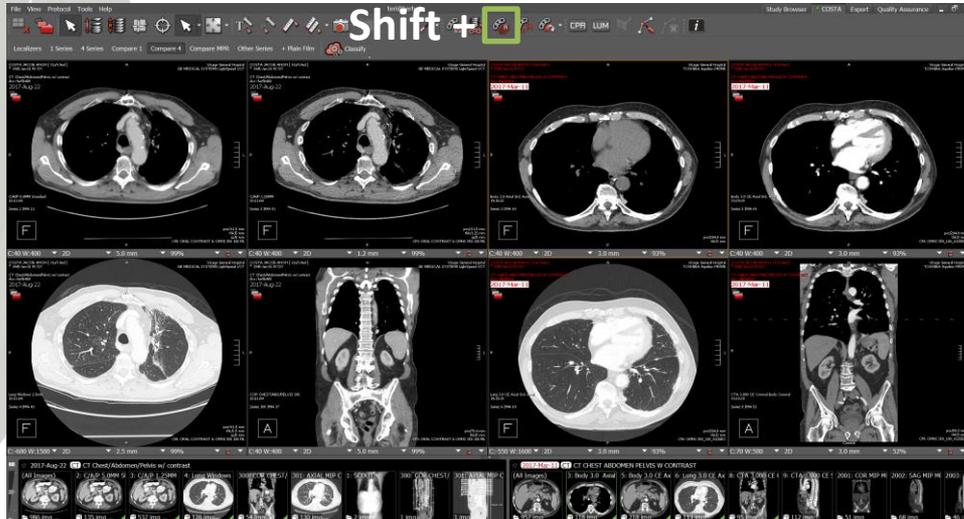
- It will only link series within a single study
- It will link the matching series for scrolling, zooming, and panning
- In this example, the axial thin slice soft tissue, thick slice soft tissue, and lung window will be linked to each other in the current exam as well as in the prior exam

Notice that the “Toggle Linking” button is enabled after using the “Automatic Linking” tool.

- Disable this button to temporarily turn off linking



„Shift“ + Automatic Linking Tool

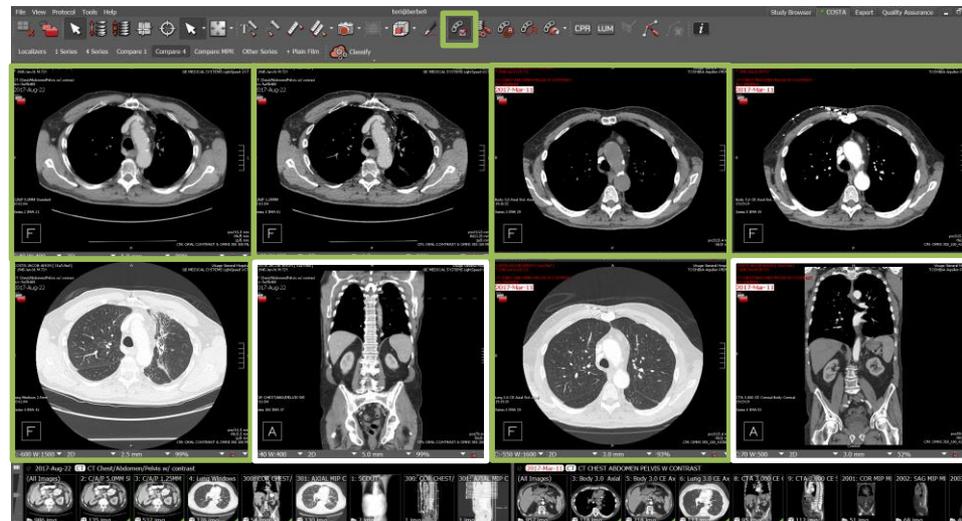


Together with the “Shift” key, the “Automatic Linking” tool will link series based on an overall “bounding box”.

- It will link series in current and prior studies
- It will link the matching series for scrolling, zooming, and panning
- In this example, all axial series and all coronal series will be linked to each other in the current and the prior exam

Notice that the “Toggle Linking” button is enabled after using the “Automatic Linking” tool.

