2022
UC San Diego
Radiology
Systems
Orientation

Table of Contents

Click on Patient Station and select the Admission Line.

Click on Treatment Team.

You will see the list of contact info. Click on Web Paging to page the person (remember the pager number).
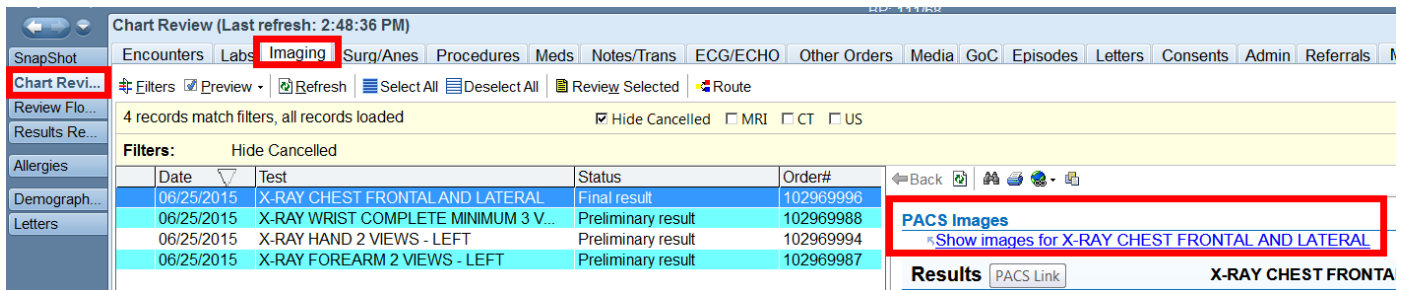
An interface exists between PACS and EPIC that allows clinicians to view images without exiting EPIC. A hyperlink appears at the top of each imaging order when images are available.

The screen layout is slightly different than Visage and the tools are limited but all images are available.
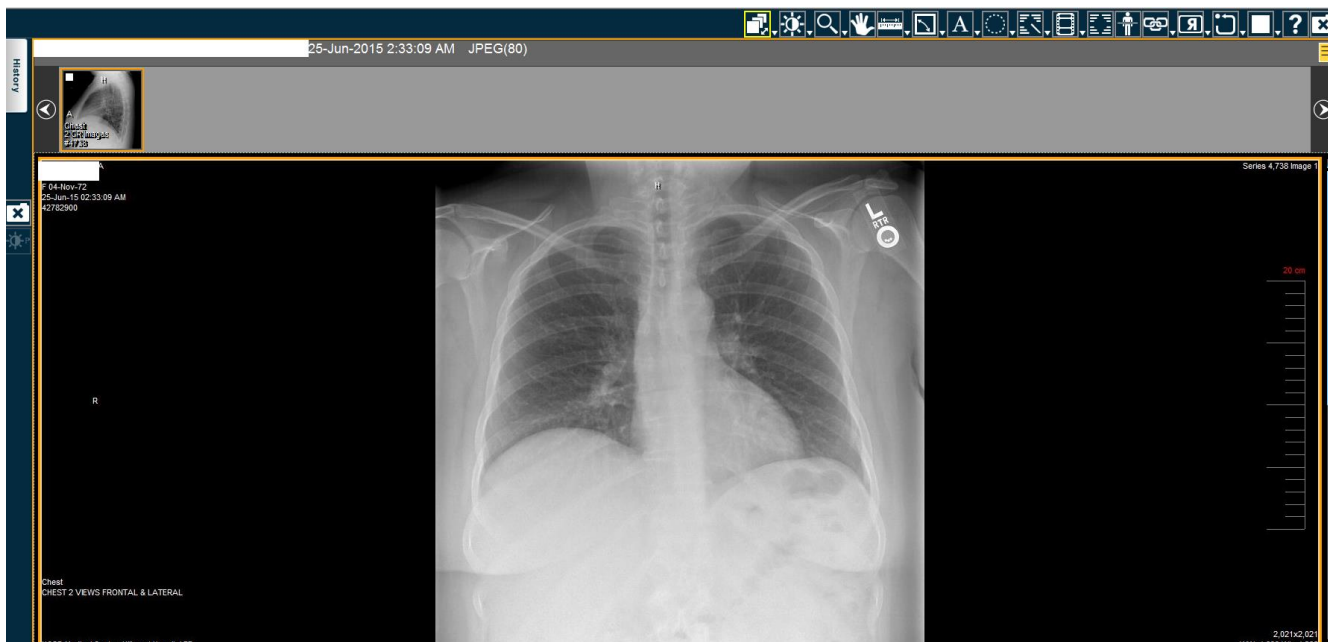
At this time all UCSD clinicians also have access to Sectra directly. Some outside clinicians also have access to images via iConnect, a web-based product.

Visage 7 Viewer FAQ

- Where do I change my monitor configuration settings for viewing on a Visage 7 client?

  o To adjust the windows that allow for viewing within the Visage 7 client, navigate to the upper left-hand corner and choose File > Preferences> Monitor Configuration. This will allow you to customize your monitors for viewing, displaying the study browser, study navigator, and export.

- How do I access priors for a patient?

  o Patient priors can be accessed from the Study Navigator, or from the Thumbnail Browser at the bottom of the viewer.

- Will the prior reports be available and where do I find them?

  o Prior reports will have been migrated into the system just prior to go-live and can be found by clicking on the Report Icon in the toolbar or the study navigator.

  o In addition, the impression of the report can be found by hovering over the report icon in the study navigator.

- Can I customize my toolbar?

  o Yes, you can right click in the empty space in the toolbar area and uncheck toolbars that you do not want or check toolbars that are not currently shown. To save these changes, right-click in an empty space in the toolbar section and select "Save Toolbar Settings". Note that the settings will be saved for that protocol only.

- What is a protocol? How do I change the protocol?

  o The protocol on a Visage 7 client refers not only to the display of data, but also incorporates the tools that will be available by default in the toolbar, certain window-levels which may be applied to viewports, and whether the linking of datasets is enabled by default. You will have more than one option for the loaded protocol. Navigate to the top left of the screen and click on "Protocol", then choose a different protocol to load if needed.

- **What is a layout? How do I change layouts?**
  - A layout dictates the way images are displayed in the viewer. They are configured as part of the hanging protocol. The user can change layouts by clicking on a different layout from the layout toolbar. They can also be re-arranged by clicking and dragging them to a more prominent place within the layout toolbar.
  - Adding to default layouts:

  The function of 'Add to Default Layouts' allows the user to quickly set a different layout as their preference to load into next time they open up a similar exam. The system will remember the last added default layout.
  - Anytime a change is made to the layout menu (setting a default, hiding, adding, or re-arranging any layout), the user must right click again on any layout and hit "Save Layout Preferences" for the changes to apply. Remember changes apply only to the Protocol they were done for.

- **Can I create Keyboard shortcuts? Can I map the keyboard shortcuts to a gaming mouse?**
  - Yes, select CNTRL+K to open the 'Configure Keyboard Shortcuts Dialogue'. A user can map a tool to a letter or combination of keys to create a keyboard shortcut and/or map specific keys to a gaming mouse via the mouse GUI.

- **How do I link the series for a current study?**
  - Some protocols may link series within a study automatically upon loading. When series are not linked, there are a few different ways they can be linked. You can use the linking tools in the toolbar, selecting as the first option the 'Automatically Link Viewers' button.

  - Note, this button may be mapped to the 'L' key on the keyboard by default. This action usually links all series of the same orientation together. (This function uses the DICOM tag "Frame of Reference" and for some exams you may find series of the same orientation that do not link with this tool due to different values of that tag). After doing so, you will notice the 'Toggle Linking' icon in the toolbar is now a darker shade, indicating that linking is active. Clicking this button will toggle linking off and on. If automatic linking is not desirable or the series that you would like to link do not meet requirements of automatic linking, use the "Link Scrolling" button to manually select and link the series, as described below.

- **How do I link a current exam to a prior study?**
    - To link series that do not have a defined anatomical correspondence, such as current/priors, you can use one of two linking tools:
    - **Link Scrolling**

        Use the link scrolling tool to link desired series at a desired position. Enable the tool, then click once in viewports to be linked. Then click the checkmark in the lower right-hand corner of the last-clicked viewer. The desired series will now be linked.

    - **Automatically Link Viewers (Frames of Reference)**


        Using this tool links the series of the same orientation from current and prior studies by the centers of their volumes. This is often a good starting point, and adjustments can easily be made by holding down the shift key and scrolling one of the linked series to the same point as the other, then after releasing the shift key, the series scroll together from the new linking point. These tools do not have specific requirements for the protocol, and work for both 2D and MPR/3D viewers.

- **How do I know which series are being displayed and if I have viewed all images?**
    - There are various indicators in the lower-right hand corners of the thumbnails that will differ depending on the data.

Volumetric Data:
Volumetric data is shown with a single cube in the lower left corner of the thumbnail. This means the thumbnail contains a single volume.
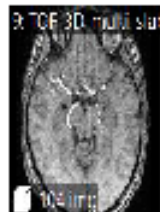
For volumetric data, a green border around a thumbnail indicates that this image set is currently shown in the active viewer. Click a thumbnail with a green border to highlight the active viewer briefly.

A green triangle in the lover right corner of a thumbnail indicates that this dataset is shown in one of the viewers on the screen.

A grey triangle in the lover right corner indicates that this dataset had been displayed in a viewer at some point but has since been unloaded.

Multi-volume or non-volumetric Data:
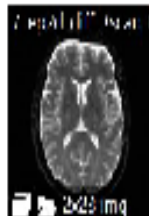A folder symbol in the bottom left indicates a non-volumetric stack of images is present.


A cube and a folder symbol indicate that multiple volumes are present in the thumbnail, such as a DWI series or In Phase/Opposed Phase series.

A hollow green triangle in the lower right corner indicates the dataset is currently on screen but not all images within the stack have been viewed.
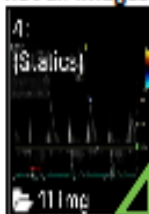
A solid green triangle in the lower right corner indicates the dataset is currently on screen and all images within the stack have been viewed.
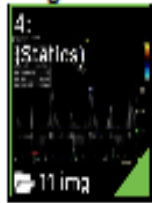
*Note: A stack is considered a compilation of single 2D images, i.e., plain Films/statics in US are single images independent of each other.

A hollow grey triangle in the lower right indicates the dataset was hung in the viewer, but not all the volumes within the series have been viewed yet.


A solid grey triangle in the lower right corner indicates the dataset was at one point hung in the viewer, and some slices within at least one of the volumes have been viewed.

*Note: It is not necessary to scroll through every slice within the volume to have the indication that the volume has been fully viewed. The same applies to Ultrasound clips- the entire clip does not need to play for it to be considered viewed.

- There is an option to set a preference, "Show warning if not all images have been viewed" for the system to notify a user when all images in a study have not been viewed upon closing the current session.
- There is a tool called "Show Unseen Images Warning" that can be manually triggered at any time via tool palette or applying it to a keyboard shortcut.
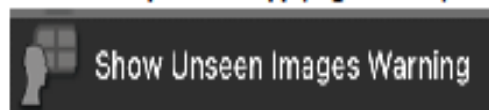
This warning would include all images in the study, including localizers and non-diagnostic series such as calibration images.

- Once I make changes to my user profile will I have to set those features up again or will it save?
  - Specific user preferences (W/L presets, Keyboard Shortcuts, and Tool Palate) will be saved to the user profile and always follow the user, regardless of the workstation they are using. Changes in font and icon sizes are stored for monitors of approximately the same size as the monitor where this change was made. The only configurations that will NOT follow the user to different workstations are monitor configuration. Monitor configuration changes will need to be set up once per workstation.

- How do I change the W/L presets? Can I create custom W/L presets?
  - Select File>Preferences>**Window/Level Presets** or select **Window/Level Presets** from the viewer controls (in bottom left-hand corner of viewport). Custom W/L presets can be chosen for the modality for which you want to define a preset and a preset number.
  - Preset numbers correspond to the NUMERIC (0-9) keyboard shortcuts that you can use to select presets quickly while you are reading images. W/L presets cannot be mapped to alphabetic letters.

- How do I configure my tool palette?
  - Select File>Preferences>**Tool Palette**. In the search filter box above the Available Tools list, type the name or part of the name of the tool that you are looking for or scroll through the list to find the desired tool.
  - Select a tool and drag it onto the Tool Palette to the right. Please note that moving a tool to a box that is already occupied by another tool will replace that tool.
  - Select whether to show the tool palette, the viewer context menu, or both when you right-click a viewer.
  - Click the "Revert to System Defaults" button to reject any recent or previous assignments or reassignments.
  - Click OK to confirm and close the dialog box.
  - If you want to remove a tool, right click on it in the grid and select 'Remove'.

- How can I find a patient that I viewed/interpreted earlier today?
  - A user can find recently opened studies from the study browser, by clicking the "Recent Studies" tab. If this is not shown, click the "+" sign next to the Visage tab, and select "Recent Studies".

- How do I reset my viewer to start over?
  - CNTRL + N will begin a new session. This is a configurable shortcut, or alternatively go to File>New Session. If you have made annotations, you will be prompted to let you know that continuing to reset will erase your annotations. You can proceed or cancel at that point.

- Can I hide the toolbar?
  - Yes, by clicking View>Auto Hide>Hide Toolbar.

- Can I change the viewer text color?
  - Yes, by going to File>Preferences>Properties> 'Text and Line Color for Prior Studies'. Similar preferences exist for current and future studies as well.

- How do I change font, toolbar, or thumbnail sizes?
  - By holding CNTRL + scrolling the scroll wheel while hovering over viewer text, toolbar, or thumbnails. Scroll the mouse wheel up to increase text size and scroll down to decrease text size.

- How do I know if there are any additional studies in the archive?
  - If there are additional studies in an archive, Visage will prompt the user with a blue hyperlink at the bottom of the study navigator which reads "Load additional studies from Archive". After clicking on the hyperlink, the user will have an option to import them to the Visage cache from the archive.

- What is the red folder icon in the corner of each viewer?
  - The red folder icon provides a user with the access to the list of the series of all currently loaded studies.

- How do I turn off the patient information if it is covering the anatomy?
  - Hit the space bar to toggle through the levels of verbosity, or you can use the "Toggle Patient/Study data" tool.

