

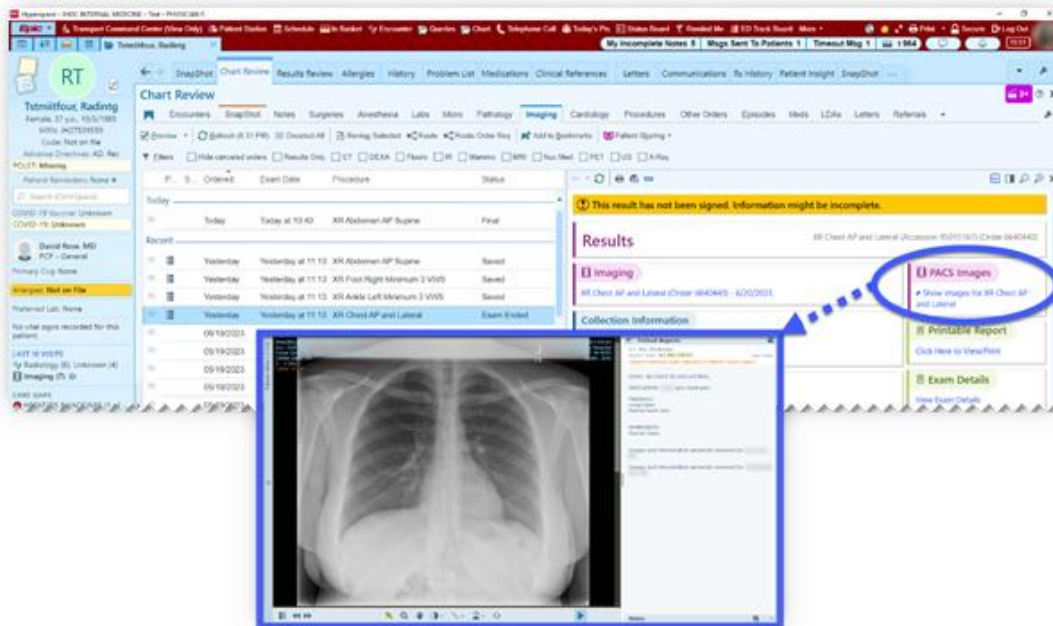
New Radiology Image Viewer



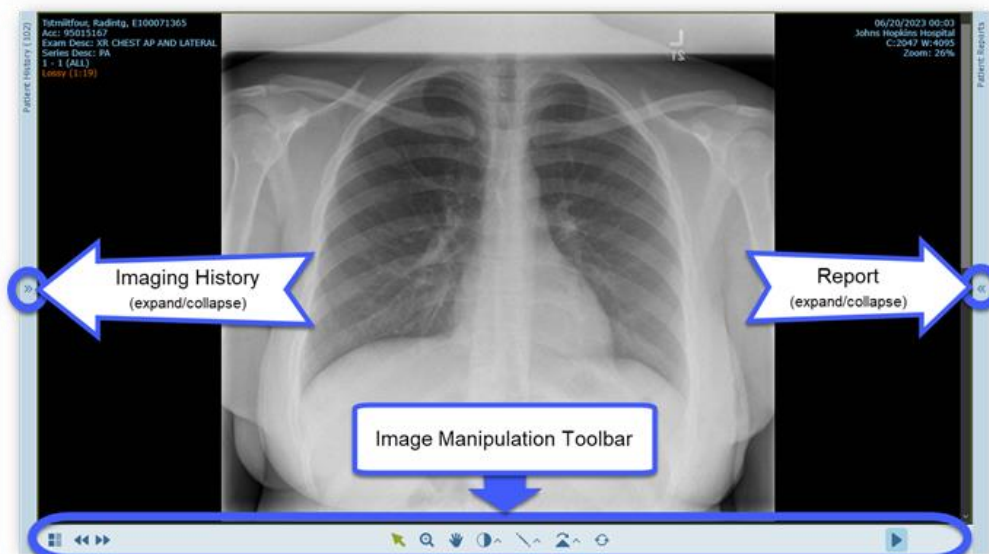
On July 18th, 2023, a new Image Viewer will be available for accessing PACS images from within Epic.

Accessing PACS Image

1. When viewing an Imaging report, a link to the PACS image is available in the upper right.











2. When the image viewer loads, it includes additional utilities:
 - A. Image Manipulation tools
 - B. The Report
 - C. Imaging History for the patient






Manipulate Images and Advanced Display Tools

- When you load an exam in the viewer, use the mouse wheel or the scroll bar to scroll through the images
- When viewing on a tablet:
 - pinch to zoom
 - one finger to scroll
 - two fingers to pan
 - long press to open drop-down menus.



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|  | Pointer |
|  | Zoom — Press the Ctrl key while zooming to zoom to a point. |
|  | Pan |
|  | Windowing — Drag the mouse up/down to change center or sideways to change window width. Hover over the icon to: <ul style="list-style-type: none"> • Select windowing presets (for CT, MR and PET images) • Select an area for automatic windowing • Perform inverse windowing |
|  | Measurements — Draw a line. The length of the line appears automatically on the image. Hover over the icon to: <ul style="list-style-type: none"> • Angle Measurement — Draw an angle or Cobb angle • ROI Measurement — Mark a region of interest • Text — Add text to an image. • Arrow — Draw an arrow and add text to it. • Cursor — Mark a specific point on an image. • Hide/Show Annotations • Hide/Show Graphics and Info • Delete Measurements |
|  | Rotate Right, Rotate Left Hover over the icon to: <ul style="list-style-type: none"> • Flip horizontal, flip vertical (for 2D images) • Roll (for 3D images) • Swivel (for 3D images) |
|  | Sync — Synchronize multiple-layout displays. If the icon is highlighted, it means that all displayed series are synchronized. When synchronized series are on the same planar view, every scroll, zoom, or pan action is performed on all series. When synchronized series are not on the same planar view, dynamic reference lines are displayed on one of the series. Registration (volumetric matching) takes place for displayed series that are of different frames of reference. Hover over the icon to: <ul style="list-style-type: none"> • Break Sync — Unlink synchronized series • Manual Sync — Synchronize series when there is not enough DICOM information for automatic linking |
|  | Reset All — Reset zoom, pan, rotate, and windowing actions to their initial state. |

