

Exa® PACS|RIS

Feature Summary

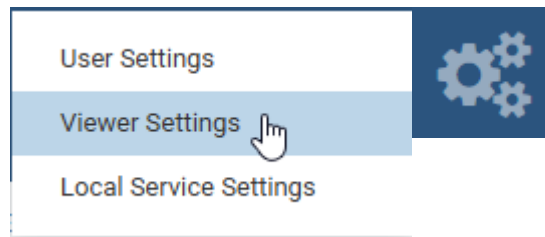
Version 35.0.1 or Later

Viewer Settings

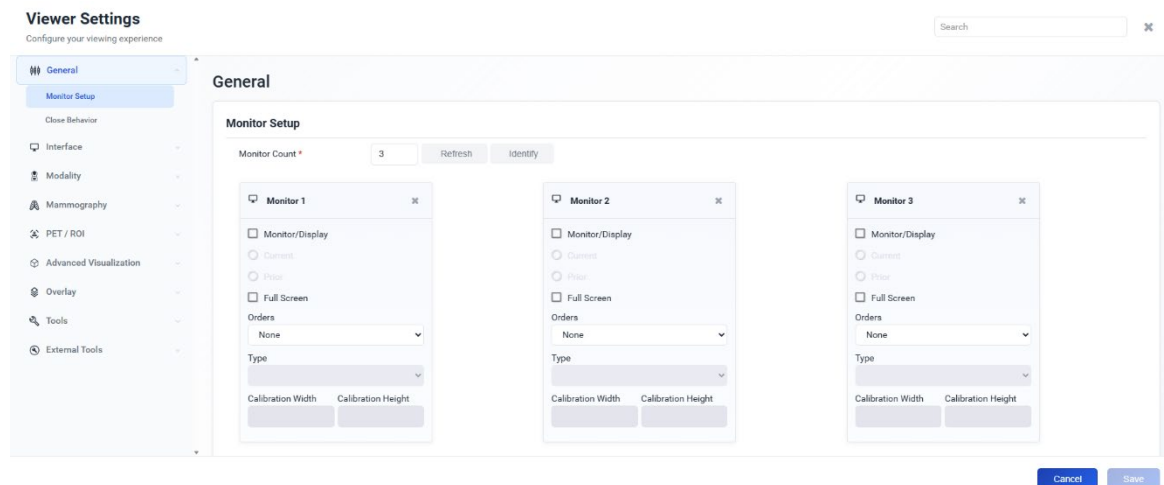
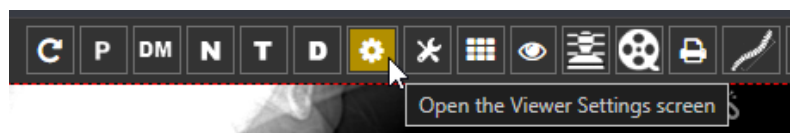
Configure the viewer

In the Viewer Settings dialog box you can configure a wide variety of viewer options including display, interface, modality, toolbars, and shortcut menus. There are two ways to open the Viewer Settings dialog box.

- From the worklist, select **Settings > Viewer Settings**.



- From the viewer, select the **Settings** button in the main toolbar

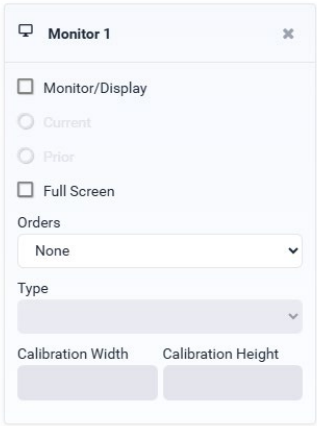


Set up connected displays

Configure all connected monitors that you intend to use with Exa PACS|RIS. These settings define default behavior for what study items open in which monitor.

Prerequisite: Install the Multi-Screen Presentation extension (Chrome Extension) in your supported web browser.

- 1. In the viewer, in the upper toolbar, select the setting  button.
- 2. In the **Viewer Settings** dialog box, in the left pane, select **GENERAL**.
- 3. Under **Monitor Setup**, click **Refresh** to detect all connected monitors.
- 4. Select **Identify** to display a monitor number on each screen.
- 5. Configure the desired settings for each monitor.
- 6. Select **Save**.