- How do I anonymize images?
  - The space bar is a quick way to hide DICOM overlays including patient demographics. Toggle patient/study data tool hides patient demographics while preserving other overlays, such as annotations and measurements, and crosshairs
  - Privacy mode can be enabled via **File > privacy mode** to hide patient data but preserve the overlays of technical factors.
  - De-identify from study browser if you need to create fully de-identified copy of the study.

- Can I export images to a PowerPoint?
    - Screenshot > Save > Export as JPEG/PNG to folder.
    - Once the image is in the export tab, a user can right click on the image from the export tab, click copy, and then paste it into PowerPoint.
    - The user can set a property for images to automatically have these copied to clipboard by going to the property File> Preferences> Properties> General Configuration > Copy Screenshot to clipboard.

- What is the difference between saving presentation states and secondary captures?
    - Presentation state is a way to save attributes such as W/L, Rotate/Flip, and annotations/measurements so that the study loads that way the next time someone loads the study. Unlike the secondary captures, the Presentation State features can be applied interactively – for example, the annotations may be hidden with a single click.
    - A secondary capture is a snapshot of a viewer or of multiple viewers. When creating the snapshot, Visage captures exact pixels that are displayed to the user, including not only the image(s) but also all text and graphic overlays. When such an image is displayed, the text and graphics cannot be interactively hidden since a separate DICOM series will be saved as a secondary capture.

Visage 7 Worklist FAQ

Visage 7 FAQ- UCSD

- Where do I access the Visage 7 Worklist?
    - To access the worklist presets, simply click on the Worklist tab in the top right corner of the application.
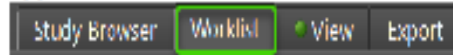

- How do I add in additional worklists to meet the needs of my workflow?
    - Right click on "New Preset" and choose "Select System Presets" from the options. From the "Show or Hide Presets" menu, check off the worklists that you would like to subscribe to and then they will appear as options on your preset toolbar.
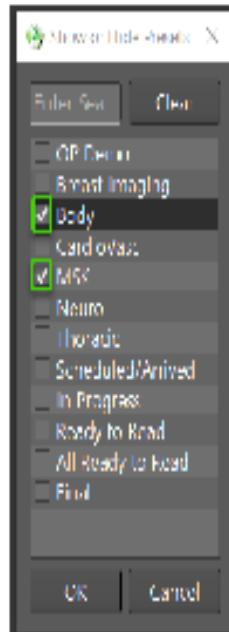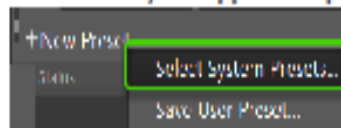
- How do I activate a specific preset?
    - Simply click on the preset that is needed at the time. The active preset will turn green when enabled.

- Can I combine multiple presets to create one list?
  - o Yes, if you click the first preset button and then hold down the Ctrl key + click the second preset, the two lists will turn green and be combined into one comprehensive list.

- Can I further filter a system worklist?
  - o If you expand the drawer on the left-hand side of the worklist screen by clicking the ellipse to the far left of the worklist presets, then you will be able to apply specific exam status, modality, timeframe, etc. filters.
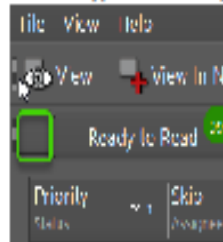
- How do I reserve or assign a study to myself?
  - o If you double click a study on the worklist to open it for dictation, the study will automatically be reserved to you. You also have the option to single left click the head icon to reserve the study to yourself.

- How do I assign studies to others?
  - o Right click on the study and select "Assign to..." from the drop-down menu. Select the appropriate assignee from the list and choose OK.

- How can I prevent my colleagues from opening and reporting on the same study that I currently have open?
  - o The "Lock Studies for Reporting" button will be enabled by default. This button will appear a darker shade of grey when depressed and should remain on while interpreting to alert other radiologists that you are actively reading that case if they were to try to open that same study. A little lock icon will also appear just under the skip icon when you have the study open for interpretation thereby presenting your colleagues with a visual indicator on the worklist. Other radiologists would always be able to "View Only" or "View Only in New Tab" so they will not be prevented from viewing that specific study.
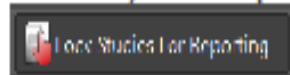
- Can I rearrange or choose to hide certain columns on the worklist?
  - Yes, you can rearrange the columns by left clicking and dragging the column within your list view to a new location. Also, you could right click on one of the column headings and choose to show/ hide certain columns.

- Can I re-sort the list?
  - The list will be default sorted by priority and then timestamp, but you could left click on any column heading to re-sort the list temporarily.

- How can I view a study that I do not intend to interpret at the time?
  - To assist with interruption workflow, right click on the study that you wish to view and not report on, then choose "View Only in New Tab". This will load the study in an additional tab and will not interfere with a prior study you had loaded for reporting purposes.

- Is it possible to skip studies that I do not have responsibility to interpret?
  - Radiologists have the option to select to skip a case on the worklist. To do so, click on the skip button which is in the "Skip/ Assignee" column and just to the right of the head icon. The middle of the icon will turn red, and an arrow will appear once the skip has been activated on a case.
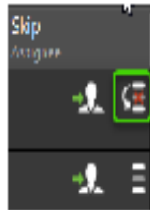
- Is it possible to use an auto advance workflow?
  - If you would like to utilize an auto-loading workflow to advance to the next study on the list, then right click on the first study, and choose "Auto Advance" from the menu. Double click to load the first study and then once you dictate your report, the Visage 7 viewer will close the session and will immediately open the next study from your worklist.

- How often does the worklist refresh?
  - The worklist will refresh automatically every 10 seconds.

Tagging Studies for Conferences

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Select the "Schedule for Conference" tool to open the "Labels" dialog

Selecting the grey check box adds this study to this conference on the selected day.

Here you can also define your favorite conferences by clicking on the star.

Conferences with yellow stars are favorites and can be filtered with the "Show" pulldown menu in order to reduce the conferences shown to your most relevant.

You can add a study comment to the label by typing into the Study Comment field and then clicking the red check mark.

To create a new conference, click the blue "New Conference" link. This will open the "New Conference" dialog. Here you can set up new private or public conferences.

Loading Data

VISAGE IMAGING
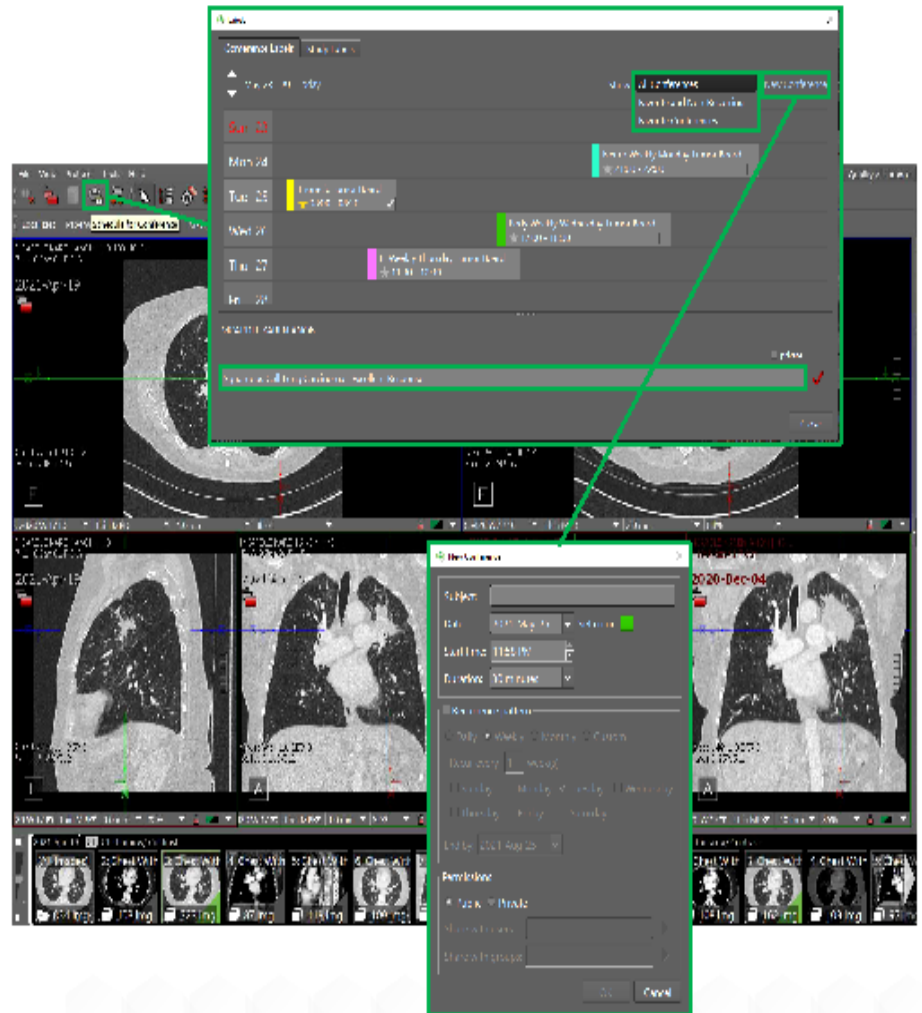
Study Navigator

Find, load and hang studies of the current patient.

- **[green box]** Studies currently hung
- **[star icon]** Studies pinned (always visible in Study Navigator and Thumbnail Section)
- **[report icon]** 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 Protocol 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.

www.visageimaging.com

V07.00 – Feb 2017

Sectra imaging is used for breast reporting. Training will be provided by the women's imaging staff as needed for residents and fellows. Below is a short summary of using Visage to view MRI breast images.
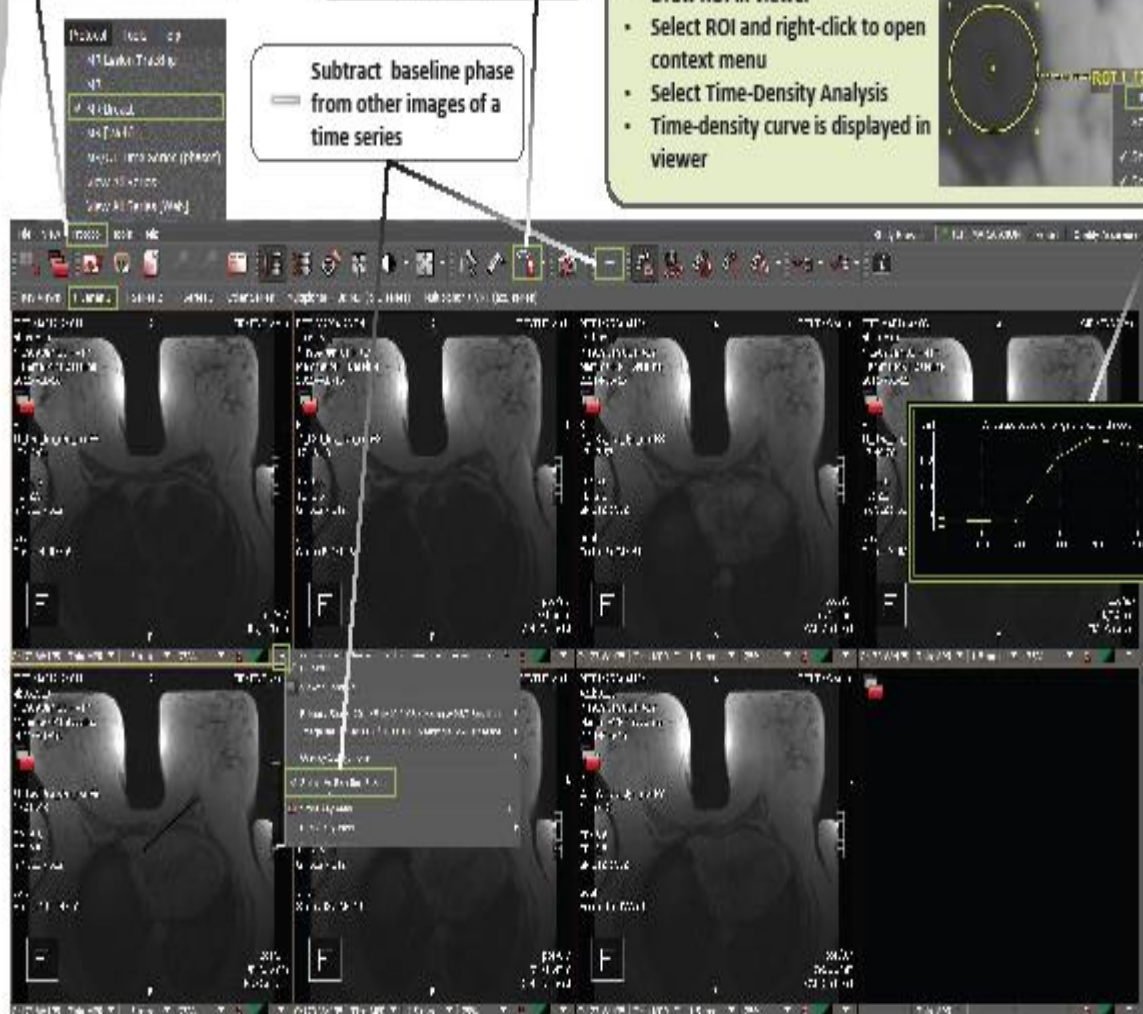
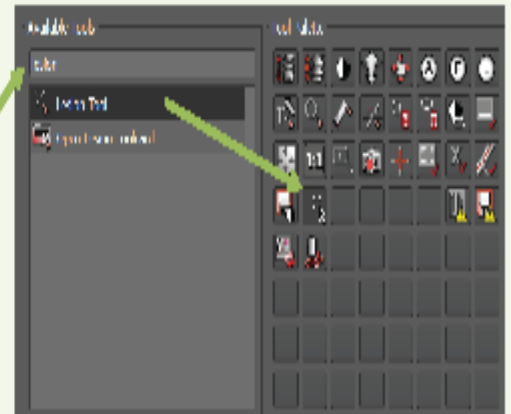# Tool Palette Customization
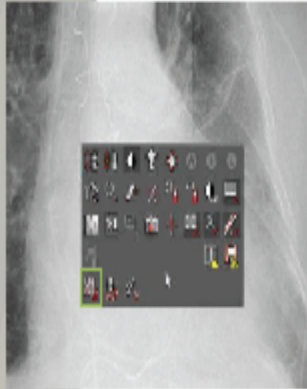
Right-click in viewer to open Tool Palette

Choose "Configure Tool Palette"

Add Tools

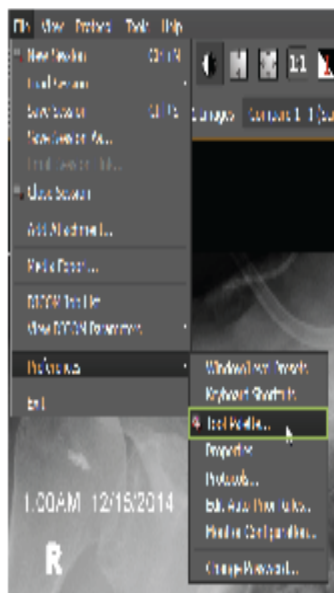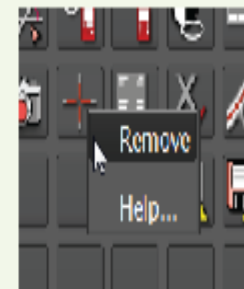Search for favorite tools and drag them into the Tool Palette

Re-arrange Tools

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

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!