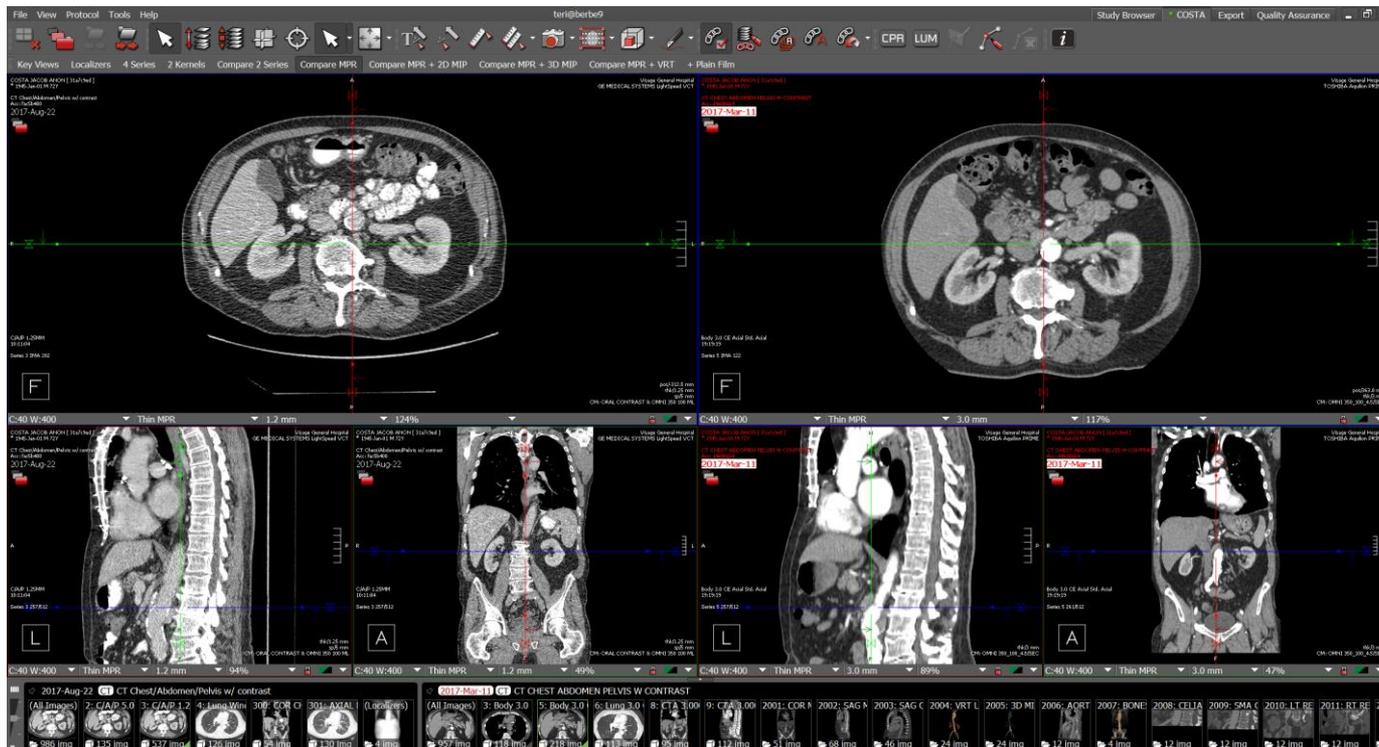
- Disable this button to temporarily turn off linking



Adjust Pan and Scroll Position

After using the “Shift + Automatic Linking” tool you may want to slightly adjust the position of the current related to the prior exam.

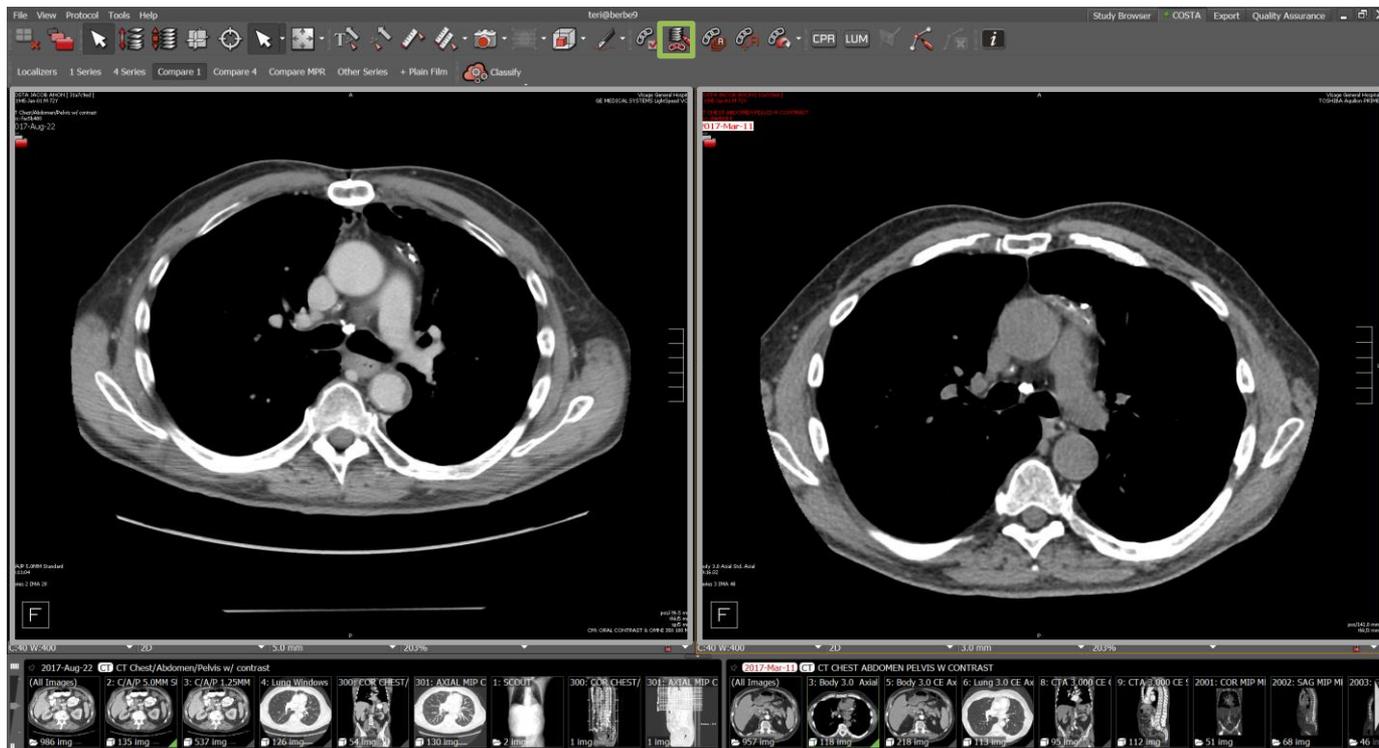
- Browsing through slices (left mouse) will scroll all axial series together. Panning (right mouse) will pan all linked viewers.
- Hold the “Shift” key and scroll/pan in the current study, and only the current moves
- When the alignment between current and prior study is good, release the “Shift” key
- Current and prior scroll/pan together from the new position



Link Scrolling – 2 Viewers

To link two viewers you can use the “Link Scrolling” tool.

