



IMAGING

Radiology Viewer

User Manual

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Targeted Build Version

Velox Radiology 1.0.48.08

**Velox PACS Radiology Version 1
Build 1.0.47.08**

**Including:
Velox DICOM Router Version 1 subsystem**

General Description: Velox PACS is a Picture Archiving and Communication System designed to meet the demanding needs of modern medical imaging. VELOX PACS provides a comprehensive suite of tools for storing, retrieving, and managing medical images and associated data.

Intended Use/Indications for Use: The device is a web-based digital imaging software system that is designed to transmit radiology images (e.g., ultrasound, x-ray, CT). The device is to be used by radiology clinics and hospitals. The purpose of the device is to give the healthcare professional the opportunity to view a patients' examination study from a non-film based format. The device is commonly referred to as a PACS or Picture Archive Communication System.

Disclaimer: Velox PACS Viewer can be used only by trained medical professionals. Velox Imaging is not responsible for the use of Velox PACS Viewer by untrained users.

Velox PACS Viewer can not be used unless it contains an adequate label indicating the version and build of the product.

Potential Hazards Warning: There are potential hazards associated with Velox PACS Viewer usage. When using Velox PACS Viewer, please pay close attention to any signs of the following potential hazards:

- Inadequate performance of Velox PACS Viewer
- Inadequate labeling
- Data corruption (duplication, inconsistency, mismatch)
- Erroneous data transfer, missing or corrupt images and documents
- Patient mismatch on images and reports
- Inadequate quality of the diagnostic images
- Erroneous measurement tools calibration

In case any of the following hazards emerge, please contact Velox Imaging immediately at 1 (416) 699-4125 or support@velox.me



Important instructions
inside



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Caution: Federal law restricts this
device to sale (or use) on the order
of a licensed practitioner.

Table of Contents

Table of Contents	3
About the Radiology Viewer	6
About This Guide	6
Technical Terms & Design	7
Glossary	7
Technical Support & Contact	10
System Requirements	11
Running the Viewer on Mac	12
Installing the Radiology Viewer	12
Downloading Software	12
Installation Process	13
Updating the Radiology Viewer	16
Getting Started	18
Logging In	18
Understanding the Interface	19
Service Statuses	21
First-time Setup	25
Clinic Policies	26
Quick-start Guide	26
The Worklist View	28
The Worklist	29
The List Panel	33
The Actions Bar	33
Shared Worklists	35
Addendum Requests	36
Downloading Files	38
Using Manual Fetching	39
File Management	39
The Encounter View	40
The Documents Bar	42
Viewing Files	46
The Toolbar	50
The Main Panel	69
Creating a Follow-up Request	72
Creating & Editing Electronic Worksheets	73
Reading Encounters	74
Reading with Audio Dictation	74
Reading with Electronic Reports	76

Rejecting an Encounter	84
Commonly Used Reading Shortcuts	84
The To Sign Tab	86
Layout	86
Signing Reports	87
The Peer Reviews Tab	88
My Worklist	88
Creating a Peer Review	88
Administrator Menus	90
The My Archive Tab	91
Restoring a Service	91
The Search Tab	93
Settings	94
Settings Menu	95
Grouping Rules	100
Tool Presets	102
Hanging Protocols	104
Overlay Settings	109
Other Settings	111
System Configuration Files	117
C:\ProgramData\Velox\	117
C:\Velox\Exe\VeloxViewer\current	120
MModal Fluency Direct	121
Installing MModal Fluency Direct	121
Enabling MModal Fluency Direct	121
Using Fluency MModal	123
The Worklist Assistant	124
Creating a Master User	124
Signing into the Worklist Assistant	125
Using the Worklist Assistant	126
Interacting with Radiology Accounts	126
Worklist Assistant Settings	128
Exiting the Worklist Assistant	130
Troubleshooting & Common Issues	131
Installation Issues	131
Login Issues	131
MModal Issues	133
Dictation Issues	135
Account Management	136
Updating Velox User Credentials	137
Password Expiry	138

About the Radiology Viewer

The Velox Radiology Viewer is produced by Velox Imaging as part of the Velox RIS-PACS Suite. It is a cloud-based system that requires an active internet connection and is synchronized with the clinic's database, requiring an account to be issued by the clinic before it can be used.

The Radiology Viewer is primarily intended for use by radiologists, cardiologists, and other medical professionals to interpret and dictate reports for patient imaging.

Other clinical staff will typically interact with the Velox Suite from the online ("RIS") component, accessible from the web by visiting login.veloximaging.net. Note that some functions that interact with the Radiology Viewer program can only be accessed from the RIS.

About This Guide

For a simplified instruction set, please see the [Quick Start Guide](#) section.

This manual is best used as a digital file. Some sections may contain text shortcuts to jump to a specified chapter heading for additional information about a topic.




The targeted software version for this manual is listed on the document cover page. If you are using a different version of the Radiology Viewer than the targeted software version, the information provided may be inaccurate or not up-to-date. To view differences between versions, please see the changelogs located at update.veloximaging.net/.

Certain actions depicted in this manual may differ from your current version. If there are any questions or discrepancies, please contact our support team.

Technical Terms & Design

This guide assumes reader familiarity with basic computer principles and common UI design elements (e.g., tabs, checkboxes, buttons, etc.).

Some sections of this manual may contain info boxes to provide additional details about a section. These info boxes may contain symbols to best direct your attention.

	Clipboard	This box includes information and context on system settings or customization.
	Exclamation Mark	This box contains tips, tricks, or general advice about a section.
	Clock	<p>This box discusses information that has been significantly changed in a system update.</p> <p>Typically used for compatibility reasons, as previous Viewer versions are generally not covered in this manual. The currently targeted Viewer version is listed on the manual title page.</p>

Glossary

This glossary covers a number of terms typically used in this manual, as well as the Velox Suite as a whole. A number of names may be used somewhat interchangeably, which have been included below.

The Velox Suite	<p>A cloud-based RIS-PACS software suite used by medical imaging clinics and their staff.</p> <p>Clinical and management tasks are done from the web-based RIS.</p> <p>Physician reading is generally performed in the Velox Radiology Viewer. Each option may feature a number of sub-components.</p>
The RIS	<p>The web-based portion of the Velox Suite, accessible by visiting login.veloximaging.net.</p> <p>This is where most non-reading tasks are performed, including patient scheduling, billing, clinic management, administration, and more. The receptionist, technologist, transcriptionist, and manager perform most of their actions from the RIS.</p> <p>Reading physician capabilities are generally limited on the RIS</p>

	unless additional account permissions have been granted.
Velox Radiology Viewer	<p>The software described in this manual, used by radiology staff to read patient encounters, amongst other functions. This is the 'PACS' component of the Velox Suite.</p> <p><i>A.k.a.: "the Radiology Viewer", "the Viewer", "the Velox Viewer", "the Rad Viewer", "the PACS".</i></p>
Velox User Account	<p>Refers to a username and password provided by an issuing clinic for use in the Velox Suite.</p> <p>The username convention consists of the clinic's abbreviation, a period, and some variation of the user's name, <i>e.g., abc.johnsmith</i>. Clinic management can sometimes grant users system permissions to access additional functions in the Velox Suite.</p> <p>Not to be confused with a Fluency MModal account, or a Worklist Assistant master account. For more information, see Account Management.</p> <p><i>A.k.a.: "clinic account", "clinic profile", "user", "user account", "user profile", "Velox account".</i></p>
The Worklist Assistant	<p>A supplementary application used to manage multiple Velox Radiology accounts at the same time.</p> <p>After creating a centralized, user-created master login, users can add their clinic accounts to their Worklist Assistant and be notified whenever encounters become available.</p> <p>For more information, see The Worklist Assistant.</p> <p><i>A.k.a.: "the WLA", "the assistant".</i></p>
Master Account	<p>An account used in the Worklist Assistant. Users can create a master account at any time, defining their own master username and master password, to allow their saved clinic profiles to be accessed from any PC.</p> <p>For more information, see The Worklist Assistant.</p> <p><i>A.k.a.: "master login", "WLA account", "master profile", "master username".</i></p>
Clinic	A contracted client of Velox Imaging. A 'clinic' may contain one or more physical or satellite locations.

	In the Velox system, each client is assigned a unique identifier, typically called “the client abbreviation” or “clinic identifier,” which is used in usernames.
Clinic Location	The name of a location within a clinic. If this is a real location, it will typically have an assigned address, phone, and fax number, which pre-populate into their reports. Satellite locations are often used with mobile imaging machines, so there may be no fixed address.
The Worklist	A list of services/encounters from a single clinic assigned to the user to be read.
Encounter	<p>A file generally containing a single patient’s visit to the clinic, holding their information, images, and documents. An encounter will contain one or more services. A patient may have several encounters on the same date at the clinic’s discretion.</p> <p><i>A.k.a.: “a case”, a “patient encounter”.</i></p>
Service	<p>A distinct procedure, treatment, or service performed at the clinic, typically grouped within a patient encounter.</p> <p>Each status in an encounter can be independently assigned to technologists and reading physicians and have service statuses applied.</p> <p><i>e.g., an ultrasound of the left tibia.</i></p>
Reading Physician	The doctor that has been assigned to read an encounter.
Referring Physician	The medical professional who has referred the patient to the clinic.
Accession Number	<p>A unique number assigned to each service performed. This is a non-personally identifiable value and can be used to share encounter information with colleagues securely.</p> <p>This value can be seen on the worklist.</p>
MRN Number	<p>The “medical record number”, effectively a unique number assigned to each patient. This is a non-personally identifiable value and can be used to privately share patient/encounter information with colleagues.</p> <p>This value can be seen on the worklist.</p>

PHIN	<p>The “personal health identification number”, which is typically issued by the province, and found on the patient’s health card.</p> <p>This value can be seen on the worklist.</p>
Installation Wizard	<p>A downloaded application used to install the Radiology Viewer. It contains a step-by-step menu to guide the user through the installation process.</p> <p><i>A.k.a.: “the wizard”, “installer”.</i></p>
Two-factor authentication	<p>An optional process to require additional verification before you are able to log into the Viewer.</p> <p>For more information, see Two-Factor Authentication.</p> <p><i>A.k.a.: “2FA”, “authenticator”.</i></p>

Technical Support & Contact

For the most up-to-date support information, please visit login.veloximaging.net or www.veloximaging.com.

If technical or operational assistance is required, contact Velox Imaging Technical Support. For any procedural inquiries, please speak directly to your clinic administrator.

Support Email	support@velox.me
Support Line	+1 (416) 699 4125 ext. 1
Software Downloads	https://update.veloximaging.net
Other Downloads	https://velox.help/install/
Sales	+1 (416) 699 4125 ext. 2

Please note that your different system accounts may have different support requirements. For further information, please see the section on [Account Management](#) within this guide. For additional information on how to troubleshoot and resolve some typical issues within the Viewer, please see [Troubleshooting & Common Issues](#).

System Requirements

Category	Description and Recommendation
Minimum Reading Physician Workstation Requirements	
Operating System	64-bit Windows 7 or higher Recommended: Windows 8.1 or higher
CPU	Intel Core i7 Quad-Core processor, 3.0GHz or faster Recommended: Intel Core i7-4770 or higher
Memory (RAM)	<p>X-ray, Mammography (static), Ultrasound (static):</p> <ul style="list-style-type: none"> 8 GB minimum 16GB recommended <p>Echo, Mammography (with tomo), PET/CT, etc:</p> <ul style="list-style-type: none"> 16GB minimum 32GB recommended <p><i>* Requirements will vary based on modality and use case. Values provided do not account for background application memory consumption.</i></p>
Disk Space	<p>500 GB (< 500 studies per day)</p> <p>Recommended: 2 TB</p> <p><i>* Software can be configured to store files on any attached disk.</i></p>
Display	<p>1 or more Windows-compatible displays</p> <p><i>* as required by modality (i.e., resolution, size, amount)</i></p> <p>Recommended: Two or more monitors</p> <p><i>* Any number of monitors is supported, although multiple displays are recommended to allow for easier viewing of files</i></p>
Microphone	<p>Any Windows-compatible microphone</p> <p><i>* Microphone must be the system's default recording device</i></p> <p>Recommended: Philips SpeechMike (Classic or Premium)</p>

	<i>* The Philips SpeechMike is the only microphone with native button support in Velox.</i>
<i>Internet Connection speed</i>	10 Mbps download – Ultrasound and X-Ray 50 Mbps download – Mammography, Cardiology, PET/CT, MRI Recommended: 100 Mbps or higher (download). <i>* Higher values are always better. Download speed will impact average wait times.</i>

Running the Viewer on Mac / Linux

As a Windows-based application (.exe), the Velox Radiology Viewer generally cannot run on non-Windows based devices, such as Mac or Linux PCs. For any users without access to a Windows-based PC, you can attempt the following alternatives:

- Install a Windows partition using Boot Camp / Dual Boot
- Using a virtual machine running Windows
- Running the Radiology Viewer using Wine or Wineskin
- Virtually streaming from another device

Velox Imaging can not provide technical assistance with setup or problems with unsupported systems, and the potential options above are only provided as suggestions. For further inquiries, please speak to your local IT administrator.

Installing the Radiology Viewer

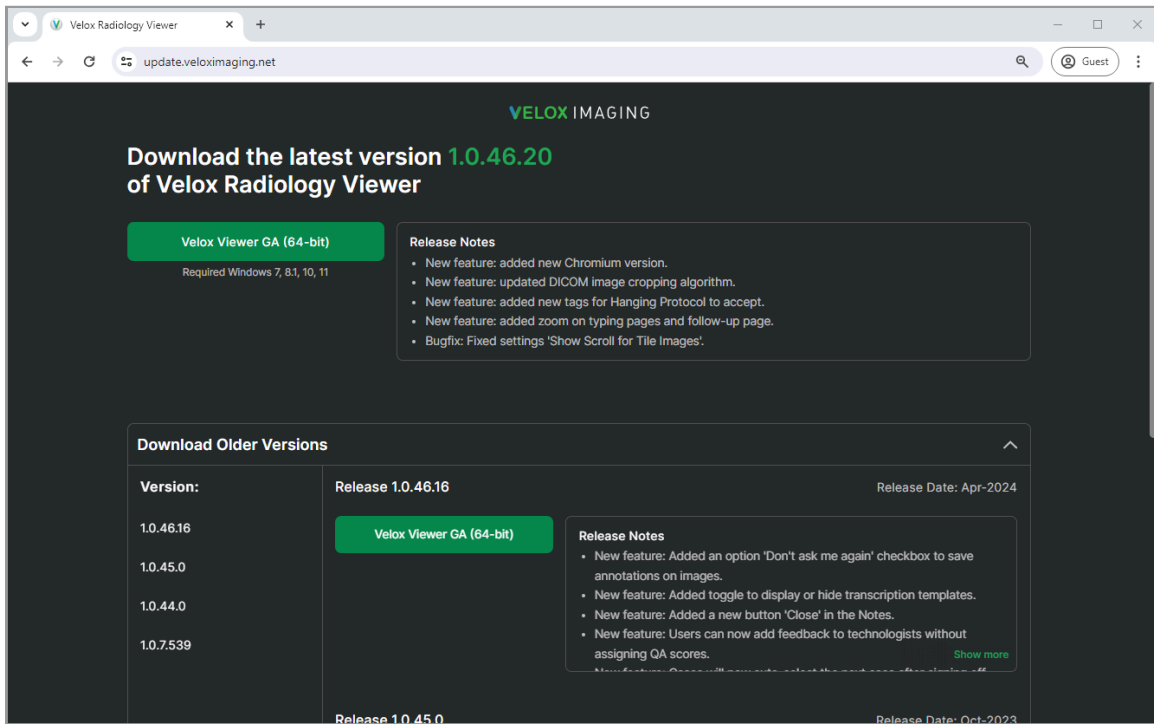
Downloading Software

The Radiology Viewer must be installed by running our installation wizard, which can be downloaded from the web. To download the installation wizard, visit our update page at <https://update.veloximaging.net>.

The latest version of the Radiology Viewer is located at the top of the page. Each release section includes information about the program version number, targeted operating systems, and patch notes.

This page may also hold prior software releases. To view or download an older version of the Radiology Viewer, click the 'Download Older Versions' dropdown and find your desired version below.

To download the latest version, select 'Velox Viewer GA' from the topmost heading.




If the download does not automatically begin after choosing your version, click 'download Velox Viewer manually'.

Typically, your internet browser will download files to your default Downloads directory, but the Radiology Viewer Updates webpage will also provide visual instructions on how to access your files. Alternatively, you may also use the keyboard shortcut **[Control + J]** to display recent browser downloads.

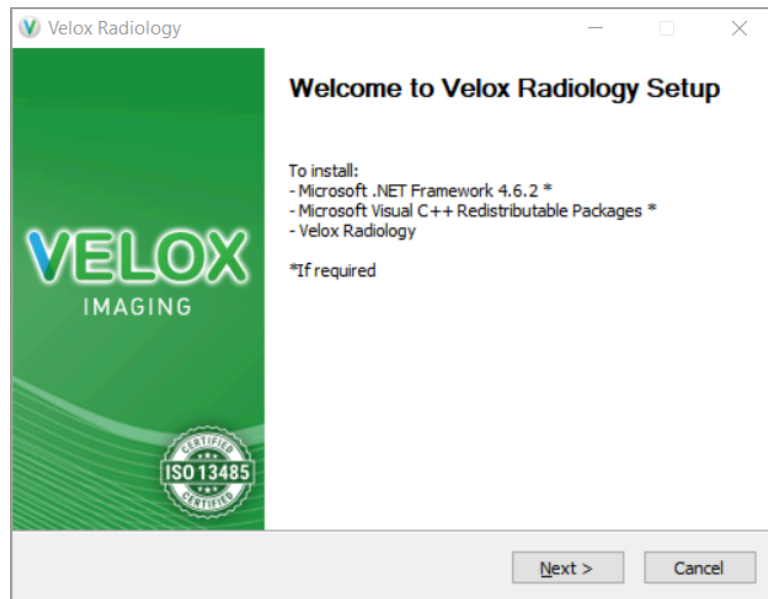
Additional Velox software and documentation can be downloaded from our online file directory at <https://velox.help/install>.

Installation Process

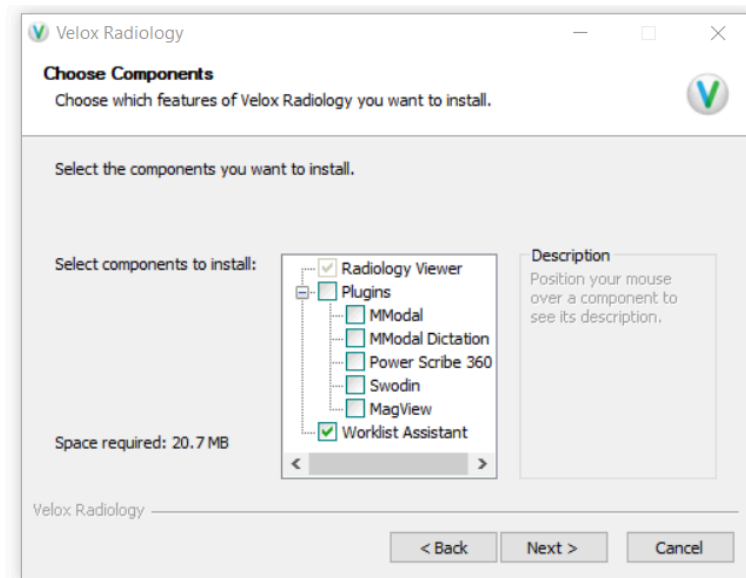
- 1) Once the software has been downloaded, run the installer to proceed. The installer will be named 'Radiology_Installer.exe' with an appended version number.

 Your Windows account must have administrator privileges to install the Velox Radiology Viewer. If you are prompted for an unknown administrative password during the installation process, please contact your system administrator.

- 2) You may be prompted for an administrative password or asked if you would like to make changes to your system. If prompted at any point, select 'Yes'. The installation wizard will now launch.

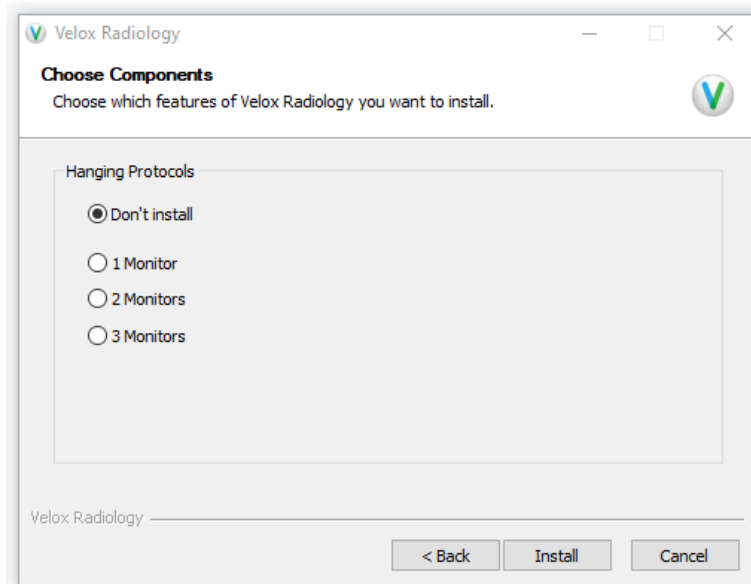


- 3) Click 'Next' to proceed.
- 4) **License Agreement** - Read through the license agreement and click 'I Agree' to proceed.
- 5) **Choose Components** - You will be asked to choose to install any additional software components. Please see the Plugins and Add-ons section below for additional information. Once you have checked off all needed components, click 'Next' to proceed.



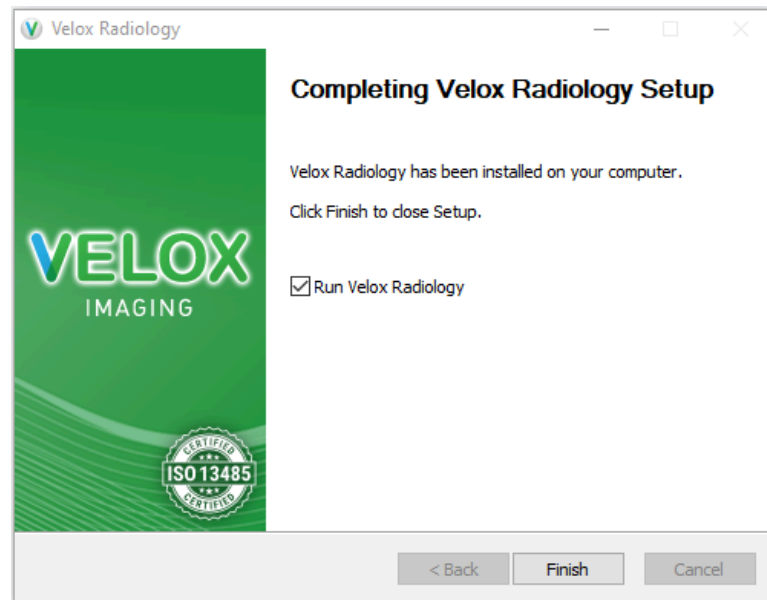
- 6) **Choose Components** - The Radiology Viewer installer will allow you to install pre-configured Hanging Protocols, which can be used with up to three diagnostic monitors. Select the number of monitors you would like to populate with a default Hanging Protocol configuration. If you would not like to configure default hanging protocols, then select 'Don't install'.

Click 'Install' to proceed.



- 7) **Installing** - If your system is missing the prerequisite software packages, they will be automatically downloaded and installed. Please be patient, as it may take

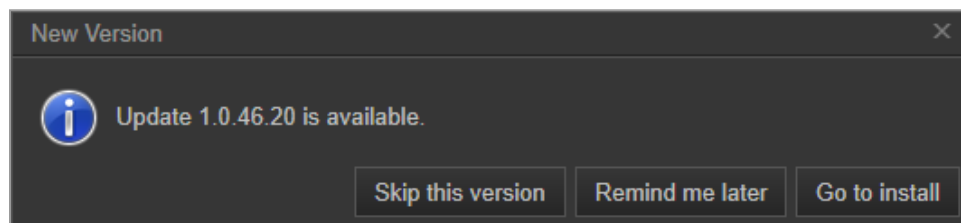
some time. The Radiology Viewer software will now be installed.



- 8) The Radiology Viewer setup is now complete. By default, the Radiology Viewer will launch when you click 'Finish'.

Updating the Radiology Viewer

The Radiology Viewer will automatically notify users of new software updates as they become available. If an update is available, you will be shown a prompt upon logging in.



Choosing '*Skip this version*' will no longer notify you about this software release. You will only receive a notification once the next version of the Radiology Viewer is available for download.


Choosing '*Remind me later*' will display the reminder notification upon the next login.

Choosing '*Go to install*' will take you to the Velox Radiology update download page in your web browser.

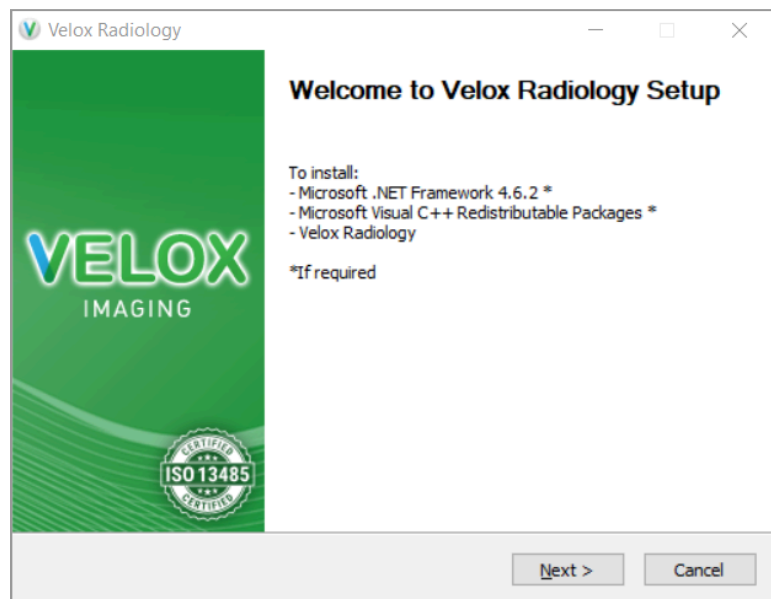
If the update reminder prompt is closed or unavailable, the download page can be accessed by clicking 'Change Version' at the bottom-right corner of the Radiology Viewer program at any time or by visiting the page in your internet browser at update.veloximaging.net.

Installing Updates

Typically, updating your Radiology Viewer will not require extraneous steps, as existing settings will be preserved. However, before reinstalling the software, please note which plugins you require.

 You may be prompted for an administrative password or asked if you would like to make changes to your system. If prompted at any point, select 'Yes', or input your administrative password. If access is denied or the password is unknown, please contact your system administrator.

- 1) Close the Radiology Viewer, then run the Installer file you have downloaded. The uninstaller component will launch first.
- 2) **Uninstall** - Select 'Uninstall' to proceed. The active components of the software will be removed from your system.
- 3) The Installer component will now launch. Click 'Next' to proceed.



- 4) **License Agreement** - Read through the license agreement and click 'I Agree' to proceed.

- 5) **Choose Components** - You will be asked to choose to install any additional software components. Check off any plugins you were using previously. If you are not sure, you can select all. Once you have checked off all needed components, click 'Next' to proceed.
- 6) **Choose Components** - You can choose to enable default hanging protocols for up to three monitors. This will only affect new logins on this computer, as your previous accounts will preserve their existing settings.

Select the number of monitors you would like to populate for new accounts if desired. Otherwise, select 'Don't install'.

Click 'Install' to proceed.

- 9) **Installing** - If your system is missing any prerequisite software packages, they will be automatically downloaded and installed. Please be patient, as it may take some time. The Radiology Viewer software will now be installed.
- 10) The Radiology Viewer setup is now complete. By default, the Radiology Viewer will launch when you click 'Finish'.

Getting Started


This section assumes that the Radiology Viewer has been installed. If you would like to install it, please see [Installing the Radiology Viewer](#).

Logging In

If you are using the Worklist Assistant to log in, please see [The Worklist Assistant](#).

To get started, run Velox Radiology from your start menu or desktop. Then, enter your username and password, and click 'Login'. If your credentials are accepted, the Viewer will now launch.



 Your Velox Radiology account is administered by your issuing clinic directly. If you forget your password, please contact the issuing clinic, as Technical Support cannot assist.