Remove Tools

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

Keyboard Shortcut Customization

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"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.
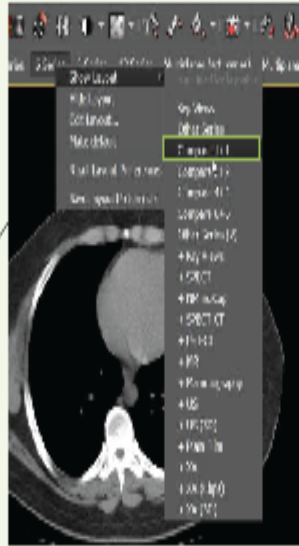
Organize Layouts

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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.
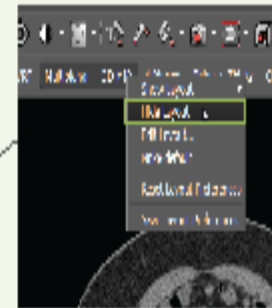
Make Default

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".
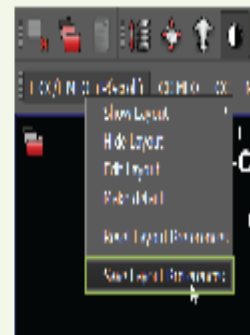
Re-Order Layouts

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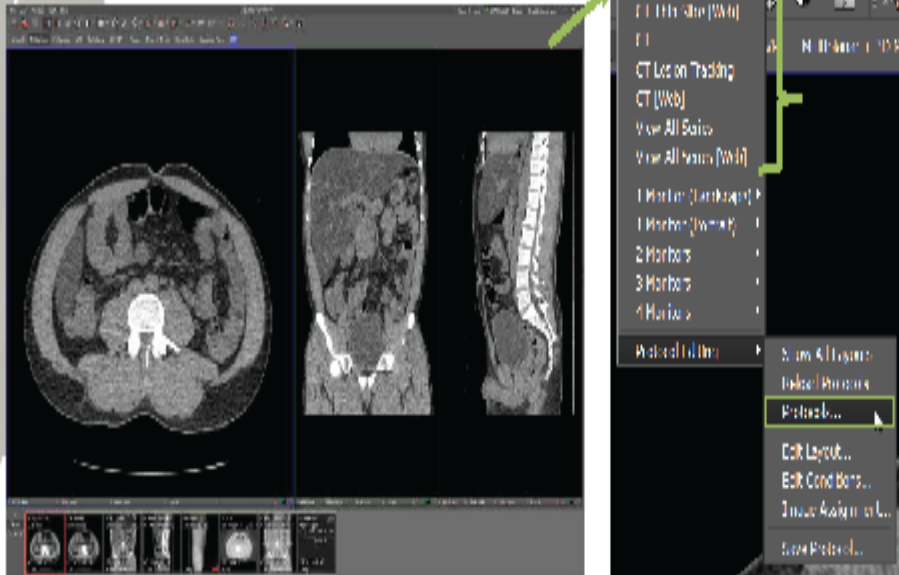
Save Layout Preferences

<u>Important</u>
After any layout change, save the layout preferences.
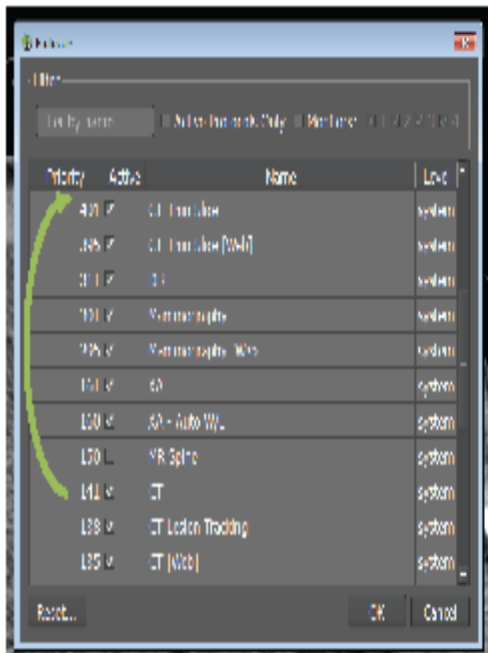
Customize Protocol Priority

VISAGE IMAGING

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.

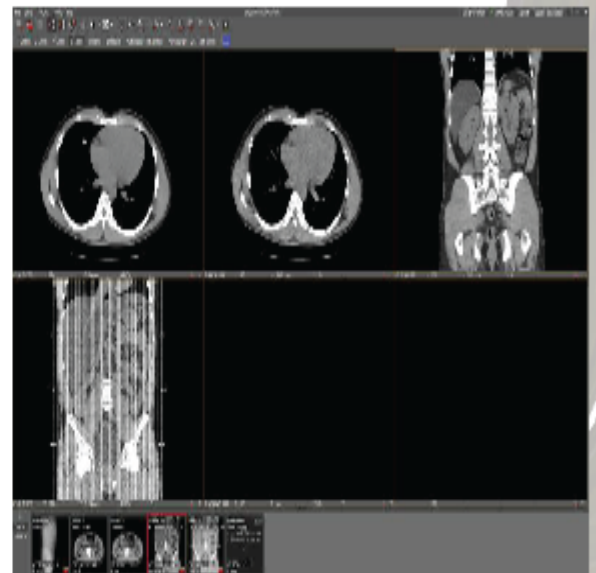To change the priority of these, select Protocol Editing → Protocols...

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.
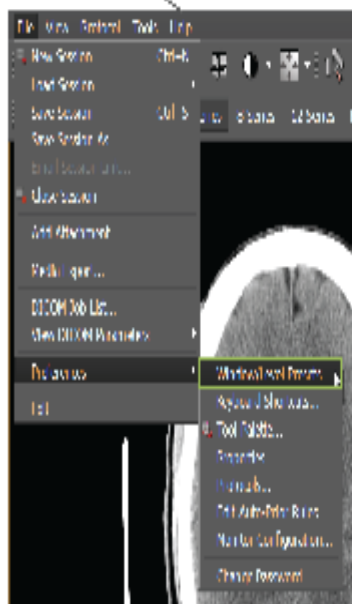
CT exams will now hang with the basic CT protocol

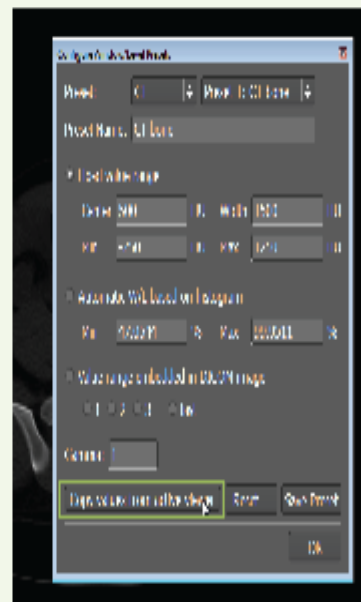# Customize Window/Level Presets

VISAGE IMAGING

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
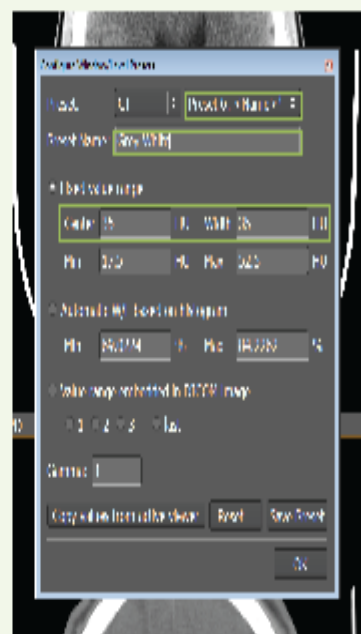File → Preferences →
Window/Level Presets...

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.

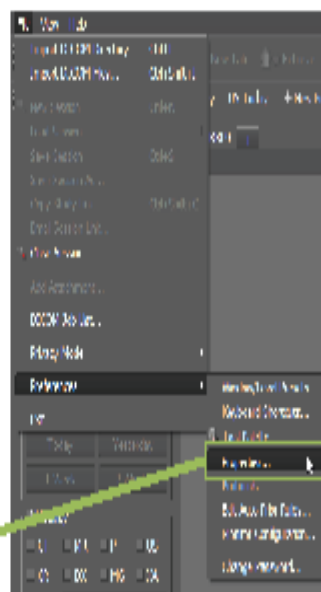The new preset can be applied by its respective shortcut (e.g. "6")

Key Images and Presentation States

VISAGE IMAGING

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".

Viewing X-Ray/US

VISAGE IMAGING
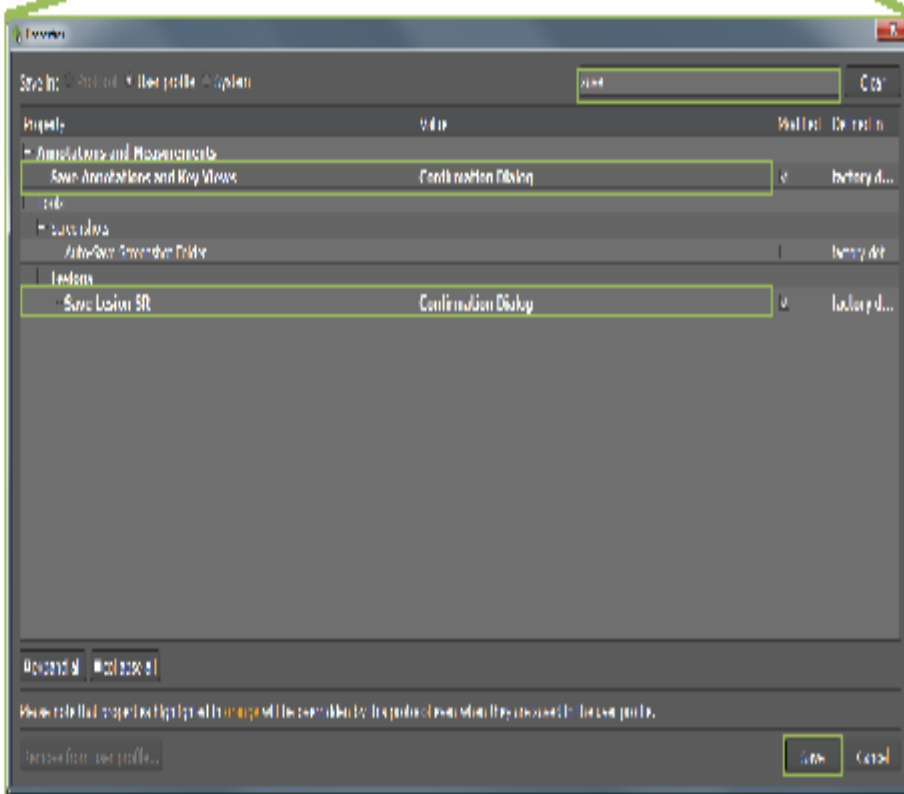
List all studies of current patient

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

Change layout

User manual available via Help menu

D	Measure distance/ diameter	
S	Screenshot active viewer	
A	Create arrow/text annotation	
I	Inverse display	

Ctrl + N	Reset viewer layout
0	Default data window
1 ... 9	Custom data window
↑ + 1 ... 9	DICOM data window

Spacebar — Hide annotations, text and lines (de-identify)

Wheel: Browse

Click&Drag: Window/Level

Click&Drag: Zoom

Click&Drag: Active Tool

Single-click: Tool Palette

Double-click: Viewer full-screen & back

Click&Drag: Pan

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

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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
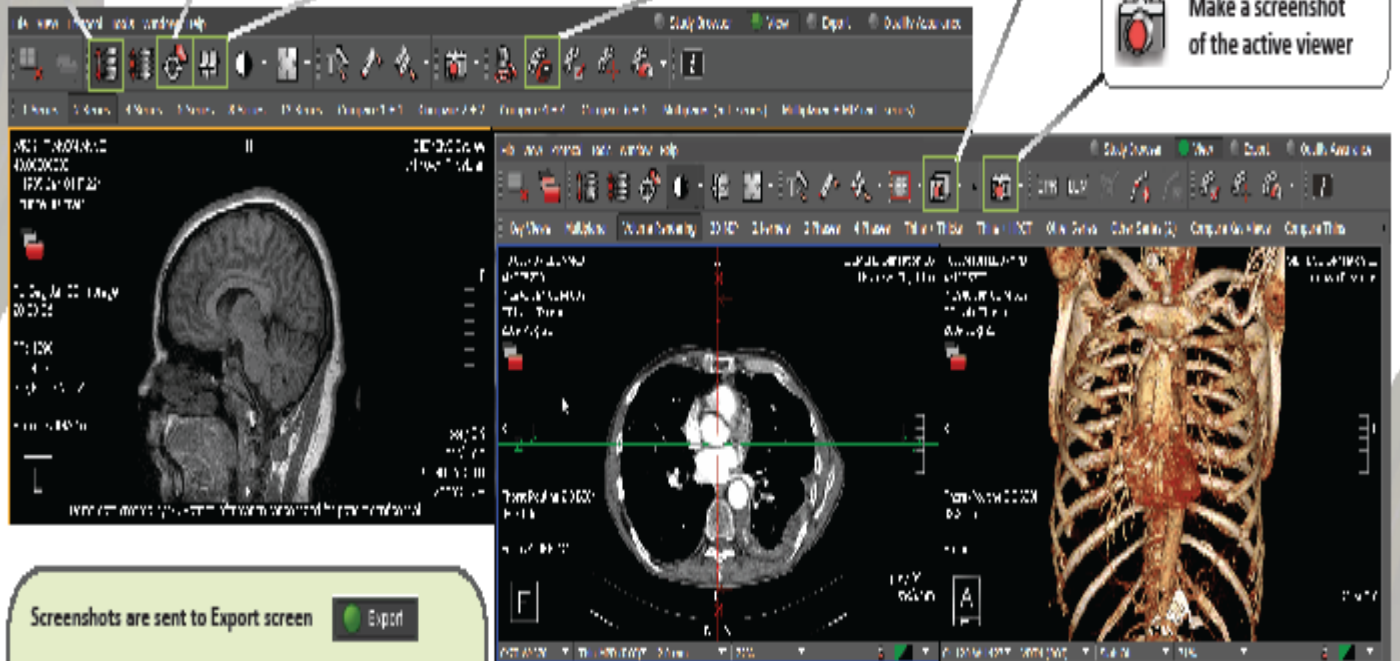
Screenshots are sent to Export screen — Export