- Position the two viewers at the same anatomical point
- Click the “Link Scrolling” button
- The two viewers will temporarily highlight in gray
- The two viewers are then linked and will scroll, pan, and zoom together



Link Scrolling – More Than 2 Viewers

When using the “Link Scrolling” tool with more than two viewers shown, you can select the viewers to link.

- Position the viewers at the same anatomical point
- Click the “Link Scrolling” button
- Select the viewers to link, these will be highlighted in gray
- Select “Accept and Exit” in the lower right corner of the last viewer added
- The viewers are then linked and will scroll, pan, and zoom together



Automatic Registration

To perform a rigid registration between volumes, you can use the “Automatic Registration” tool.

- It only works for MPR viewers because the result may be rotated
- Since it requires some set up in the hanging protocol, you may need to contact Visage for configuration
 - *Workaround: Shift + Automatic linking as step 1 creates the necessary configuration*

On a layout with multiple volumes showing in MPR viewers, select the “Automatic Registration” tool and the volumes will be registered. The volume in the active viewer will stay fixed, while the other volumes will be adjusted to match the volume in the active viewer.

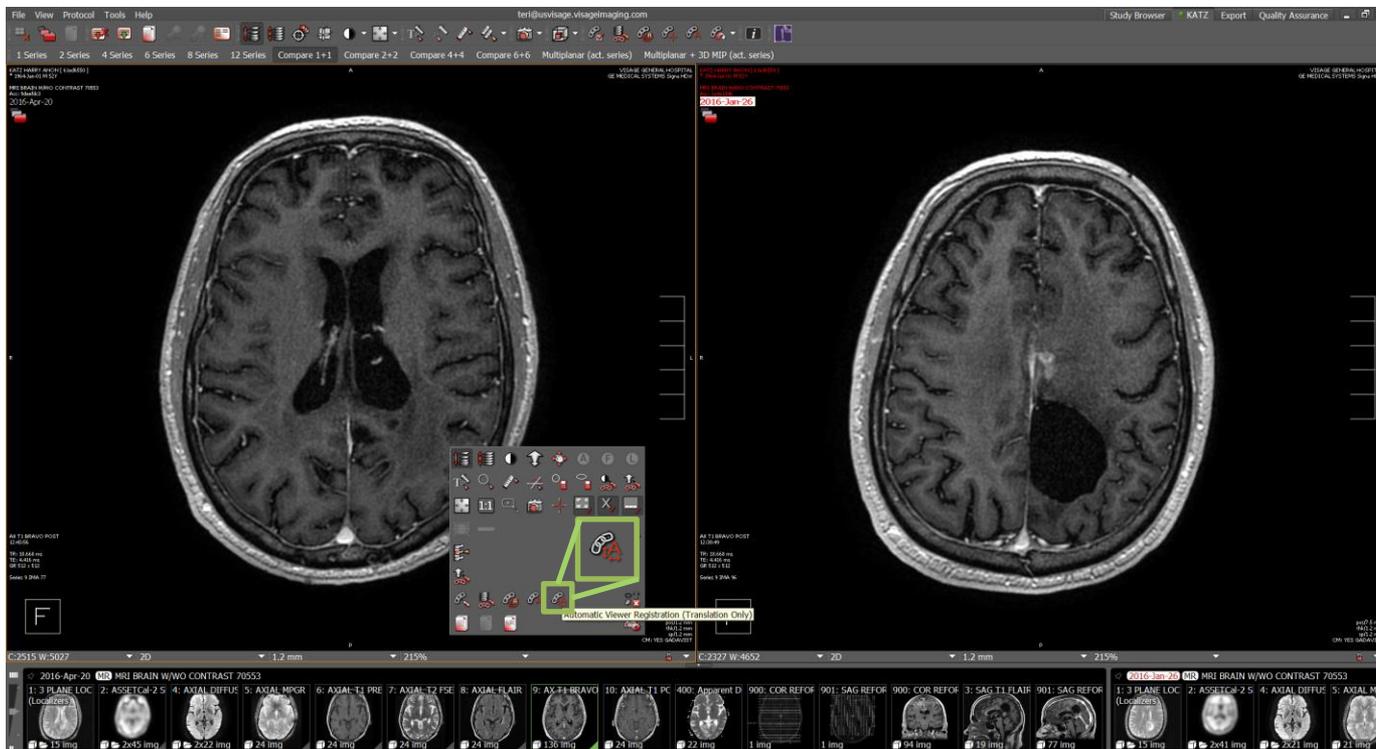


Automatic Registration Translation Only

To perform a registration between volumes without rotation, you can use the “Automatic Registration – Translation Only” tool.