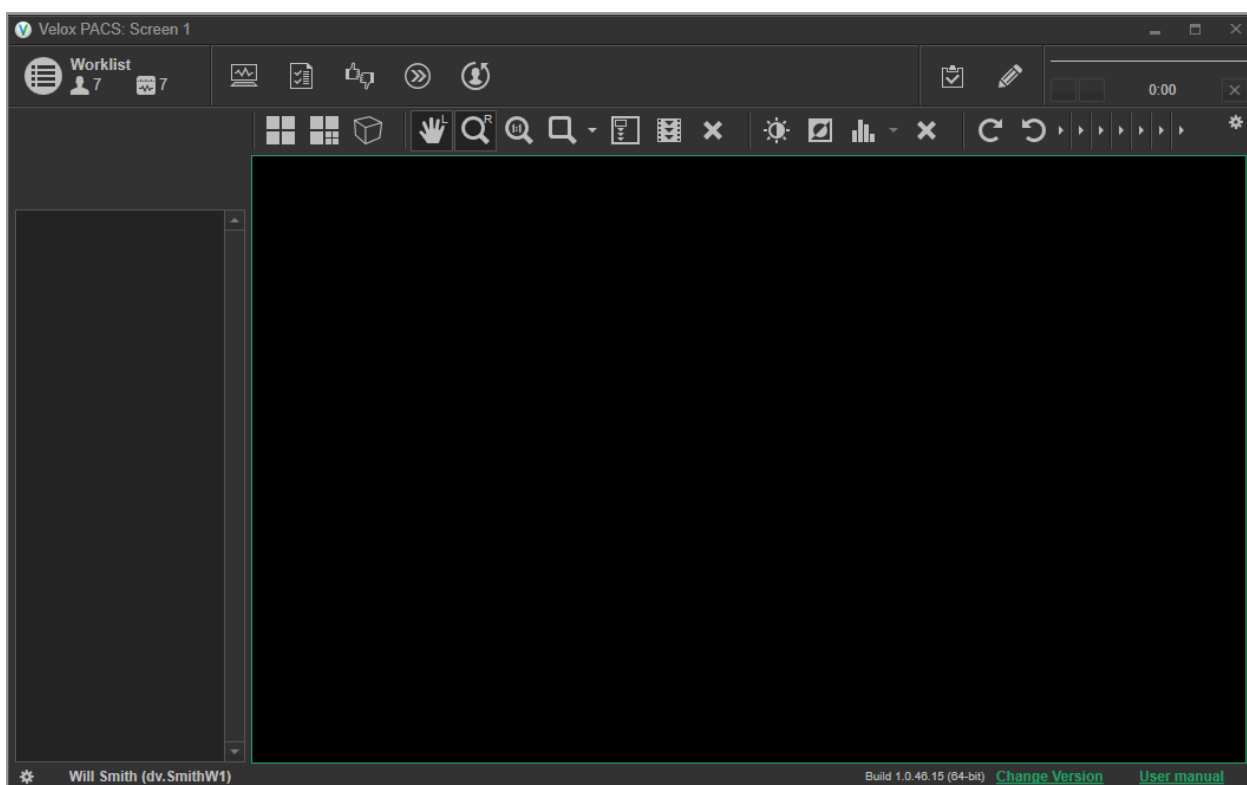
Please note that, as Velox is a cloud-based system, you must have an active internet connection to sign in.

Understanding the Interface

The Velox Viewer application is primarily composed of one or more screens (windows) that can be repositioned as needed. To exit the Radiology Viewer at any time, click the Close ('X') button at the top-right corner of the screen.

There are two primary interfaces to familiarize yourself with: the **Encounter view** and the **Worklist view**.

The Encounter view is where most of the time is spent in the Radiology Viewer. Here, encounters can be reported or dictated, documents and images can be viewed, and much more. For more information, see [The Encounter View](#).

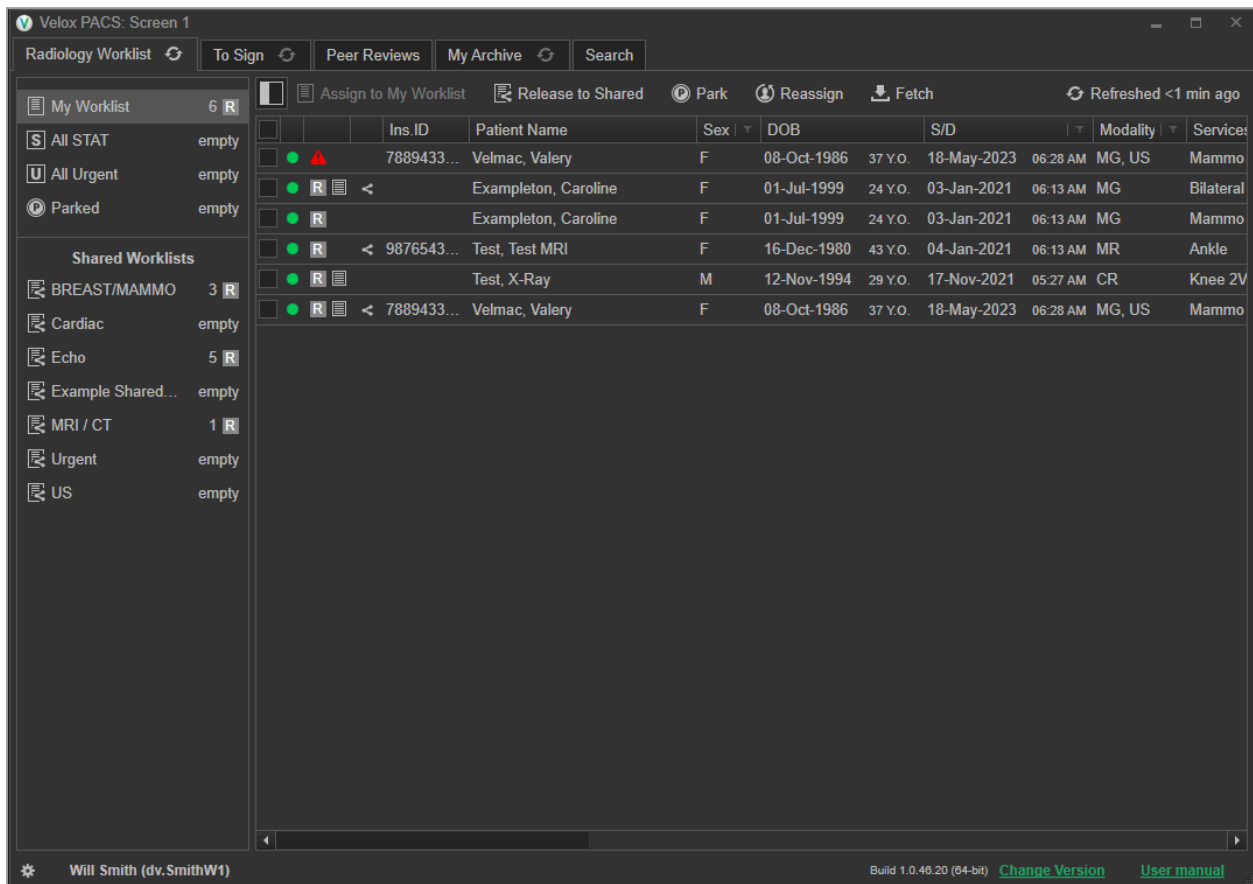


The Worklist view will contain several tabs at the top of the page. These will be used to access additional menus and tools. Selecting the 'Refresh' icon (↺) in a tab heading will update your current list. For more information, see [The Worklist View](#).

These tabbed options include:

Radiology Worklist	Shows your currently assigned encounters, allowing them to be selected, viewed, and read.
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<u>To Sign</u>	Shows your completed but unsigned reports, allowing them to be reviewed and signed off.
<u>Peer Reviews</u>	Shows your assigned peer reviews. Also allows peer reviews to be assigned and verified.
<u>My Archive</u>	Shows a chronological history of your encounter activity so you can conveniently view recent encounters.
<u>Search</u>	Allows searching for any encounter in the clinic's system, using a variety of search filters.



The bottom edge of the Radiology Viewer will always display the following options (from left to right):

<u>Settings</u>	Clicking the cog icon will display a number of general settings and options, which can be changed as needed.
<u>Name & Username</u>	Displays the name and username of the currently logged in user.

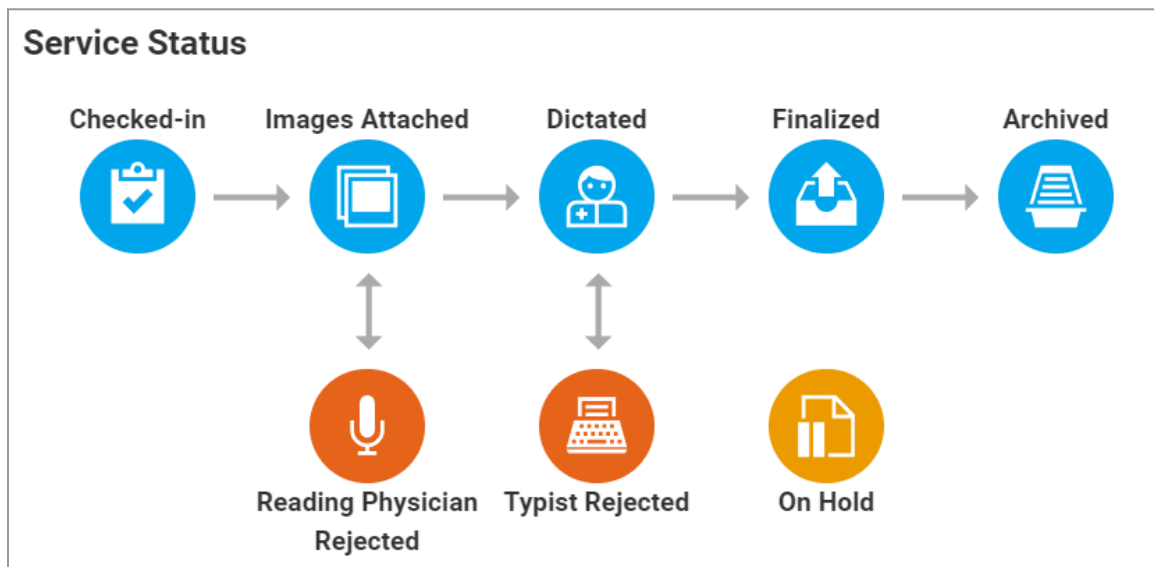
	Clicking here will allow you to update your login and password and enable two-factor authentication if desired.
Build #	The current Radiology Viewer software build/version number.
Change Version	A link to the Viewer Update page allows users to download the latest versions of the Radiology Viewer.
User Manual	A link to view/download the Velox Radiology user manual.

Service Statuses

In Velox, each service has a status that reflects its current position in the clinic workflow. As each process is completed, a service's status will be steadily updated. Note that statuses are not bound to an encounter itself but rather to the services contained within.

Reading physicians primarily interact with services in their worklist in the *Images Attached* status. After the service has been read, the physician will update them to either *Dictated* or *Finalized* status. If the service is not readable, it can be set to Reading Physician Rejected.

The *Dictated* status is skipped if a dedicated typist is not used. Some statuses also have a variant for rejections (e.g., Reading Physician Rejected, Typist Rejected).



Start: Upon arrival at the clinic, the patient is greeted by reception staff, *creating an encounter* with services in the **Checked-in** status.

Checked-in

Applied once the patient has arrived at the clinic. Usually indicates that the service or encounter has just been created.

The clinic staff will attach any requisition sheets to the encounter and assign the Reading Physician and Technologist to the service.

The technologist will then invite the patient in for imaging. Once complete, the technologist will attach any images or worksheets to the services.

*After all files have been attached, the technologist verifies that the service is ready to be interpreted and manually updates the status to **Images Attached**.*

Images Attached

Applied by clinic staff once the images are ready to be interpreted.

The service will appear on the assigned radiologist's worklist. The radiologist can proceed with interpreting the case.

From here, the service can go one of three ways:

- a) *If the encounter is read using audio dictation*, the Radiologist will read the case using the audio tools in the Viewer. They will then select **Submit for Transcription**.
- b) *If the encounter is read directly into a digital report*, the Radiologist will read the case with the report functionality, either typing manually or using voice dictation software. They will then select **Submit Signed Report**.
- c) *If the encounter cannot be read*, the Radiologist may find an issue with the service (e.g., missing views, mislabelled services, missing or incomplete documents, etc.). They may choose to reject the service. The Radiologist will select **QA Review** and mark off **Reject Study**, leaving a comment in the field, along with an optional star rating.

Images Attached is the only state in which services can be read/interpreted and submitted.

The service status can then go into one of three categories, depending on the prior choice.

- a) If **Submit for Transcription** was selected, the service will be set to **Dictated** to

have the audio-report transcribed by the typist.

- b) If **Submit Signed Report** was selected, the service will be set to **Finalized**, as the final signed report is already present.
- c) If **Reject Study** was selected, the service would be set to **Reading Physician Rejected**, requiring the technologist's attention.

Dictated

Applied when a radiologist has attached dictation audio to a service.

The service, with its attached audio, is put into the Dictation queue. A typist will listen to the audio and transcribe it into a report.

The next status will depend on if the report can be completed;

- a) *If there are no issues with the audio*, the typist will **save the report**.
- b) *If there is a problem with the audio*, the typist will **reject** the service.

The service status can then go into one of two categories, depending on the prior choice.

- a) If the report was **saved**, the service will be set to **Finalized**, with the report *unsigned*.
- b) If the audio was **rejected**, the service will be set to **Typist Rejected**, requiring clinic review.

Finalized

Applied to a service when the report has been completed by either the typist or reading physician.

From here, the report will be sent to the referring doctor, typically via fax. Clinic policy at this stage will vary.

- *If the report was transcribed*, some clinics may require reading physicians to sign off on their transcribed reports before they are sent to the referrer. The physician may visit the **To Sign** tab in the Viewer to review and **sign off** the reports.
- If *auto-fax* is enabled at the clinic, the reports will be automatically sent out to the referrer, with an optional delay, giving reading physicians time to retract a report. Some clinics require staff to manually review or send reports.

	<ul style="list-style-type: none"> Many clinics opt to enable <i>auto-archive</i>, immediately archiving the service upon successful report delivery; otherwise, the status is manually updated.
After the report is delivered, either manually or automatically (if <i>auto-archive</i> is enabled for the clinic), the service is set to Archived , denoting that no further action is required.	
Archived	The report has been completed and delivered to the referrer. No further clinical action is required.

Reading Physician Rejected	<p>Applied when a reading physician is unable to interpret a service and requires the technologist to review it.</p> <p>The assigned technologist will receive a notification of their service rejection. They can review the encounter, along with radiologist comments/notes, and correct any errors that caused the rejection.</p>
After reviewing the encounter, the technologist will manually set the service status back to Images Attached to be read by the physician.	

Typist Rejected	<p>Applied when a typist is unable to transcribe dictated audio.</p> <p>Denotes an incomplete report. A member of the clinic staff needs to review the rejected service and reassign it to the radiologist.</p>
After reviewing the encounter, clinic staff will manually set the service status back to Images Attached to be read by the physician.	

On Hold	Applied whenever the clinic staff needs to place a service on hold for any reason.
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First-time Setup

By default, the Viewer will launch with a number of windows matching the amount of monitors on your system. These windows will be numbered in sequential order.

1) Position monitors

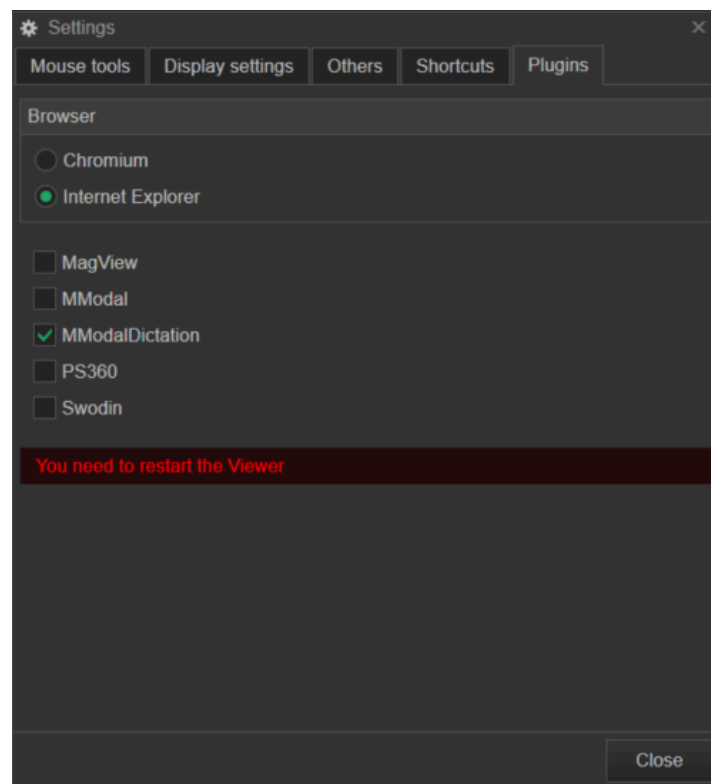
Drag the window labeled 'Velox PACS: Screen 1' into your leftmost monitor, and maximize the window. For any additional monitors, continue this process with the labeled screen order ascending from left to right.

Note that the worklist can be opened in any window. To do so, click the 'Worklist' button at the top-left.

2) Enable Plugins

If you are using any plugins on this account, they must be enabled first. Additionally, ensure all requisite applications are successfully installed and that the plugin is enabled when installing the Radiology Viewer.

To access your plugins page, go to **Settings > Other Settings > Plugins**. Here, enable any necessary plugins. Exit and re-open the Viewer for your changes to take effect.



3) Other Settings

- a. Review the Settings menu, especially for items under Auto-open, Display, and Sorting settings.
 - Many display settings can be applied per screen to allow for greater customization.
- b. In the Encounter View, adjust and rearrange your toolbar, hiding any unneeded toolbar items.
- c. Rearrange and resize your worklist columns to prioritize important information.
- d. Set up any tool presets or hanging protocols.

After setting up the Viewer just the way you like it, you can save your current settings as the new default for any future accounts on this computer. This can be done from the Settings menu > Other Settings > Others > 'Save as Default'.

Clinic Policies

As clinic policies may differ, speak to the clinic about your workflow before beginning to read cases.

Dictation type: whether you are meant to complete audio dictation or directly transcribe reports. Furthermore:

If dictating audio, you may want to inquire about the Report Sign-off Policy and whether you are required to manually sign your reports from the **To-Sign menu** before they can be sent to the referrer.

If completing reports, you may want to inquire about if the clinic has a reporting Submission Delay. If the clinic has a submission delay set up, this will give you time to alter a report before it is sent to the referrer.

Quick-start Guide

This is a brief overview designed to help you get started in using the Radiology Viewer. These instructions assume default settings are being used, and there may be several ways to adjust your settings to help improve your efficiency. For further information, please consult the detailed manual below.

1) Open the Radiology Viewer

If not yet done, go through any installation & setup steps in the sections above.

- [Installing the Radiology Viewer](#)
- [First-time Setup](#)

Run the Radiology Viewer app and enter your username/password. After logging in, the program will open onto the Worklist.

2) Select an Encounter

Using the worklist, select any encounter.

The Encounter View will open with the patient's information on the left-hand side. Drag any documents and images into the center of the screen to view the files and use any tools as necessary.

3) Read the Encounter

From the service list, check off which services you are currently reading. If the encounter cannot be read (such as due to missing views, documents, etc.), it can be rejected. To do so, click 'Technologist QA Review' and ensure 'Reject Study' is checked off.

The next steps will differ depending on whether you are using **audio dictation** or **report transcription** to complete your reading.

a. Audio Dictation

Perform your audio dictation using the recording tools at the top right. When ready, click **Submit Signed Report** to submit your reading.

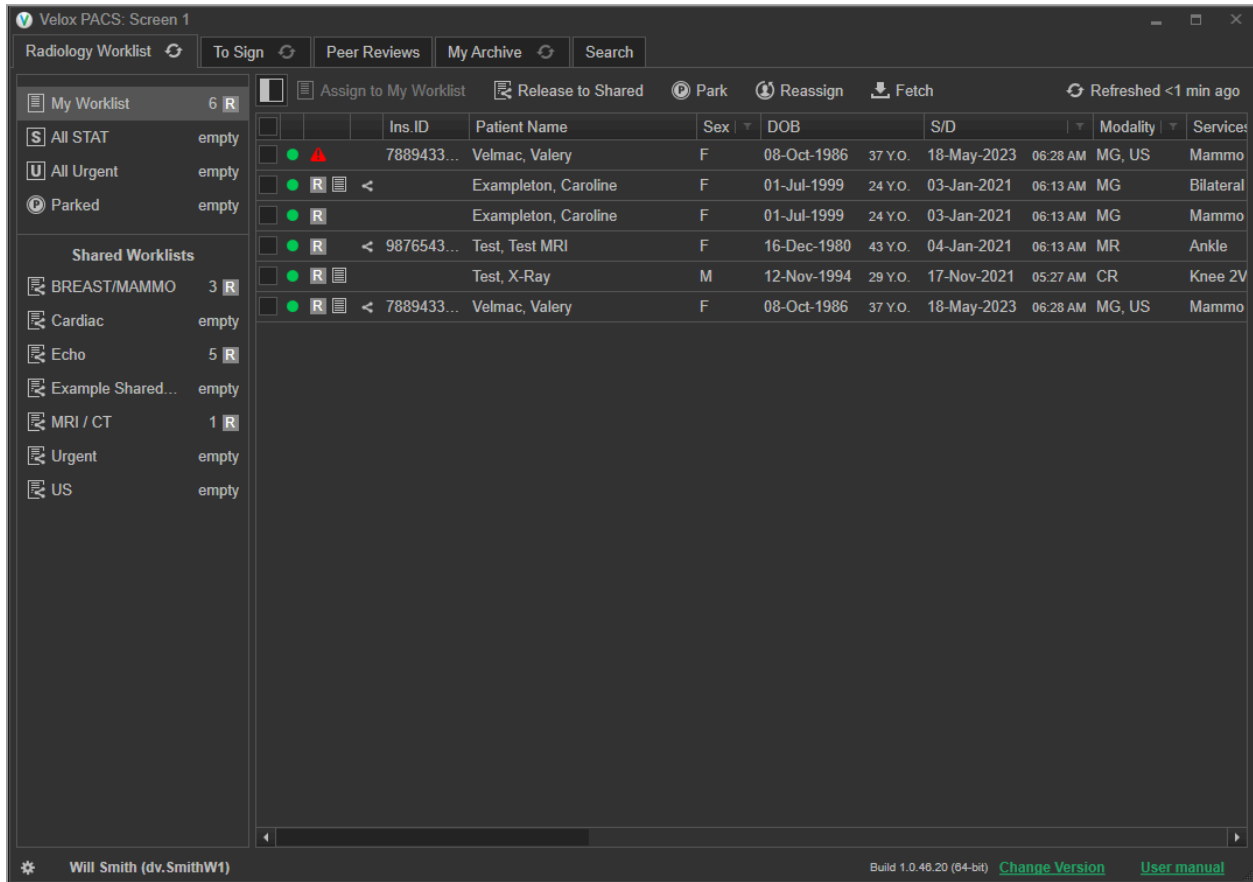
b. Report Transcription

Click **New Report** at the top-right to open the report editor. In the editor, complete your report, and select **Submit Signed Report** to submit your reading.

After all services in an encounter have been read, the next report will automatically open.

The Worklist View

The worklist menu is the default screen when not actively viewing a case. This menu is made up of the following elements:




The Worklist	View, select, and interact with elements on the worklist.
The List Panel	<p>Occupies the sidebar on the left-most side. Allows you to change which worklist you are currently viewing, including your personal & shared worklists.</p> <p>Also allows for filtering between additional options, such as stat/urgent cases and parked cases.</p>
The Action Bar	<p>Occupies the topmost section, underneath the system tab selection.</p> <p>Allows you to perform actions for chosen encounters and change your refresh frequency. Certain actions can also be accessed by right-clicking.</p>

The Worklist

The worklist will display your assigned encounters in each row. Clicking on a case will open it, allowing you to read services or perform other actions.

Each column will display information about the case. You can reposition or rearrange these columns as needed and click on a heading to either change the sorting priority or apply filters to the data.

 By default, the worklist is hidden after opening an encounter. However, it can be reopened on any screen by clicking the 'Worklist' button at the top-left.

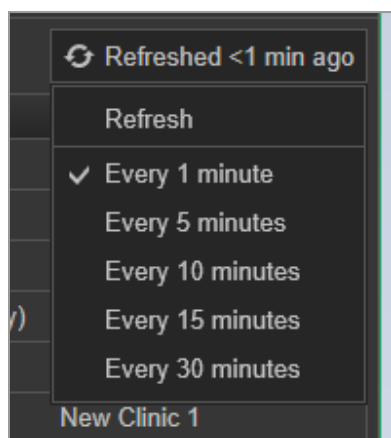
To change this behaviour, uncheck the '**Close worklist after encounter open**' option under the **Settings > Other Settings > Display settings** menu.

Clicking the '**X**' button at the top-right of the worklist will close the worklist, allowing this view to be used as a reading monitor.

The checkbox to the far left of any result will allow you to select multiple items at the same time. Once multiple items are selected, you can apply options via the Actions bar or by using the right-click menu.

Refreshing the Worklist

The worklist will periodically refresh to check for new cases. Once a new encounter is found, it will be assigned to a worklist, and files will automatically begin downloading based on your download preference.



By default, the worklist refreshes every 15 minutes. You can change this duration by selecting **Refresh** at the top-right corner and choosing an alternative timespan.

This section will also note when the worklist has been last refreshed.

The worklist can be manually refreshed at any time by selecting the Refresh subheading or selecting the Refresh icon from the tab header.

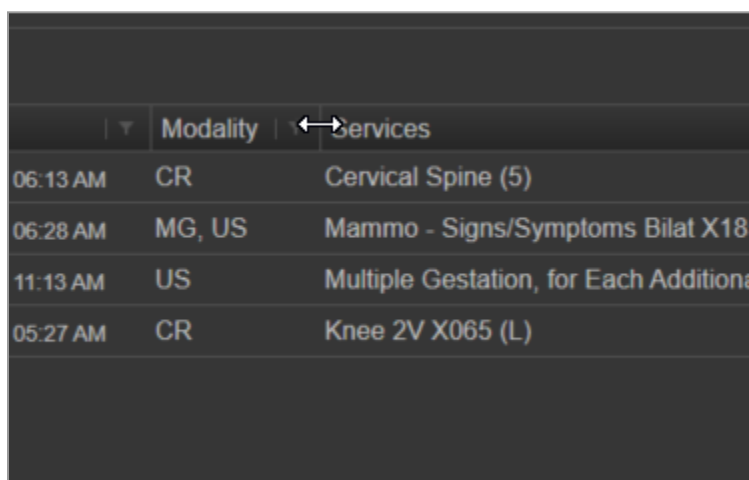
Worklist Columns

Image Status Indicator	<p>A symbol that shows the image download status of a given case. The icon may appear as follows:</p> <ul style="list-style-type: none"> • Ready with history (green circle) • Ready with no history (blue triangle) • Downloading (rotating circle) • Waiting to download (yellow square) <p>Mousing over the image status indicator will display additional information, such as the downloaded image count.</p>
Priority	<p>A symbol that displays the encounter's priority. The symbol can represent multiple meanings:</p> <ul style="list-style-type: none"> • Report addendum requested (red warning symbol) • Stat priority (red S) • Urgent priority (orange U) • Regular priority (grey R) <p>Higher priority items will be displayed at the top of the worklist. Encounter priority can be changed from within the Encounter View.</p>
Ins. ID	The institution's identifier number.
Patient Name	The name of the patient. Uses format (<i>Lastname, Firstname</i>).
Sex	The registered sex of the patient.
DOB	Date of Birth; the birthdate of the patient (format DD-Mon-YYYY), along with the age.
S/D	Service Date; the date & time when services were performed.
Modality	Displays the modality the assigned services belong to.
Services	Displays the assigned services for the encounter.
Billing Information	Shows billing codes for each service, if applicable.
Acc. num	Accession number, a unique non-personal identifier for each service registered at the clinic.
Image Status	<p>Shows the download status and image count of a given case.</p> <p>Before the download has started, the indicator will show 'Waiting'.</p>

	<p>When downloading files, the amount of images currently downloaded will be shown, along with the total number of images.</p> <p>When the case is fully downloaded, the state will change to 'Ready'. The column will also display the number of images currently downloaded, the total number of images downloaded, and whether the patient history has been downloaded.</p>
Clinic	The name of the clinic where the imaging was performed.
Tech	The name of the technologist who handled the imaging.
Ref. physician	The name of the assigned referring physician.
Read. physician	The name of the assigned reading physician.
Patient MRN	Medical Recourse Number, unique, non-personally identifiable number associated with the patient.

Resizing Columns

To resize a column, place your mouse cursor on the column heading's edges. Then, click and hold down left-click, dragging the mouse to extend or shrink the column as needed.



	Modality	Services
06:13 AM	CR	Cervical Spine (5)
06:28 AM	MG, US	Mammo - Signs/Symptoms Bilat X18
11:13 AM	US	Multiple Gestation, for Each Additiona
05:27 AM	CR	Knee 2V X065 (L)

Rearranging Columns

To rearrange a column, place your mouse cursor on its heading. Then, click and hold down left-click, dragging the mouse as needed to change the column's order.

Removing Columns

Columns cannot be removed entirely from the worklist. If you would like to hide a column, simply resize or reposition the column as needed to remove it from view.

Sorting Your Worklist

By default, your worklist is sorted by service date. Only one sorting method can be applied at a given time. If you would like to narrow down your results further, please see Filtering Your Worklist.

To sort by any parameter, click on the column heading to begin sorting your list in descending order.

Clicking on a column heading after it has already been sorted in descending order will reverse priority, sorting in ascending order. Clicking on a column heading a third time will reset it back to its original state and return your worklist to sorting by Service Date.

Filtering Your Worklist

Filtering is available on certain columns. Enabling a column filter will allow you to hide certain entries from view.