Setting	Description
Monitor/Display	Select to make monitors available for image viewing.
Current	Select to make monitor available to display current (active) studies and thumbnails.
Prior	Select to make monitors available to display prior (comparison) studies and thumbnails, if available.
Full Screen	Select to default the image area to full screen view.
Orders	Select another section of Exa or integration to open in the corresponding monitor along with the images when launching a study. For example: If you select Transcription in the Orders list for DISPLAY2 , the user default transcription tool opens in DISPLAY2 when you open a study.
Type	The color or grayscale display type.
Calibration Width/mm	Type a manual calibration width
Height/mm	Type a manual calibration height



If monitors are added, removed, or display settings are changed in Windows, click **Refresh** again to update the monitor configuration in Exa.

Configure autosave options

You can configure how the viewer performs automatic saving and other functions.

1. In the viewer, in the upper toolbar, select the settings  button.
2. In the **Viewer Settings** dialog box, in the left pane, select **GENERAL**.
3. Under **Close Behavior**, enter the settings in the table below.
4. Select **Save**.

Setting	Description
Save Image Properties on Close	Automatically saves image properties such as the W/L when the image is closed. Saved properties are restored the next time the image is opened.
Save Image Annotations on Close	Automatically saves image annotations when the image is closed. The annotations saved are restored the next time the image is opened.
Change Status to READ on Close	Automatically marks the study as “Read” when the study is closed.
Upload Dictation on Close	Automatically uploads recorded dictations to add to the study when the study is closed.
Save Viewer Settings on Close	Automatically saves any changed viewer settings such as toolbar configuration when closing the viewer.
Auto Open Next Study	Automatically opens the next study in the worklist when the current study is closed.
Send Annotated Images on Close	Automatically sends images, if they include annotations, back to the AE title from where the study was received.

Configure the toolbar and tool settings

You can configure the appearance and other properties of the viewer toolbar. For additional toolbar settings, see “Configure other interface settings.”

1. In the viewer, in the upper toolbar, select the settings  button.
2. In the **Viewer Settings** dialog box, in the left pane, select **INTERFACE**.
3. Under **Tool Settings** and **Toolbars**, enter the settings in the table below.
4. Select **SAVE**.

Note: You may need to update the viewer (F5) for changes to take effect.

Tool Settings

Tools

- ☐ Caliper Zoom
- ☐ Outlines - Show First & Last
- ☐ Outlines - Thickness: 1
- ☐ Disable Queuing: 4
- ☒ Focus-In on Zoom Point
- ☐ High-Quality Interpolation
- Magnify Tool Size: 200
- Pixel Factor: 2
- ☐ Show Calibrated Ultrasound Region
- ☐ Show Span Overlay
- ☐ Span as Scroll
- Span Sensitivity: Auto (selected), Default, Manual
- W/L Acceleration: 100

Toolbar Buttons

- ☐ Hide All Monitor Layout Change Button
- ☐ Hide Document
- ☐ Hide Notes
- ☐ Hide Print
- ☐ Hide Reports
- ☐ Hide Transcription

Buttons: Cancel, Save

Setting	Description
Magnifying Tool Size	Adjust the size of the area affected by the magnifying glass.
W/L Acceleration	Sets the rate or sensitivity of W/L adjustments. Typical range is 100–600.
Span Sensitivity	Sets the rate or sensitivity of span adjustments.

Toolbars

Toolbars

DM Toolbar

- DM Toolbar Location: Top
- ☒ Fill Empty DM Cells
- ☐ Show Label in DM Preview

Main Toolbar

- ☐ Client-Side Window/Level (US Only)
- Main Toolbar Location: Top
- Main Toolbar Size: 100
- ☐ Use Modified Toolbar

Prior Toolbar

- ☒ Show Prior Index
- ☒ Show Priors Toolbar
- ☐ Stretch Prior Bar

Thumbnail

- ☐ Open Key Images as Single Images
- ☐ Show Middle Slice in Thumbnail
- Thumbnail Column/Rows: 1
- Thumbnail Location: Left
- Thumbnail Size: 100

Buttons: Cancel, Save

Setting	Description
Main Toolbar Size	Adjust the size of toolbar buttons.
Thumbnail Size	Adjust the size of the thumbnail bar.
Thumbnail Column/Rows	Sets the number of columns and rows for the thumbnail bar.
Thumbnail Location	Sets the position and resultant orientation of the thumbnail bar.
Main Toolbar Location	Sets the position of the toolbar and other header items.
DM Toolbar Location	Sets the position of the DM toolbar.

Configure calipers

You can configure the number and placement of calipers.