- It works for both 2D and MPR viewers
- Since it requires some set up in the hanging protocol, you may need to contact Visage for configuration
 - *Workaround: Shift + Automatic linking as step 1 creates the necessary configuration*

On a layout with multiple volumes showing in MPR/2D viewers, select the “Automatic Registration – Translation Only” tool and the volumes will be registered. The volume in the active viewer will stay fixed, while the other volumes will be adjusted to match the volume in the active viewer.



Loading Data

Study Navigator

Find, load and hang studies of the current patient.

-  Studies currently hung
-  Studies pinned (always visible in Study Navigator and Thumbnail Section)
-  Show report of study (if exists)

Filter studies

Type search string, list will be updated

Slider position:

- Left:** Hung/loaded studies
- Middle:** Hung/loaded, relevant prior (auto-load rules) and all current studies
- Right:** All studies of the patient on Visage server

Hang entire study

Select box (turns green) and click Load button or double-click in box.

Hang individual series

Click on study to show thumbnails, drag thumbnail into a viewer.

*Multiple Protocols checkbox
Allows different protocols per monitor. Use green box to define which monitor is used for each study.



Thumbnail Section

-  **Green frame**
Image set shown in active viewer.
-  **Green triangle**
Image set currently shown in a viewer on screen. Click on thumbnail to locate viewer.
-  **Gray triangle**
Image set was previously shown on screen during session.

Studies which are **currently hung** are shown expanded by default, thumbnails represent DICOM series or image sets.
Click on study header to expand or collapse.



Studies which are **not yet hung** are displayed as a single thumbnail (hatched). Click on thumbnail header to expand.

Hang individual series
Drag thumbnail into viewer.

For **prior studies** the study date is displayed with a **red** background.

Hang entire study
Drag study header into viewer.

Mammography

 **Activate magnification region in single or multiple viewers**

 **Create arrow/ text annotation**

 **Create circle annotation**

 **Perform measurements**

 **View study information**

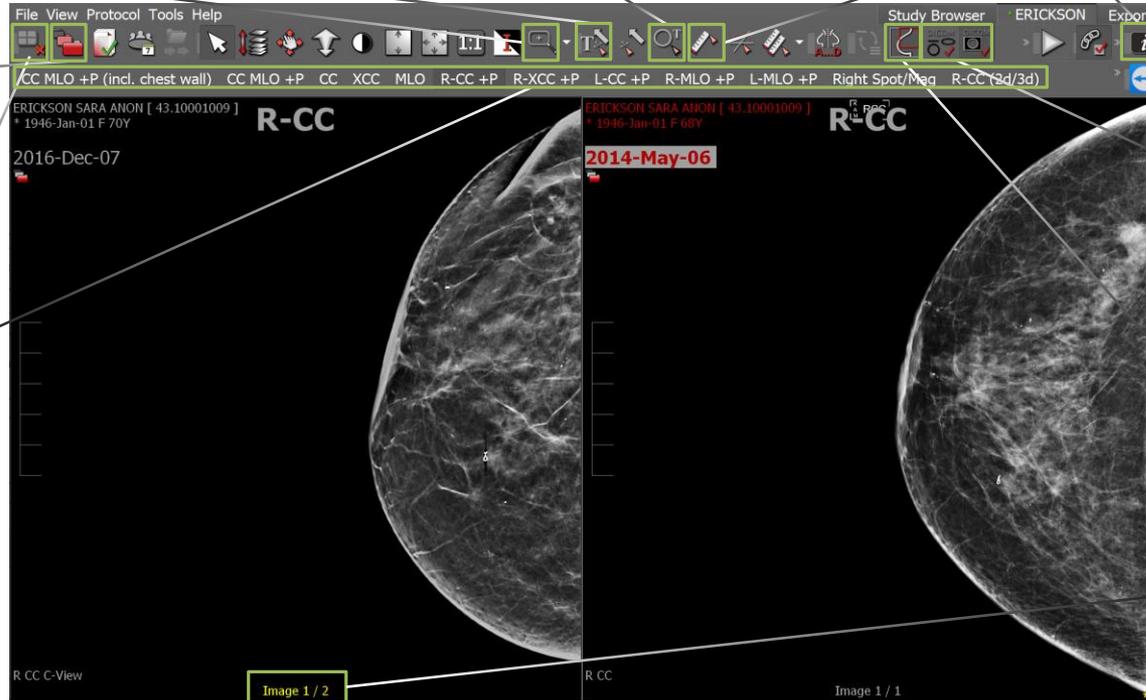
User manual available via Help menu

 **List studies of current patient**

 **Close session**

Select layout from Layouts Toolbar

Next/Previous layout

 **Show/Hide DICOM annotations**

 **Show/Hide DICOM shutters**

 **Show/Hide DICOM overlays**

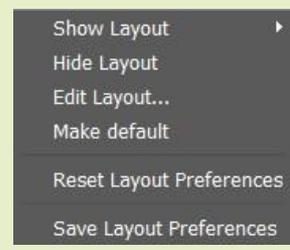
 **Enable Quadrant Navigation**

 **Next/Previous quadrant view**

More images available in viewer
Image 1/2
Use mouse wheel

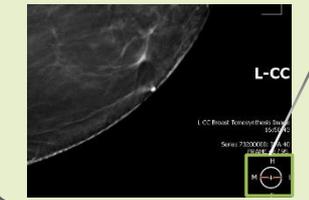

Configure Mammography reading workflow:

- Order of layouts:**
 Drag&Drop layout names from Layouts Toolbar to change order of layouts.
- Hide/Show layouts or make selected layout default:**
 Right-click on Layouts Toolbar to open context menu. Use "Save Layout Preferences" to save your changes.