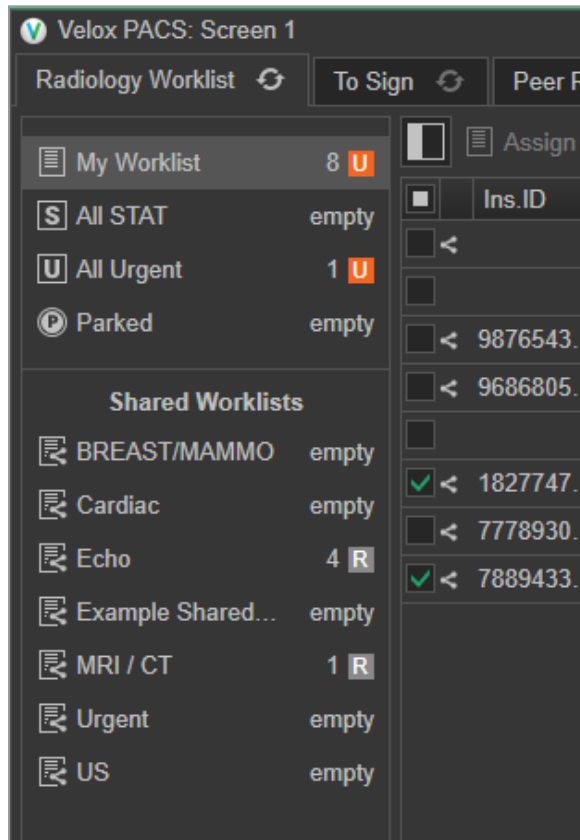
To filter your worklist, find a valid column and click on the filter icon in the heading. Now, select which criteria you wish to view. After selecting an item, the filter will be applied.

To filter by multiple criteria, click on the filter icon again and choose additional criteria, repeating as many times as necessary. Multiple filters can be applied at the same time.


To reset the filters on a specific column, click on the filter icon and select 'All.'

	Modality	Services	Billin
06:13 AM	MG	All	nmography
06:13 AM	MG	CR	gns/Symptoms Unilat... X184
06:13 AM	MR	MG	A600
11:13 AM	US	MR	G315
05:27 AM	CR	US	65 (L) X065
06:18 AM	US	Breast - J127 (R)	J127
06:24 AM	US	Breast - J127 (R)	J127
06:28 AM	US	Breast - J127 (L)	

The List Panel

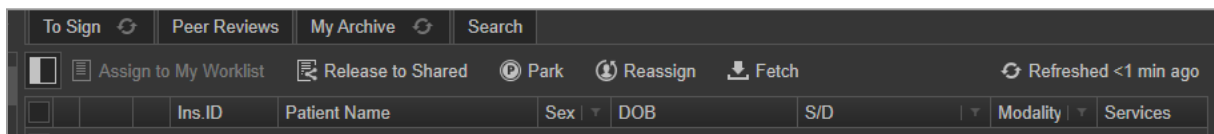


The List Panel allows users to toggle between the worklists they are viewing. This includes their personal worklist (top section) and shared worklists (bottom section).

 A user must be assigned to a shared worklist for it to be visible. If you would like to be assigned or unassigned from a shared worklist, speak to your clinic administrator.

The Actions Bar

The worklist actions bar contains a number of tools for interacting with your worklist.

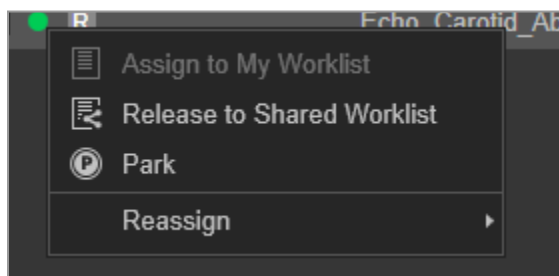


The actions bar contains the following options from left to right:

Hide Worklists	Hides/shows the List panel, giving your Worklist view an expanded field of view.
Assign to My Worklist	If applied to items in a shared worklist, sets yourself as the assigned radiologist.

Release to Shared	If applied to items in a personal worklist that were previously part of a shared worklist, it will release these cases back to the shared list, allowing somebody else to read them.
Park	Moves your selected encounters to the 'Parked' list.
Reassign	Reassign your selected encounters to a different reading physician or shared worklist.
Fetch	<p>Downloads ("fetches") images belonging to your selected cases. This option is only used if your Auto-download setting is set to 'Manual'.</p> <p>Options include:</p> <ul style="list-style-type: none"> • Current Only <ul style="list-style-type: none"> ○ Only downloads files from the current case. No priors will be included. • Current and Relevant History <ul style="list-style-type: none"> ○ Downloads files from the current case and relevant priors only. • Current and History <ul style="list-style-type: none"> ○ Downloads files from the current case and full history.
Refresh	<p>Displays last refresh time.</p> <p>Clicking here gives an option to manually refresh or the option to change the worklist auto-refresh rate from a default of 15 minutes to anywhere from (1/5/10/15/30) minutes.</p>

Note that right-clicking on an encounter in the worklist will also show a set of duplicated actions and automatically check off the encounter.



Reassigning a Case

To re-assign a case to a different user or shared worklist:

- 1) Select the case(s) you wish to reassign.
- 2) Select **Reassign**.

Once a case has been reassigned, it cannot be restored by the user.

All STAT / All Urgent

The All STAT menu will display stat cases that have been assigned to you or a shared worklist.

The All Urgent menu will display urgent cases that have been assigned to you or a shared worklist.

Parking A Case

Encounters can be 'parked' to be moved into the 'Parked' section. A case in parked will not appear in any other worklist while they are parked.

To park any encounters:

- 1) Select your encounter(s).
- 2) Select **Park** from the top of the page or the right-click menu.

If you are on the 'Parked' page, selecting a Parked encounter will give you an option to 'Unpark' it at any time. To unpark an encounter:

- 1) Access the Parked list.
- 2) Select your encounter(s).
- 3) Select **Unpark** from the top of the page or the right-click menu.

Your cases are also removed from Park once they have been read and submitted.

Shared Worklists



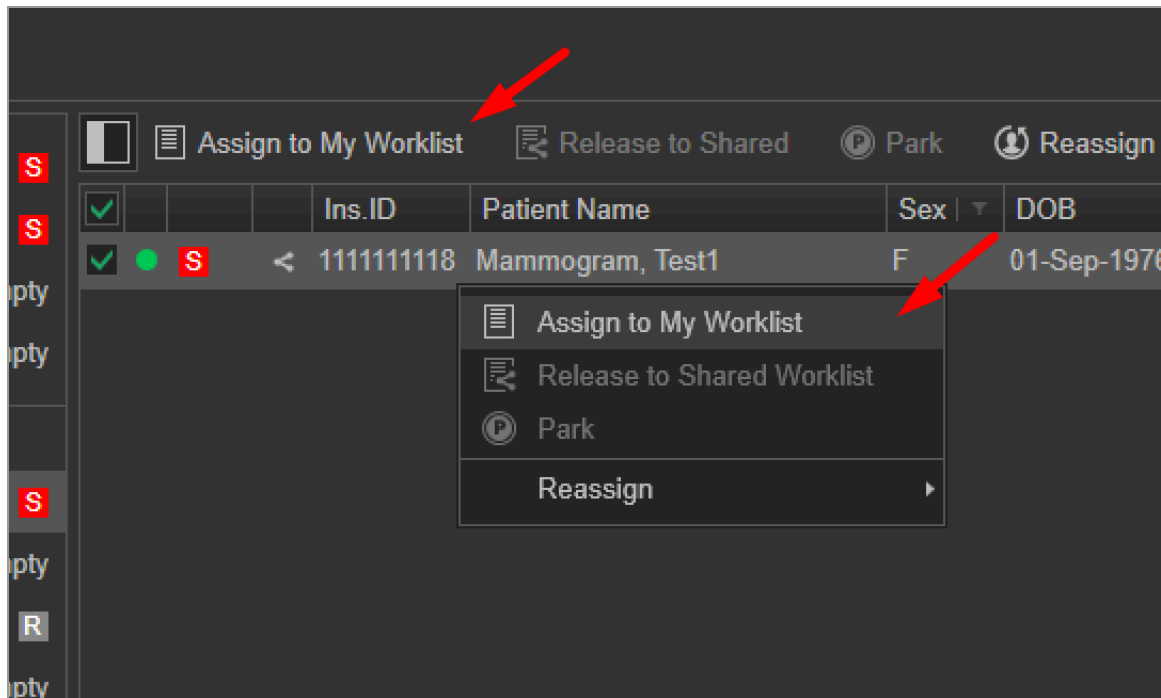
A user must be assigned to a shared worklist for it to be visible. If you would like to be assigned or unassigned from a shared worklist, speak to your clinic administrator.

Shared worklists are assigned to multiple reading physicians at a time to share a workload, allowing the encounter to be read by anybody in the shared worklist group.

Any physician assigned to the worklist can assign cases to themselves on a first-come, first-serve basis.

Encounters from a shared worklist can be assigned to yourself in two ways:

- a) Opening an encounter from a shared worklist to immediately assign it to your personal worklist.
- b) Directly assigning encounters to yourself.
 - 1) Select any encounter(s) from a shared worklist.
 - 2) Select **Assign to My Worklist** from the action bar or the right-click menu.



If you are unable to read an encounter, you may want to return it to the shared worklist.

To take an encounter out of a shared worklist:

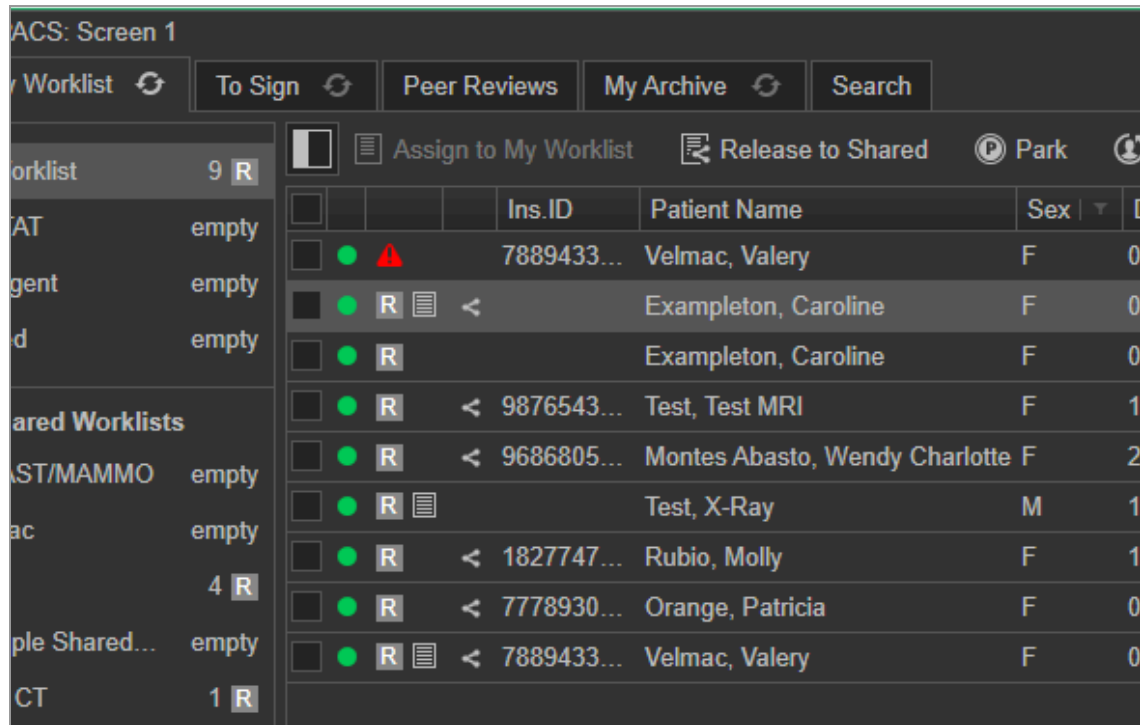
- 1) Select any encounter(s) from your personal worklist.
- 2) Select **Release to Shared** from the action bar or the right-click menu. Once released, cases that originated from a shared list will be returned to their original positions.

Encounters can also be reassigned to any individual or shared worklist by selecting **Reassign**.

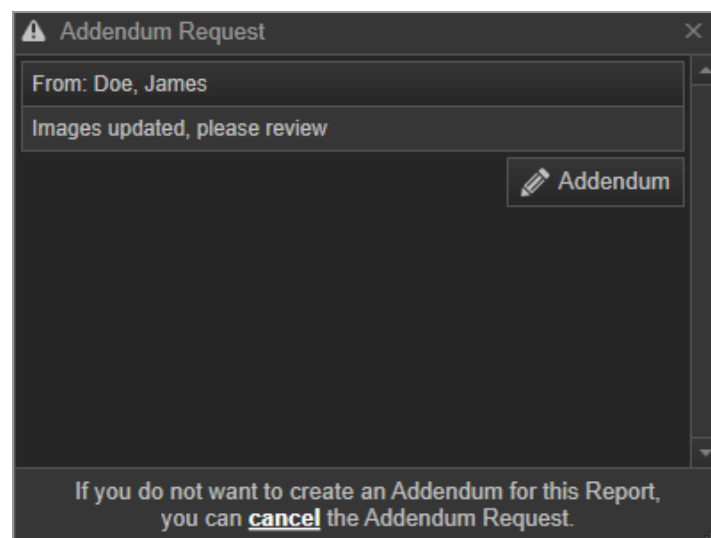
Attempting to exit and encounter or close the Viewer while shared encounters are assigned to you will display a prompt option to release incomplete encounters back to the shared worklist.

Addendum Requests

While most items on the worklist page will be for procedures to be read, addendums are an exception. The clinic may request reports to be amended, which will be displayed on the worklist with a red warning symbol (⚠).



Selecting an addendum request will open the encounter and display an addendum request window.



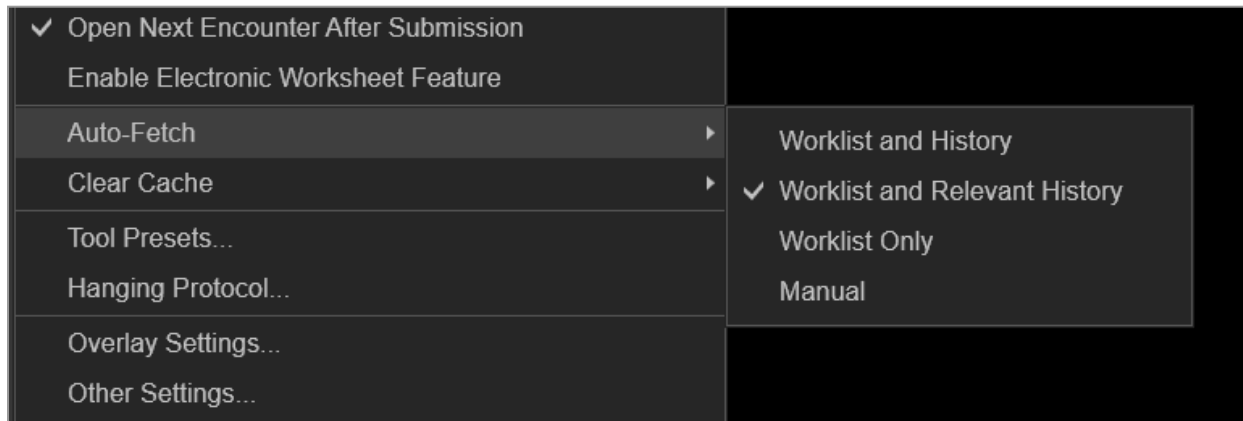
Selecting **Create Addendum** will open the addendum reporting menu. The addendum request can be completed from this menu by selecting **Submit Addendum**.

To cancel the request, select **Cancel Addendum**. Canceling the request will remove it from your worklist and mark the report with "Addendum request cancelled".

Downloading Files

Once a case has been added to your worklist, its files must be downloaded before they can be viewed. If any files for a case you are opening have not been completely downloaded, the download will be prioritized when opened.

By default, your system will download the cases once they arrive in your worklist, typically for the encounter files and any relevant visits in the past. The extent to which files are downloaded can be changed in the 'Autofetch' settings menu.



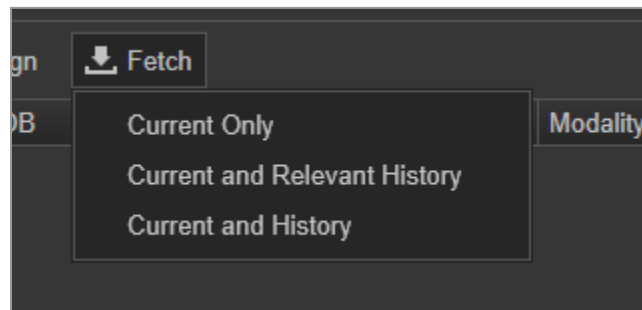
Selecting an option changes the range of files which are downloaded from cases in the worklist.

Worklist and History	<p>Automatically downloads the patient's complete file history, including from all prior encounters.</p> <p>This will take the longest time and take up considerable storage space. Not typically recommended.</p>
Worklist and Relevant History	<p>Automatically downloads the files from the current case and any relevant priors for this patient.</p> <p>This is the default setting and is recommended for most users.</p>
Worklist Only	<p>Automatically downloads the files from the current case only.</p> <p>This will take up the least amount of storage and download files quickest. Recommended for situations where the internet connection is</p>

	slow/unreliable or if the computer has a very low amount of storage space.
Manual	<p>Files will not be automatically downloaded. Users must manually use the 'Fetch' button to retrieve patient files for selected encounters on the worklist. The information can be selectively chosen from the prior settings.</p> <p>This is recommended only in the most restrictive situations, such as very poor internet connections or extremely limited system storage.</p>

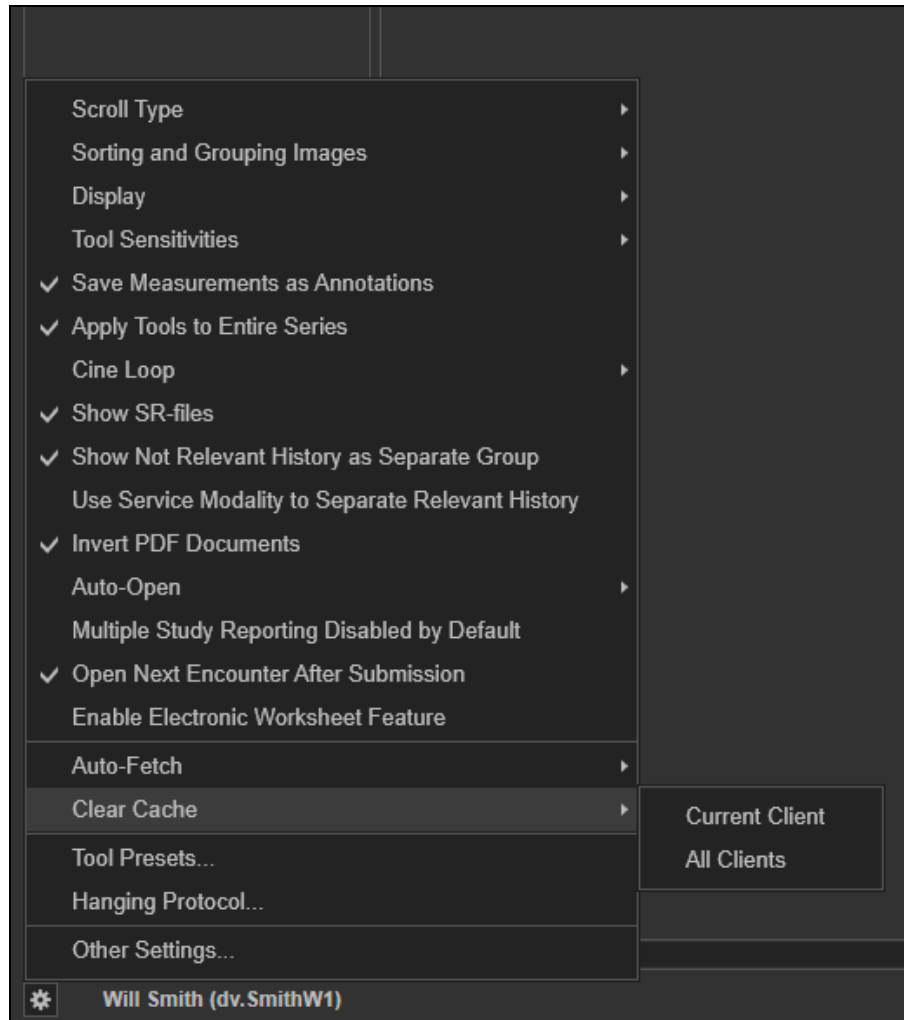
Using Manual Fetching

If manual fetching is selected, cases will no longer be automatically downloaded and must be manually selected and fetched. After selecting any number of encounters, clicking 'Fetch' within the Action Bar will allow users to download files for their chosen file level.




File Management

Any downloaded files can be removed from the system via the Clear Cache function, which can be accessed from the Settings menu.

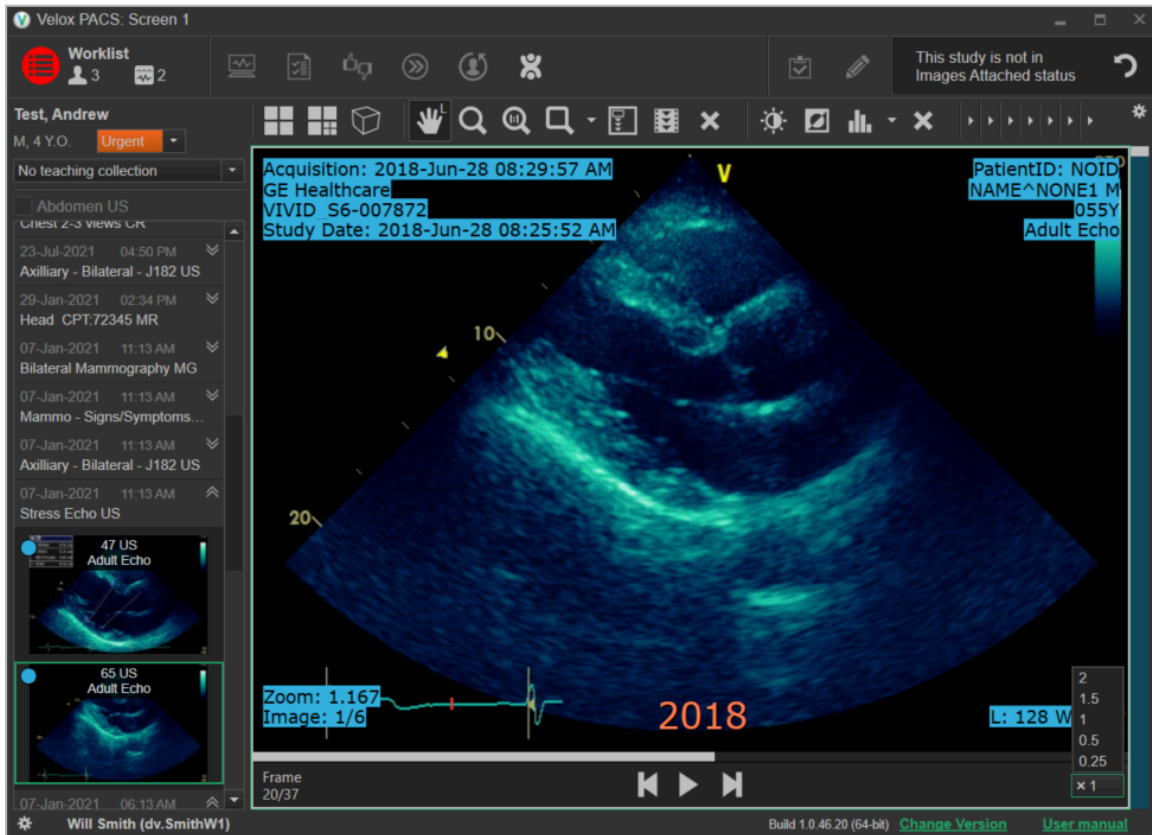


After selecting 'Clear Cache', users will be given the option to select 'Current Client' (files from the currently logged-in user account) or 'All Clients' (files from all Velox accounts on this PC). Once selected, the program will automatically clear out any cached documents, images, or audio dictations. This may take some time, depending on how many files were cached and the PC's drive speed.

 By default, your cached files are stored for 7 days, after which they will be automatically deleted. The total file storage duration can be changed via the configuration file to a minimum of 1 day of storage. See [System Configuration Files](#) for more details.

The Encounter View

The Encounter View is the menu where the bulk of the work is performed in the Radiology Viewer. In the Encounter View, documents and images can be viewed and annotated, audio files can be dictated, and reports can be completed.



The Encounter View is made up of a number of requisite parts.

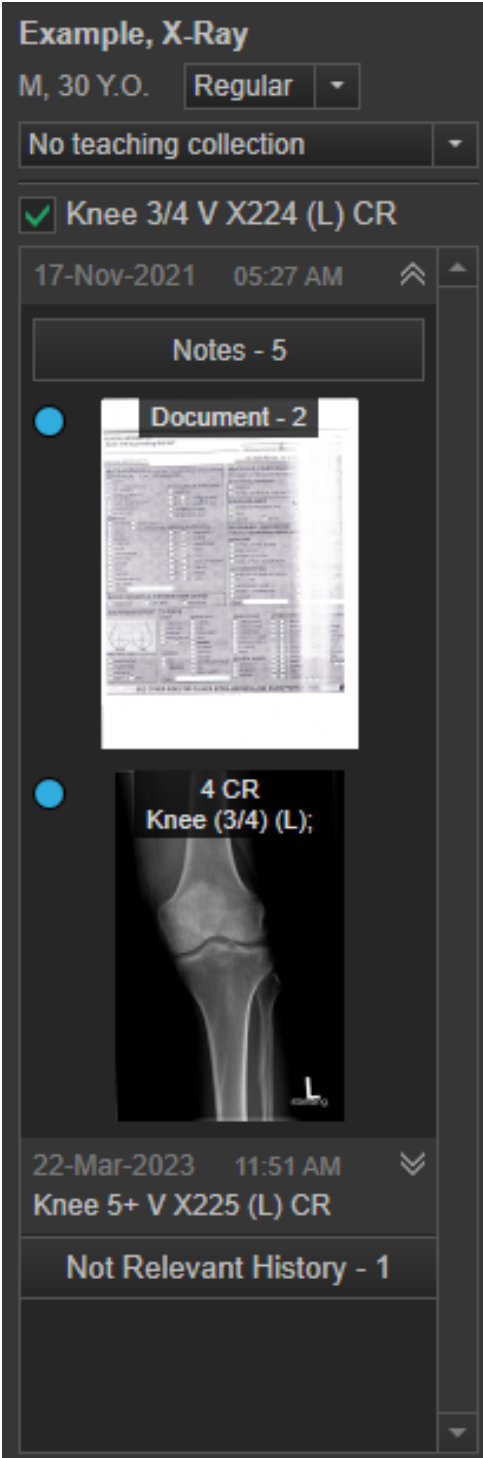
The Documents Bar	Located on the far left. Holds encounter information and shows patient documents/images from current or prior encounters.
The Main Panel	Located at the top of the screen. Holds functions for reporting, submitting dictations, and system navigation.
The Toolbar	Located at the top of the screen, directly below the Main Panel. Holds tools for viewing, measuring, and annotating images. Elements can be rearranged as needed, and most settings can also be accessed by the right-click menu.

The Viewing Field	<p>Located at the center of the screen. Documents and images may be viewed here.</p> <p>If a relevant hanging protocol has been set up for this encounter's parameters, it will automatically be applied.</p>
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More detail will be provided for each component in the sections below.

The Documents Bar

The Documents Bar is the element that holds all information about the patient, with their documents and images nested within each chronological encounter. The following information is displayed in descending order:

 <p>The screenshot shows a mobile application interface for a patient's medical history. At the top, it says 'Example, X-Ray' and 'M, 30 Y.O.' with a 'Regular' status dropdown. Below that is a 'No teaching collection' dropdown. A green checkmark indicates a 'Knee 3/4 V X224 (L) CR' encounter on '17-Nov-2021' at '05:27 AM'. Under this, there are 'Notes - 5' and 'Document - 2'. The first document is a thumbnail of a medical form. The second is a thumbnail of an X-ray labeled '4 CR Knee (3/4) (L);'. Below the X-ray, another encounter is listed: '22-Mar-2023 11:51 AM Knee 5+ V X225 (L) CR'. At the bottom, it shows 'Not Relevant History - 1'.</p>	Patient & Encounter Details
	Encounter Services
	Encounter Information & Contents
	Encounter Notes
	Encounter Files
	Prior Encounters
	Non-relevant Priors

Patient & Encounter Details

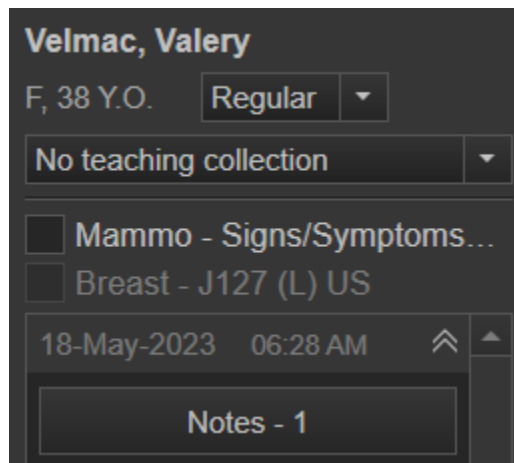
The top section will always display the patient's name, followed by their sex and age.