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

| C | Cine play/pause | Alt | + | ... |

| T | Toggle thin/thick slice display; slab on/off | A | P | Anterior/posterior image orientation |

| T + Ctrl | Toggle MIP, MinIP, AvIP | L | R | Left/right image orientation |

| X | Toggle partial/full crosshair | H | F | Head/foot image orientation |

Drag&Drop series from Thumbnail Browser into viewer for display

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V08.00 – Dec 2018

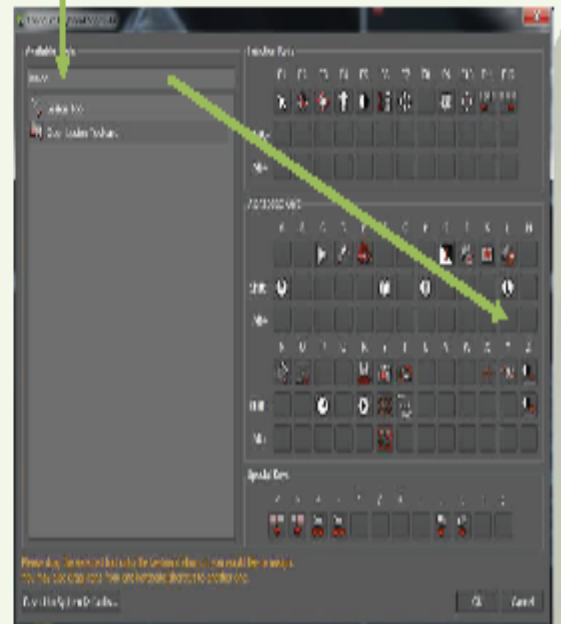# Keyboard Shortcut Customization

VISAGE IMAGING

"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.
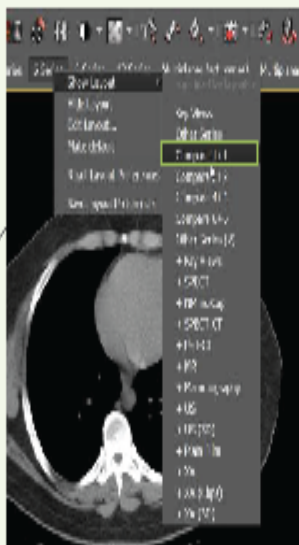
Organize Layouts

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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.
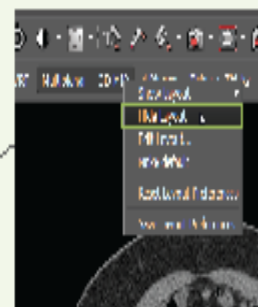
Make Default

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

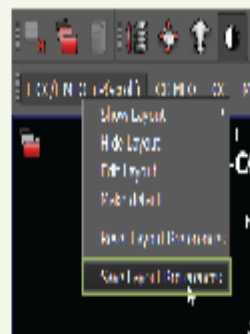Unused layouts can be hidden. Right-click on a layout and choose "Hide Layout".

Re-Order Layouts

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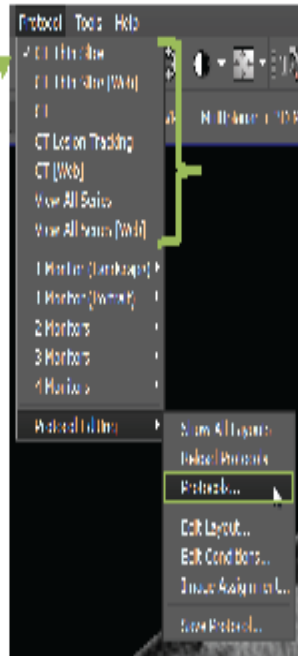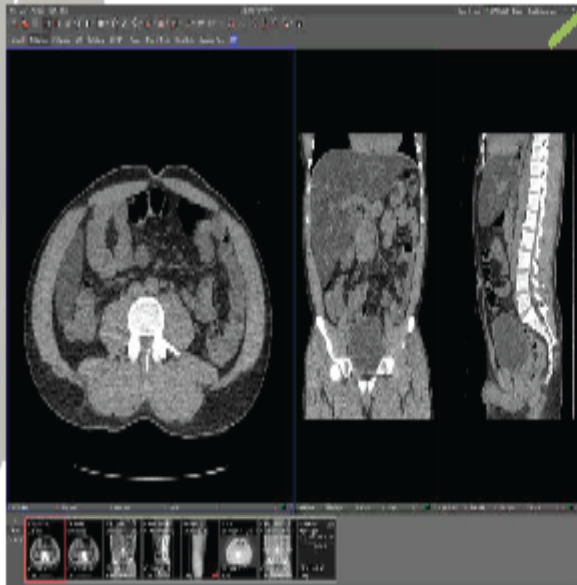
Save Layout Preferences

Important
After any layout change, save the layout preferences.
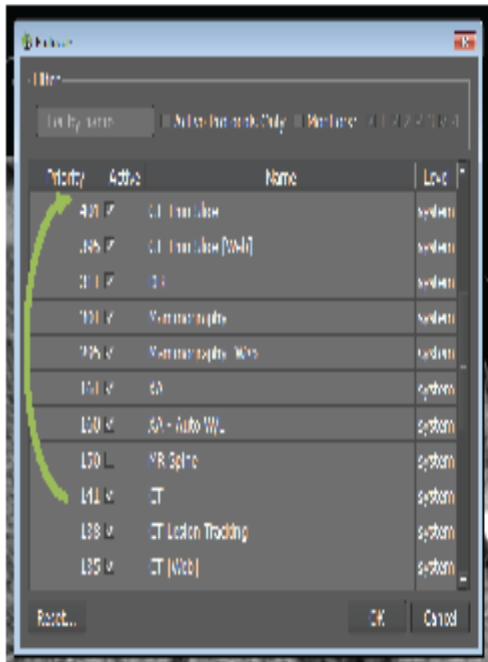
Customize Protocol Priority

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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.

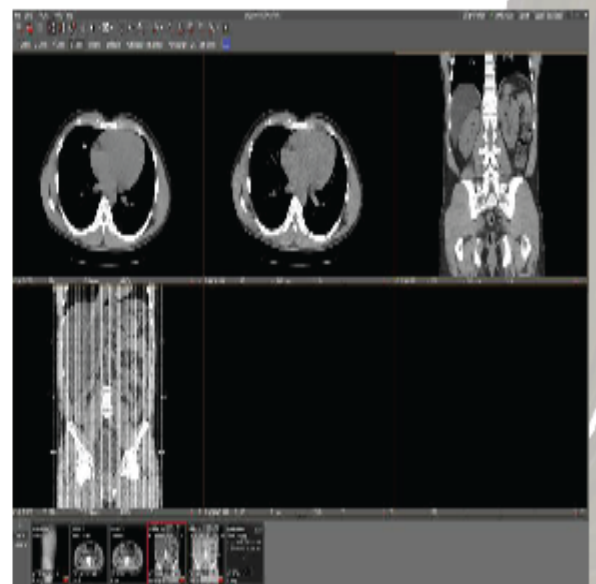To change the priority of these, select Protocol Editing → Protocols...

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.

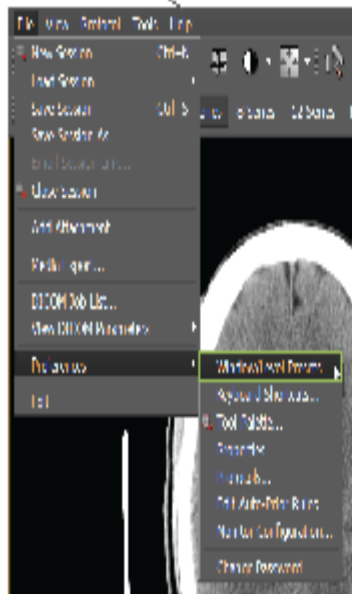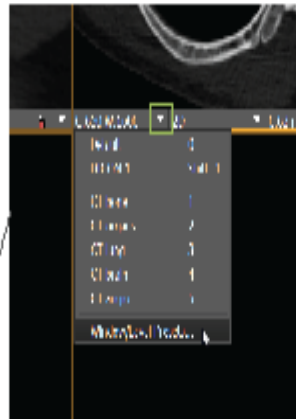CT exams will now hang with the basic CT protocol

Customize Window/Level Presets
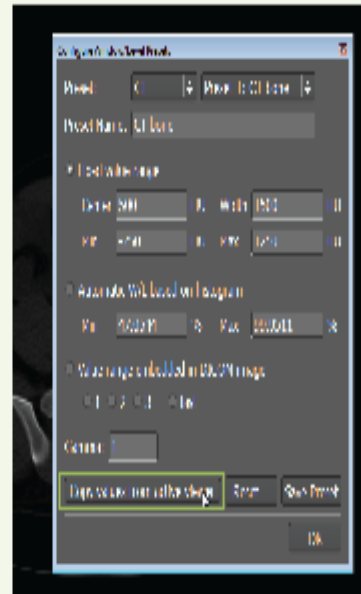
VISAGE IMAGING

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...
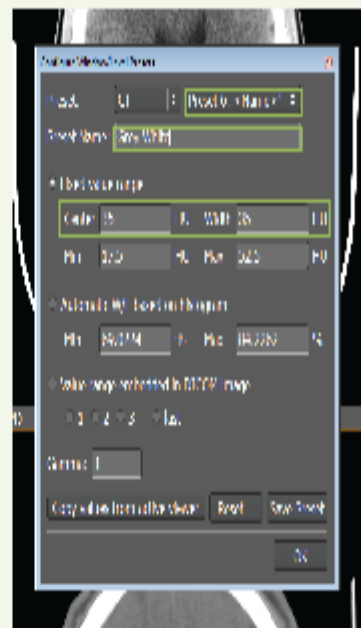

Modify W/L Preset

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

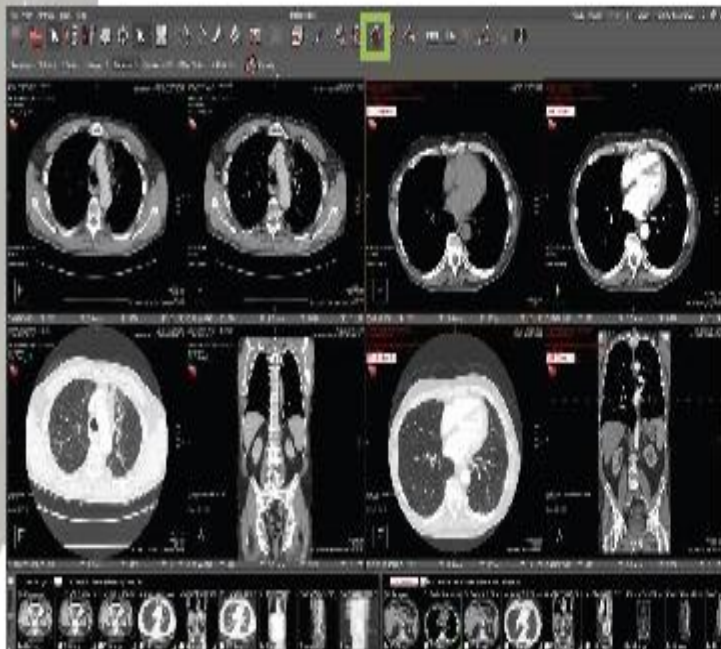type in the new Window and Level values

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")

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V02.00 – Oct 2018

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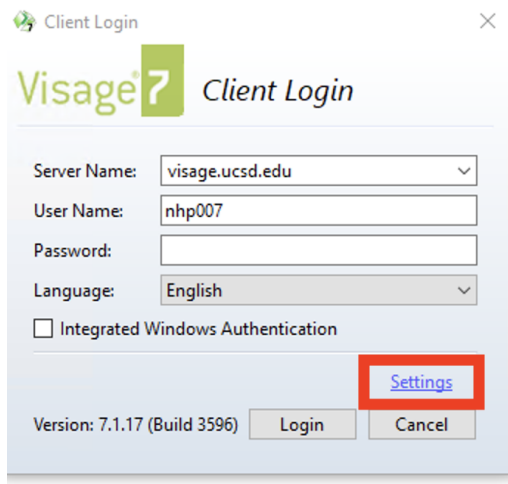
Notice that the "Toggle Linking" button is enabled after using the "Automatic Linking" tool.