Digital Breast Tomosynthesis:

DBT position indicator illustrates position of current slice within volume.

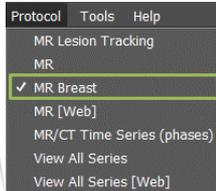




H Head
 F Foot
 L/R Left/Right
 M Medial

MR Mammography

Select MR Breast protocol and switch to T-Series 1 layout



Draw 2D ROI to evaluate image information

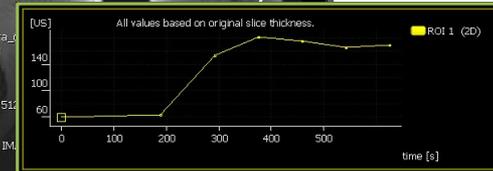
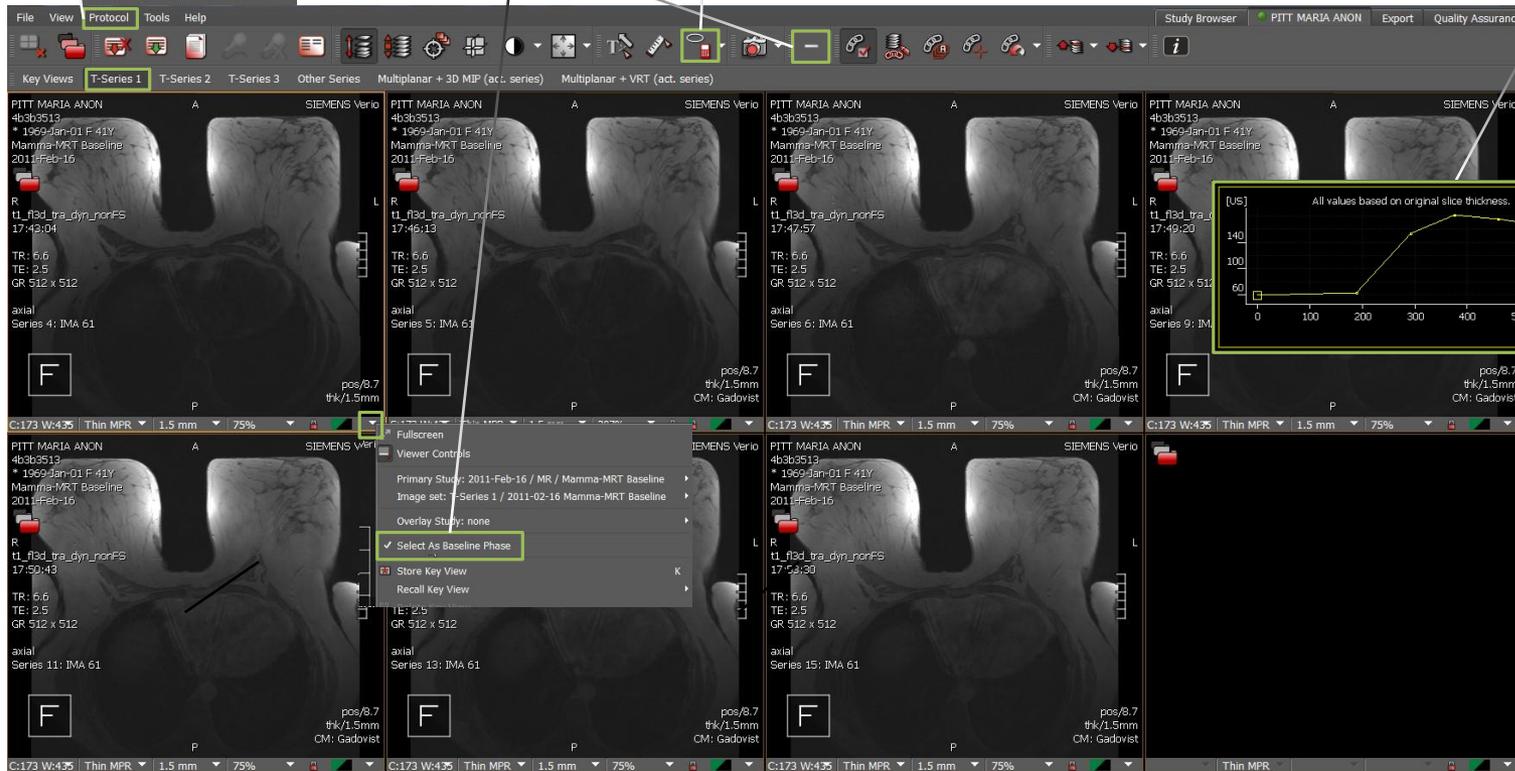
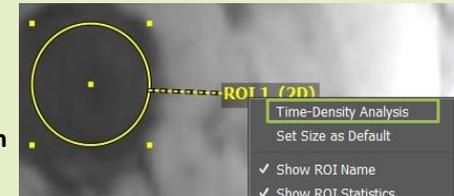