- 1. In the viewer, in the upper toolbar, select the settings  button.
- 2. In the **Viewer Settings** dialog box, in the left pane, select **INTERFACE**.
- 3. Under **Tool Settings > Caliper Position**, select check boxes for each caliper that you want to display, and then select **SAVE**.

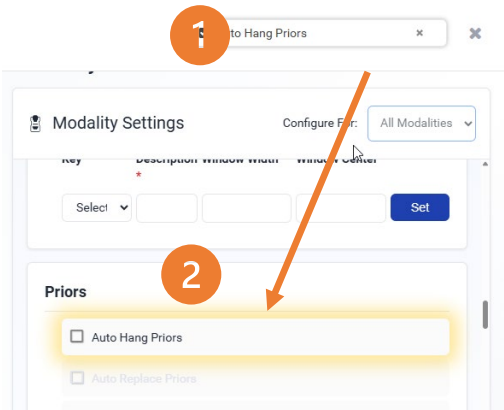


Configure other interface settings

You can configure miscellaneous viewer toolbar and other settings. For the main viewer toolbar settings, see "Configure the toolbar."

- 1. In the Viewer, in the upper toolbar, select the setting  button.
- 2. In the **Viewer Settings** dialog box, enter the settings in the table below.

***You can use the search functionality to easily locate the setting in the viewer settings window



Setting	Description
Ask on Close	Prompts you to specify which items to save before closing the viewer.
Single Instance Mode	Limits the viewer to one study/transcription per session.
Skip Frames in Cine to Maintain Playback Speed	Skips large images in a cine loop so that the cine plays a fixed speed.
Show Cutlines for First & Last Images	Shows any available cutlines only on the first and last images of a series.
Open Key Images as Single Images	Displays any available key images separately in the thumbnail area. When cleared, show all series images in the key image thumbnail area.

Use Modified Toolbar	Hides study thumbnails until a study is selected from Priors Toolbar
Caliper Zoom	If selected, you can drag the calipers to zoom the current image.
Auto-Play Cine Loops	Automatically plays cine loops when opened.
Auto Play Cine Delay (ms)	Sets a pause time before auto-playing cine loops.
Default Frame Rate for MP4	Sets a default frame rate for MP4 files.
Cutline Thickness	Sets a default thickness for cutlines.
Auto Open Orders section	Select the options that appear in the Orders list in the Viewer Settings dialog box, General Info. screen, under Display Settings.
Show Priors Toolbar	Shows all prior studies in a separate bar at the top of the viewer.
Focus-In on Zoom Point	Allows the user can drag on an image to zoom in and out at pointer position.
Fill Empty DM Cells	Fills undefined DM frames with images in the current study.
High-Quality Interpolation	Select to use high-quality image interpolation. Frequently used to enhance X-ray quality. You can use this compression option to remove unwanted “gridlines” if switching between earlier and high-resolution monitors.
Enable RGB/YBR Swap	Makes the color settings supported by the user video settings available.
Enable Developer Mode	Display progress of browser cache per series (testing purposes only)
Show Calibrated Ultrasound Region	Display a box that indicates the area with accurate spatial scaling for measurement
Hide Partial Close Button	Hides the Partial close button in the viewer “X” next to the close image button
Hide All Monitor Layout Change Button	Hides the toolbar’s monitor layout change button that appears when two or more monitors are made available.
Show Label in DM Preview	Shows the previews of hanging protocols in the DM bar.
Show Middle Slice Thumbnail	Displays the middle slice of a series within the thumbnail
Enable Cardio Viewer	Enabled with purchase of Echo viewer
Disable Queuing	Forces synchronous communication: client message and server response occur one at a time. CAUTION: We do not recommend changing this setting. Consult with your Konica-Minolta representative.
Stretch Prior Bar	Extends the prior bar across multiple monitors. If the prior bar exceeds the total available screen width, a scroll bar appears.
Show Prior Index	Displays the Prior index number in the thumbnail and Prior bars.
Auto open Next STAT study	Opens the next available STAT study in the worklist when the current study is closed
Color Only as Last Monitor	Chooses the color monitor as the last monitor on which to display images.
Client-Side Window/Level for US	Processes the Window/Level for ultrasounds on the client side. May reduce lag by bypassing the server.

Configure annotation tools

You can configure annotation tool functionality.

1. In the viewer, in the upper toolbar, select the settings  button.
2. In the **Viewer Settings** dialog box, in the left pane, select **INTERFACE**.
3. Under **Annotation**, enter the settings in the table below.
4. Select **Save**.