* Disable this button to temporarily turn off linking

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V01.00 – Mar 2018
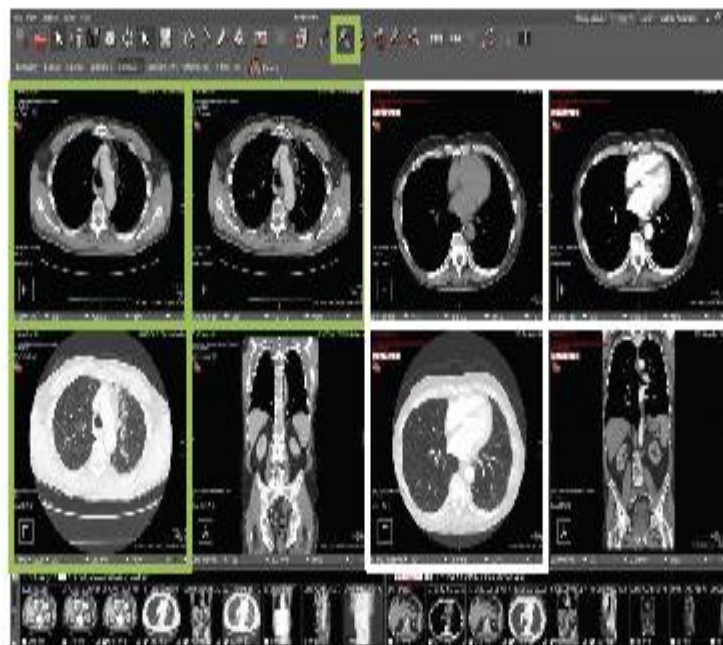
M*MODAL FLUENCY FOR IMAGING REPORTING

IF INTEGRATION IS NOT OPERATING AS EXPECTED, PLEASE ENSURE THAT THE SETTING IS CORRECT.

When logging into Visage on a designated reading station (DS), Fluency will auto launch, but will not auto log you in. You can independently launch Fluency on other hospital computers or via the clinical web portal (cwp).

Application opens to default tab = "Active Jobs" which displays the number of currently active jobs for the user. Active jobs are considered jobs started, but not yet signed and includes jobs in the following states:
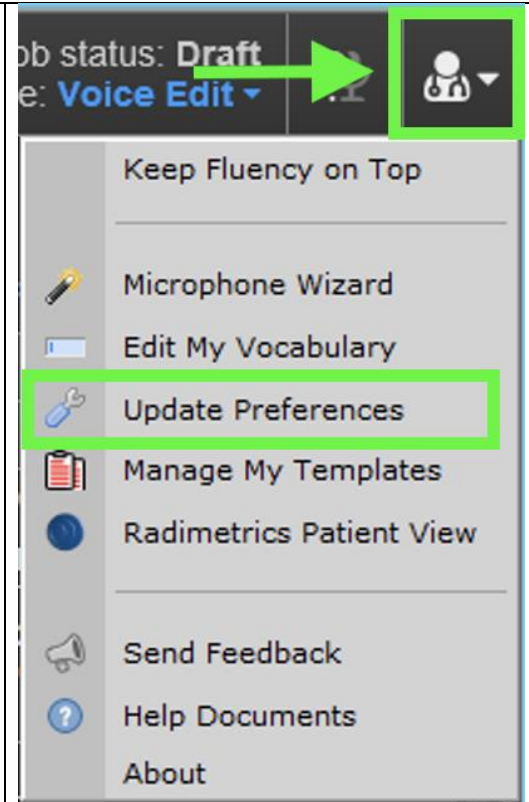
Draft (Suspended)
Corrected
Resident Assigned

Set up Fluency	
Fluency Settings To access the Fluency Settings and user preferences, click the settings icon (Doctor with Stethoscope) from the toolbar	
Fluency Microphone Wizard Recommended to run once if you are in a new environment. It ensures that the microphone is connected and receiving audio at the appropriate audio level. The wizard also records the user's dictation to improve speech recognition. • To access the wizard, click on the Fluency Settings icon and click Microphone Wizard from the drop down menu. • Hold down the Record button and read the available text. Speak as you normally would during a dictation. The audio level will be displayed as the recording occurs. Click on the 'Finish Wizard' button when finished reading text.	
Update Preferences Tools are available to customize Fluency properties • General setting – Can set auto save frequency time period • Change application Theme: dark(night mode) and light(standard) • Text Editor settings – Editor skin	
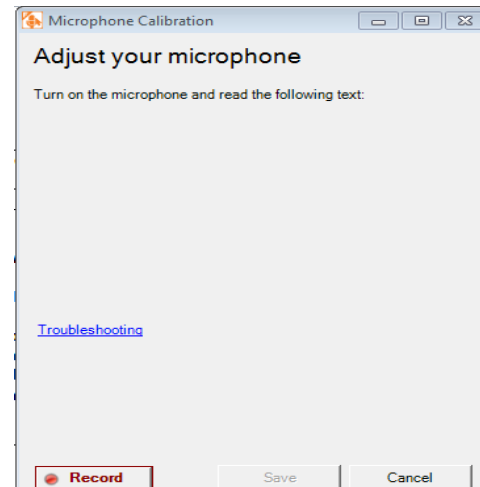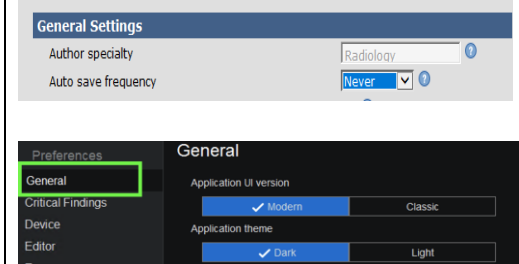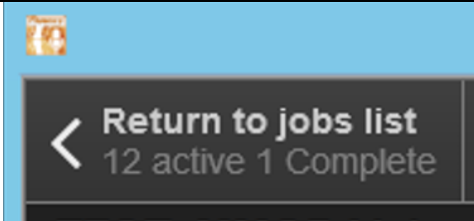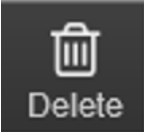
- Update user settings – There are a few settings that requires you to close fluency and re-log in.

- Recording Device – Set dictation for "Push To Talk" or "Toggle"

- MModal Scout - Can launch reporting analytics module from Fluency. You will need to enter your username and password the first time you use this tool.
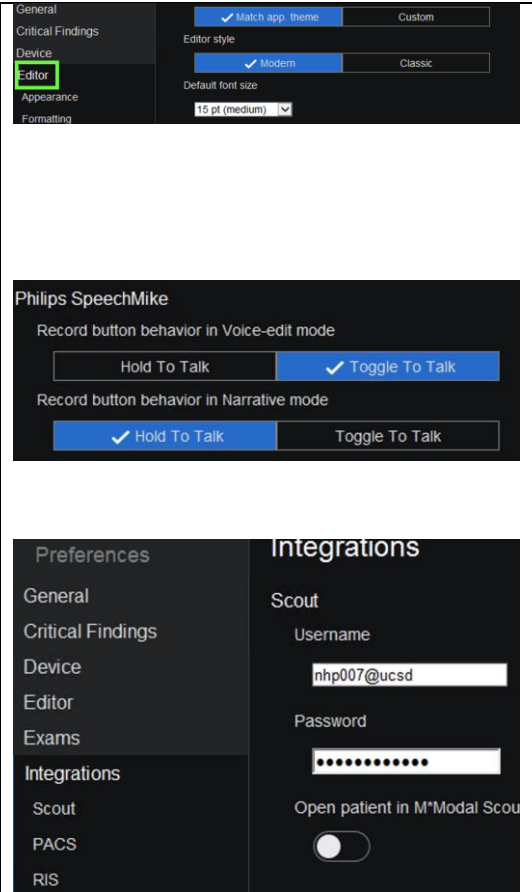
Reporting Window and Toolbar	
Dashboard The dashboard will display a count of jobs applicable for the current user. Clicking on the return to job list will close the current dictation and return the user to the active jobs list. The user will be prompted if there are unsaved changes to the current report.	Return to jobs list 12 active 1 Complete
Save/Assign/Sign • Save will save a draft version. • Residents will assign reports to either a person or a pool depending on assigned rotation. Pools were created to allow multiple supervising radiologists to view signed reports by residents and fellows. • Fellows working as unsupervised radiologists will sign reports.	Sign Assign Reject Save draft
Formatting tools • Common edit tools of cut, copy, undo, etc. • Tokens are place holders for data to be inserted into the report from external systems (e.g. and order)	B I U AA [T]
Delete report Once a report is signed, it cannot be deleted. Only draft versions of reports will be deleted.	Delete

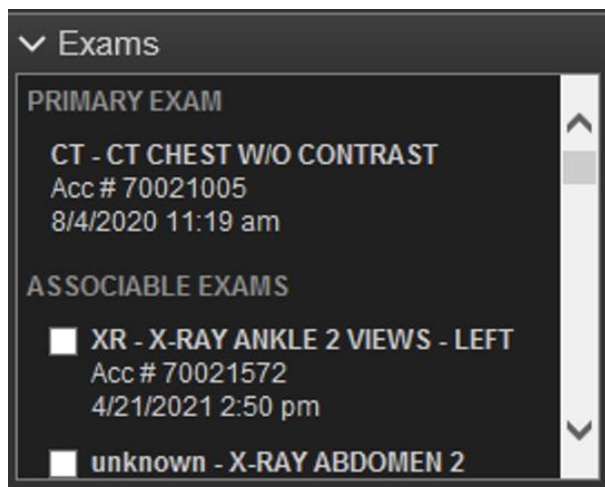| Fluency reporting	
Exams Displays a list of reportable exams for the patient in context. The main exam that was launched for dictation will be under PRIMARY EXAM. Other reportable/linkable exams will be displayed ASSOCIABLE EXAMS with checkboxes. Prior relevant studies will also be listed. You can view those reports, as well as the author and date signed, Also, you can copy relevant data to paste into current report. **Linking studies** To associate another accession number with the main exam, click on the corresponding checkbox. A prompt will be displayed when attempting to associate an exam from a different modality or an exam outside of a 4 hour window of the main exam. Once a preliminary or final report is sent, and unlinking is not possible.	∨ Exams PRIMARY EXAM CT - CT CHEST W/O CONTRAST Acc # 70021005 8/4/2020 11:19 am ASSOCIABLE EXAMS ☐ XR - X-RAY ANKLE 2 VIEWS - LEFT Acc # 70021572 4/21/2021 2:50 pm ☐ unknown - X-RAY ABDOMEN 2

TEMPLATES	
Templates Available templates for the exam loaded for dictation will be displayed in the templates section. A template often serves as the starting point for a new document and may contain sections, subsections, fields and tokens, each possibly containing text. Fluency supports both user templates and system templates. User templates will override system templates. If multiple templates match the current exam, the highest ranking (or oldest) template will be chosen by default. Additional templates will be displayed in the Templates window based on match of Modality and Body Part and/or Procedure code. **Note: After selecting a template, it is possible to hide/minimize the template section by clicking on the TEMPLATES header. This will leave more room for the other content on the right side of the document. This setting will be remembered between dictations.**	∨ Templates 1. System Default PERSONAL 2. CHEST CT WITH SYSTEM 3. BLANK VOICE EDIT TEMPLATE 4. BLANK NARRATIVE TEMPLATE 5. Chest CT 71250 HRCT 6. Chest CT 71250 Noncon 7. Chest CT 71260 With IV 8. Chest CT 71270 With and Without Find	Create from Draft	Manage
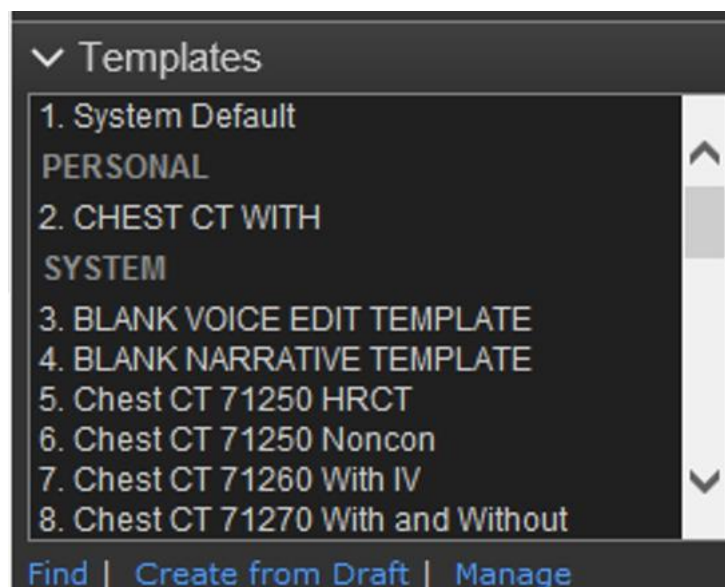
Find a Template