Subtract baseline phase from other images of a time series

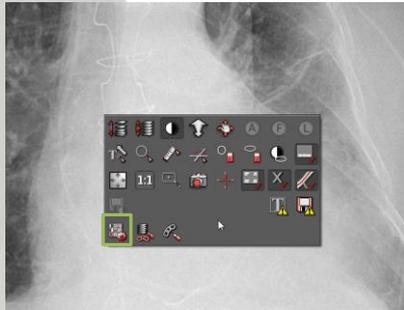


Time-Density Analysis

- Select a ROI tool from toolbar (or drop-down menu)
- Draw ROI in viewer
- Select ROI and right-click to open context menu
- Select Time-Density Analysis
- Time-density curve is displayed in viewer

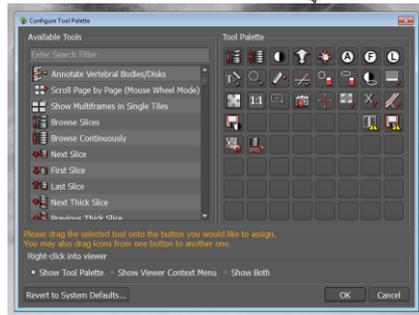


Tool Palette Customization



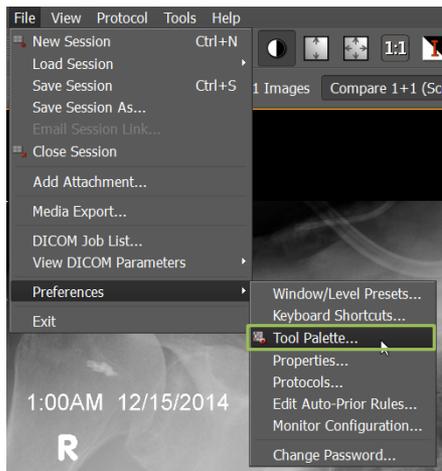
Right-click in viewer to open Tool Palette

Choose "Configure Tool Palette"



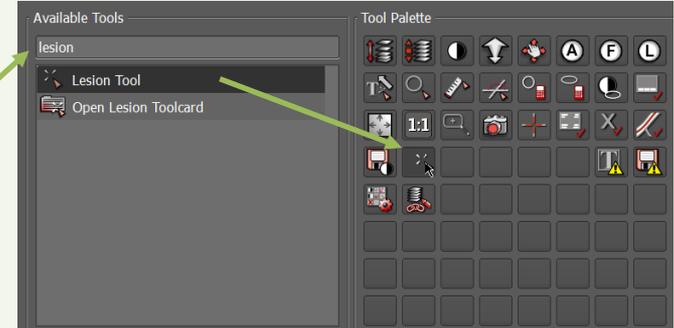
If „Configure Tool Palette“ is not already in your Tool Palette, you can access the Tool Palette configuration dialog by choosing **File → Preferences → Tool Palette**

Be sure to add it for the next time!



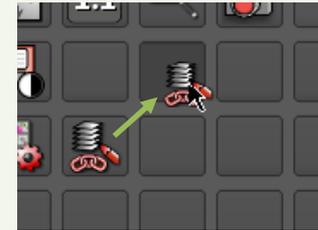
Add Tools

Search for favorite tools and drag them into the Tool Palette



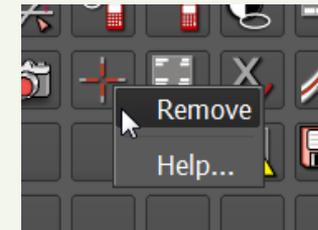
Re-arrange Tools

Re-arrange icons by dragging them into another Tool Palette location



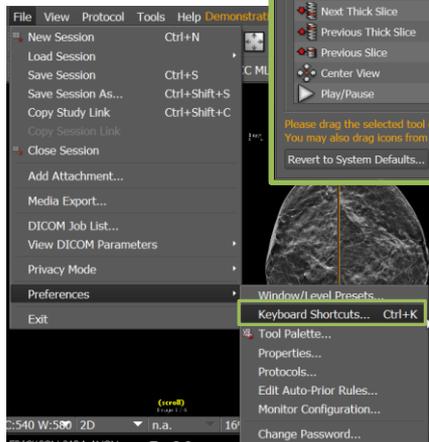
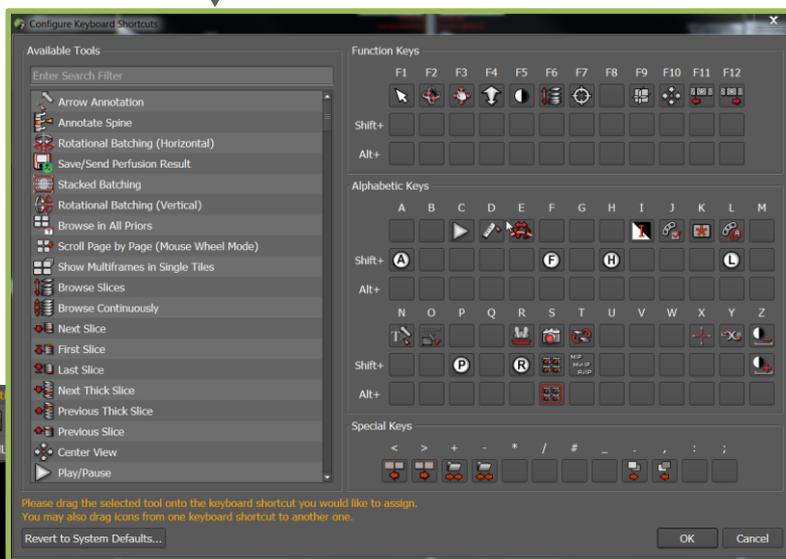
Remove Tools