Setting	Description
Show Annotation	Shows annotations by default. The user can still hide them manually in the viewer.
One-Click Annotations	Limits annotation tools to one use at a time; mouse is reset to its default function after placing an annotation
Show One-Click Annotations Button	Shows a button for turning One-Click annotation on and off.
Edit Annotation mode	Allows annotations to be edited at any time
Use Dot Cursor	Changes the standard pointer to a dot pointer.
Edit Annotations after Creating	Causes the viewer to enter Edit mode after initial placement of an annotation.
Drag to Create	Creates annotations by dragging the mouse instead of clicking.
Confirm Annotation Delete	Prompts the user for confirmation when deleting annotations.
Persistent Annotation Tool	Makes a selected annotation tool available until the user selects a different tool. If cleared, the pointer changes to the default operation after using the tool.
Measurement Units	Sets the units for any length measurements taken.

Configure annotation colors

You can configure the color of annotations to indicate whether they are selected, in edit mode, or applied.

1. In the viewer, in the upper toolbar, select the settings  button.
2. In the **Viewer Settings** dialog box, in the left pane, select **INTERFACE**.
3. Under **Annotations → Colors**, to add an annotation color, select inside a color or grayscale box and then use the color picker to select a color.
4. Select **SAVE**

Configure annotation size and scaling

You can configure the pixel or font size of annotations, and scale annotation points.

1. In the viewer, in the upper toolbar, select the settings  button.
2. In the **Viewer Settings** dialog box, in the left pane, select **INTERFACE**.
3. Under **Annotations > Visibility & Display**, enter the settings in the table below.
4. Select **Save**.

Setting	Description
Scale by Pixel	Determines the annotation font size by the pixel size.
Annotation Font Size	Sets the font size for annotations.
Annotation size	Sets the line thickness for annotations.

Configure recording

You can configure audio recording options for Exa Dictation.

1. In the viewer, in the upper toolbar, select the settings  button.
2. In the **Viewer Settings** dialog box, in the left pane, select **INTERFACE**.
3. Under **Dictation & Transcription**, enter the settings in the table below.
4. Select **Save**.

Setting	Description
Hold for Record	Requires you to hold down the button for the duration of recording.
Beep on Record (heard on recording)	Beeps when recording starts.
Blink on Record Pause	Causes the microphone light to blink when recording is paused.
Monkey Chatter on Rewind	Plays “monkey chatter” sound when rewinding.
FFWD/RWD Factor (200–500)	Changes the rate off fast forward and rewind.
Lag	Delays the response after selecting play or record by the specified amount of time. (0–5000)

Show or hide tool buttons

1. In the viewer, in the upper toolbar, select the settings  button.
2. In the **Viewer Settings** dialog box, in the left pane, select **INTERFACE**.
3. Under **Tool Settings > Toolbar Buttons**, select the check boxes of the items that you want to hide.
4. Select **SAVE**

Configure fusion, ROI, and SUV options

You can configure options for fusion, ROI, and SUV.

1. In the viewer, in the upper toolbar, select the settings  button.
2. In the **Viewer Settings** dialog box, in the left pane, select **INTERFACE**.
3. Under **PET/ROI**, enter the settings in the table below.
4. Select **Save**.

Group	Setting	Description
Fusion	Auto Adjust for CT/PT Frame Count Mismatch	Select to reconstruct PET anatomy on fusion overlays between absent slices. Disable to display PET overlays only for slices originally included in the PT series.
ROI & SUV	ROI Show Size	Adds length and area measurements to ROI.
	Show Number of Pixels in ROI Selection	Select to show the number of pixels selected when annotating an ROI or selecting with the freehand tool.
	Show Number of Slices in ROI Selection	Select to show the number of slices selected when annotating an ROI or selecting with the freehand tool.
	ROI Selection Weighting	Select which pixels are included in an ROI. Weighted: Include only full pixels Inclusive: Include pixels touching or within the ROI border Exclusive: Include only pixels completely within the ROI border
	Enable SUV Calculations	Select to add SUV calculations to ROI annotations of PET SUV series and CT-PET fusion studies. Prerequisite: Your system administrator must also enable SUV in a separate procedure.
	Show SUV Type and Measurements in the ROI Header	Select to include the SUV type and measurements in the ROI header.
	Show SUV Units after Measurements	Select to include the SUV units following the measured values in the ROI header.
	Use Standard SUV Type Units (g/ml, cm ² /ml)	Select to display SUV values using standard units for the SUV type. Clear to use the values stored in the DICOM file.
	Default SUV Type	Select the type of SUV calculation to perform.