The current encounter's priority and (if applicable) the assigned teaching collection is displayed. Clicking on either field will allow these options to be changed.

Encounter Services

Any services assigned to this encounter will be displayed here.

If a service is readable by you, it will be displayed in white font with an interactable checkbox next to it. Note that for a service to be readable, it must be in the 'Images Attached' status and assigned to the current user. If these criteria are not fulfilled, the service will be greyed out and not interactable.

A screenshot of a patient encounter interface. At the top, the patient's name 'Velmac, Valery' is displayed in white. Below the name, the text 'F, 38 Y.O.' is shown next to a dropdown menu currently set to 'Regular'. Underneath, another dropdown menu is set to 'No teaching collection'. The main section lists two services: 'Mammo - Signs/Symptoms...' and 'Breast - J127 (L) US'. Both services have a greyed-out checkbox to their left. Below the services, the date and time '18-May-2023 06:28 AM' are displayed with up and down arrow icons. At the bottom, a box indicates 'Notes - 1'.

(fig.) a greyed-out service cannot be read, as it is either unassigned or already completed.

Each readable service contains an interactable checkbox. This controls which services are currently being read. If more than one checkbox is checked, then any saved audio dictations or reports will apply to multiple services.

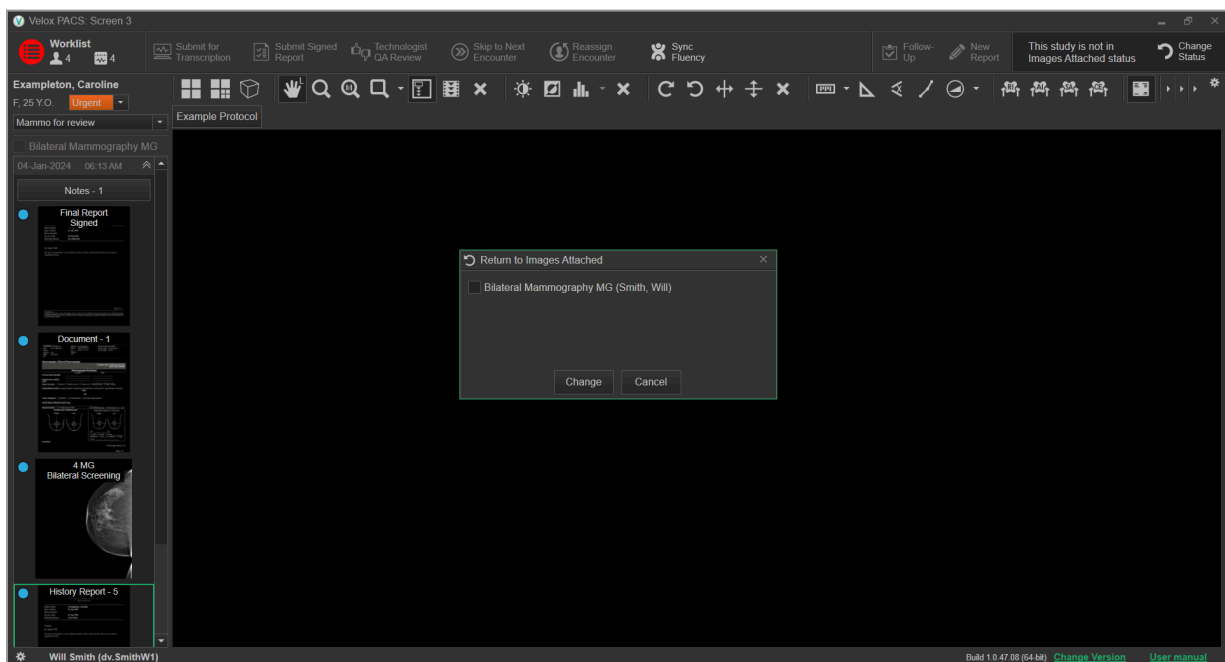
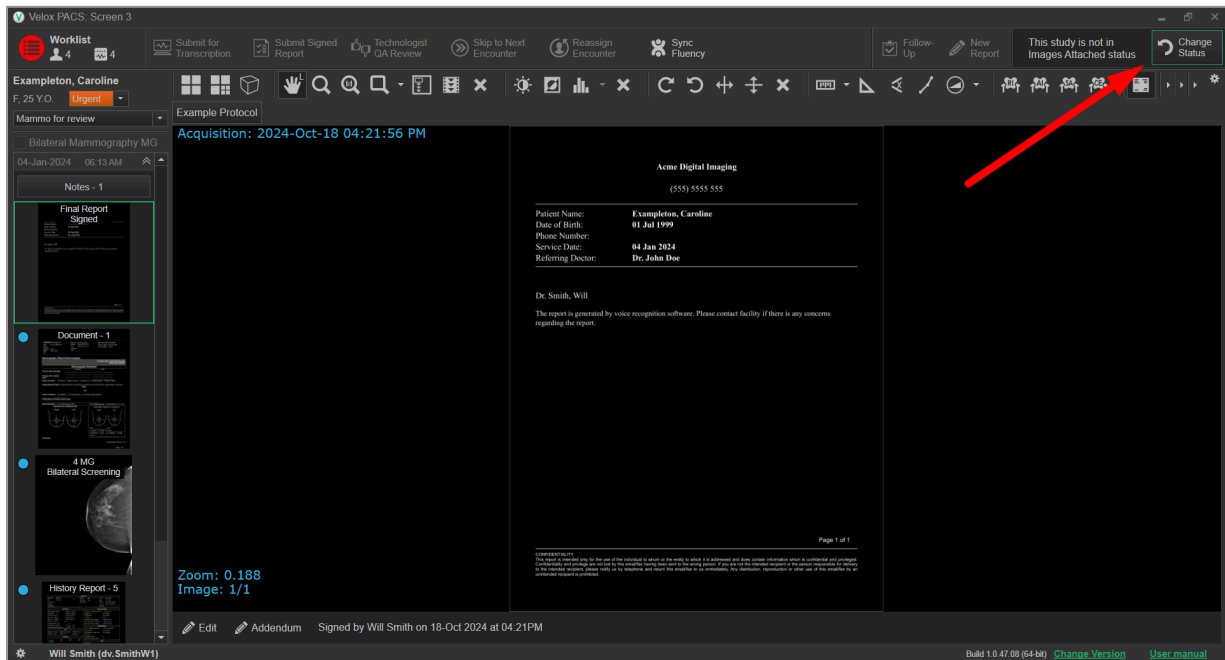
The following actions are simultaneously applied to all selected services:

- Submit For Transcription
- Submit Signed Report
- Technologist QA Review
- Reject Study

Once a service is read, rejected, or re-assigned, it will become greyed out and cannot be interacted with. If there are any remaining unread services, the process can be repeated as many times as needed until the encounter is complete.

Restoring a Service

To restore a service to an interactable state, make sure there are no remaining services to be read. From the top-right, select **Change Status** and choose which services to restore. Note that you may only restore services that have been assigned to you.



(fig.) Reverting a Finalized encounter to Images Attached.

Patient Encounters & Priors

The documents bar will hold a list of the patient's encounters in chronological order, with the currently open encounter always at the top.

Each encounter's header shows a time and date, along with a ¥ symbol if the case has been imported from an outside system. Clicking on the encounter header will expand the encounter, displaying any documents, notes, or images attached to it.

A patient's encounter history can also be seen by right-clicking an active view and selecting 'History of Patient'.

Non-Relevant Priors

If there is a prior encounter for a different body part than the one being currently read, the encounter will be marked as 'Not Relevant' and collapsed at the bottom. To see these non-relevant priors, click on the heading.

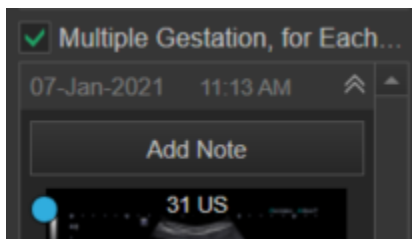
Encounter Notes

Encounter Notes can be created by any clinic staff, including receptionists, technologists, and other radiologists, and may contain important information about the patient or encounter. Notes can be added to your current encounter by clicking the Notes button directly below the encounter heading.

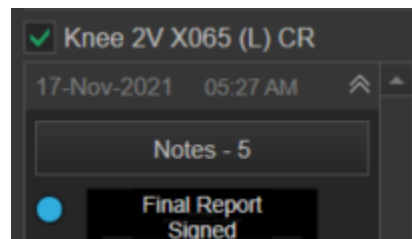
If a note is available, the 'Notes' button will display a visible counter. Clicking on the button will display the notes list. Above each note's contents, there is a label containing the date, time, and name of the user who created the note. If there are no notes, the button will read 'Add Note' instead and will immediately open the note entry box if clicked.

To create additional notes, the 'Add Note' button at the bottom of the Notes list will allow a new note to be typed.

If you are viewing historical encounters, the Notes button will only be displayed if there is a note to see. Notes on prior encounters are read-only and cannot be added.



(fig. 1) Notes button when the encounter does not have a prior note.



(fig. 2) Notes button with total number of encounter notes displayed

Viewing Files

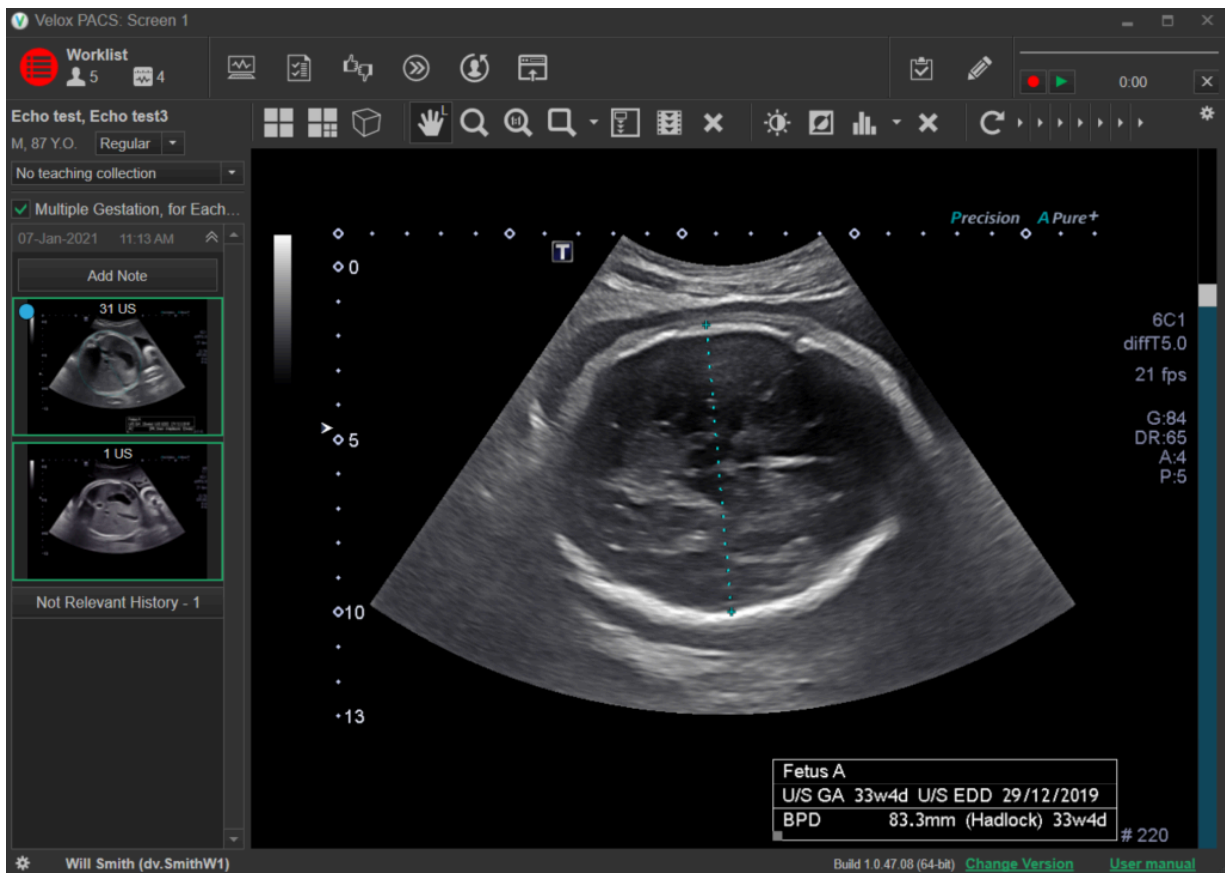
To view a document or image, click and drag the file into an available view.

This can be performed by placing your mouse pointer over a file of your choice. Click and hold down the left mouse button while moving the cursor into an available view. Release the mouse cursor to display the file.

When scrolling through files, the Scroll Type rules will be followed. These can be changed from the Settings menu.

If a file has not been viewed yet, then the file thumbnail will display a blue dot in the top-left corner. Once all files within a series have been viewed, this blue dot will disappear.


The scroll bar will also show which image in the series has not yet been viewed, highlighting unseen sections on the scroll bar blue.

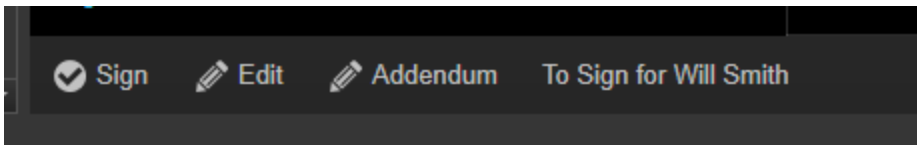


(fig.) The scroll bar (right) displays any unviewed image in a series, while the visibility indicator (left) will note if the user has not viewed the series in full.

Supported Documents and File Types

The Radiology Viewer supports a number of file types, including proprietary in-system electronic files. The Radiology Viewer may display the following types of discretely organized files:

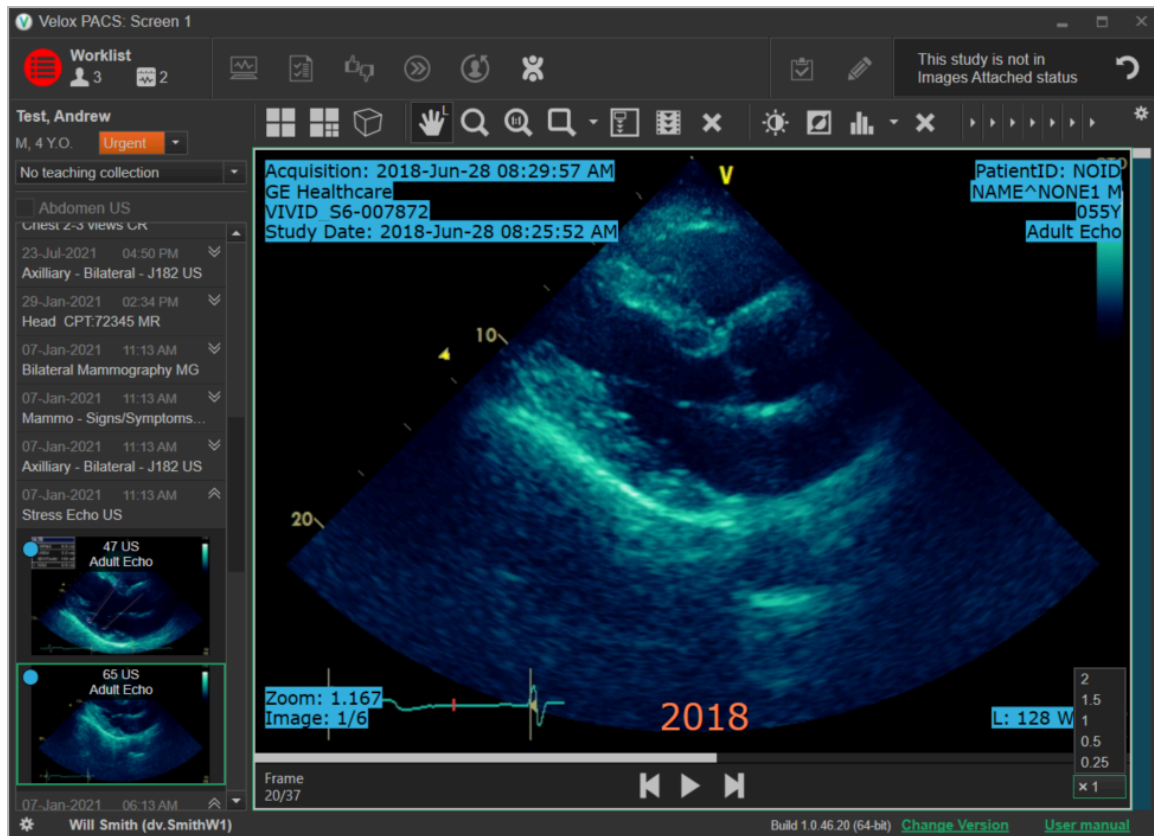
DICOM Images	<p>Supports standard DICOM images (.dcm files).</p> <p>Some files feature special viewing options, such as Cineloop files. SR (structured reporting) data files are supported and displayed in a table format by default.</p>
Documents	<p>Documents uploaded by the clinic. Files in this category may be either requisition sheets or worksheets.</p> <p>By default, requisition sheets will be displayed before worksheets in the Documents list. This priority can be changed via the 'Sorting and Grouping Images' settings.</p> <p>Supported file types: <i>png, jpg, pdf, doc, docx</i>.</p>
Final Reports	<p>Electronic reports assigned to the current encounter. Reports can be edited within the Viewer and can come in three statuses:</p> <ul style="list-style-type: none">• Draft• To Sign• Signed <p>If a report has been saved as a draft, it must be signed off before it can be sent to the referrer.</p> <div data-bbox="776 1276 1081 1598"></div> <p>Any report labelled 'To Sign' can be signed by dragging it into the View Field and clicking the 'Sign' button at the bottom left.</p>

	 <p>Reports can also be in non-editable formats, such as <i>png</i>, <i>jpg</i>, <i>pdf</i>, <i>doc</i>, and <i>docx</i>.</p>
History Reports	Reports automatically retrieved from prior relevant encounters.
Electronic Worksheets*	<p><i>*Requires the 'Enable Electronic Worksheets' setting to be enabled.</i></p> <p>Electronic worksheets will be separated from the documents list and can be edited at any time by dragging the file into a view and selecting 'Edit'.</p> <p>New worksheets can be opened by selecting 'New Worksheet' at the top-right section of the main panel.</p> <p>For more information, see Creating & Editing Electronic Worksheets.</p>

Cineloops

Note: This is not to be confused with the 'Cine' button on the toolbar.


If the image viewed is a cineloop, there will be playback controls at the bottom-middle of the page.



A frame indicator at the bottom-left corner will show how many frames are remaining in the current image.

Cineloop playback can be paused or resumed with the **⏸** button in the middle. The arrows on either side will set the next or previous frame, respectively.

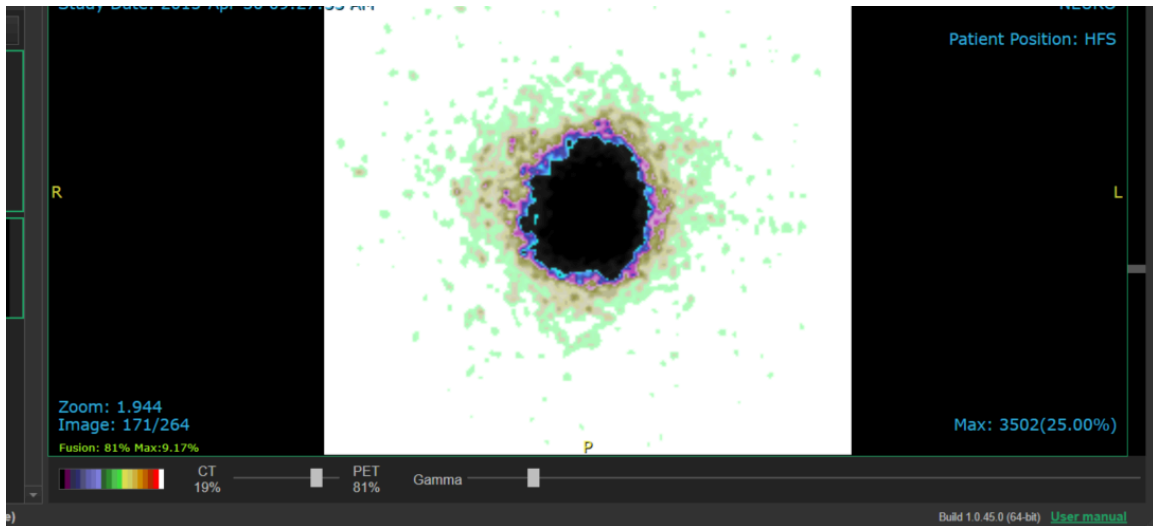
The frame playback speed can be controlled via the dropdown menu at the bottom right.

 By default, cineloops will automatically play when viewed and automatically repeat. This behavior can be changed via the 'Cine Loop' option within the settings menu.

To separate cineloops from other images in the series, select **Settings > Sorting & Grouping Images > Cine Loops as a Separate Series**.

PET-CT Images

PET-CT images will show additional settings at the bottom of the image if the PET-CT panel has been enabled. This function can be enabled from **Settings > Other Settings > Display settings > Show PET-CT Panel**. The default color scheme can also be set from this menu.




The PET-CT panel will display the current fusion & max levels. Additionally, it will allow for the selection of color scheme, the PET-CT ratio, and the gamma level using the dropdown & slider settings within the PET-CT panel.

Image Overlays

Images will contain overlays, displaying information from the DICOM tags.

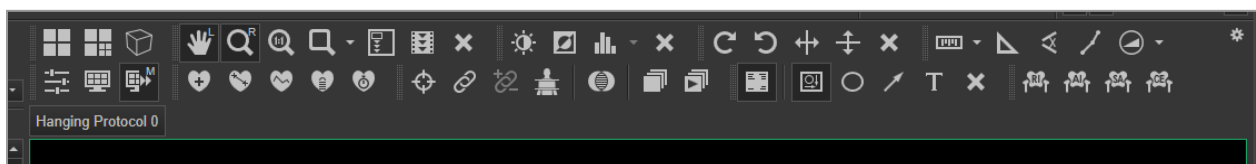
A DICOM tag typically contains demographic or configuration settings set by the originating machine. The Radiology Viewer will automatically display certain tags.

The displayed tags will vary depending on the laterality being viewed. Overlays can be toggled on/off at any time by using the “Toggle Image Overlays” tool.

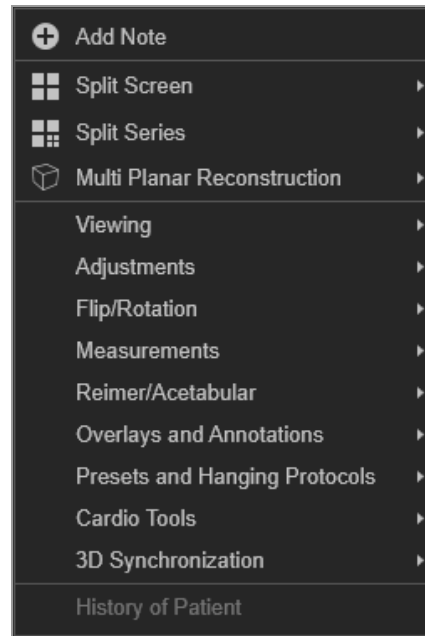
 To change what data is displayed, see [Overlay Settings](#) for more information.

The Toolbar

The toolbar contains a variety of tools to help view and dictate cases and is located at the top of the viewing window. Most toolbar elements can be rearranged, removed, or hidden as needed.



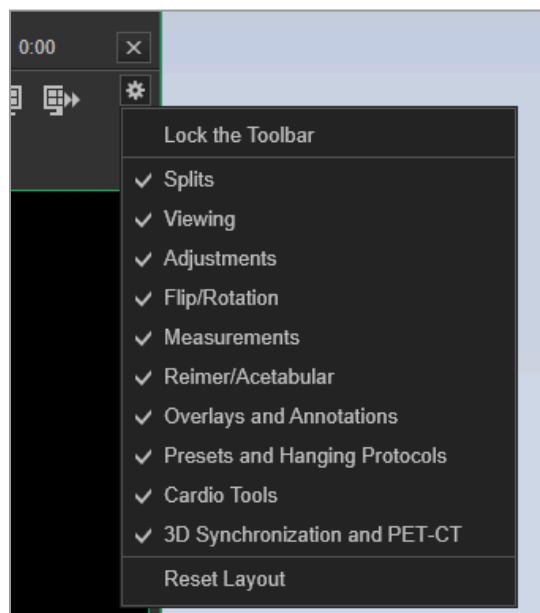
Alternatively, some options can be accessed by right-clicking within the viewing field.



Toolbar Settings

The toolbar settings menu can be used to hide unused toolbar settings, as well as rearrange elements in a preferred order. These settings can be accessed via the cog icon on the right-hand side of the toolbar.

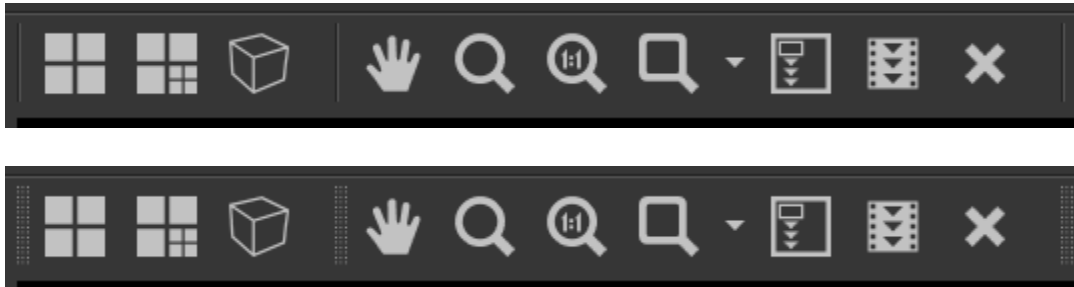
Toolbar changes are applied per screen, and can be used to customize your multi-monitor configuration to best suit your needs.



Rearranging the Toolbar

To rearrange toolbar categories, deselect 'Lock the Toolbar'.

If the toolbar is unlocked, the left border of a category will now show a dotted line. This dotted line can be click-and-dragged using the mouse cursor to be moved anywhere along the toolbar.



(fig.) an unlocked (top) vs locked (bottom) toolbar.

If there is not enough space to fit a category in its current position, categories will be condensed. If a category is truncated, clicking on the adjacent dropdown icon will display any hidden icons.

Toolbar items may also be moved up or down to create additional rows on the toolbar. This can be used to ensure all items are visible without requiring icons to be collapsed.

Hiding Toolbar Items

Unneeded toolbar items can be hidden as necessary by clicking on a category.

To hide a toolbar group, select the group name from the toolbar settings list. To return a hidden category to view, select it from this list to be checked off again.

If there are any toolbar functions that are not needed, it is recommended to hide them from view.

Toolbar Items

The toolbar contains a number of options to better view images and read encounters.

Settings generally fall into two types, differing by how they are used:

Standard Tools	Once selected, tools immediately apply settings to the current view. Can sometimes be toggled on/off.
Mouse Tools	<p>Once a tool is selected, the tools are applied and controlled with a defined mouse button.</p> <p>The default mouse button used for each tool can be reassigned via the 'Mouse Tools' settings menu.</p>

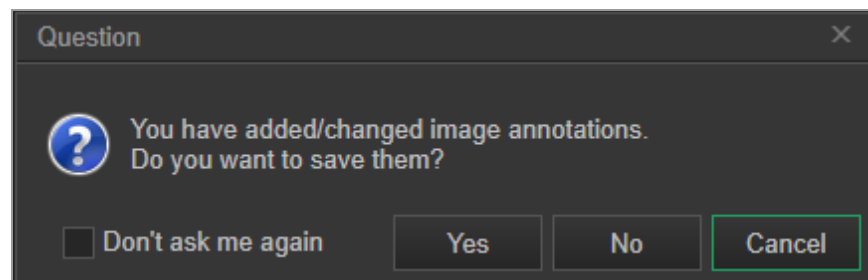
Some items will contain an adjacent dropdown menu. Choosing an option from an adjacent dropdown menu will generally modify the behaviour of the tool.


Drawing Tools

Tools under certain categories, such as the Annotations menu, or measurement tools (Measurements, Cardio Tools, and Reimer/Acetabular), are considered 'drawing' functions and will allow the user to place measurements or shapes onto an image.

These drawings may be freely adjusted after placement using the mouse cursor, by either moving the vertices of the shape to adjust its shape, or translated by moving the shape's edges. To clear a drawing in progress, press the *Escape* key. Many measurement options will also feature a label, which can be moved as needed.

If any drawings have been applied, the user will be prompted to save their drawings when closing the current encounter. Saved drawings will be visible and editable for anybody viewing the image in the future. Drawings do not directly affect the image contents and can be interacted with separately.