Remove tools from the Tool Palette by right-clicking and selecting "Remove"



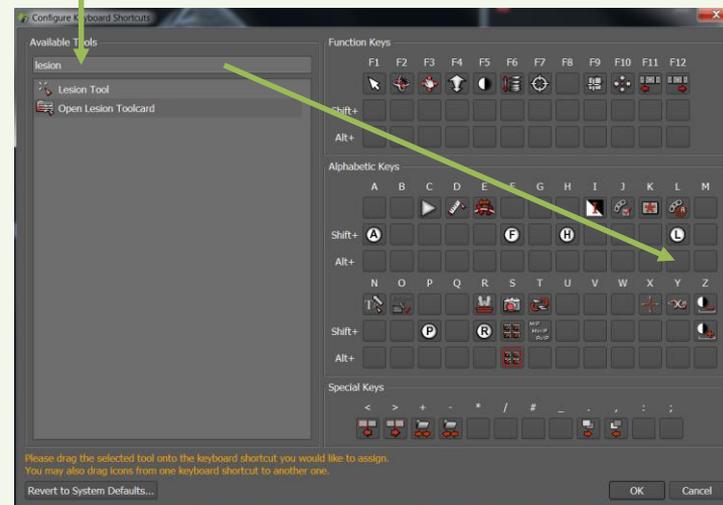
Keyboard Shortcut Customization

“Control K” opens up the Keyboard Shortcut dialog. Otherwise you could select File → Preferences → Keyboard Shortcuts



Add Tools

Search for favorite tools and drag them into the Tool Palette. Note that you can define shortcuts as a single keystroke or together with the “shift” or “alt” key.



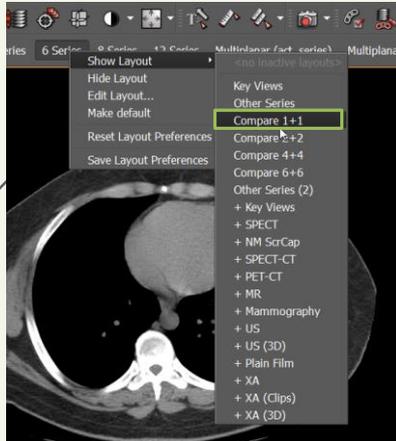
Organize Layouts

Show Layout

Standard layouts may be hidden if certain conditions have not been met by the loaded exam(s).

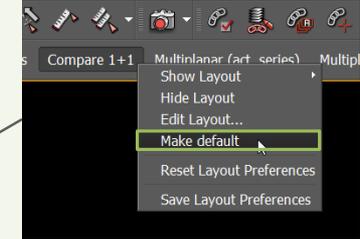
For example, comparison layouts are often hidden if only one exam is loaded.

Show hidden layouts always by right clicking on any layout, select "Show Layout", and choose the layout to show.



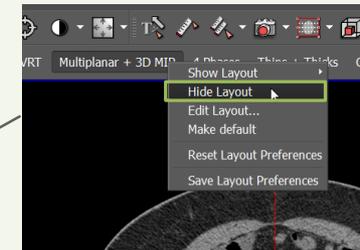
Make Default

To change the default layout, choose "Make Default". This will always be the default for this protocol, and may overwrite a more complicated default rule, i.e. default layouts that change depending on what exams are loaded.



Hide Layout

Unused layouts can be hidden. Right-click on a layout and choose "Hide Layout".



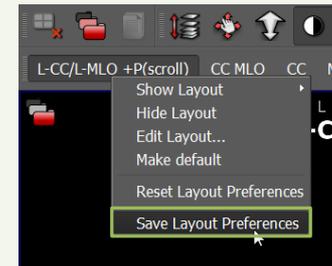
Re-Order Layouts



To change the order of the layouts, left-click the layout name and drag it to the new location.

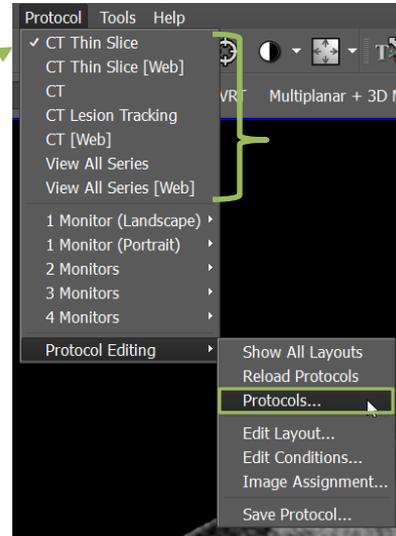
Save Layout Preferences

Important
After any layout change, save the layout preferences.