Configure modality-specific viewing options

You can configure how studies appear in the viewer for all modalities, or for each specific modality.

1. In the viewer, in the uppertoolbar, select the settings  button.
2. In the **Viewer Settings** dialog box, in the left pane, select **MODALITY**.
3. In the **Configure For** drop down, select a modality to configure.
4. Enter the settings in the table below.

Section	Setting	Description
Layout	Screen Layout	Changes the layout of series within the viewer.
	Series Layout	Changes the layout of images within a series.
Mouse	Left/Right/Middle/ Left+Right	Assigns functions to mouse buttons. This is frequently used by CAD users to assign functions to extra mouse buttons.
Compression		Sets the image quality, which inversely affects viewer performance.
Presets	Key	Assigns shortcut keys to W/L presets.
	Description	Type a name for the W/L preset.
	Window Width	Sets the window width of the W/L preset.
	Window Center	Sets the window center of the W/L preset.
	Set	Select when finished entering Preset settings.
Options	Auto Linking	Turns on the Auto Linking function.
	Assume Color Study	Forces studies of the selected modality to appear in the default color monitor set in the display settings regardless of color.
	Assure All Viewed	Displays a check mark in thumbnails of images that were opened.
	Apply CLAHE	Turns on the CLAHE function.
	Auto Hang DM	Enables the use of DMs. Makes the first instance on the DM preview available to hang on the viewer.
	Auto Hang Priors	Automatically loads the first prior when the viewer opens. Works in conjunction with Auto Open Priors.
	Auto Replace Priors	Automatically replaces prior images in the current layout.
	Invert SC Images	Inverts white and black of scanned documents such as reports. Reduces eye fatigue.
	Auto Next Series	When moving beyond the last image of the current series, automatically opens the next series.
	Auto Next Series Cine	Automatically starts cine play of the next series when the user opens it.

	Auto Next Series Wrap	Automatically opens the first series after viewing the last image of the last series in a study.
	Auto Swap Red/Blue	Inverts colors that may not be displayed from the modality properly (such as with non-DICOM ultrasounds).

Section	Setting	Description
	Show DICOM Overlays	Automatically displays DICOM overlays, if present.
	Auto Show SR Overlays	Automatically displays SR overlays, if present.
	Cutlines - Show	Automatically displays cutlines, if present.
	Auto Show Cine player	Shows the media control bar when a series is opened.
	Show W/L Bar	Shows the window/level bar when the viewer opens.
	Detect Pixel Padding	Turns detection of pixel padding ON/OFF.
	DM Allow Missing Cell	Shows a blank cell in the DM if the assigned image is not available.
	DM Save W/L	Saves the window/level with the DM.
	Create Study DM on Close	Creates a new DM using the last used layout when closing a study
	Show PDF in Last Stack	Moves PDF files to the last place in the stack: in the viewer, they are loaded last, if an empty cell is available.
	Instance Window/Level	Shows each image with its own W/L, rather than using the W/L of the first instance.
	Do Not Skip Images	Prevents scrolling forward if subsequent images are not yet loaded.
	Ignore Frame of Reference within Study	Disables referencing of the study's DICOM frame of reference UID when performing linking and cutline functionality.
	Ignore LUT	If LUT values are corrupted, Exa PACS/RIS ignores the LUT values, and attempts to render the best image possible.
	Ignore Presentation LUT	Same as Ignore LUT, but select for certain vendors that use a "Presentation LUT."
	Keep Rotate	Applies the current rotation to all images in the series.
	Keep W/L	Applies the current W/L to all images in the series.
	Keep Zoom	Applies the current zoom level to all images in the series.

	Extend Image Display (if Stretch)	When Stretch Across Monitors is selected, extends a single image across multiple monitors.
	Apply Pixel Padding to Background	Interpolates missing pixel data to fill in “dead” spots in an image. Note: When using this feature, reading physicians should be aware that some pixels may be synthesized.
	Pre-generate Bitmaps	Pre-generates bitmaps automatically if imported into PACS.
	Reset W/L for Individual Images	Resets the W/L for each image. Frequently used to optimize MRI images. Clear to use the first W/L sent by the modality for all images.
Section	Setting	Description
	Select Last Contrast Entry	When DICOM tags include multiple W/L values, uses the last value for all images in the series. Clear to use the first value.
	Show DM Toolbar	Shows/hides the DM toolbar on initial load.