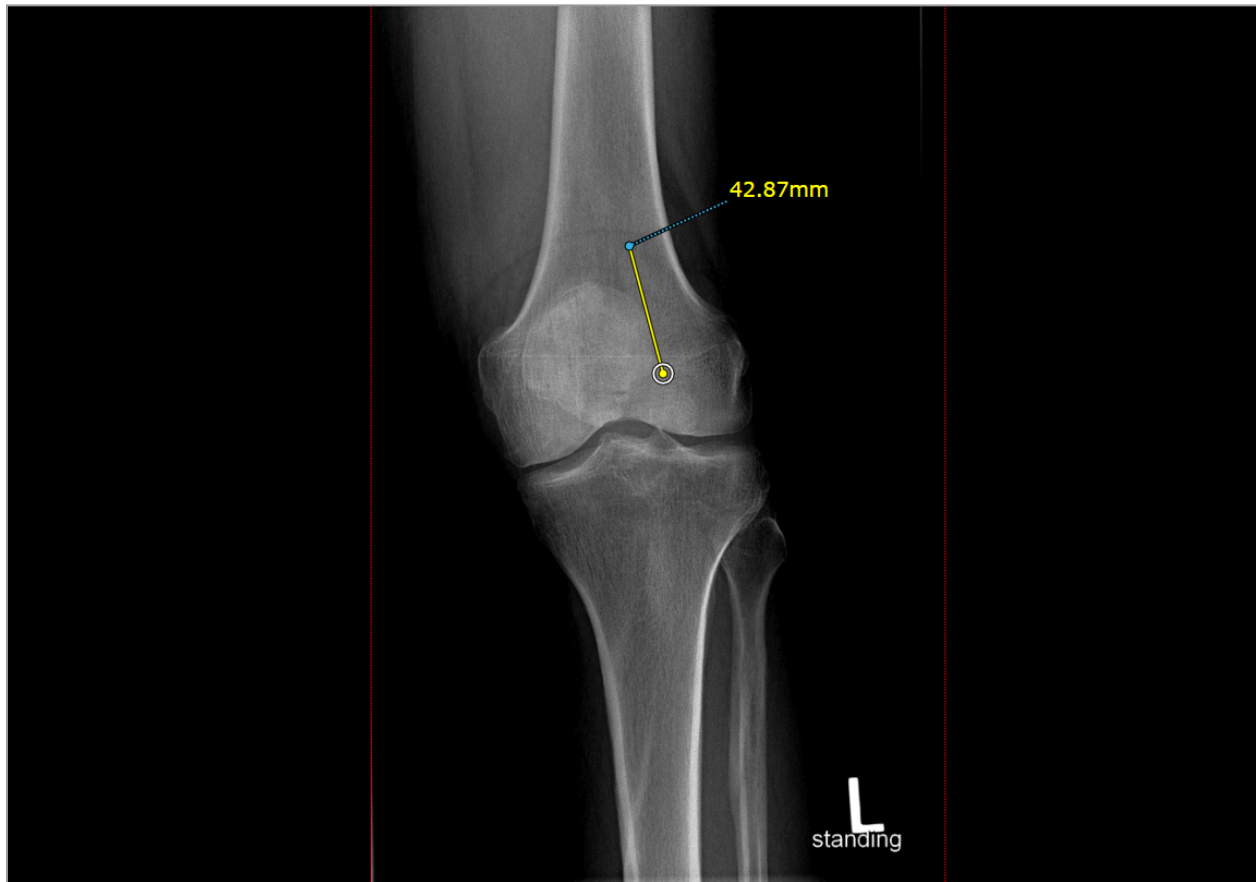


 If the 'Save Measurements as Annotations' setting is disabled, measurements will no longer be counted as annotations for this purpose.

Drawings may be deleted from an image by:

- In groups, using the 'Delete All Annotations' tool (or equivalent shortcut).
- Individually, right-clicking an image and selecting 'Delete Drawing'.
- Chronologically, using the 'Delete Last Measurement' shortcut (*Delete* key on the keyboard by default).

Drawings may be shown or hidden at any time with the 'Show or Hide Image Annotations' tool. This does not modify or affect the drawings.



While a measuring tool is being placed or highlighted, the borders of the image will be outlined. Units and scaling are only defined within the bounds of the image. If a unit is undefined, the measurements will default to pixels (px).



The scale of the image is defined within the image tags by the imaging device. Image scale can be manually calibrated by the Calibrate measurements tool under the Measurements dropdown.

Split Settings






Split Screen

Allows the currently highlighted view to be split into multiple equal segments, as chosen by the user. The number of views created is chosen by selecting a dimensional grid for up to 4 x 4 windows.

These split segments can be independently populated with images and manipulated freely.	
	Split Series
<p>Allows the currently highlighted view to be split into multiple equal segments, as chosen by the user. The number of views created is chosen by selecting a dimensional grid for up to 4 x 4 windows. A split series can be created within a split screen if required.</p> <p>These split segments will display items of the same series in each view, in sequential order. Scrolling will bring the next image set from this series into view. Viewing tools (i.e., Zoom, Pan, etc.) will be applied to all images in a set.</p>	
	Multi-planar Reconstruction
<p>Will apply the selected angle or selected projection type to the currently highlighted view.</p> <p>Selecting “No Reconstruction” will remove any angles or projections from the highlighted view.</p>	

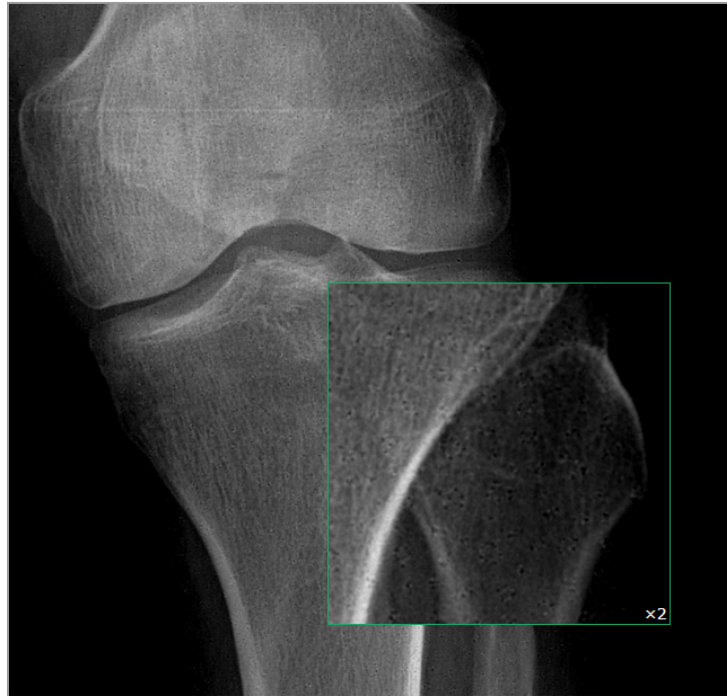
Viewing

	Pan
Allows the view to be moved by holding down the applied mouse button and dragging the cursor.	
	Zoom
Allows the view to be zoomed in/out by holding down the applied mouse button and dragging the cursor up/down.	
	1:1 True Scale
Immediately applies a 1:1 scaling onto the highlighted view. This scaling is defined by the image’s DICOM tags.	



Magnifying Glass

When holding down the applied mouse button, a section of the image is magnified. The current zoom level is displayed at the bottom-left of the magnification region.





[dropdown]

The adjacent dropdown menu can be used to change the zoom level and the size of the magnified area.






Quadrant Zoom

When applied to a view, enlarges the file to its original size (1x Zoom) and divides the image into a number of quadrants. Scrolling through an image to

which this tool is applied will change which quadrant is being viewed.	
	Cine
Play back your current series in sequential order and rapid succession, similar to a cineloop. Playback will continue until this option is clicked again or another operation is applied.	
	Reset Position
Resets all position changes to a default state.	

Adjustments

	Brightness/Contrast
Adjusts the brightness and contrast of an image.	
To use: Hold down the applied mouse button and move it in any cardinal direction. Moving the cursor left/right will increase/decrease the image brightness, respectively. Moving the cursor up/down will increase/decrease the image contrast.	
	Invert
Inverts the colours in the highlighted view.	
	Window/Level
Adjusts the window and level settings of an image.	
To use: Hold down the applied mouse button and move it in any cardinal direction. Moving the cursor left/right will increase/decrease the image windowing, respectively. Moving the cursor up/down will decrease increase/decrease the image level.	

[dropdown]

Some images may come with prespecified window/level presets in the DICOM tags. Any defined presets will be listed here, and the appropriate window/level settings will be applied when selected. This is not to be confused with the user-defined 'Presets' menu.

**Reset Image Adjustments**

Resets all image adjustments to a default state.

Flip/Rotation

**Rotate Left**

Rotates the current view 90 degrees to the left.

**Rotate Right**

Rotates the current view 90 degrees to the right.

**Flip Horizontally**

Mirrors the current view horizontally.

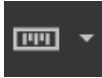
**Flip Vertically**

Mirrors the current view vertically.

**Reset Position**

Resets all position changes to a default state.

Measurements



Measurement

Creates a line to measure the distance between two points on an image. Right-click the placed measurement to delete it.

To use:

Hold down the applied mouse button to place your starting point, and release it to place your endpoint.

If an adjustment is required after placing the length measurement, the vertices on the line can be moved with the mouse as needed. The line itself can be dragged to move the shape in its entirety. Additionally, the measurement label can be moved as needed to avoid obscuring the image.

The lengths and units of measurement will be based on image tags unless otherwise calibrated. The adjacent dropdown can be used to recalibrate the length of items.



[dropdown] Calibration Tools

See Calibration Tools option below.



Calibration Tools

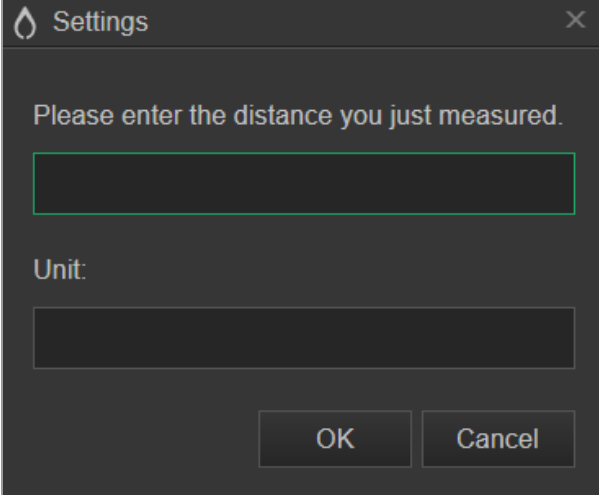
Calibrate Measurements:

Allows the scale and units of an image to be defined.

To use:

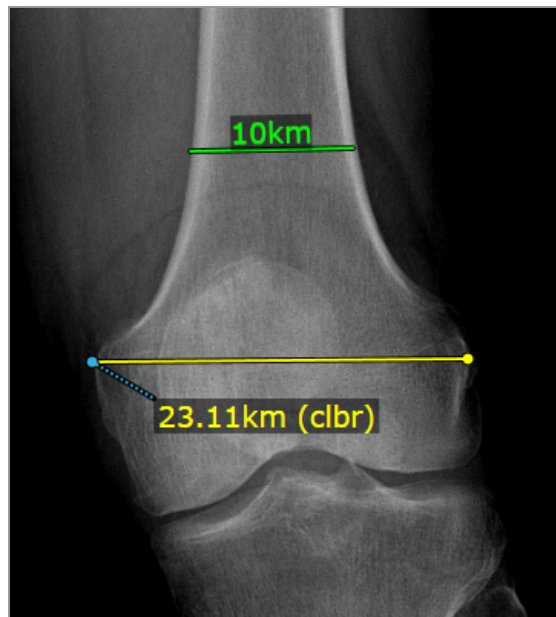
Hold down the applied mouse button to place your starting point, and release it to place your endpoint.

The calibration settings window will appear, allowing the distance and unit of measure to be entered. This scaling will be applied to all future measurements made.



A screenshot of a 'Settings' dialog box. The title bar says 'Settings' with a close button. The main text says 'Please enter the distance you just measured.' followed by a text input field. Below that is the label 'Unit:' followed by another text input field. At the bottom are 'OK' and 'Cancel' buttons.

Any measurements made under a custom calibration will use the suffix (clbr).



Delete Calibration:

Resets the image to default calibration settings as defined within the DICOM tags.

**Angle**

Creates two connected lines, measuring the angle in between. Right-click the placed measurement to delete it.

To use:

Hold down the applied mouse button to place your starting point, and release it to place your midpoint. Click again to place your endpoint.

If an adjustment is required after placing the angle measurement, any vertices on the line can be moved with the mouse as needed. The line itself can be dragged to move the shape in its entirety. Additionally, the angle label can be moved to avoid obscuring the image.

**Cobb Angle**

Creates two connected lines, measuring the angle in between. Right-click the placed measurement to delete it.

To use:

Hold down the applied mouse button to place your starting point, and release it to place your midpoint. Click again to place your endpoint.

If an adjustment is required after placing the angle measurement, any vertices on the line can be moved with the mouse as needed. The line itself can be dragged to move the shape in its entirety. Additionally, the angle label can be moved to avoid obscuring the image.

**Path Length**

Creates a line of any length/shape and measures the length. Right-click the placed measurement to delete it.

To use:

Hold down the applied mouse button to place your starting point, and release it to place your second point. Each click will now create an additional connected vertex. Double-click to finish drawing the shape.

If an adjustment is required after placing the path length measurement, any

vertices on the line can be moved with the mouse as required. The line itself can be dragged to move the shape in its entirety. Additionally, the measurement label can be moved to avoid obscuring the image.



ROI Measurement

Creates a circle with an adjustable radius to measure an ROI (region of interest). Displays information about the max/mean US values, ellipsoid diameter, area, and volume.

To use:

Hold down the applied mouse button to place the ROI measurement onto the image. Use the adjacent dropdown to change the diameter of the ellipsoid.

[dropdown] Ellipsoid Diameter:

Displays a slider that allows the ROI measurement ellipsoid to be adjusted in size.

Reimer/Acetabular tools



Reimer Index

Allows for the measurement of the Reimer index on an image. Right-click the placed measurement to delete it.

To use:

Hold down the applied mouse button to place your starting point, and release it to angle your first line. The circle can now be placed and set to any size needed. Lastly, apply the perpendicular line to finalize your measurement.

The placed measurement can be dragged to move around as needed. Additionally, the measurement label can be moved to avoid obscuring the image itself.




Acetabular Index




Allows for the measurement of the Acetabular index on an image. Right-click the placed measurement to delete it.



Sharp Angle

Allows for the measurement of the Sharp angle on an image. Right-click the placed measurement to delete it.	
	Center Edge Angle
Allows for the measurement of the center edge angle on an image. Right-click the placed measurement to delete it.	

Overlays and Annotations

	Image Overlays
Toggles the display of image overlays on/off.	
Image overlays will typically contain information taken from the image's DICOM tags.	
	Show/Hide Annotations
Toggles the display of image annotations on/off. This includes any items under the Measurement tools, Reimer/acetabular tools, Cardio Tools, or Annotation tools.	
Note that this does not delete any information but temporarily hides it from view.	
	Ellipses
Allows for a circle of any shape/size to be drawn onto the image. Right-click the placed annotation to delete it.	
<p>To use:</p> <p>Hold down the applied mouse button to place your starting point, and release it to size out your ellipse.</p> <p>Once placed, the ellipse can be adjusted as needed. A midpoint can be dragged to change the length and orientation of the shape, while the shape can be moved by dragging the line radius or the midpoint indicator.</p>	



Arrow

Allows for an arrow shape to be drawn onto the image. Right-click the placed annotation to delete it.

To use:

Hold down the applied mouse button to place your starting point, and release it to place your endpoint.

If an adjustment is required after placing the arrow, any vertices on the line can be moved with the mouse. The line itself can be dragged to move the arrow in its entirety.



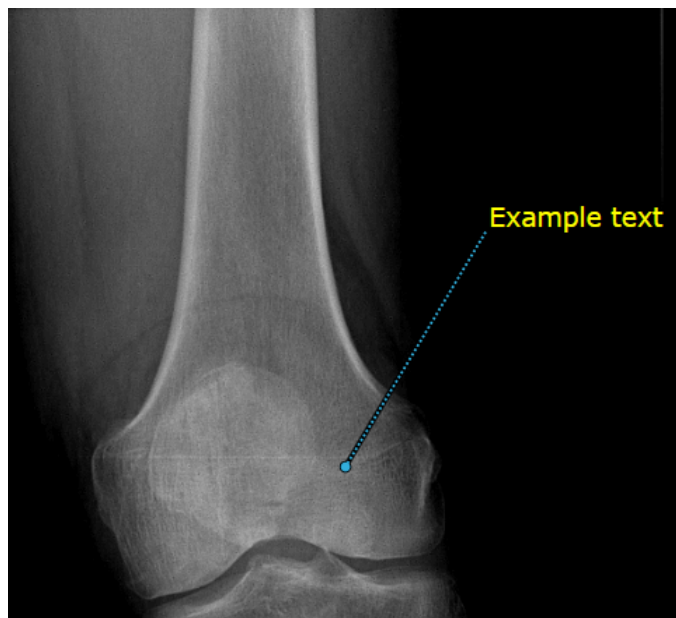
Text Annotation

Allows for text to be placed onto the image. Right-click the placed annotation to delete it.

To use:

Click the applied mouse button to place your starting point. Then, begin typing a message of your choice. To stop typing, use the Enter key.

After placing the text annotation, the text box or the point label can be moved to any position to avoid obscuring the image.





Delete All Annotations

Deletes all annotations on the current image. This includes any items under the Measurement tools, Reimer/acetabular tools, Cardio Tools, or Annotation tools.

Presets and Hanging Protocols



Presets

Allows for the selection of user-defined presets, which can apply various parameters to the current image.

Presets can be assigned from the Tool Presets menu within the Settings. See [Tool Presets](#) for more information.



Hanging Protocols

Allows for the selection of user-defined hanging protocols, which can determine the default layout of an encounter.

Relevant hanging protocols (based on the study matching parameters) will be listed at the top, although non-relevant protocols can still be selected.

Hanging protocols can be assigned from the hanging protocols menu within the Settings. See [Hanging Protocols](#) for more information.



Scroll Hanging Protocol

Goes to the next hanging protocol in sequence.

To use:

After selecting this tool, press the applied mouse button to go to the next hanging protocol.

Cardio Tools



Doppler Velocity

Measures the velocity of a Doppler reading. This tool will display a warning message if no measurement data is available.



Doppler Deceleration

Measures the deceleration of a Doppler reading. This tool will display a warning message if no measurement data is available.



Doppler Trace

Measures the deceleration of a Doppler reading. This tool will display a warning message if no measurement data is available.



Area and Volume

Measures the length, area, and volume of a user-defined shape on an image.

To use:

Hold down the applied mouse button to place your starting point, and release it to place your second point. Each click will now create an additional vertex. Double-click to finish drawing the shape.

If an adjustment is required after placing the path length measurement, any vertices in the shape can be moved with the mouse as required. The shape itself can be dragged to be moved in its entirety. Additionally, the measurement label can be moved to avoid obscuring the image.



Doppler Time

Measures the Doppler time. This tool will display a warning message if no measurement data is available.

To use:

Hold down the applied mouse button to place your starting point, and release it to place your second point. The distance between these two points will be used for the Doppler time calculation.

3D & Synchronization Tools



3D Cursor

Enables controls for the 3D cursor on image sets. This cursor is synchronized between related 3D views, and will scroll images when moved.

To use:

Upon activating this tool, a 3D cursor will appear in all relevant image views. Clicking & dragging the mouse will move the cursor. Images in alternative views will synchronize to show the current 3D slice you are viewing.



Synchronize Stacking

Enables/disables synchronization of images that were acquired in the same planes.



Synchronize Stacking List

Marks the currently selected view. Controls, such as scrolling, are synchronized for any marked views. This tool is only available if Synchronize Stacking is active.

To use:

- 1) Highlight a view with the mouse cursor and apply the **Synchronize Stacking List** tool; a paperclip icon will appear in the upper left corner.
- 2) Highlight a different View and apply the **Synchronize Stacking List** tool again.

Views marked with a paperclip icon will now be synchronized while scrolling. Can be applied to multiple views as needed.





Reference Lines

Creates cross-reference lines to help view series with different image planes.

They appear as yellow lines that mark the intersection of the image planes. Cross-reference lines are always displayed on inactive series and without a line on active series (which will scroll).



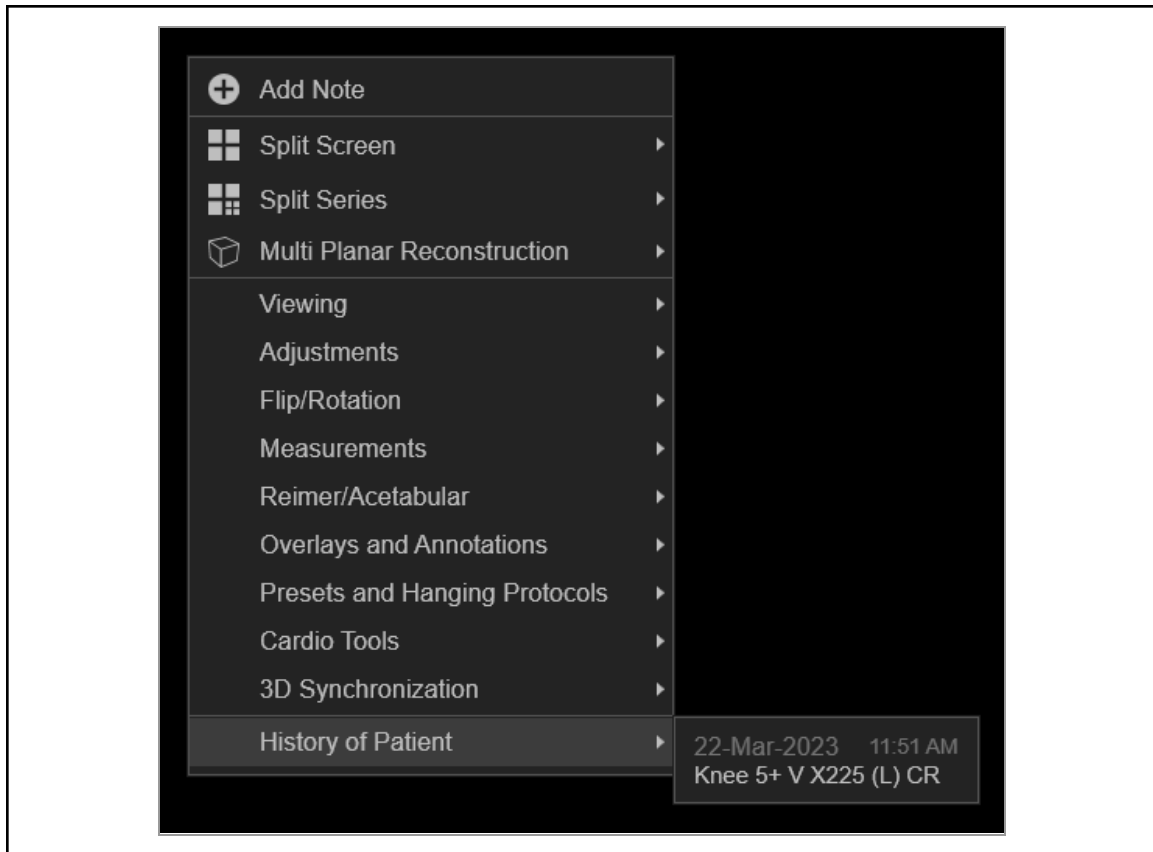
PET - CT Adjustments

The combined CT image is superimposed on the PET image to help identify areas of tissue with increased bio-activity.	
	Stack Series
<p>Scrolls through a series of images using the mouse cursor.</p> <p>To use: Select the Stack Series mouse tool. While viewing an image series, hold down the mouse button and move the cursor horizontally to scroll through images.</p>	
	Stack Frames
<p>Scrolls through Cineloo DICOM frames.</p> <p>To use: Select the Stack Frames mouse tool. While viewing a multi-frame cineloo, hold down the mouse button, then move the cursor horizontally to scroll through frames. Playback is paused when the tool is applied.</p>	

Other

This option is only available via the right-click menu.

Patient History
Lists the patient's relevant history. Selecting an item from this list will immediately open the historical encounter in the patient history bar.



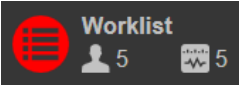
Tabbed Hanging Protocols







Hanging Protocols must be set up first before they can be used. See [Hanging Protocols](#) for complete information. If a matching hanging protocol is found, it will be added as a tab below the toolbar in the Encounter view, and the first hanging protocol will be applied by default.


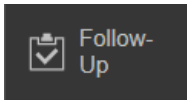
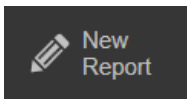
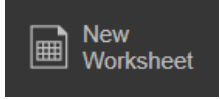
The tabs can be used to quickly switch between hanging protocols, instantly changing your view to predefined settings.

The Main Panel

The main panel can be hidden on any individual screen via the settings menu. To hide the main panel, go to Settings > Display > Main Panel.

<p>Open Worklist</p> 	<p>Clicking here opens the worklist window on top of the current screen.</p> <ul style="list-style-type: none"> • The color will change to red if there is an unread stat-priority encounter on the worklist.
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	<ul style="list-style-type: none"> • The profile icon will show how many encounters are currently on the worklist. • The chart icon will show how many procedures are currently on the worklist.
Submit for Transcription  Submit for Transcription	<p>Submits the current audio recording for transcription by a typist. If there is no recorded audio, a warning will be given.</p> <p>If 'Open Next Encounter After Submission' is enabled, the next encounter in the worklist will be opened.</p>
Submit Signed Report  Submit Signed Report	<p>Submits the current report as signed.</p> <p>If 'Open Next Encounter After Submission' is enabled, the next encounter on the worklist will be opened.</p>
Technologist QA Review  Technologist QA Review	<p>Allows the reading physician to leave a quality assurance comment on the technologist's work and/or to reject a study with issues.</p> <p>See Rejecting an Encounter for more information.</p>
Skip to Next Encounter  Skip to Next Encounter	<p>Opens the next encounter on the worklist without making any changes to the current encounter. You may be prompted to save any incomplete work.</p>
Reassign Encounter  Reassign Encounter	<p>Allows the current encounter to be reassigned to a different person or worklist.</p> <p>Clicking here will display any shared worklists or other Reading Physicians. Selecting one will reassign the encounter to the selected worklist.</p>
Sync Fluency*  Sync Fluency	<p><i>* The 'MModal Dictation' plugin must be enabled for this option to appear. This option will not work properly unless a compatible version of MModal Fluency Direct has been installed.</i></p> <p>Clicking this will reload any integrated copies of MModal</p>

	Fluency Direct, resolving common synchronization errors.
Sync PowerScribe*	<p><i>* The 'PowerScribe 360' plugin must be enabled for this option to appear. This option will not work properly unless a compatible version of PowerScribe 360 has been installed.</i></p> <p>Clicking this will reload any integrated copies of PowerScribe 360, resolving common synchronization errors.</p>
Send to MagView*	<p><i>* The 'MagView' plugin must be enabled for this option to appear. This option will not work properly unless a compatible version of MagView has been installed.</i></p> <p>Clicking this will transfer your current case to the MagView application.</p>
Open in SWODIN* 	<p><i>* The 'SWODIN' plugin must be enabled for this option to appear. This option will not work properly unless SWODIN has been installed.</i></p> <p>Clicking this will open your current encounter in the SWODIN application.</p>
Follow-up 	<p>The Follow-up window will open, allowing a follow-up request to be created. This request can then be processed by your reception staff.</p> <p>See Creating a Follow-up Request for more information.</p>
New Report 	<p>Open the Report Editor menu.</p> <p>See Electronic Reports for more information.</p>
New Worksheet* 	<p><i>* The 'Enable Electronic Worksheet Feature' setting must be enabled for this option to appear.</i></p> <p>Open the Worksheet Editor menu.</p> <p>See Electronic Reports for more information.</p>
Audio Recording Tools	<p>This section contains tools for recording and playing back audio.</p> <p>See Audio Dictation for more information.</p>

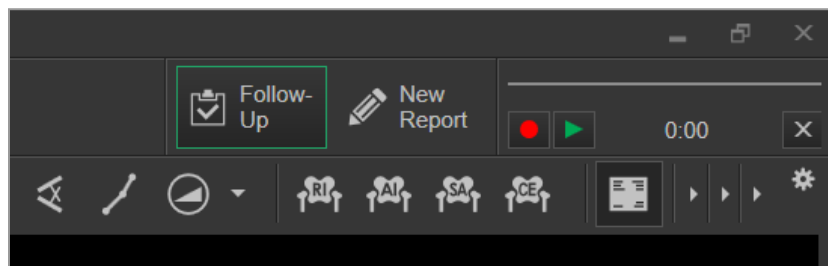


Creating a Follow-up Request

The Radiology Viewer allows users to request a follow-up examination for any patient being viewed. Creating a follow-up request in this manner will notify the clinic's reception staff with a pre-populated request, allowing the clinic to efficiently book return patients.

To create a follow-up request, proceed with the following steps:

- 1) Click 'Follow-up Request' on the main panel. The follow-up request menu window will open.