If you want to use a template other than any that are displayed by default (e.g. a template belonging to another user), you can click on the Find Template link. The Find Template window will appear.
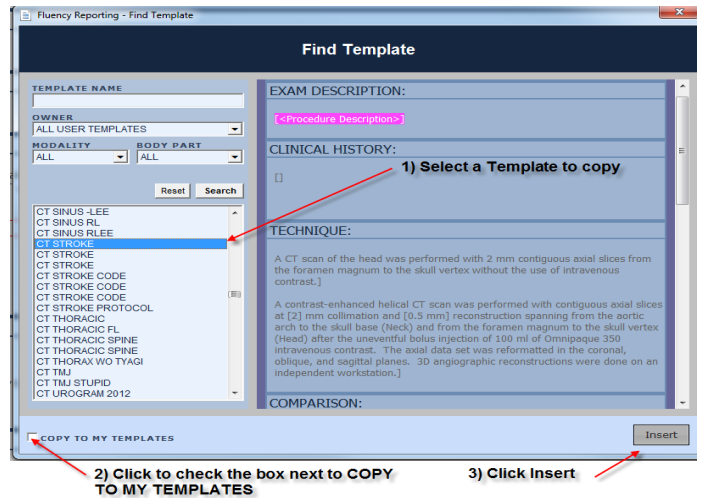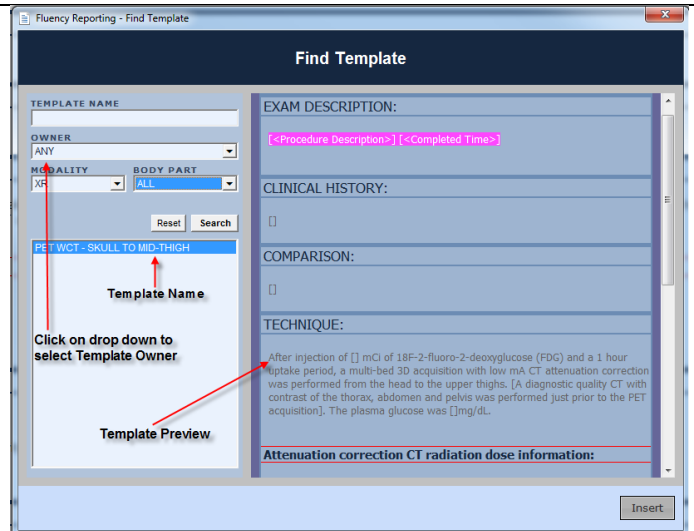
1. Enter a Template name. The name must be unique. The name can be used as a voice command to launch the template. Find a system template user specific template, create from draft or "copy to my templates." Will copy over procedure codes and/or body part rules as original template. Recommend as first time users. When working more with attending radiologists, specific templates may be *required* by section chiefs. **Your personal templates will override system templates.**	
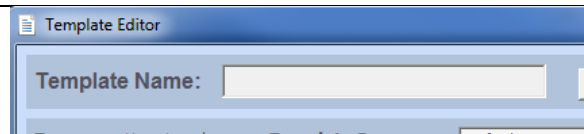
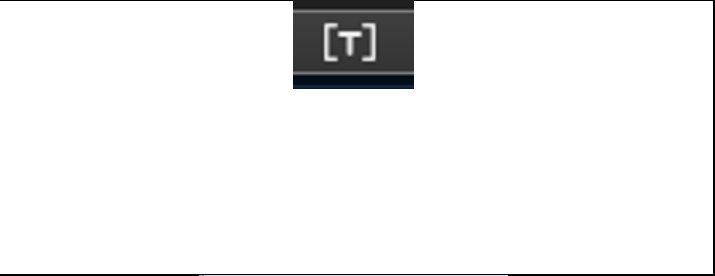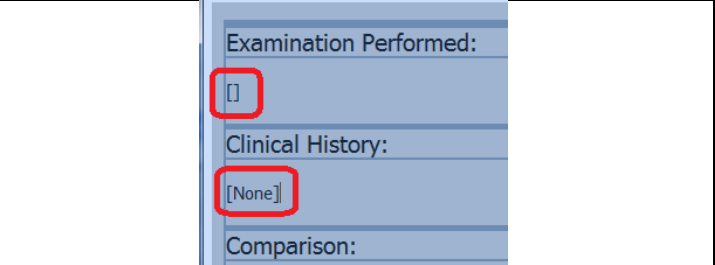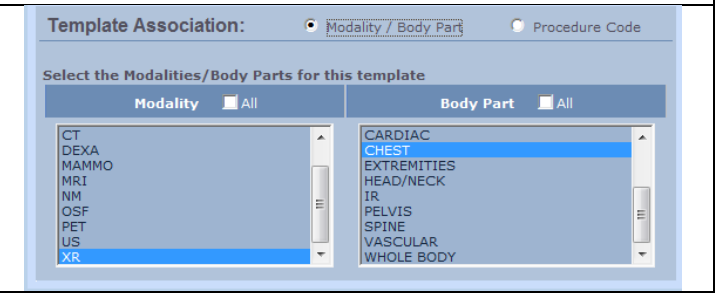|	
2. Insert/Modify the template content – template content can be added by typing or using the microphone as if you're in Voice Edit mode.	**Keep Fluency on Top** Microphone Wizard Edit My Vocabulary Update Preferences **Manage My Templates** Radimetrics Patient View Send Feedback Help Documents About Fluency Reporting :: Personal Template Manager Fluency Reporting :: Personal Template Manager Create a new Template Template Name / Modality Body Part Procedure Code Action All All Search
3.1 Inserting Tokens – tokens are place holders for data to be inserted into the report from external systems (e.g. and order). To insert a token, click on the Insert Token icon, select the token from a list and click Submit.	[T]
3.2 Adding Simple Fields – to insert a simple field, type an opening and closing bracket anywhere in the template. They can be navigated to by using the FF/RW keys on the microphone or by issuing the NEXT FIELD or PREVIOUS FIELD voice command.	Examination Performed: [] Clinical History: [None] Comparison:
3.3 Other formatting options: There are other formatting options in the toolbar which can be used to modify the look and feel of the document template. Bulleted and Numbered Lists can also be inserted in a report template. **Note: When the final message is sent via HL7, the formatting will be stripped in most cases**	⊞ ⊟ ⊟ ✂ 🗇 📋 **B** *I* <u>U</u> AA ᴬᴮᶜ
4 Associate the Template: Templates can be associated with specific modalities and or body parts or with specific procedure codes. This will make it easy to create, for example, a "global" CT template or a global CHEST template.	Template Association: ⊙ Modality / Body Part ○ Procedure Code Select the Modalities/Body Parts for this template Modality ☐ All Body Part ☐ All CT CARDIAC DEXA CHEST MAMMO EXTREMITIES MRI HEAD/NECK NM IR OSF PELVIS PET SPINE US VASCULAR XR WHOLE BODY
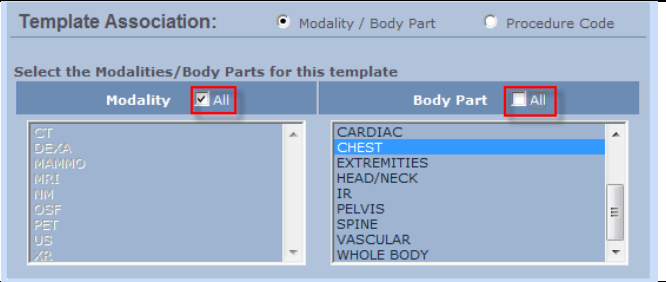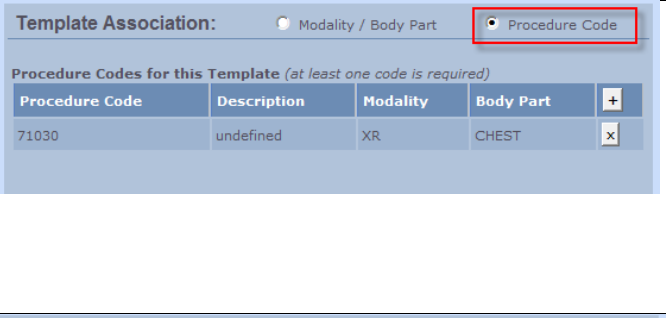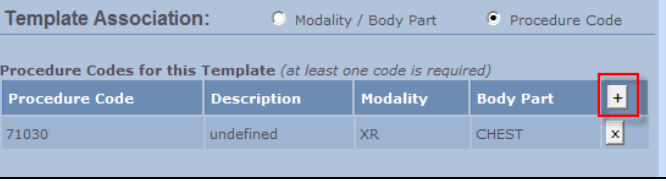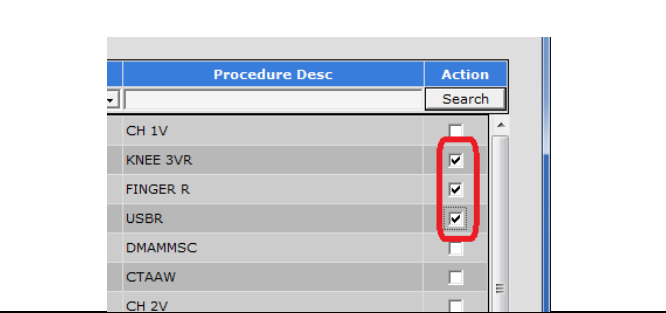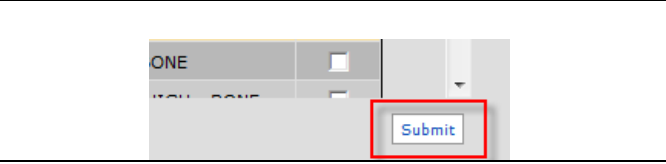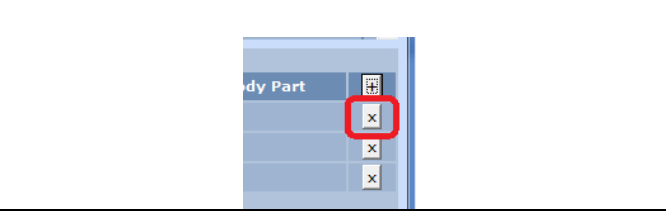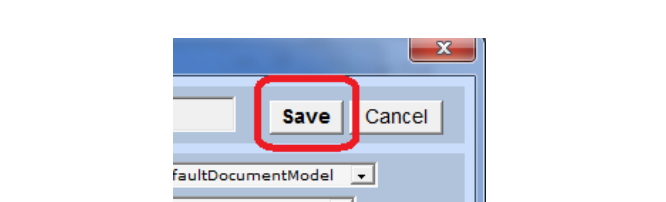
5.1 Click on the Modality / Body part checkbox to associate with a specific modalities and/or body parts. Hold down the CTRL key to select multiple entries from the modality and or body part lists.	
5.2 To select all entries, click on the All checkbox for the corresponding entries	
5.3 Click on the Procedure Code checkbox to associate with a specific modalities and/or body parts

Click on the Procedure Code checkbox to associate with a specific modalities and/or body parts | |
5.4 Click on the + icon under the procedure codes section.	
5.5 In the Add Exam Code to Template dialog, use the filter options to search for a specific procedure code and click the Search button.	
5.6 Click the **Submit** button. The window will close and the procedure codes will be added to the list.	
5.7 To remove a procedure code, click on the **[x]** button next to a procedure code.	
5.8 Save the template by clicking on the **Save** button or **Cancel** to cancel changes	

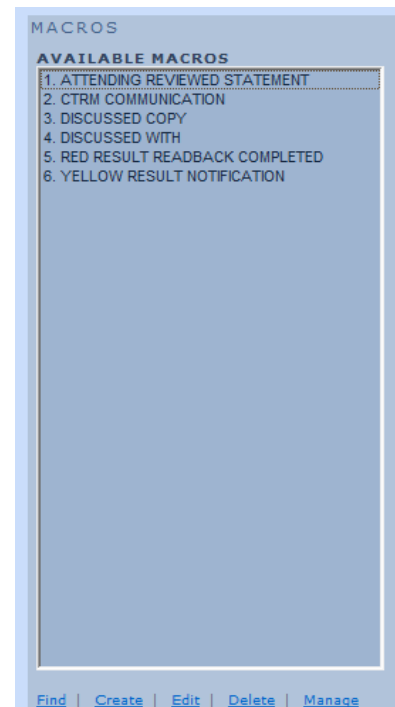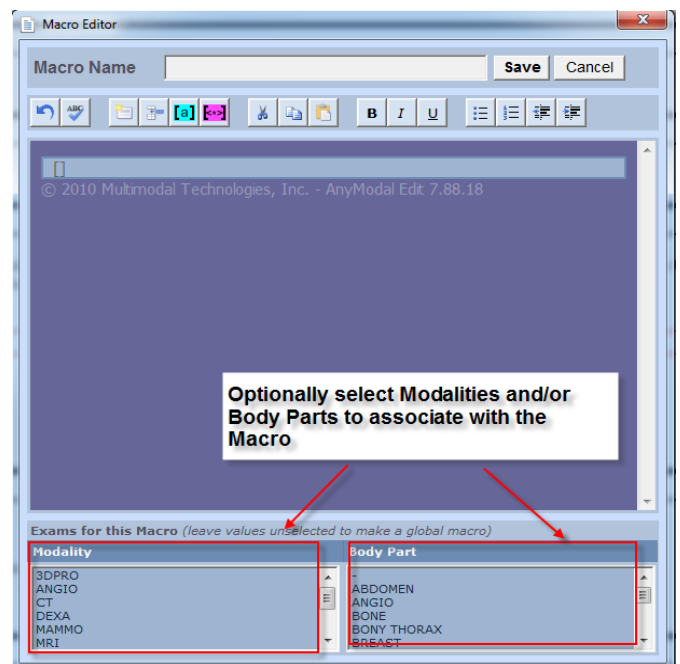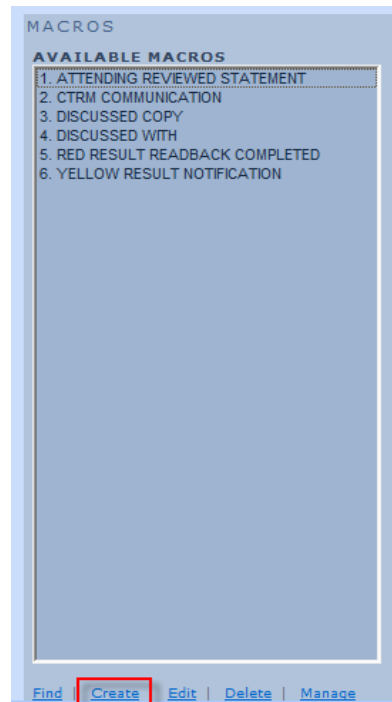|	
To Edit an existing Template • Locate the template in the list of Personal Templates. Enter in a name or partial name of a filter or the associated procedure code to narrow the search. • Select the Edit button for the template. • ▯ The Template Editor window will appear. From here you can edit the template information. Note: The template base cannot be modified.	
MACROS	
Macros Macros are snippets of text, either a series of words, a sentence or multiple sentences that can be inserted into the document as part of the reporting process through manual selection within the macro list. Macros can be created at the user level or the system level. Available macros will be displayed in the Macros section and will display a list of available Macros for that specific user. Macros can be inserted into the report as needed. Users have the option to Create, Edit, or Delete a Macro from the interface. **Note: The Macros section will only be displayed while in Voice Edit mode.** **Note: After selecting a macro, it is possible to hide/minimize the macros section by clicking on the MACROS header. This will leave more room for the other content on the right side of the document. This setting will be remembered between dictations.**	MACROS **AVAILABLE MACROS** 1. ATTENDING REVIEWED STATEMENT 2. CTRM COMMUNICATION 3. DISCUSSED COPY 4. DISCUSSED WITH 5. RED RESULT READBACK COMPLETED 6. YELLOW RESULT NOTIFICATION Find | Create | Edit | Delete | Manage

Create a Macro

To create a macro, perform the following steps:

- Click on the 'Create Macro' text. A floating window titled Macro Editor will display. Any text selected in the editor will be carried over into the macro editor.