- Layout and Series Chooser

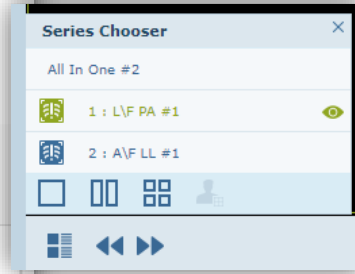
Change the Images on Display

Click the **Series Chooser** icon  at the bottom left of the viewer to show all series of the displayed exam and loaded exams. The active series is highlighted in a different color. To view a different series, select it or drag it to the display area.

You can also do the following:


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|  | Select a default layout or choose one of the layout presets defined by your system administrator. |
|  | Use the arrows to navigate to the next or previous series. |




Note: Dragging is not supported on a tablet.



- Play Cine

Play Cine

Click the **Play Cine** icon  at the bottom right of the viewer to play the exam in cine mode. Use the cine toolbar to:


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|  | Play and pause the cine. |
|  | Go to the previous or next frame. |
|  | Select the frame rate, if applicable. Note: For cardiac ultrasound images, the exam is automatically played at the patient's heart rate. |




Depending on how your system has been set up, the scroll box on the scroll bar may move in synchronization with the cine.





- View Images in 3D


View Images in 3D


Hover over the **Multipanar Reconstruction Views** icon  at the bottom left of the viewer to select one of the following 3D rendition type views.

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|  | Coronal Plane View |
|  | Sagittal Plane View |
|  | Axial Plane View |

When a series is displayed in one of these views, you can hover over the **Swivel** icon  and use the **Swivel** and **Roll** tools to improve viewing. Click the **Revert to Original View** icon  to go back to the original display.

Advanced 3D Views

Click the **Change Rendition Options** icon  to enhance visualization of the image using different rendition types (MPR, MipPR, and MinPR) or pre-defined volume rendering (VoIR) protocols:

- In the **Rendition Options** window, click a hot spot  in the illustration or select a body part from the **Body part selection** drop-down list.
- Click the desired pre-defined protocol or rendition type.
- If needed, change the thickness, spacing, and orientation in the **Parameters and Planes** drop-down lists. Any changes you make are immediately reflected in the image display.
- Click **OK**.



View Imaging History

View Previous Exams

You can view a patient's previous exams in the **Patient History** pane to the left of the viewer. The status of each exam is represented by the following icons:

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| | Only an order is available for the exam. Images are not yet stored in the archive. |
| | Images are available. The exam can be viewed, but a report is not yet available for this exam. |
| | A report exists for the exam. |
| | A note exists for the exam. |
| | A report and notes exist for the exam. |

Linked exams are marked with a colored frame.

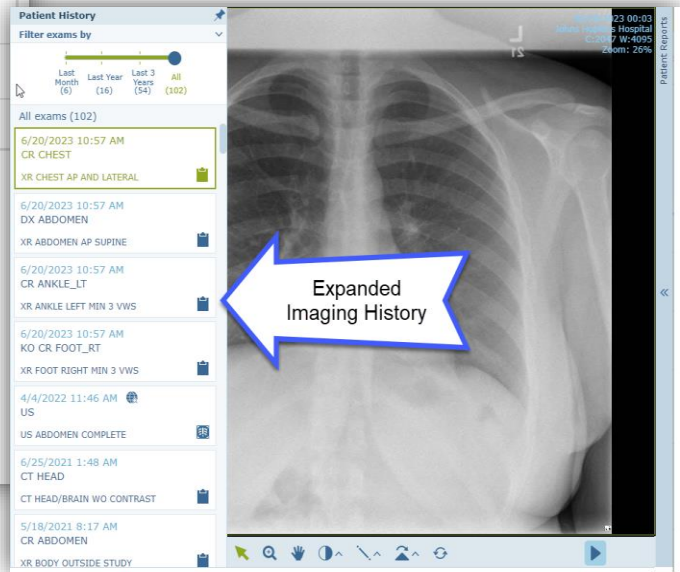
Load an Exam from the Patient History List

Click an exam to load it in the viewer. Hover over an exam to display additional information. This additional information is not available on tablets. To display a prior exam side-by-side with the current exam, hover over the exam and click **+**.

Filter the Patient History List

If there are a large number of prior exams for a patient, you can filter the Patient History list:

- Use the timeline to filter according to a specific time frame
- Click **∨** to filter by modality, body part, or exam description.



View Report

View Patient Reports

You can view the displayed exam's report in the **Patient Reports** pane to the right of the viewer.

The user name of the radiologist who signed the report and the report date appear at the top of the pane. If the report serves a number of linked exams, the linked exams are also specified.

The report may contain text marked as hyperlinks to bookmarks marked on images. Click a hyperlink to display the image with the bookmark.

If more than one report exists for the selected exam, click **< >** to navigate through the report.

If an order exists, a **View Order** link appears at the top right of the report. Click the link to open a separate window which displays order details as captured in the RIS or patient registration system.

Click to open the report in a new window.

Note: To prevent mismatches between reports and exams, reports opened in a new window close whenever you select a different exam.