- 2) Select the service you would like to request a follow-up for from the service list below.
- 3) *Optionally*, select a due date for the follow-up visit via the dropdown at the top-left corner. The default time is 'ASAP', but a number of default time periods are available. The calendar selector nearby allows you to customize a due date.
- 4) *Optionally*, leave a note about your request in the 'Notes' field.
- 5) *Optionally*, change the follow-up's referrer to a different referrer.
- 6) Click 'Save' to submit your request. The follow-up request has been created and will appear in the clinic's inbound referrals queue.

Creating & Editing Electronic Worksheets



To edit an electronic worksheet, the appropriate option must be enabled. This can be done by accessing **Settings > Enable Electronic Worksheet Feature**.

If the Enable Electronic Worksheet feature is activated, new worksheets can be created based on your clinic's available electronic templates, or any electronic worksheets saved to the encounter can be edited.

*To edit an existing electronic worksheet in the encounter, place it into an available view. Then, select **Edit** from the bottom-left corner of the view.*

*To add a new electronic worksheet to the encounter, select **New Worksheet** from the top-right of the Action Bar. This will allow you to choose an editable format based on your clinic's existing electronic worksheet templates.*

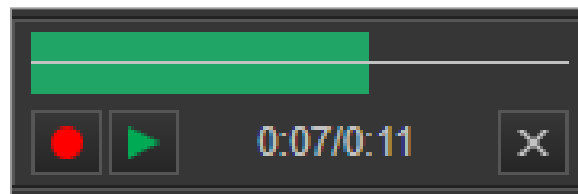
After selecting your worksheet template, fill it in, and select **Save** to save your worksheet or **Discard** to cancel your changes. To return to the list of possible templates, select **Return to List**.

Reading Encounters

Reading with Audio Dictation

Audio Dictation is typically used when the clinic employs a transcriptionist to complete the report. Audio recording tools are located at the right-most side of the Main Panel.


Selecting **Submit for Transcription** will submit any recorded audio to the currently selected services. Once a service has been submitted, this audio recording cannot be played back.



Recording

Clicking the Record button (●) will begin recording audio. While recording, the top bar will indicate your microphone audio volume and the timer will indicate how much time has elapsed.

While recording, clicking Stop Record or Stop Playback (■/⏏) will stop recording audio.

 The microphone used for your audio recording is determined by your Windows default recording device.

If you are having issues with audio input, try checking your Windows audio recording settings and ensuring the microphone is detected and set as the default recording device.

Playback

After a recording has been made, clicking Play (▶) will allow for audio playback from any given point. The timer will display the current timestamp, along with the total time remaining. Additionally, the top bar will act as a progress meter. Clicking anywhere on the top bar will immediately seek to the defined section.

If the Record is pressed while the progress bar is at a midpoint, the new audio recording will be inserted into the current point.

To stop playback, press the Pause or Stop Playback button (⏏).

Deleting a Recording

To delete a recording, click the Delete Audio button (✕) at the bottom-right of the recording tools.

Submitting Audio Dictations

Once the audio dictation is complete, it can be submitted to the transcriptionist.

- 1) Check off the services you'd like to assign the dictation to on the Documents Bar.
- 2) Select **Submit for Transcription**.

The selected services will be set to 'Dictated' status and immediately sent to the transcription queue.

! **Submit Signed Report** and **Reject Study** will save recorded audio to the service but will not automatically submit it to a transcriptionist.


This can be useful if an audio record is required to accompany a report or rejection.

Philips SpeechMike Compatibility

If a compatible Philips SpeechMike is connected, certain audio recording shortcuts are available by default.

On SpeechMike, using the Record/Stop button (or equivalent slider) will initiate a recording in the Radiology Viewer. Pressing the Record/Stop button again will stop the recording.

If preferred, the Radiology Viewer can be set to record only while the Record/Stop button is held down. In this case, releasing the button will stop the recording.

 SpeechMike audio recording options can be changed within your Velox settings. Go to the Settings menu > Other Settings > Others, under the 'SpeechMike' section.

To enable hold-to-record, uncheck the 'Continue Record on Record Button Released' box.

To disable SpeechMike audio recording shortcuts entirely, uncheck the 'Enable SpeechMike Record/Play Commands' box.

When using a SpeechMike, it is recommended to install the Philips SpeechControl software, as it will provide a number of useful software utilities for your microphone.

Reading with Electronic Reports

Electronic Reports can be accessed using the 'New Report' function or by editing an existing report.

The Report Editor

New Report

Discard Submit for Transcription Submit Signed Report Save as Draft

Typing Preview

Documents in Dark Mode Display Template Panel

Back to list

Acme Digital Imaging

(555) 5555 555

Patient Name: **Exampleton, Caroline**
Date of Birth: **01 Jul 1999**
Phone Number:
Service Date: **03 Jan 2021**
Referring Doctor: **Dr. John Doe**

Dr. Smith, Will

The report is generated by voice recognition software. Please contact facility if there is any concerns

Bilateral Mammography MC
CR Abdomen Skull
C-Spine Xray

Auto populate templates

The Report Editor window is where all report editing occurs. This window is made up of a few primary sections:

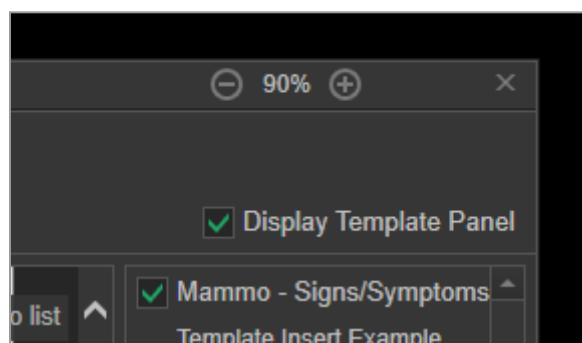
The Report View	<i>Middle;</i> The field for viewing and interacting with the document.
------------------------	---

The Template Panel	<i>Right;</i> Choose which services are being read, and insert text templates.
Report Actions Panel	<i>Top;</i> Actions for saving and submitting the report.

The window itself can be resized along its borders to increase/decrease the field of display. The template panel's border can also be adjusted as needed.

To resize the report, use the zoom function by using the '+' and '-' buttons at the top-right of the Report Editor. In Internet Explorer mode, the zoom function can also be activated by holding down Control and using the '+' or '-' keys or by holding down Control and using the scroll wheel.

If the Viewer is set to use Chromium as the default browser, the report editor will have a toggleable option to view file previews in dark mode.



Report View

The Report view contains two primary tabs.

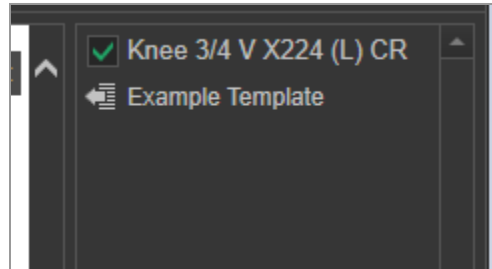
The Typing tab will allow the report to be edited and interacted with. Clicking 'Back to List' at the top-right will allow the document format to be changed. By checking off 'Documents in Dark Mode', the report will be displayed in an inverted, dark theme.

The Preview tab will generate a PDF preview to show the report in its final state. If 'Dark Theme for Documents' is enabled in the Settings Menu, the preview colours will be inverted. Dark theme settings will not affect the final report.


Service/Template Panel

The Service/Template panel will display services assigned to the encounter, reflecting the options shown on the Document Bar's service list. A checked-off service will impact which service the report is assigned to once it has been saved.

While a service is selected, any Typing Templates assigned to the service will be displayed underneath it. Clicking on a template will immediately populate it into your current report.



If a template's name begins with an exclamation mark, it will be automatically applied to the report. This can be disabled by unchecking 'Auto populate templates' at the bottom of the Service/Template Panel.

 Templates are shared between all users. Please speak to your clinic management to make changes to templates or request access to the template page.

This panel can be hidden at any time by unchecking the 'Display Template Panel' at the top-right of the Report Editor window.

Creating a New Report

To create a new report, click 'New Report' in the Main Panel. The Reporting window will now open.

If no default report template has been assigned, you will be shown the report template selection screen. Any available reports will be categorized and listed on this page. If more than one default report has been assigned, they will be kept under the 'Related Forms' heading. Click on your desired template to open it.

New Report
100%

Discard
Submit for Transcription
Submit Signed Report
Save as Draft

Typing
Preview

☒ Display Template Panel

▼ Related Forms
1

▼ Velox
34

▼ Velox BMD
13

▼ Velox Breast Imaging
1

▼ Velox Electrocardiogram
10

▼ Velox Mammogram
6

▼ Velox MSK Ultrasound
9


▼ Velox Obstetrics
16

▼ Velox Reports
3

▼ Velox Vascular Ultrasound
7

☒ Mammo - Signs/Symptoms
Template Insert Example
☒ Breast - J127 (L) US
TEST ULTRASOUND
Template Insert Example

☐ Auto populate templates

 The default report assignment can only be done from the clinic's Electronic Form Assignment RIS page.

Please speak to your clinic management to request page access or make form assignment changes.

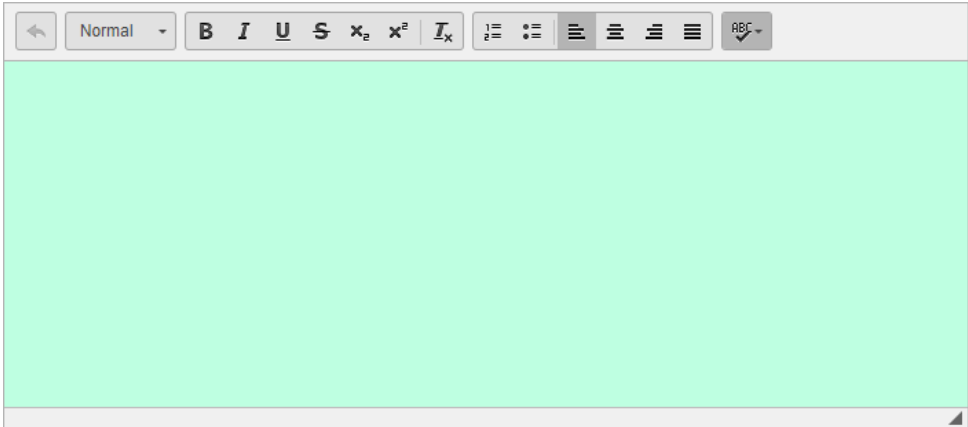
The report editing page will now open. To return to the report list at any time, click 'Back to list' at the top-right of the editing panel.

Report Contents

Reports may vary in format from clinic to clinic. At the top, they typically contain dynamically generated information such as patient, referrer, and clinic details. Below, they typically have a signature line that is automatically filled in after the report is submitted.

The simplest report will consist of a blank text field. Input types can vary greatly, and some inputs may come pre-populated or filled with data. For text fields, standard shortcuts for keyboard editing will apply.

Input types:

Dropdown	Displays a selectable list of items when clicked.
Checkbox	Toggles on/off when clicked.
Buttons	Applies pre-specified contents or adds elements to the current report.
Text fields	A small text box for character-limited content entry.
Text box	A large text box for multi-paragraph content entry.
Rich text box	<p>A large text box that can be completed by the user. The toolbar at the top of the text field allows the user to change text formatting, such as bolding, italicizing, font sizes, etc.</p> <p>The rich text field can be expanded by clicking and dragging the sizing triangle at the bottom-right border and will automatically resize if the text bounds are reached.</p>  <p>Spellcheck is only available in Internet Explorer mode. It is enabled by default and will check typed content for accuracy, underlining any words not found in the dictionary.</p>

	<p>Right-clicking a flagged word will reveal suggested word options. Selecting 'Add to Dictionary' will add the word to your custom dictionary, preventing it from being flagged again.</p>		
	Toolbar options:		
	Undo	<i>Ctrl Z</i>	Undoes the previous action.
	Font Size		Allows selection of font size. Can be applied to the current selection.
	Bold	<i>Ctrl B</i>	Applies bold to text.
	Italic	<i>Ctrl I</i>	Applies italics to text.
	Underline	<i>Ctrl U</i>	Underlines text.
	Strike-through		Strikes a line through the text.
	Subscript		Sets the text a level below the standard line.
	Superscript		Sets the text a level above the standard line.
	Remove Formatting	<i>Ctrl /</i>	Removes all text styles from the selection.
	Numbered List	<i>Ctrl ,</i>	Creates a numbered list. Using this function on an existing list will remove list formatting.
	Bulleted List	<i>Ctrl M</i>	Creates a bulleted list. Using this function on an existing list will remove list formatting.
	Alignment		Applies the Left , Center , Right , or Justified text alignment.
	Spell Check		Enable/disable automatic spell-checking.
Interactable Diagrams	Can draw and annotate onto a populated diagram.		

Saving Reports

When a report is ready to be submitted, clicking on **Submit Signed Report** in either the Report Editor window or the Main Panel will submit the report to all currently selected services.

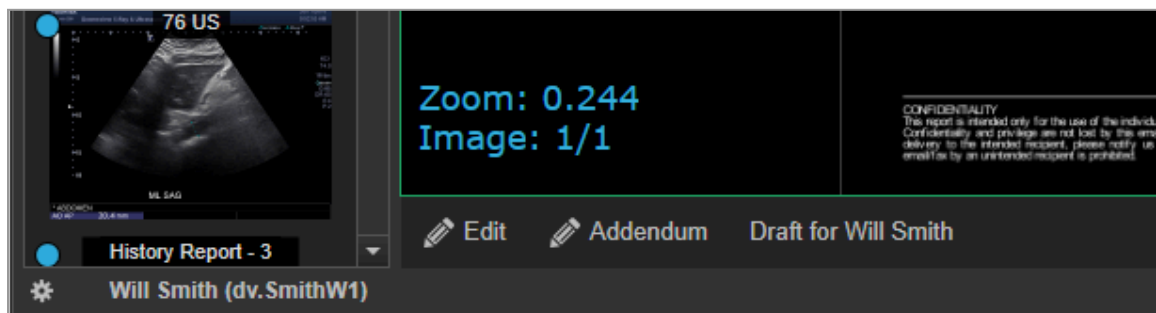
If a report is incomplete and you would like to come back to it later, it can be saved as a draft instead by clicking 'Save as Draft'.

! Selecting **Submit for Transcription** and **Reject Study** will also save the report to the selected services, but the file will not be signed off.

Editing Reports

Only the original creator or assignee can edit a report. Otherwise, only an addendum can be created.

To edit a report, drag it from the Documents Tab into an available view. At the bottom left, a number of report editing options will appear. Click 'Edit' to edit the current report.



Draft Reports

Reports can be saved as a draft and later returned to at any point. In some clinic workflows, a technologist may create a draft report for the Reading Physician to complete.

Draft reports cannot be deleted directly from the Radiology Viewer.

Creating Draft Reports

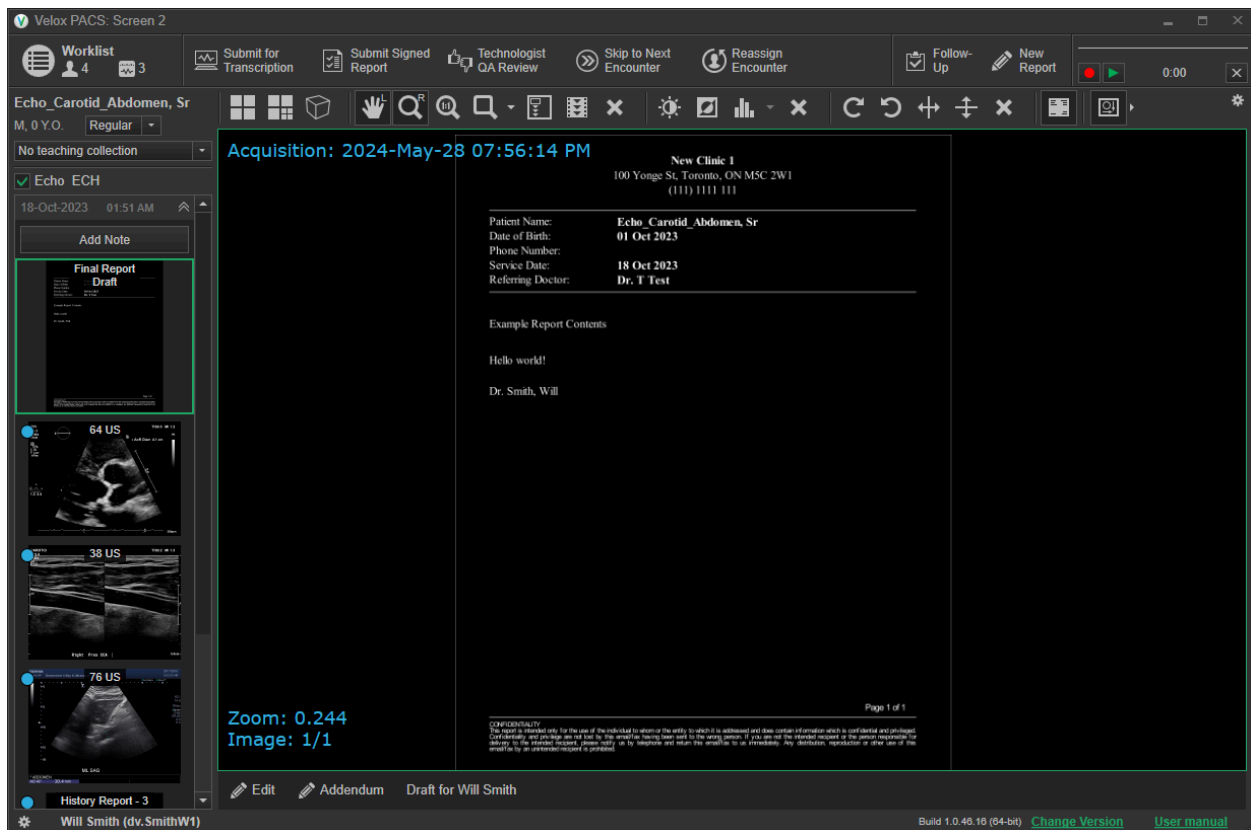
To save a report you are editing as a draft, click 'Save as Draft' from the Report Editor toolbar.

Editing Draft Reports

You must be the original assignee to edit a draft report.

If a draft report exists within the encounter, clicking 'New Report' will present an option to edit an existing draft report or create a new report. If Auto-Open > Report Editor is enabled, the draft report will be automatically opened.

Otherwise, to edit a report, it must be placed into a view. Once in view, click 'Edit' at the bottom-left to resume editing the draft report.



Report Addendums

Click 'Addendum' at the bottom-left corner of the view.

An addendum uses a fixed reporting format to create a secondary document for the original report. Clicking 'Save Addendum' will save any changes.

The encounter does not have to be in a readable state, and you do not need to be the owner to create an addendum.

Rejecting an Encounter

When viewing a study, it can be rejected at any time by selecting “QA Review” on the main panel. When selected, the QA Review window will open.

Optionally, a quality rating of 1-5 stars can be selected. Selecting a star value within this menu will save a rating that can be used to track technologist performance.

The checkbox at the bottom controls whether to reject the study. If saved, the selected services will have their status updated to ‘Rejected by Reading Physician’. Unchecking the box will allow a rating or feedback to be provided without impacting the currently selected services. If a service is rejected, the assigned technologist will be notified. The technologist will be able to correct any issues with the encounter and re-assign it to the reading physician worklist.

If a technologist has been previously assigned, their name will be selected by default. To reassign this encounter to a different technologist, an alternative user can be selected from the dropdown menu.

The feedback box will allow a reading physician to leave a comment regarding their rating or why they are rejecting the study. It is highly recommended that you leave a comment here, as this will be visible to anyone addressing the rejected study or reviewing the QA ratings in the future. These notes will be visible on the encounter and, if applicable, on the QA Review management page.

Clicking ‘Save’ will submit any changes made.

Commonly Used Reading Shortcuts

Many functions can be assigned to a keyboard or SpeechMike shortcuts for easy access when reading a case.

While this section covers some commonly used shortcuts for reading cases and their default key assignments, it is not a comprehensive list of available functions. All actions can be reassigned to any key as required. For complete setup information, see the [Shortcuts](#) section.

<u>Action Name</u>	<u>Description</u>	<u>Default Shortcut</u>
Submit for Transcription	Send the current encounter for transcription.	F1

Submit Signed Report	Submit the current report as Signed.	F2
QA Review / Reject	Open the QA Review menu. Encounters may also be rejected from here.	F3
Skip to Next Encounter	Skip to the next encounter on your worklist.	F4
New Report	Open the New Report window, allowing a new report to be typed.	F11
Edit Report	Edit an existing report.	Ctrl+F11
Open Worklist	Opens the worklist over the currently selected screen.	F12
Next Hanging Protocol	Switch to the next relevant hanging protocol in your list based on your protocols' study matching parameters.	→
Previous Hanging Protocol	Switch to the previous relevant hanging protocol in your list based on your protocols' study matching parameters.	←
First Image in Series	Go to the first image in the series being viewed.	Home
Last Image in Series	Go to the last image in the series being viewed.	End
Delete Last Drawing	Delete the last-placed drawing.	Delete
Delete All Measurements	Delete all measurements and annotations on the screen.	Ctrl+Del
Show / Hide Overlays	Toggle display of overlays on and off.	O
Show / Hide Annotations	Toggle display of annotations on and off.	Ctrl + O
Reference Lines	Toggle reference lines on the image.	R
Zoom	Select the Zoom mouse tool.	Z
Brightness / Contrast	Select the Brightness / Contrast mouse tool.	B
Window / Level	Select the Window / Level mouse tool.	W
Measurement	Select the Measurement mouse tool.	M

Pan	Select the Measurement mouse tool.	P
Invert	Select the Measurement mouse tool.	I
Rotate Left	Rotate the image 90 degrees to the left.	>
Rotate Right	Rotate the image 90 degrees to the right.	<
Reset All	Reset all image adjustments and changes.	Escape
.....
Coronal	Set the current view to the Coronal plane.	C
Sagittal	Set the current view to the Sagittal plane.	S
Axial	Set the current view to the Axial plane.	A

The To Sign Tab

The To Sign menu contains any reports that you have not signed off on. This generally includes reports that have been transcribed, completed, or edited by other staff at the clinic. This menu can be accessed by selecting the 'To Sign' tab on the worklist page.

While in many cases a report does not need to be signed off to complete an encounter, this is often required by clinic procedure.

Layout

The middle section will contain a worklist of all unsigned reports. Each column in the worklist can be rearranged, resized, or filtered.

A field on the right-hand side will display report contexts in text. This bar can be resized as required.

To view a report in full, double-click an item on the list. This will open the encounter view, allowing all files to be reviewed as needed.

The screenshot shows a 'Radiology Worklist' application. At the top, there are tabs: 'Radiology Worklist', 'To Sign', 'Peer Reviews', 'My Archive', and 'Search'. Below the tabs is a 'Sign' button with a checkmark icon. The main area is divided into two sections. The left section contains a table with columns: 'Ins.ID', 'Patient Name', 'Sex', 'DOB', 'S/D', and 'Modality'. The right section displays a detailed report for a 'MAMMOGRAM REPORT' dated '6/14/2024'. The report includes sections for 'INDICATION', 'COMPARISON', 'FINDINGS', and 'Recommendation'.

Ins.ID	Patient Name	Sex	DOB	S/D	Modality
<input type="checkbox"/> <input checked="" type="checkbox"/>	Exampleton, Caroline	F	01-Jul-1999	24 Y.O. 03-Jan-2021	06:13 AM MG
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	Velmac, Valery	F	08-Oct-1986	37 Y.O. 18-May-2023	06:28 AM MG, US

MAMMOGRAM REPORT
6/14/2024

INDICATION: []

COMPARISON: [None]

FINDINGS:

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur mattis lectus non scelerisque hendrerit. Curabitur posuere pellentesque nibh eu rhoncus.

In hac habitasse platea dictumst. Etiam egestas eros dui, nec vestibulum libero tempus in.

Cras non lacus vehicula, scelerisque libero id, fringilla turpis. Phasellus imperdiet felis et neque consectetur elementum. Nulla cursus pulvinar elit eu convallis. Integer sodales tempor nunc, et rutrum nisl facilisis sit amet. Sed non suscipit magna.

Recommendation:

Routine screening mammogram in 1 year.

☒ Sign Report

Signing Reports

Reports can be signed off from the menu itself or from within the encounter.

A) To review the report contents only:

Select an item on the worklist. The unsigned report will be displayed in the text field on the right-hand side.

Clicking **Sign Report** will sign off your report and immediately select the next item on the list.

B) To review an encounter in full:

Double-click an item on the list. The encounter view will open, allowing all patient files to be reviewed as needed.

To sign off on a report from the encounter page, drag it into the view field and select **Sign Report** from the bottom-left corner.

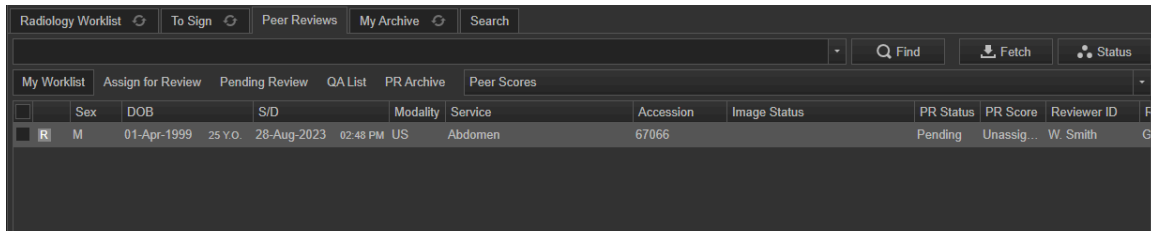
Once a report has been signed, the next item in the list will open.

Reports can also be signed off in bulk from the worklist screen. After using the checkboxes on the left of your worklist to select all applicable reports, click the 'Sign' button at the top-left to immediately sign off your entire selection.

The Peer Reviews Tab

The Peer Review menu allows you to perform reviews of other readings done at the clinic. This menu can be accessed by selecting the Peer Reviews tab on the worklist page.

Using the filter box at the top of the page will allow you to narrow down your results on each page.



The screenshot shows a software interface for Peer Reviews. At the top, there are navigation tabs: Radiology Worklist, To Sign, Peer Reviews (selected), My Archive, and Search. Below these are buttons for Find, Fetch, and Status. A dropdown menu is open, showing options: My Worklist, Assign for Review, Pending Review, QA List, PR Archive, and Peer Scores. Below the dropdown is a table with the following columns: Sex, DOB, S/D, Modality, Service, Accession, Image Status, PR Status, PR Score, Reviewer ID, and a final column with 'F' and 'G'. The first row of data shows: M, 01-Apr-1999, 25 Y.O., 28-Aug-2023, 02:48 PM, US, Abdomen, 67066, Pending, Unassign..., W. Smith, and G.

Sex	DOB	S/D	Modality	Service	Accession	Image Status	PR Status	PR Score	Reviewer ID	
M	01-Apr-1999	25 Y.O.	28-Aug-2023	02:48 PM	US	Abdomen	67066	Pending	Unassign...	W. Smith

My Worklist

The My Worklist tab holds all cases that have been directly assigned to you for review.

Selecting a listing from the Peer Review worklist will open up the encounter, allowing patient documents and images to be reviewed.

You can pre-fetch patient files by using the **fetch** option at the top-right of the menu, which is applied to any selected encounters on the worklist. Your worklist can be filtered if necessary by using the dropdown at the top of the page.

Creating a Peer Review

After selecting an entry on the Peer Review worklist, the encounter will open. Any documents and images will be viewable, along with the previously dictated report.

To create a peer review:

- 1) Access Peer Reviews > My Worklist and select an encounter from the worklist.
- 2) The previously read encounter will be opened along with the Peer Review scoring window. Examine the report and determine your own findings based on the patient documents and imaging.
- 3) In the Peer Review scoring window, choose a score from 1 - 3. Include a comment describing the discrepancy if necessary.
- 4) Select **Save** to submit your peer review.

Peer Review Window

Abdomen US

Scoring should include both primary findings and incidental findings on the imaging study. Both misses and overcalls can be included.

I Agree ☒ 1. Concur with original reading

Understandable Discrepancy ☐ 2A. Unlikely to be significant
☐ 2B. Likely to be significant


Obvious Discrepancy ☐ 3A. Unlikely to be significant
☐ 3B. Likely to be significant

Discrepancy

[peer review contents here]

Save Cancel


Excluding 'I Agree', each option has a variant for if the discrepancy is *unlikely* to be significant (A), or if the discrepancy is *likely* to be significant (B).

 As of Viewer version 1.46.22, the options have been changed to a 3-point rating system to best match changing industry practices. Prior to this version, the peer review option used a 4-point rating system, as follows:

- 1 - I Agree
- 2 - I Disagree, Minor (*a,b*)
- 3 - I Disagree, Moderate (*a,b*)
- 4 - I Disagree, Major (*a,b*)

Score 4 has been depreciated. All existing results in scores 3 & 4 have been merged into a singular score 3, now renamed 'obvious discrepancy'.

Administrator Menus

 Some functions are only accessible by users who have been given the appropriate permissions. If you need access to assign or reassign reviews, speak to your clinic management.

If you are assigned as a **peer review administrator**, new functions and pages become available for the peer review component.

When right-clicking an item on the list, you can assign a reviewer and apply a peer review status. These options are also available at the top right of the menu, along with a file pre-fetch option.