- Enter the Macro Name. This name will also be used as a voice command for inserting the macro: INSERT <MACRO_NAME>. The name must be unique and once it is created, it cannot be changed.

- Enter or exit the content of the Macro. The same voice and keyboard commands that are used when doing a dictation can be used in this window.

- Optionally select Modalities and/or Body Parts to associate with the Macro. This will limit the macro from displaying in the list for matching exams.

- Click Save to save the macro or Cancel to exit without saving.

Note: If a modality or body part was not selected, the Macro will display in the Macro list for every exam launched in Fluency.

MACROS

AVAILABLE MACROS
1. ATTENDING REVIEWED STATEMENT
2. CTRM COMMUNICATION
3. DISCUSSED COPY
4. DISCUSSED WITH
5. RED RESULT READBACK COMPLETED
6. YELLOW RESULT NOTIFICATION

Find | Create | Edit | Delete | Manage

Macro Editor

Macro Name [   ] Save Cancel

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Optionally select Modalities and/or Body Parts to associate with the Macro

Exams for this Macro *(leave values unselected to make a global macro)*

Modality	Body Part
3DPRO	-
ANGIO	ABDOMEN
CT	ANGIO
DEXA	BONE
MAMMO	BONY THORAX
MRI	BREAST

Edit a Macro

To edit a macro, perform the following steps:

- Click on the 'Edit Macro' text. A floating window titled Macro Editor will display populated with the existing Macro information.

- Edit the text of the Macro or select/edit the Modality and/or Body Part.

  Note: The name of the macro cannot be changed once it is created.

- Click Save to save the macro or Cancel to exit without saving.

MACROS

AVAILABLE MACROS
1. ATTENDING REVIEWED STATEMENT
2. CTRM COMMUNICATION
3. DISCUSSED COPY
4. DISCUSSED WITH
5. RED RESULT READBACK COMPLETED
6. TRAUMA
7. YELLOW RESULT NOTIFICATION

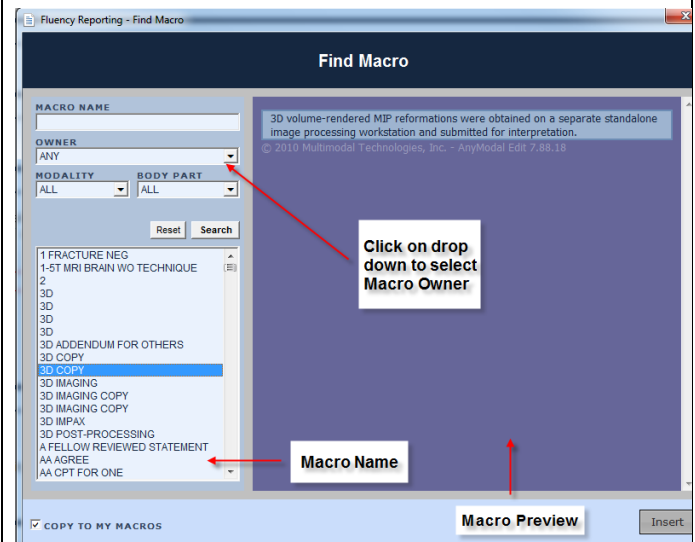Find | Create | Edit | Delete | Manage

---

Find a Macro

Similar to Find a Template, if you want to insert a macro that does not display by default (e.g. a macro belonging to another user), you can click on the Find Macro link (or FIND MACRO voice command). The Find Macro window will appear.

By default, the window will show you macros belonging to you matching the same modality as the exam you are dictating. The following search items can be modified:
- Macro Name (partial matches allowed)
- Owner: select a specific user, all users, system level or all macros
- Modality and Body Part

Enter your search information and click the Search button. The list will populate with any macros that match your search criteria. Clicking on the macro name will display a preview of that macro.

Fluency Reporting - Find Macro

Find Macro

MACRO NAME

OWNER
ANY

MODALITY   BODY PART
ALL   ALL

Reset   Search

1 FRACTURE NEG
1-5T MRI BRAIN WO TECHNIQUE
2
3D
3D
3D
3D
3D ADDENDUM FOR OTHERS
3D COPY
3D COPY
3D IMAGING
3D IMAGING COPY
3D IMAGING COPY
3D IMPAX
3D POST-PROCESSING
A FELLOW REVIEWED STATEMENT
AA AGREE
AA CPT FOR ONE

☑ COPY TO MY MACROS

3D volume-rendered MIP reformations were obtained on a separate standalone image processing workstation and submitted for interpretation.
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Click on drop down to select Macro Owner

Macro Name

Macro Preview

Insert

When a macro is selected, a checkbox in the lower right hand corner may appear giving you the following options:

- If the macro belongs to another user, you have the option to copy this macro to your personal macro list.
- If the macro belongs to you, you have the option to update the association of that template so it will match the current exam you are dictating.

Click the Insert button to insert the macro into the current report.
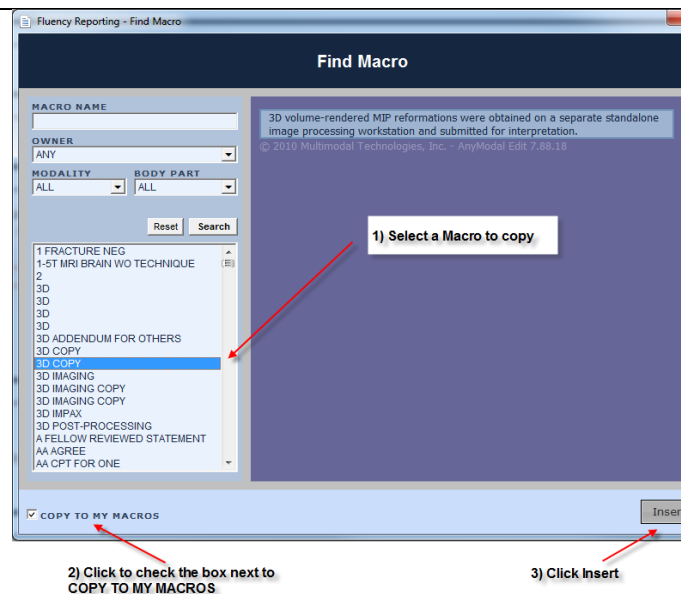
Delete a Macro

To delete a macro, perform the following steps:

- Select one of the macros from the list.
- Click on the 'Delete Macro' text. A message box will display confirming that the selected Macro should be deleted.
- Click Yes to delete the macro or No to cancel without deleting.

  Note: This option cannot be undone.

  Note: Fluency users do not have the permission to delete system level macros.
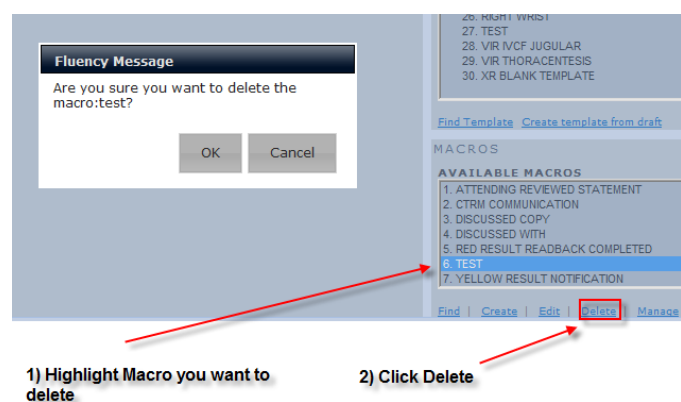
|	
Manage Macros Users can manage their personal macros similar to editing their personal templates. To manage macros, follow these steps: • Click on the **Manage** link in the macros area. • The personal Macro Manager will appear • Every personal macro will be displayed, 15 per page • Click the Edit button on a specific row to display the Macro Editor • Click the Delete button on a specific row to delete the macro	
Inserting a Macro into a report To insert a macro into a report, move the cursor to the position of the report where the macro is to be inserted (this can be done with the mouse, keyboard or voice commands). There are three options to insert a macro: • Double click on the macro in the list • Insert using a voice command: INSERT <MACRO_NAME> • Insert using the macro index: INSERT MACRO ONE which corresponds to the number index of the macro	
VOCABULARY	
Excluded Words Ability to specify words that should not be included in the report. **To exclude a word, perform the following steps:** Select the Excluded Words radio button and click Add. • Type the word that you do not wish to see in the dictation. Click OK.	
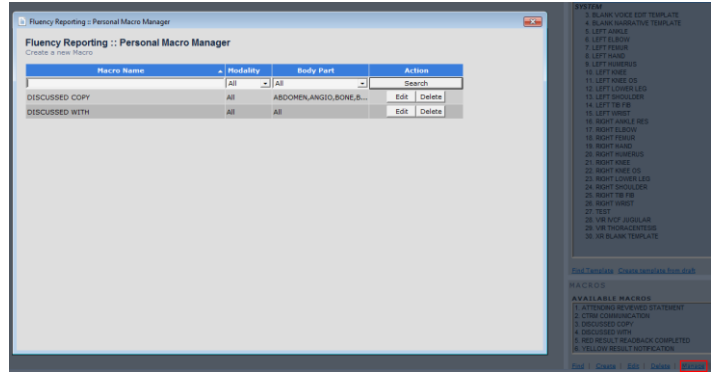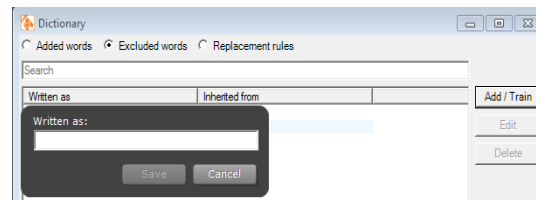
Replacement Rules Ability to create a collection of words or phrases that will be used to substitute the spoken form. Select the Replacement Rules radio button and click Add. • Enter the original text into the Original Word field (ex: cabbage) • Enter the replacement text into the Replace With Field (ex: CABG) Click Save.	
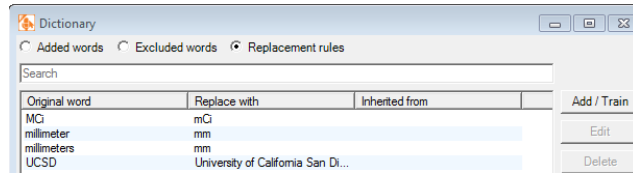
Content Highlighting

Content in Fluency editor window when creating/editing a report is color coded to assist in the display of the report. The following color codes are supported:

Token Content	Content added by tokens is highlighted in purple. Tokens are placeholders for data pulled in from external systems, such as data from the RIS Order.
Field Content	Voice Enabled Fields are highlighted in teal.
Template / Macro Content	Content that was added as part of the template or added as part of a macro will be rendered in grey as a visual indicator that this information does not need to be checked again for errors.
Dictated / Edited Content	Any content edited by the current user either by typing or dictating will be rendered in black (exact color depends on the skin being applied)

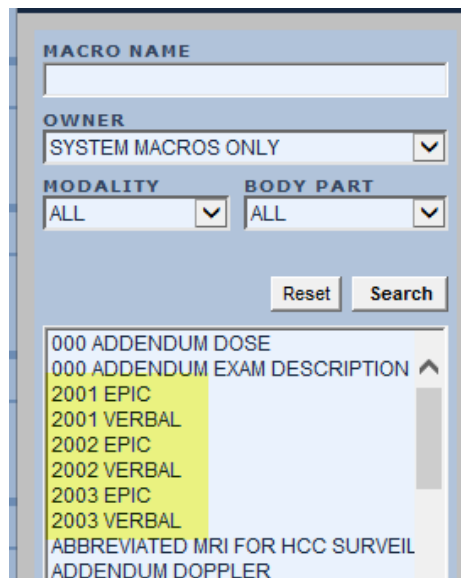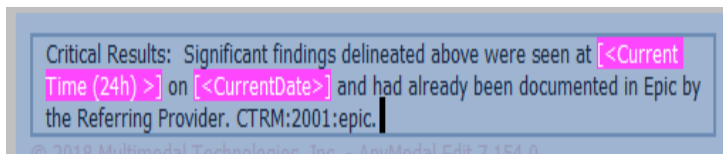|	

Create Critical Findings :
 	
- Currently use macros inserted into impression section.
- **2001 EPIC** – Findings that are potentially immediately life-threatening.
     Examples include: pneumothorax, Ischemic bowel, Intracerebral hemorrhage.
     You MUST phone and notify the ordering Physician ASAP.
- **2002 EPIC** – Findings that could result in mortality or significant morbidity if not appropriately treated urgently.
     Examples include: Intra-abdominal abscess Impending pathological hip fracture.
 	
- **2003 EPIC** – Findings that could result in mortality or significant morbidity if not appropriately treated, but are not immediately life-threatening or urgent.	