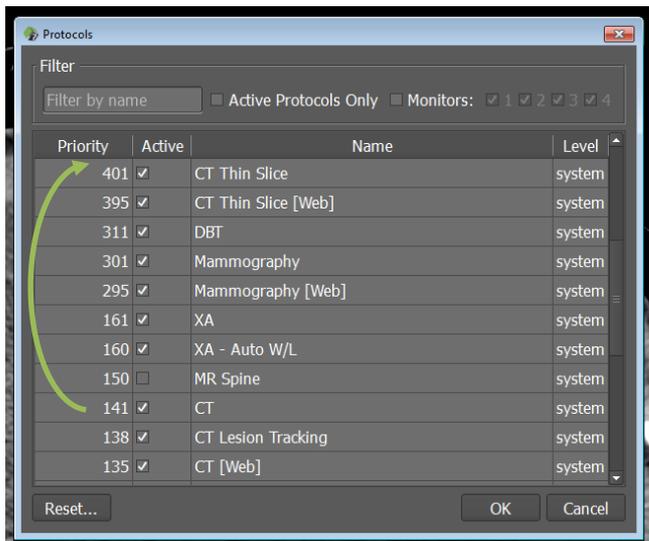
Customize Protocol Priority

Example: Exam loads into CT Thin Slice Protocol, but user prefers a basic CT Protocol



The Protocol Menu lists all protocols that match the loaded data.

To change the priority of these, select Protocol Editing → Protocols...



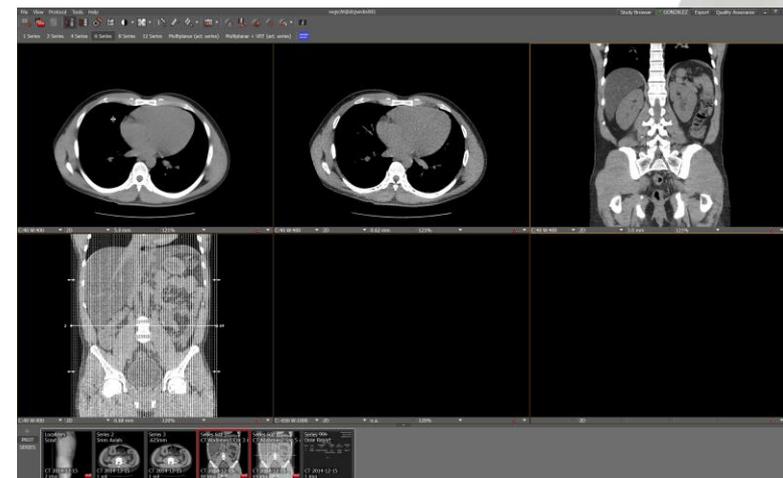
In the Protocols Dialog, disable a protocol by unselecting the active checkbox.

Change the priority by dragging the desired protocol above the highest priority protocol.

For this example, drag the CT protocol above the CT Thin Slice protocol.

Click OK and type CTRL-n to re-apply protocols to see the change.

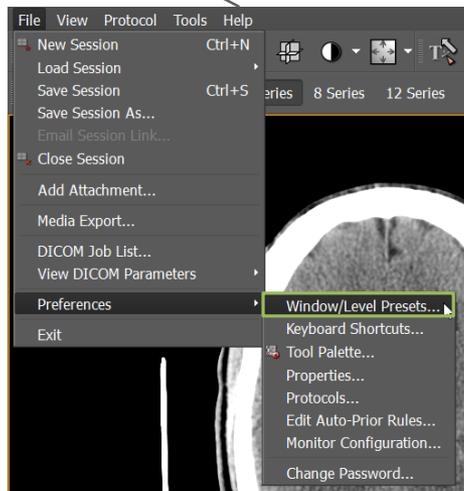
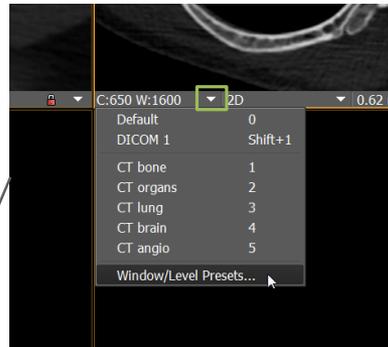
CT exams will now hang with the basic CT protocol



Customize Window/Level Presets

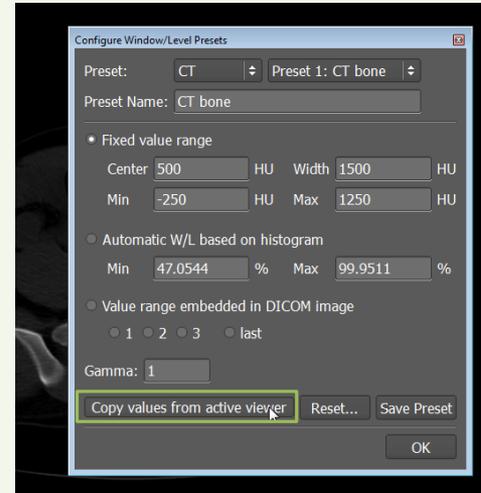
Open W/L Preset Dialog

Open the Window/Level preset dialog by clicking on the white triangle next to the W/L values in the Viewer Control Menu or select menu option File → Preferences → Window/Level Presets...



Modify W/L Preset

To modify the values of an existing Window/Level Preset, adjust the W/L to the desired values, and use “Copy values from active viewer” to update the preset or type in the new Window and Level values



Create W/L Preset

To create a new Window/Level Preset, select the preset number, enter the name for the new preset, and enter the Window and Level values.

The new preset can be applied by its respective shortcut (e.g. “6”)