Statuses:

Not Scheduled	Peer review not scheduled or assigned.
Pending	Peer review assigned to the user, waiting to be completed.
New Review	Peer review completed, waiting for QA review.
Archived	Peer review completed and reviewed by the administrator.

Admin-only menus:

Assign for Review	Allows you to view and assign unassigned reviews.
--------------------------	---

Pending Review	Shows all reviews that have been assigned to a user but are yet unread.
QA List	Shows all previously reviewed cases.
PR Archive	Shows all previously reviewed and archived cases.

The My Archive Tab

The **My Archive** menu shows a history of encounter interactions sorted by date.

Similarly to the worklist screen, each column can be rearranged or resized. This menu has two unique columns: The 'Action Date' field shows when the action was performed, while the 'Action' column shows what action was performed.

These actions can include:

Dictated	User has selected 'Submit for Transcription' and forwarded the dictation audio to transcriptionist.
Finalized	User has selected 'Submit Signed Report' to complete/finalize the encounter.
Rejected by Physician	User has selected 'Reject Encounter' to return the encounter back to the technologist.
Images Attached	User reverted a completed encounter's status to Images Attached.

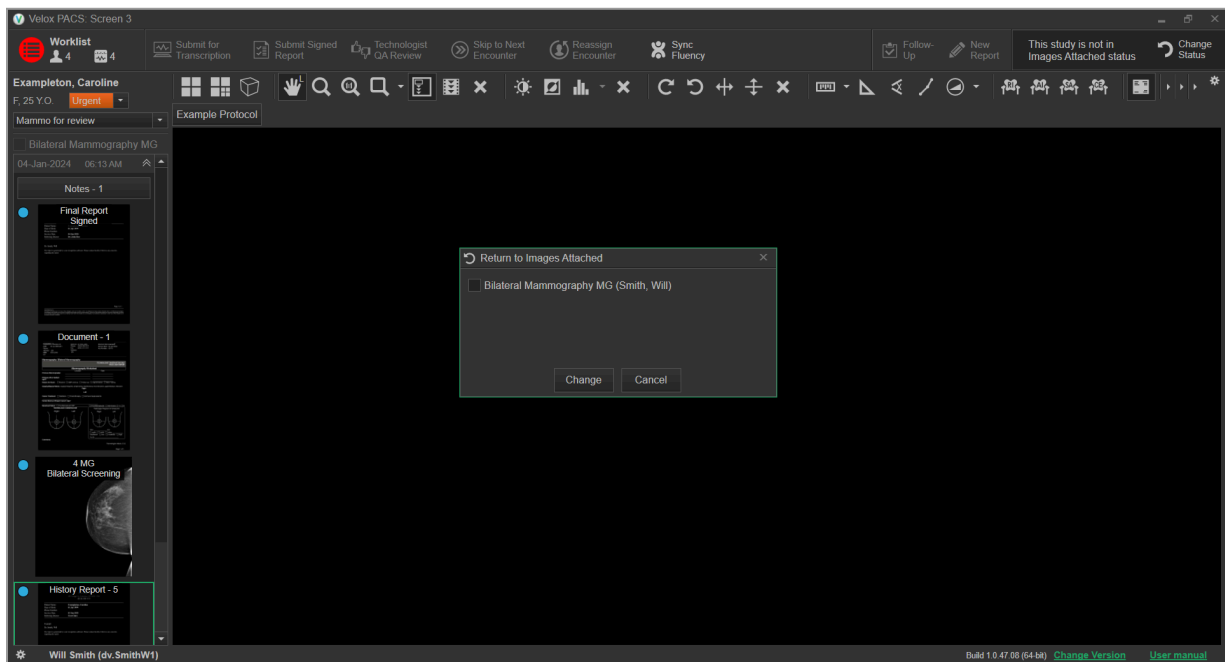
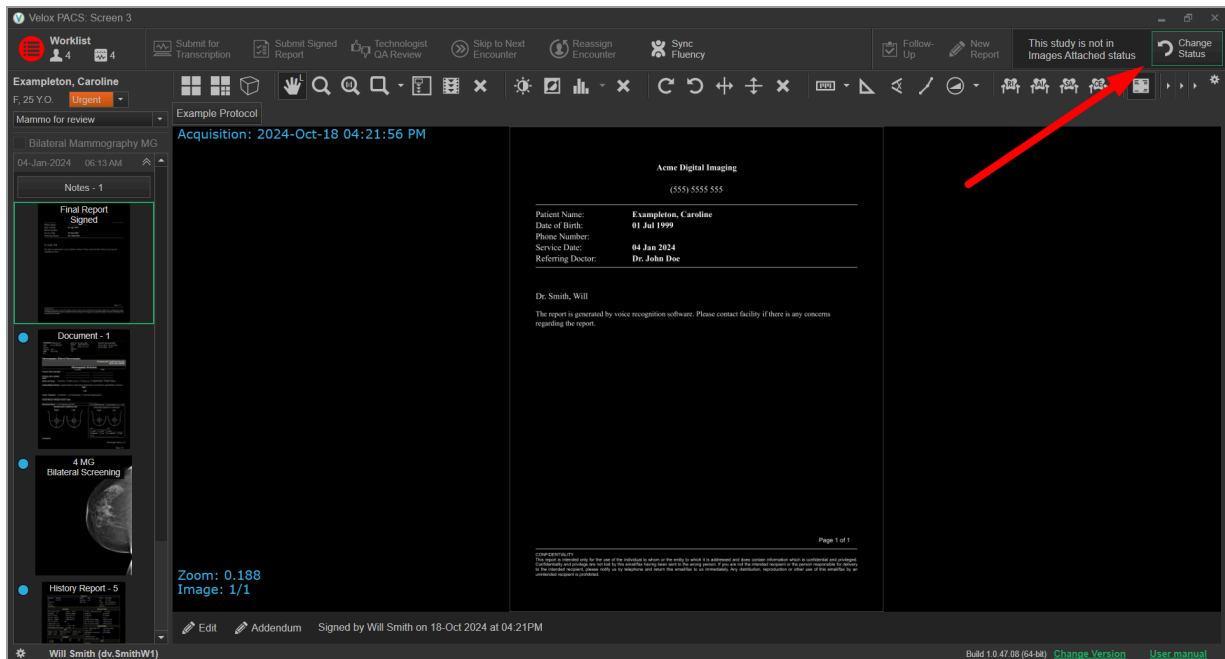
To view an encounter, select it from the list.

If you've performed an action which is not yet visible on the My Archive page, use the refresh button to see all recent listings.

Restoring a Service

If the encounter has already been read, it must be restored to a prior state before it can be read again. To do so, select **Change Status** at the top-right and choose any services that apply.

Note that you may only restore services which have been assigned to you.



(fig.) Reverting a Finalized encounter to Images Attached.

The Search Tab

The Search menu allows for encounters to be searched for using a variety of filter criteria.

The screenshot shows the 'Search' tab in a medical software interface. At the top, there is a navigation bar with tabs: 'Radiology Worklist', 'To Sign', 'Peer Reviews', 'My Archive', and 'Search'. The 'Search' tab is active. Below the navigation bar, there is a search bar with a magnifying glass icon and the text 'Find'. The main area is divided into several sections for filtering search results:

- Ins.ID**: A dropdown menu.
- Clinics**: A list of checkboxes for selecting clinics: Demo Clinic, New Clinic 1, New Clinic 2, Acme Digital Imaging, Downtown Imaging, Progressive Cardiology, and Do not use.
- Modalities**: A list of checkboxes for selecting imaging modalities: BMD, CM, Chest X-Ray, ECHO, MAMMO, MSK, OBSP, US, Hospital, VASCULAR, MRI (Without Contrast), MRI (With Contrast), and MRI WSIB Tech Fe.
- Statuses**: A list of checkboxes for selecting the status of the encounter: Checked-in, Images attached, Dictated, Finalized, Archived, Rejected by Reading Physician, Rejected by Typist, and On Hold.
- Person**: A section for selecting the person involved in the encounter, including a dropdown for 'Patient', a text input for 'Name or HIN or MRN', a dropdown for 'Shared Worklist' (set to 'Any'), a checkbox for 'Emergency', and a 'Service Date' range selector with 'From' and 'To' date pickers.
- Teaching Collection**: A dropdown menu set to 'All cases'.
- Accession Number**: A text input field.

The filter box is located at the top of the page. By default, it is blank. Clicking on the filter box will expand a dropdown containing all available filters. Clicking 'Find' will execute your search.

Available filters include:

- Clinic/location
- Service modality
- Service status
- By party:
 - Patient name, MRN, or PHIN
 - Referrer name or billing code
 - Assigned reading physician
 - Technologist name
 - Shared worklist
- Service Date Range
- Accession number
- Teaching collection

You can apply as many filters as needed to the same search. Filters are not mandatory, but the search may fail if the terms are too broad.

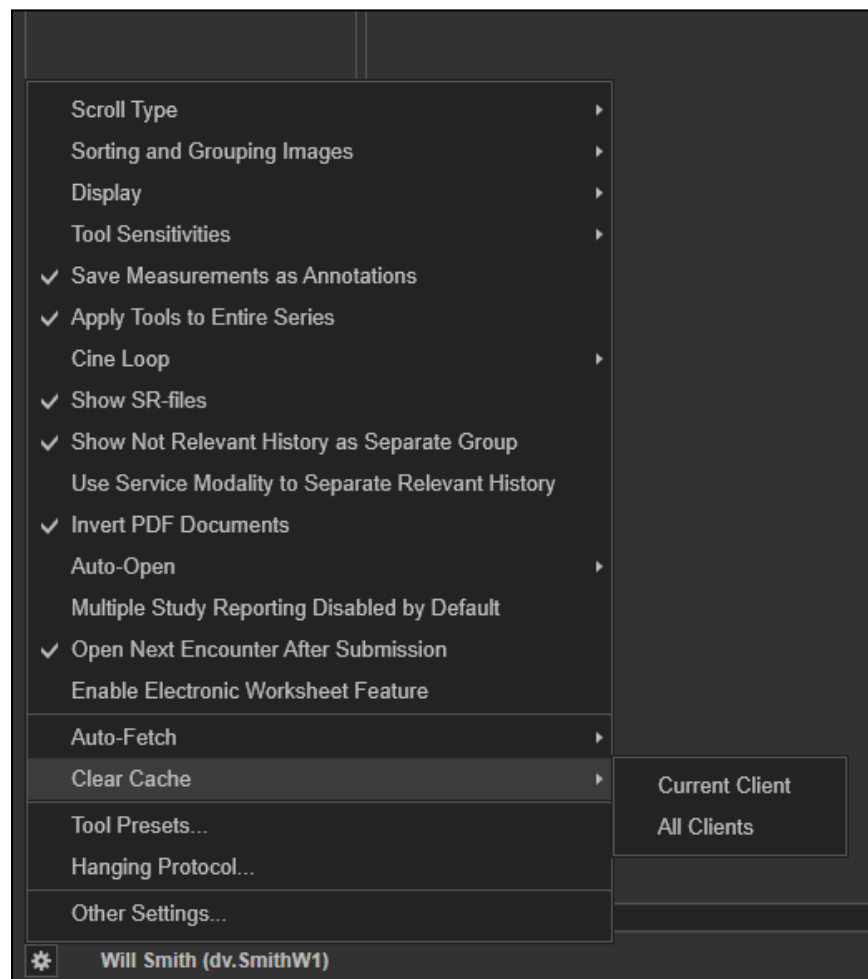
! When sharing information with colleagues, keep in mind that the MRN and Accession Number are considered non-personally identifiable information and isolated to your clinic's database. Therefore, they can be used as a safe patient identifier over insecure or indirect communications (e.g., emails, notes, etc.).

Settings

System Settings can be accessed via the cog wheel icon at the bottom left.

Settings are stored locally per user account, and changes will only be applied to your current user account on this PC. Your user settings can be saved and imported into any other accounts by using the Import & Export tools under Other Settings.

Note that for most viewing settings, your changes will only be visible after reloading the current encounter.



Settings Menu

General Settings

Scroll Type	
Controls what can be scrolled to when viewing files in the Encounter view.	
All Data	Allows scrolling through all files within the encounter.
Current Series	Allows scrolling through the current image series only.
Same Series Type	Allows scrolling through the same series type as the current encounter.
Modality	Allows scrolling through the same modality as the current encounter only.
Persistent Series Scroll Position	Remembers your scroll progress when the view or document is changed. Upon returning to the prior view, you will resume where you left off.
Infinite Scroll	When scrolling to the end of available files, you will be looped back to the first available file.

Sorting and Grouping Images	
Specifies the order and grouping of patient documents & images.	
Worksheets First	Worksheets will show first when viewing encounter documents.
Reqsheets First	Requisition sheets will show first when viewing encounter documents.
Group by Study UID	Groups images into sets based on the Study UID in the DICOM tags.
Group by Series UID	Groups images into sets based on the Series UID in the DICOM tags.

Group by Modality	Groups images into sets based on their Modality DICOM tags.
Cine Loops as a Separate Series	Always store Cineloops in a separate series.
Use Cardiology View Grouping	Groups DICOM images by the “View Name” tag. This is particularly helpful for cardiology views, e.g., <i>4CH</i> , <i>2CH</i> , <i>PLAX</i> , <i>APLAX</i> , <i>SAX-PM</i> , etc.
Rules [...]	<p>Opens up the Grouping Rules menu, allowing users to set up customized grouping rules.</p> <p>See the Grouping Rules section below for more information.</p>

Display	
Modifies display settings. Note that for most Display settings, your changes will only be visible after reloading the current encounter.	
Documents and Images	Moves the Documents and Images bar in the current display to the left side, right side, or hides it entirely.
Toolbar	Shows/hides the Toolbar in the Reading Window.
Main Panel	Shows/hides the Main Panel in the Reading Window.
Tabbed Hanging Protocols	Shows/hides Tabbed Hanging Protocols in the Reading Window.

Tool Sensitivity
Changes the mouse sensitivity of the Stacking, Brightness/Contrast, and Window/Level tools.

Save Measurements as Annotations

Includes measurements as annotations for all relevant functions, including saving.

Apply Tools to Entire Series

Applies any tools to an entire series rather than just a single image.

Cineloop

Changes cineloop settings.

Autoplay	Automatically plays cineloops when viewed.
Autorepeat	Automatically repeats cineloops when the final frame has been played.

Show SR Files

Shows/hides Structured Reporting files from the file list.

Show Non-relevant History as a Separate Group

Adds all non-relevant cases to a separate group in the encounter history.

Use Service Modality to Separate Relevant History

Uses the modality to match relevant history rather than assigning services to a body part.

Dark Theme for Documents

Inverts colors on viewed PDF files.

Auto-Open

Automatically opens selected elements when a new encounter is opened.

Notes	Opens the notes list when the encounter is opened, if a note exists.
--------------	--

Report Editor	Opens a saved draft report or brand new report when the encounter is opened.
----------------------	--

Multiple Study Reporting Disabled by Default

De-selects all studies when the encounter is opened, requiring each study to be selected first, rather than being pre-selected.

Open Next Encounter After Submission

Automatically opens the next encounter after an encounter is submitted.

Enable Electronic Worksheet Feature

Enables e-worksheet editing functionality, allowing users to edit electronic worksheets, create new ones, or make addendums.

See [Creating & Editing Electronic Worksheets](#) for more information.

Download Settings

Auto-Fetch

Choosing an option controls which files are downloaded from the worklist.

Worklist and History	Automatically downloads the patient's complete file history, including from all prior encounters.
Worklist and Relevant History	Automatically downloads the files from the current case and any relevant priors for this patient.
Worklist Only	Automatically downloads all files from the current encounter only.
Manual	Users must use the 'Fetch' button to manually retrieve patient files for selected encounters on the worklist.

Clear Cache

Choosing an option allows users to erase currently downloaded worklist files from their current workstation.

Current Client	Erases files from the currently logged-in account.
All Clients	Erases files from all accounts on this workstation.

Reading Configuration

Tool Presets [...]

Opens the Tool Presets menu, allowing tool presets to be saved and modified.

Hanging Protocol [...]

Opens the Hanging Protocol menu, allowing hanging protocols to be configured and modified.

Additional Settings

Overlay Settings [...]

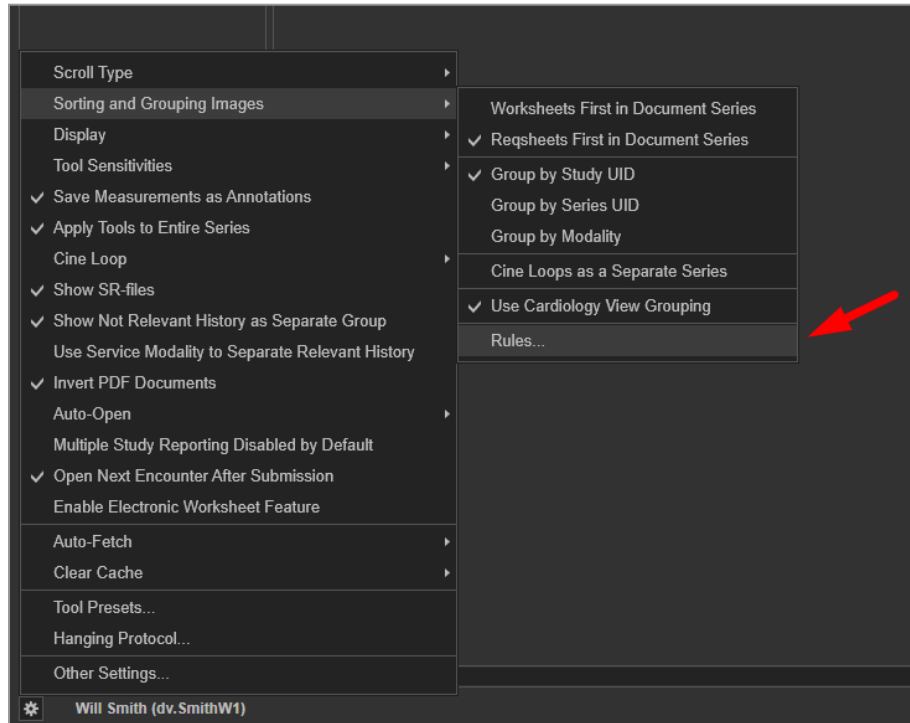
Opens the Overlay Settings menu, allowing the displayed overlay tags on your images to be customized.

Other Settings [...]

Opens the 'Other Settings' menu, showing additional settings.

Grouping Rules

Grouping Rules are used to set up specific grouping parameters for certain studies or modalities. It can be accessed from **Settings > Sorting & Grouping Images > Rules**.



Your created grouping rules are listed on the left-hand side. Use the Add & Delete keys to create or remove rules, respectively. The arrow functions can be used to change the priority of each rule.

Image Grouping Rules

Add Up Down Delete Name: Grouping Rule 0

Grouping Rule 0

Study Matching

Modality:

Description:

Grouping

☐ Group by Study UID

☒ Group by Series UID

☐ Group by Modality

☐ Cine Loops as a Separate Series

☐ Use Cardiology View Grouping

Close

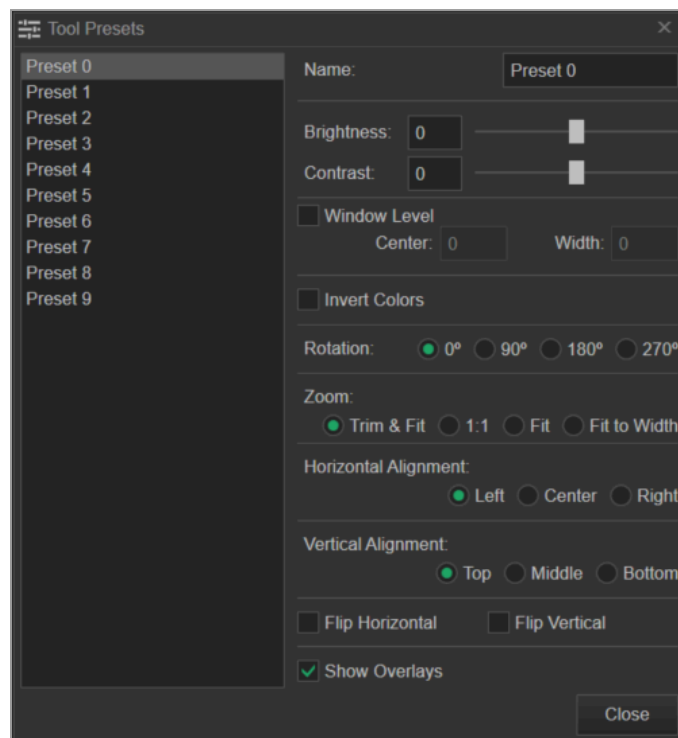
Setting up Grouping Rules

Name	Give your grouping rule a recognizable name to make it easier to identify.	
Study Matching	Study Matching determines if grouping rules are applied when viewing an encounter. These values depend on the assigned services, optionally allowing a modality code or study description to be entered.	
	Modality	Filters by the service modality code. e.g., <i>CR, US, MG, etc.</i>
	Description	Filters by the name of the service. e.g., <i>Abdominal Wall</i>
Grouping	Selects which type of grouping is used; select between: <ul style="list-style-type: none"> • Group by Study UID • Group by Series UID • Group by Modality 	

Cine Loops as Separate Series	Keeps cineloop files separate from other images.
Use Cardiology View Grouping	Groups DICOM images by the “View Name” tag. This is particularly helpful for cardiology views, e.g., <i>4CH</i> , <i>2CH</i> , <i>PLAX</i> , <i>APLAX</i> , <i>SAX-PM</i> , etc.

Tool Presets

Setting up Tool Presets



Tool Presets are used to set up parameters that can be applied to your images on the fly or, alternatively, used as part of your Hanging Protocol configuration. To edit your presets, visit **Settings > Tool Presets**. Then, select which preset you would like to edit from the left column.

Name	Give your preset a recognizable name to use later.
Brightness & Contrast	Sliders to increase the brightness or contrast of the image.

Window Level	Numerically defines the center and width window and level values.	
Invert Colors	Enable/disable inverted view colours by default.	
Rotation	Rotates image in 90-degree increments.	
Zoom	Zooms into the file based on predefined options.	
	Trim & Fit	Trims blank space and sets the size of the image to fit into the current view.
	1:1	Displays the image in 1:1 resolution. Equivalent to the 1:1 True Scale function in the toolbar.
	Fit	Sets the size of the image to fit into the current view.
	Fit to Width	Sets the size of the image to fit the horizontal length into the current view.
Horizontal Alignment	Aligns the image to the left/middle/right side.	
Vertical Alignment	Aligns the image to the top/middle/bottom side.	
Flip Horizontal/ Vertical	Flips the image horizontally / vertically.	
Show Overlays	Enable/disable overlays on the image.	

Using Tool Presets

Tool Presets can be applied from either the reading screen at any time or to a hanging protocol configuration. To use a tool preset when reading, select the presets dropdown from either the toolbar or the right-click menu, and select the name of the preset that you wish to apply.

Hanging Protocols

Hanging Protocols are configurable settings that determine your screen layout when viewing encounters. This can be especially useful for complex and consistent setups, as this can save time spent on repetitive setups.

The Hanging Protocols Configuration menu can be accessed from the **Settings** menu > **Hanging Protocols**.

Your created grouping hanging protocols are listed on the left-hand side. Use the Add and Delete keys to create or remove rules, respectively. The arrow functions can be used to change the priority of a hanging protocol.

! Multiple items can be included in a filter field using the pipe character: |

e.g.: "CR|DX|DR"

If included in a modality field, this example will help properly detect any X-ray modality, even if variations exist in the naming scheme. This is especially useful when migrated patient records are used, as naming standards may have been phased out or otherwise changed between systems, which may prevent older images from working properly.

Setting up Hanging Protocols

Hanging Protocols

Name: Mammo R+L CC+MLO

Study Matching

Modality: MG Study Name:

☒ Always apply ☐ Apply if no history ☐ Apply with history

Layouts

1x1 1x1 1x1 1x1 1x1

Screen 1 Screen 2 Screen 3

Layout Properties

☐ None ☒ DICOM ☐ Document ☐ Report ☐ History Report

Image #: Study: Current ☐ Synchronized Viewing

Formula Filter: fx

Series Description:

Study Description:

Modality: MG Laterality: R View Position: CC

View Name: Stage Name:

MPR: None PET-CT: No PET-CT

☐ Use Quadrant Zoom in Protocol Navigation ☐ Use Cine

☐ Enable Presets Presets...

Close

Study Matching

Study Matching determines if a hanging protocol is applied when viewing an encounter.

These values depend on the assigned services, optionally allowing a modality code or study description to be entered. If both sections are left blank, then the hanging protocol will not be applied by default.

Modality	Filters by the service modality code. e.g., <i>CR, US, MG, etc.</i>
Description	Filters by the name of the service. e.g., <i>Abdominal Wall</i>

You can choose between three Study Matching options for the encounter history. Choosing one will enable the following setting for the hanging protocol you're editing:

Always apply	Always apply the Hanging Protocol if the modality and description are correct, regardless of whether the patient has a relevant history.
If no history	Only apply the Hanging Protocol if the patient has no relevant priors.
With history	Only apply the Hanging Protocol if the patient has relevant priors.

Layouts

The layout determines where files are positioned when using this hanging protocol.

Each square in the layout section represents a screen in sequential order. After highlighting a square, the layout properties menu below becomes active.

The controls at the top left can be used on your selected view to Split Screen or Split Series, respectively.

Layout Properties



After highlighting a view, the Layout Properties menu becomes active. Here, the type of file can be dictated, along with which parameters are required. Fields can be left blank as needed. If no file in the encounter matches the applied filters, the view will be left blank.

None

Does not show any file type.

DICOM

Displays DICOM images according to the following parameters:

Image #	Applies a specific image number in a series.
Study	Selects which study the file should be taken from. Choose from the current encounter or up to three relevant priors.
Synchronized Viewing	Enable/disable synchronized viewing if using Split Screen.
Formula Filter	<p>Filters images by a user-defined formula.</p> <p>Selecting  will show additional information on how to use this tool.</p> <p>Selecting  will verify the validity of your formula.</p>
Series Description	Filters by series description from the image DICOM tags.
Study Description	Filters by study description from the image DICOM tags.
Modality	Filters by modality code from the image DICOM tags.
Laterality	Filters by laterality from the image DICOM tags.
View Position	Filters by view position from the image DICOM tags.
View Name	Filters by view name from the image DICOM tags.
Stage Name	Filters by stage name from the image DICOM tags.
MPR	Select which MRI angle to filter by.
PET-CT	Select which PET-CT spectrum to display.
Use Quadrant Zoom in Protocol Navigation	Enable/disable starting with the Quadrant Zoom tool active.
Use Cine	Enable/disable starting with the Cine tool active.
Enable Presets	<p>Enables presets for this Hanging Protocol. Presets can be configured with the adjacent button.</p> <p>See Tool Presets for more information.</p>

Document/Report/History Report

These options feature the same filter choices.

- **Document:** Displays documents (worksheets and requisition sheets) in the selected view.
- **Report:** Displays reports in the selected view. Note that while prior studies can be selected, it may be preferable to use the History Report option instead.
- **History Report:** Displays historical reports in your selected view.

Image #	Applies a specific document from the grouped sequence.
Study	Selects which study the file should be taken from. Choose from the current encounter or up to three relevant priors.
Synchronized Viewing	Enable/disable synchronized viewing if using Split Screen.
Enable Presets	Enables presets for this Hanging Protocol. Presets can be configured with the adjacent button. See Tool Presets for more information.

Using Hanging Protocols

Hanging protocols are automatically applied when an encounter is opened based on current service details and the Study Matching parameters that have been set on each protocol. If more than one hanging protocol is valid for an encounter, the protocols are prioritized in descending order in the protocol list.

When an encounter is open, relevant hanging protocols will be shown in tabs below the toolbar. Selecting a tabbed hanging protocol will immediately apply its settings to your encounter view.

You can also apply hanging protocols, including ones that are not relevant, from the Hanging Protocols menu on the toolbar or the right-click menu. Additionally, shortcuts are available to set specific protocols or to switch between them in sequence.

Overlay Settings

The Overlay Settings menu can be used to configure the appearance of your DICOM tag overlays, along with the information that is displayed.