Text within the macro may be edited after insertion into the report.	 Critical Results: Significant findings delineated above were seen at [<Current Time (24h) >] on [<CurrentDate>] and had already been documented in Epic by the Referring Provider. CTRM:2001:epic.
Line item at the end of each macro statement **MUST NOT BE MODIFIED OR DELETED**. The **CTRM: 200x** signals the correct information is sent over to EPIC in the correct format for clinician notification.	 Provider. CTRM:2001:epic.
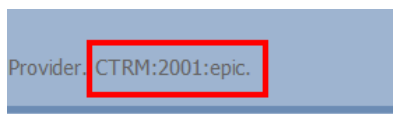
Voice Edit Commands

Clicking on Question Mark Icon will give you a list of Voice Edit commands that Fluency utilizes.
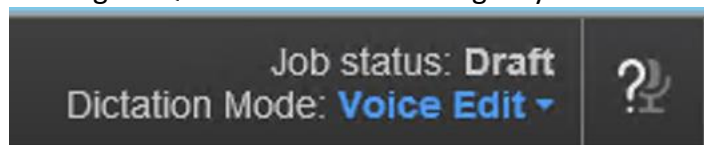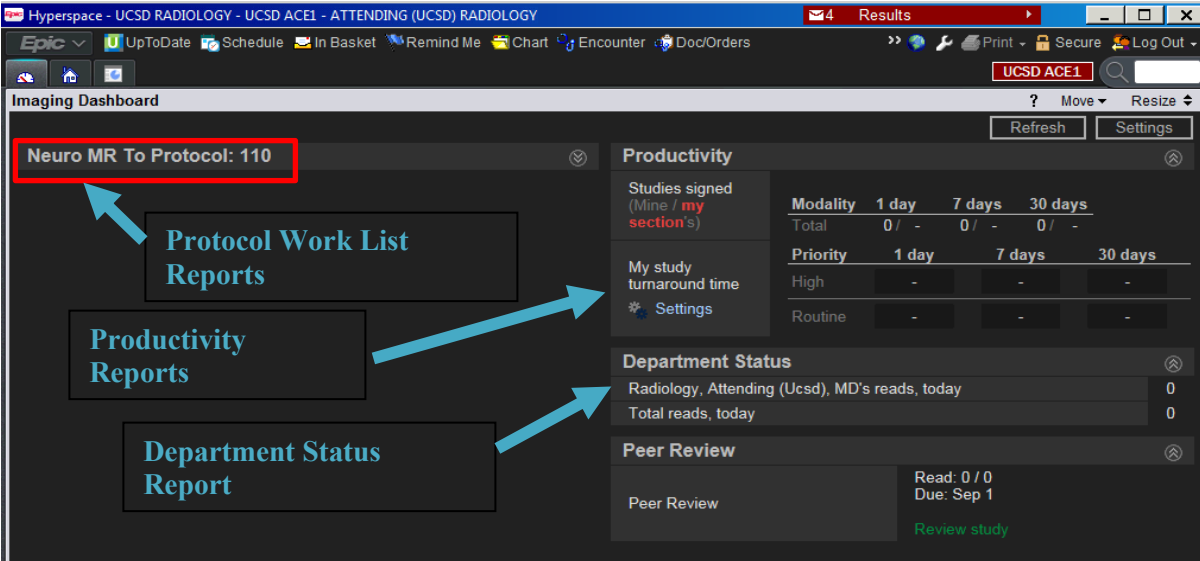

Fluency Toolbar and their voice commands

1.) Click to save as draft [Voice Command: SAVE DRAFT]

2.) Click Sign report [Voice Command: SIGN REPORT]

3.) Click to assign this report [Voice Command: ASSIGN REPORT]

4.) Click to reject a report [Voice Command: REJECT REPORT]

5.) Click to prelim a report [Voice Command: PRELIM REPORT]

6.) Click to preview report [Voice Command: PREVIEW REPORT]

7.) Click to undo [Voice Command: UNDO THAT]

8.) Click to change font size (7 different sizes)

9.) Click to insert a token [Voice Command: INSERT TOKEN] Note: Two tokens cannot be inserted back to back without a space between them.

10.) Cut – Ability to remove selected text from the current location and place it on the workstation's 'clipboard' for pasting into a new location.

11.) Copy – Ability to copy selected text from the current location and place it on the workstation's 'clipboard' for pasting into a new location.

12.) Paste – ability to paste text stored on the workstation's 'clipboard' into a new location

13.) Bold [Voice Command: BOLD SELECTION]

14.) Italic [Voice Command: ITALICIZE SELECTION]

15.) Underline [Voice Command: UNDERLINE SELECTION]

16.) Add comment

17.) New Subsection [Voice Command: NEW SUBSECTION]

18.) Click to create a bulleted list [Voice Command: NEW LIST; NEXT ITEM]

19.) Click to create an ordered list [Voice Command: ITEM NUMBER ONE, …; NEXT ITEM]

20.) Click to run Spell Check [Voice Command: CHECK SPELLING]

21.) Click to delete job [Voice Command: DELETE JOB] Note: A job that already has HL7 messages sent (e.g. Resident Assigned, Sent to MT) cannot be deleted.

Available Tokens

Accession Number	The Id of the Exam as ordered in the RIS (e.g. 79856566)
Body Part	The body part which is associated with the order for the exam (e.g. ABDOMEN)
Comparisons	ISITE Only. Displays the procedure description, exam date, and accession number of every comparison exam loaded on the canvas page
Completed Date	The date the exam was completed in the RIS (also known as the exam date) in the format m/d/yyyy (e.g. 1/24/1971)
Completed Time	The date/time the exam was completed in the RIS (also known as the exam date/time) in the format m/d/yyyy h:m a/p (e.g. 1/24/1971 11:30 AM)
Current Time (24h)	The current time in 24h format H:m (e.g. 09:30)
CurrentDate	The current date in the format m/d/yyyy
CurrentUser	The full name of the user logged in to Fluency Reporting
Gender	The gender of the patient. Will be one of M,F,U (e.g. F)
Job ID	The Id of the Job which is an incrementing value automatically created by the Fluency database (e.g. 42345)
Medical Record Number	Medical Record Number (e.g. 000045678)
Modality	The modality associated with the procedure code for the exam as defined in the exam code dictionary (e.g. CT)
Ordered Time	The time the order for this exam was placed in the format m/d/yyyy h:m a/p (e.g. 1/24/1971 11:30 AM)
Ordering Physician	User data field OBR-37 built from OBR-16.++
Patient Birth Date	The patient's date of birth in the format m/d/yyyy
Patient Class	The type of patient. Will be one of I (inpatient), E (emergency), O (outpatient) (e.g.))
Patient Name	The name of the patient in the form LAST, FIRST MI (e.g. DOE, JANE B)
PatientAge	The current age of the patient at the time of the exam (e.g. 43 y/o)
Procedure Code	The procedure code which is associated with the order for the exam (e.g. CTABD1)
Procedure Description	The procedure description which is associated with the order for the exam (e.g.; CT ABDOMEN W CONTRAST)
Radimetrics Dosage	This is the Radimetrics patient dosage
Reason for Exam	The reason the exam was performed as supplied in the order (e.g. MVA)
Scheduled Time	The time exam was scheduled for in the format m/d/yyyy h:m a/p (e.g. 1/24/1971 11:30AM)
Status	The current RIS status of the exam. Will be one of the A, D, P, F, X, C
Subspecialty Code	The subspecialty Code which is associated with the order for the exam (e.g. BODY)
Updated Time	The time the order for this exam was last updated in the format m/d/yyyy h:m a/p (e.g. 1/24/1971 11:30 AM)

RIS (RADIOLOGY INFORMATION SYSTEM)

Understanding your Home workspace

☐ Log in to Epic using the information provided to you on your classroom information sheet.

☐ On the department screen choose **UCSD Radiology.**

▪ **Hint:** UCSD Radiology should be the department you select every time you log in, this provides access to multiple modalities across the hospital access may be limited if you log in to departments other than this.

☐ Once you log in you will be brought to the Imaging Dashboard [icon] this is your Home Workspace.

-Reports Subject to Change-

▪ **Protocol Work List:** These reports will only populate if there is a protocol to complete. The protocols are organized into categories. Ex: Neuro Mr., RIS Chest CT, etc....

▪ **Productivity Reports:** These reports are an easy way for you to track your productivity without leaving your home workspace. This report will show you information on the following. How many studies you signed/your section signed in the past 1,7, and 30 days. It will also show you your study turnaround time for Routine and High priority exam for the past 1 day 7 days and 30 days.

▪ **Department Status Report:** This report will show you how many total reads you have completed today as well as total overall count of reads for the day.

Understanding Integration

☐ Integration is a tool implemented on your reading stations that will automatically launch the patients chart information in Epic when opening the images from PACs.

  ▪ <u>Epic will automatically launch the Study Review activity pictured below corresponding to the patient selected in your Visage window.</u>

Finding documentation from a Technologist
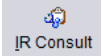
☐ Documentation/Notes entered by the technologist will appear for your review in the Study Review report.

Viewing Patient Information

- ☐ Within Epic click on the _____ button on the Hyperspace toolbar.

  Chart

- ☐ Patient: Deanna

- ☐ Search for the Deanna patient on your classroom information sheet.

- ☐ You will be brought to the Snapshot report by default, this is an area that summarizes the patients chart. (Problem List, Allergies, Medications, Health Maintenance, etc.…)

- ☐ Click on Chart Review.

  - ▪ Hint: Use the tabs to review Labs, Imaging studies, past procedures, Notes)

- ☐ If you're looking for specific information, search the chart.

  - ▪ Enter a search term, such as "protocol", in the field in the upper-right corner of the screen.

Writing a note on a patient from Protocol Work List.

- ☐ Log in to Epic

- ☐ Access your protocol work list using the links from your imaging dashboard.

- ☐ With the patient selected click the IR Protocol button in your toolbar.

  IR Consult

- ☐ Once in the patient's chart choose the progress note activity.

- ☐ Within the note are, use smart text or free text to enter the necessary note. Once complete, Click **Accept.**

- ☐ Sign the Visit by accessing the Sign Visit activity once all other documentation is completed.

- ☐ Click **Sign Visit.**

Protocol upcoming exams

Completing an Protocol

<u>Scenario:</u> **You notice that you have a pending protocol link appearing on your Imaging Dashboard when you log in to Epic. You will use the link to access the various protocol categories to complete the pending protocols.**

☐ Open the Protocol Work List.

   ▪ On the Imaging Dashboard, click the **Outpatient CT Body to Protocol** link.

☐ Find your patient and review the protocol Work List report.

☐ Complete the protocol using the smart form button options.

   ▪ Hint: The choices made on the smart form will auto populate the details in the protocol section of the Smart form. (Contrast and Route are automatically included in the protocols)

   ▪ Changes or additions to this can be specified in the <u>Additional instructions</u> sections **<u>DO NOT</u>** by modify the protocol section. (Technologist are trained on looking in the Additional Instructions section for modifications)

☐ You have completed your protocol and specified any modifications in the Additional instructions box, Mark the protocol as **Finalized.**

   ▪ Hint: If the only options available to you are Accept and Restore verify that the Finalize protocol setting is selected.
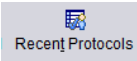
 vs.
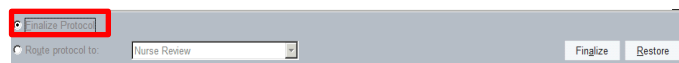
☐ Notice the Protocol is now off your Protocol Work List.

Finding and Changing a Protocol

Scenario: You access your protocol work list and are unable to locate the patient that the tech asked you to protocol.

☐ From your top toolbar (Hyperspace Toolbar) Click on the **Update Protocols** button.

☐ Search for the patient name in the Patient name/ID field.

☐ Once in the Update protocols area, update the protocol as needed.

☐ When finished mark as **finalized.**

Update protocol information

☐ You remember that you forgot to add additional details to a Protocol you just completed and wish to access the finalized protocol to update it.

☐ Access your protocol work list.

☐ Within the activity click **Recent Protocols.**

☐ Locate the protocol that you need to update. Click **Update.**

☐ Update the protocol as needed.
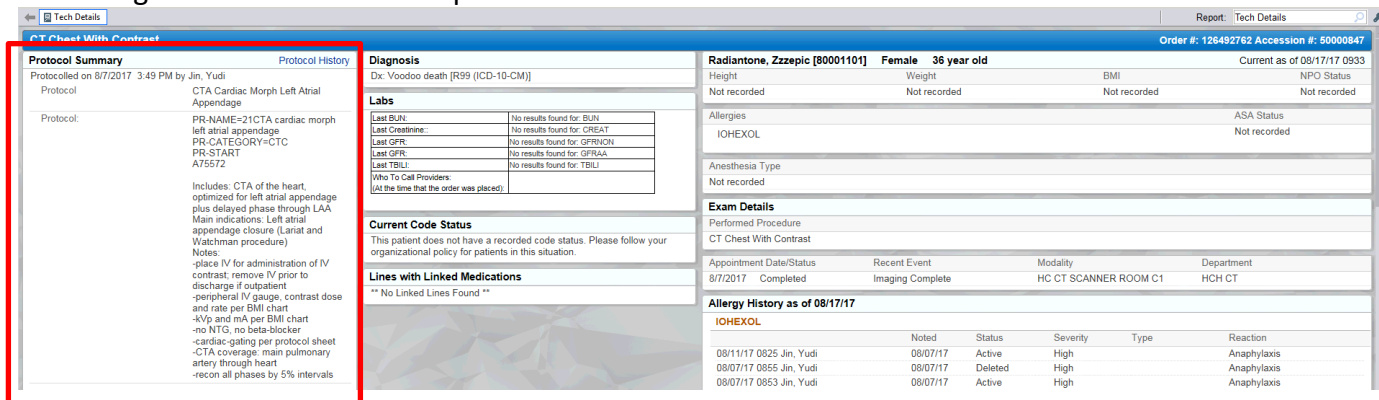
☐ Finalize the protocol.

▪ Click **Finalize**.

Update protocol information

Scenario If necessary the need for a protocol can be cleared by the Radiologist, if you have determined that a study does not require a protocol mark the study as No Protocol needed by following the instructions below.

☐ Access your protocol work list

☐ With the study selected, Click **No Protocol.**

How Technologist see the information documented by a Radiologist

☐ When you document details within the protocol to relay to the performing it will appear to the technologist in the tech details report and in order details area.

If you have time: Review a patient's chart while completing a protocol

☐ Open the Protocol Work List.

☐ Open Chart Review for a patient. Click **Chart.**

☐ Review the patient's chart.

▪ Use the **Snapshot** Activity.

▪ Enter "imaging" in search field in the upper right of your screen. Radiant tip sheets can also be found on the UC San Diego Pulse website: https://pulse.ucsd.edu/departments/EMR/ResourceLibrary/Pages/Radiant.aspx

ISCHEMIC STROKE CARE AND VIZ. AI APPLICATION

UCSD will be transitioning from IschemiaView (RAPID) to Viz.ai to provide real-time, multi- dimensional access to hyper-acute imaging, CTP analysis, mobile access and augmented LVO detection. Given that we have ED, In-house, and Telemedicine cases (that require rt-PA and NIR), communication between teams has been fragmented, and requires immense attention from the coordinating team to notify all parties in a timely manner.   Viz.ai has a communications pathway included in the implementation that will allow for easy communication between teams, allowing full teams notification.

Brett C. Meyer, MD is the Co-Director of the UCSD Stroke Center.   Click on the link below to launch his Powerpoint presentation for Viz.ai and its use at UCSD.

Viz App
Presentation.pptx