Font	Select any system-installed font to use for the overlays.
Font Size	Changes the font / display size of the overlays. Size increments between 100% to 30% may be chosen.
Colors	Select which colours to use for separate types of overlays. Can be separately set for Text Color , Position Color , Year Color (for priors), and Info Color as defined by specific overlay types.
Overlay Lines	Formats overlay information when viewing images. Up to 9 lines permitted per quadrant. Mousing over and selecting the 'edit' icon on any overlay line (or double-clicking) will allow a custom formula / value to be entered.
Grouping by View Position	Specifies modalities that are grouped by the View Position tag. 'Apply only if suitable neighbour' can be used to filter out unneeded images.
Historical Images	Changes the overlay display settings for prior/historical images. Optionally: <ul style="list-style-type: none">• Bolded borders for priors• Inverted overlay colors• Year of study displayed at bottom

Overlay Settings
✕

Font: Verdana
Font Size: 100%

Text Color:
Position Color:
Year Color for History:
Info Color:

Overlay Lines

'Acquisition: ' + (FORMAT(Acquisition,'yyyy...	IF(TAG('0010','0020'), 'PatientID: ' + TAG('0...
JOIN(' ', TAG('0008','0080'), TAG('0008','00...	JOIN(' ', TAG('0010','0010'), TAG('0010','00...
TAG('0008','1010')	JOIN(' ', DATE(TAG('0010','0030')), TAG('0...
IF(DATE(TAG('0008','0020')), 'Study Date: '...	JOIN(' ', TAG('0008','1030'), TAG('0018','00...
IF(TAG('0008','0050'),'Accession: '+TAG('00...	
IF(TAG('0008','1070'),'Operator: '+TAG('000...	IF(TAG('0018','5100'), 'Patient Position: ' +...
JOIN(' ', Laterality, ViewPosition)	JOIN(' ', Laterality, ViewPosition)
	JOIN(' ', IF(TAG('0018','1191'), 'Anode Targ...
'Zoom: ' + FORMAT(Zoom,'0.###')	JOIN(' ', IF(TAG('0018','1150'), 'Exposure: '...
'Image: ' + (ImageIndex+1) + '/' + ImageCount	WindowLevel

Grouping by View Position

Modality: MG
☒ Apply only if suitable neighbour

Historical Images

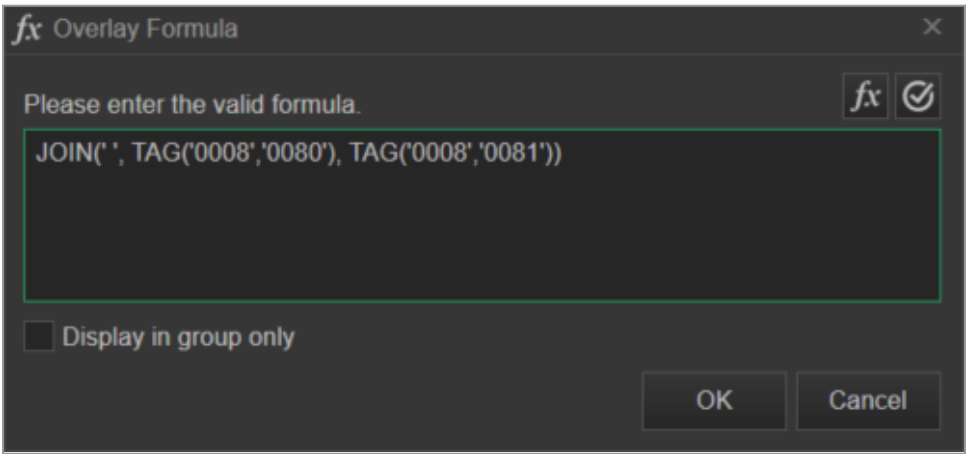
☒ Bold border
☒ Invert Overlays
☒ Year

Close



(fig.) The Overlay Settings menu

Editing Overlays

Selecting the ‘edit’ (pencil) icon on any Overlay Line (or alternatively, double-clicking) will open up the Overlay Formula menu. Here, entering a formula into a line will allow customizable contents to be overlaid onto the images.



The Velox overlays menu uses a proprietary formatting language for contents, which incorporates elements of SQL & other scripting languages. Two tools are available to help compose your formula entry.

 <i>Help/Information</i>	<p>Displays a help menu containing information about formatting, such as valid formula characters & queries.</p> <p>This includes examples and other suggested terms. Clicking on any parameter/operator will populate it within your formula query.</p>
 <i>Check Formula</i>	<p>Verifies your formula contents. Will warn you of any errors in formatting.</p> <p>We recommend all formulas be checked before proceeding.</p>

Selecting ‘Display in Group Only’ will enforce ‘Grouping by view position’ settings.

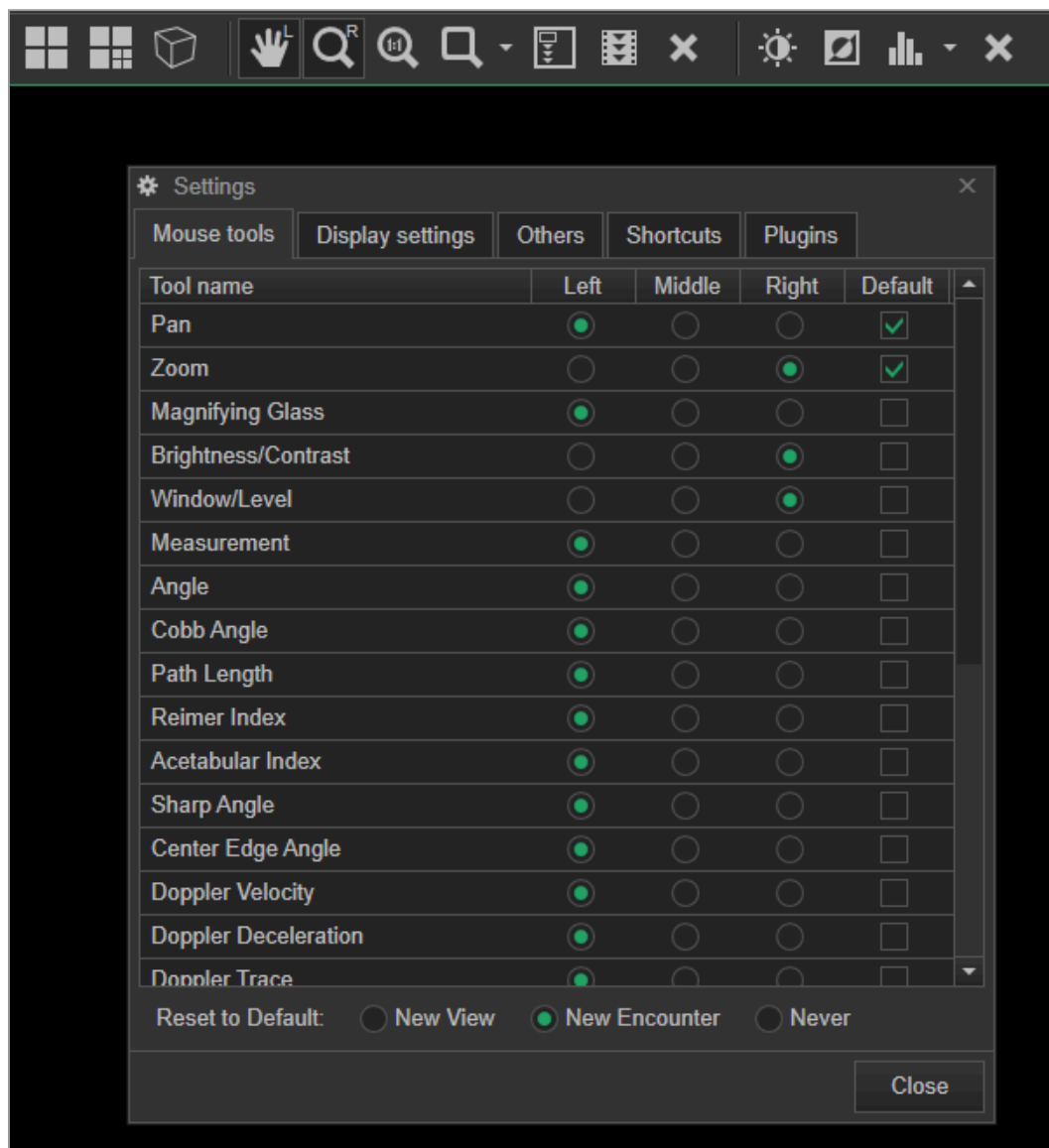
Other Settings

The Other Settings menu contains a number of tabs to display additional functions.

Mouse Tools

Allows items in the reading toolbar to be configured to work with specific mouse buttons.

A tool can be assigned to use left, middle, or right mouse buttons for each respective function. Checking off 'Default' will select this tool by default. The 'Reset to Default' options will specify when the default settings are applied.



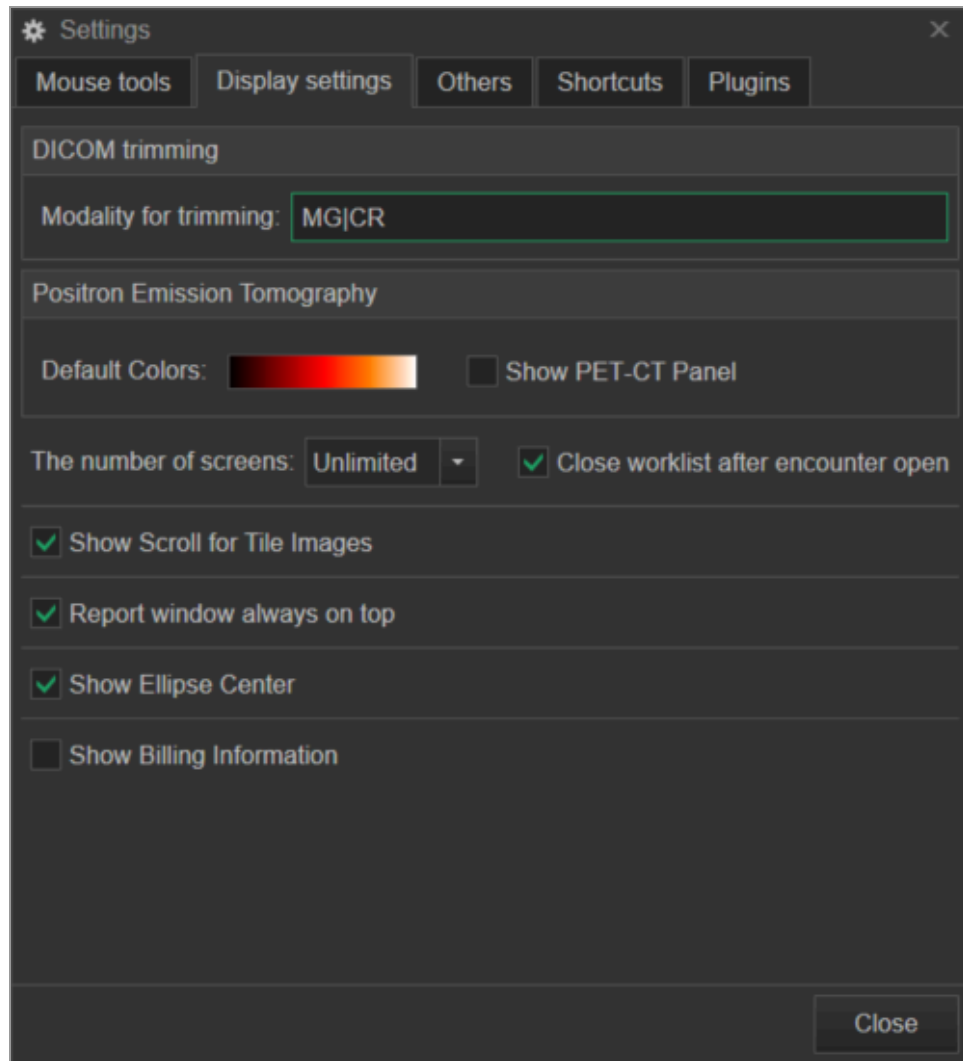
Display Settings

Settings that change visual and UI elements. Note that for most Display settings, your changes will only be visible after reloading the current encounter.

DICOM Trimming
Enter any specified modality code to trim. Use pipe () symbols as a separator if entering multiple modalities.

Positron Emission Tomography	
Default Colors	Define default spectrum colors for PET-CTs.
Show PET-CT Panel	<p>Enable/disable a dedicated PET-CT panel.</p> <p>When the <i>Show PET-CT Panel</i> setting is activated, a settings panel will appear at the bottom of any DICOM images when the PET/CT Adjustments tool is applied. This panel includes sliders for changing the PET-CT, gamma levels, and colour scheme and shows the fusion and max levels.</p>

Number of Screens	Selects the number of active screens. These settings will apply when the system is restarted.
Close Worklist After Encounter Open	Controls whether the worklist is hidden or kept open when selecting a case from the worklist.
Show Scroll for Tile Images	Show/Hide the scrollbar on viewed documents & images.
Report Window Always on Top	Prevents the Report Editor window from being put into the background.
Show Ellipse Center	Show/hide a crosshair that marks the center of the ellipse tool.
Show Billing Information	Shows the billing codes for each service where applicable (i.e., worklist, study selector, etc.).



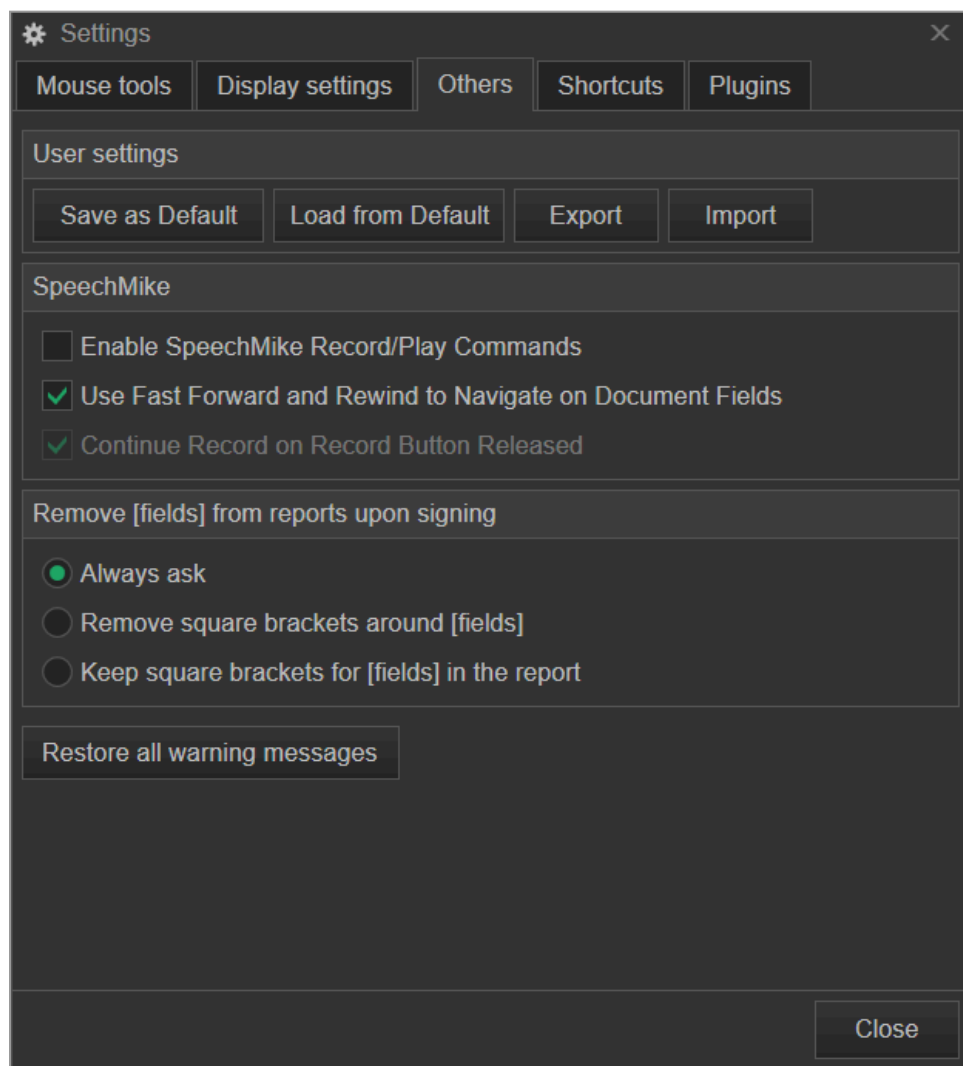
Others

Settings for migrating configurations and reporting preferences.

User settings
Allows settings files to be exported and imported, applying them to your current account.
Saving settings as a default will set them as the default settings for any new accounts made.

SpeechMike
Enables additional SpeechMike compatibility.

Remove [fields] from reports upon signing	
Changes the behaviour of text fields (text surrounded by square brackets).	
Best used in conjunction with SpeechMike's "Use Fast Forward and Rewind to Navigate on Document Fields".	
Restore all warning messages	Restores all previously dismissed warning messages. (i.e., warning before signing off on a non-existent report).



Shortcuts

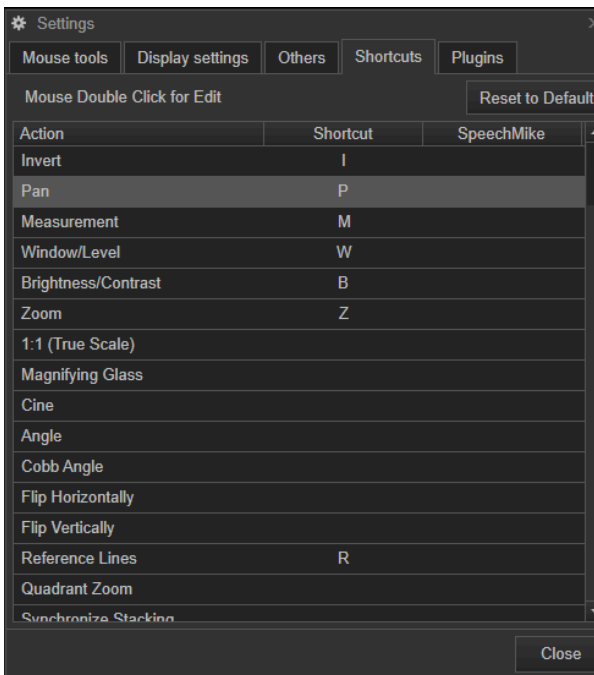
Shortcuts can be assigned to any toolbar item and a number of additional functions.

See [Commonly Used Shortcuts](#) for a quick overview.

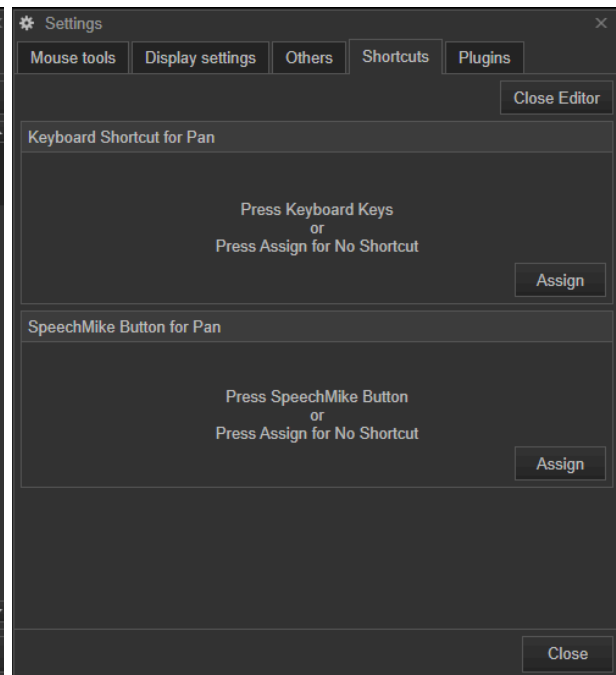
To reassign a function, double-click on an item, and the shortcut editor will open. Press the key or key combination you would like to assign and click 'Assign' to assign the defined function.

Selecting **Close Editor** will close the Shortcut Editor.

Selecting **Assign** when no key is defined will un-assign any shortcuts from this function.

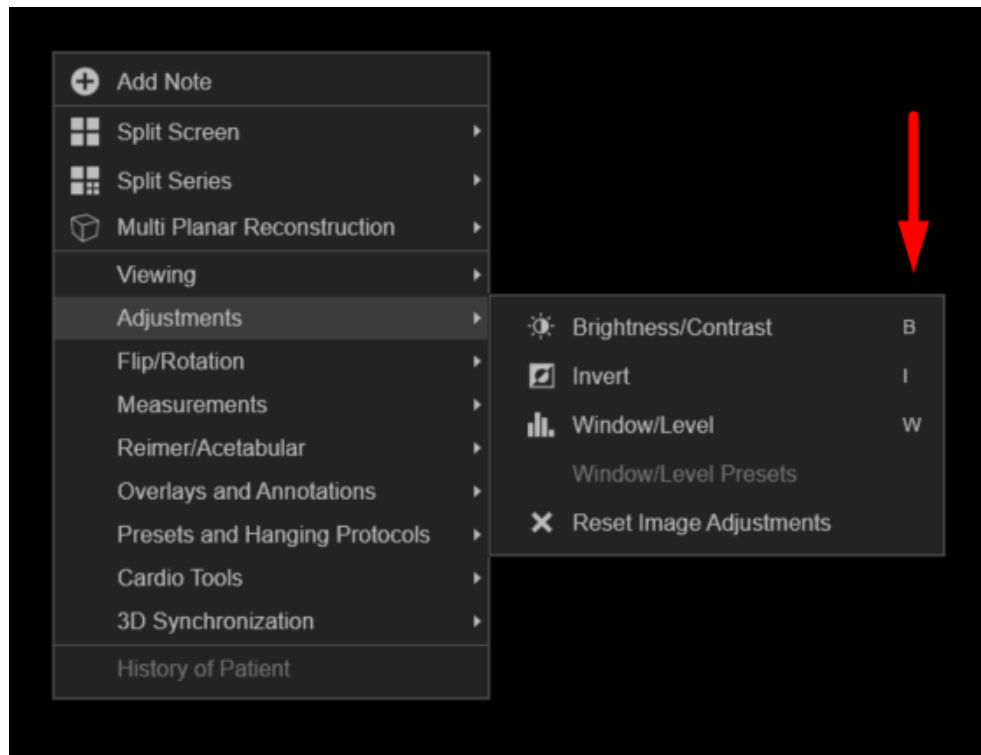


(fig. 1) The shortcuts menu



(fig. 2) The shortcut editor

Assigned tool shortcuts can also be quickly reviewed from the Encounter View's right-click menu.



(fig. 3) Assigned shortcuts are shown next to each tool.

Plugins

After modifying plugin settings, the Viewer must be restarted for changes to take effect.

Browser	
Allows the Browser type to be changed between Chromium and Internet Explorer. These options may change interactions when editing reports.	
Possible choices include:	
<ul style="list-style-type: none"> Chromium Internet Explorer 	
Plugins	<p>For plugins to appear here, they must have been selected as an integration when installing the Velox Viewer. Each option requires its own requisite software installation, which is not included with the Velox Viewer. Plugin selection <i>only</i> affects integration setup.</p> <p>Possible choices include:</p>

	<ul style="list-style-type: none"> • MModal • MModal Dictation • Powerscribe 360 • SWODIN • MagView
--	--

System Configuration Files

This section is intended for advanced configuration only. Errors may result in improper function of the Radiology Viewer. If you are unsure about how to proceed, please contact Technical Support.

The Radiology Viewer uses files in two directories. If your Viewer is not downloaded in the default directory, the filepath may differ.

The primary volume (C:\Velox\Exe\VeloxViewer\current) contains the executable files, as well as log files.

The ProgramData folder (C:\ProgramData\Velox) contains configuration/settings files and acts as encrypted storage for all downloaded documents and images.

Below is a listing of files that may be relevant to users. Some fields may be omitted for brevity. These are generally unremarkable or necessary for system function.

Please create a backup of any configuration files before attempting to edit information.

C:\ProgramData\Velox\		
\AppData\	Temporary folder.	
\UploadTasks\	Temporarily holds submission files while they are being uploaded.	
\Files\	\Backup\	Temporary folder.
	\BlinkViewer_Audio\	Stores recorded audio.
	\StudyProvider_Buffer\	Stores encrypted patient file downloads.
	This folder contains subfolders for encrypted patient download files, along with recorded audio files.	

	<ul style="list-style-type: none"> • As patient files are encrypted, they cannot be viewed unless decrypted with the 'Decrypt.exe' program or opened in the Viewer. • This folder's contents are periodically cleared (as per the StoreFilesDays setting.) • Folder contents are also emptied when using the 'Clear Cache' function in the Viewer settings or can be manually emptied to free up additional space.
\Configs\...	<p>This folder holds advanced configuration settings.</p> <p>See the \Configs\ section below.</p>

C:\ProgramData\Velox\Configs\															
ViewerProvider\	<p>Contains the VeloxViewer.cfg configuration file, which controls various storage options. After saving this file, the ViewerProvider system service must be restarted for changes to take effect.</p> <p>Can be edited for the following settings:</p> <table border="1"> <thead> <tr> <th colspan="2">VeloxViewer.cfg</th></tr> </thead> <tbody> <tr> <td><i>MinFreeSpaceMb</i> =</td><td>The amount of minimum space (in megabytes) required to run the Radiology Viewer.</td></tr> <tr> <td><i>StoreFilesDays</i>=</td><td>Controls the time (in days) that cached files are preserved.</td></tr> <tr> <td><i>DownloadThreadCount</i>=</td><td>The number of simultaneous download threads being used.</td></tr> <tr> <td><i>DownloadAttemptCount</i>=</td><td>The number of times to attempt redownloading failed patient files before failing the download.</td></tr> <tr> <td><i>StoreFilesPath</i>=</td><td>Sets the filepath where patient files are stored.</td></tr> <tr> <td><i>UploadTaskPath</i>=</td><td>Sets the filepath for temporary file upload storage.</td></tr> </tbody> </table>	VeloxViewer.cfg		<i>MinFreeSpaceMb</i> =	The amount of minimum space (in megabytes) required to run the Radiology Viewer.	<i>StoreFilesDays</i> =	Controls the time (in days) that cached files are preserved.	<i>DownloadThreadCount</i> =	The number of simultaneous download threads being used.	<i>DownloadAttemptCount</i> =	The number of times to attempt redownloading failed patient files before failing the download.	<i>StoreFilesPath</i> =	Sets the filepath where patient files are stored.	<i>UploadTaskPath</i> =	Sets the filepath for temporary file upload storage.
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<i>StoreFilesPath</i> =	Sets the filepath where patient files are stored.														
<i>UploadTaskPath</i> =	Sets the filepath for temporary file upload storage.														

\\WorklistAssistant\\	<p>Contains the Assistant.cfg configuration file, which controls the Worklist Assistant's settings. These largely correspond to settings within the program itself.</p> <p>Can be edited for the following options:</p> <table border="1" data-bbox="461 426 1414 1075"> <thead> <tr> <th colspan="2">Assistant.cfg</th></tr> </thead> <tbody> <tr> <td><i>UpdateIntervalSeconds=</i></td><td>The amount of time (in seconds) between checking for new worklist encounters.</td></tr> <tr> <td><i>ShowBalloon=</i></td><td>Hide/show Windows icon tray warnings. [0/1]</td></tr> <tr> <td><i>LastUser=</i></td><td>Displays the username of the last logged in WLA user.</td></tr> <tr> <td><i>AlwaysOnTop=</i></td><td>Disable/enable the WLA window to be the active window at all times. [0/1]</td></tr> <tr> <td><i>ViewerPath=</i></td><td>Points to the filepath where the Viewer is installed.</td></tr> <tr> <td><i>[User_####]</i></td><td>Stores the name of the user, and encrypted cached user credentials.</td></tr> </tbody> </table>	Assistant.cfg		<i>UpdateIntervalSeconds=</i>	The amount of time (in seconds) between checking for new worklist encounters.	<i>ShowBalloon=</i>	Hide/show Windows icon tray warnings. [0/1]	<i>LastUser=</i>	Displays the username of the last logged in WLA user.	<i>AlwaysOnTop=</i>	Disable/enable the WLA window to be the active window at all times. [0/1]	<i>ViewerPath=</i>	Points to the filepath where the Viewer is installed.	<i>[User_####]</i>	Stores the name of the user, and encrypted cached user credentials.
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\\BlinkViewer\\...	<p>This folder holds user configuration settings.</p> <p>See the \\BlinkViewer\\ section below.</p>														

C:ProgramData\\Velox\\Configs\\BlinkViewer\\					
<p>This section will contain individual folders for each unique clinic login on this PC, labelled with their internal user ID. These hold configuration and settings files for each user account.</p>					
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	<i>UseAPI=</i>	Set the current MModal API level. <i>[0/1]</i>
	<i>User_[username]=</i>	Stores cached MModal user credentials.
\[Userfolder]\	This section will contain individual folders for each unique login on this PC, labelled with their internal user ID. These folders contain the user's dedicated configuration and settings files.	
	\[Userfolder]\	
	Settings.cfg	Stores user-configured system settings.
	ToolSettings.cfg	Stores user-configured toolbar setup.
	Hotkeys.cfg	Stores user-configured hotkey assignments.
	Overlays.cfg	Controls how overlays are displayed, including font size & style.
	HangingProtocol.cfg	Stores user-configured hanging protocol setups.
	Assorted 'window' files:	Stores screen & window positions.
\Default\	If it exists, all containing config files in this folder are used as the template for all new accounts.	
	This folder is created by using the 'Save as Default' function in the Viewer Settings.	

C:\Velox\Exe\VeloxViewer\current	
This folder contains a number of files and folders. For brevity, only the most relevant information is included.	
\Log\	Contains daily log files. The filename suffix determines what is being logged in each file.

	A: Worklist Assistant logs & records. P: Download & system error logs. V: Viewer activity records.
\Plugins\	Contains .dll files for installed Viewer plugins.
VeloxViewer.exe	Runs the Velox Viewer program.
uninstall.exe	Uninstalls the Velox Viewer program.
DecryptFiles.exe	An emergency file decryption program.
WorklistAssistant.exe	Runs the Velox Worklist Assistant program.

MModal Fluency Direct

Fluency Direct is a voice transcription software developed by 3M Corporation and licensed to Velox Imaging. This section only corresponds to MModal subscriptions managed by Velox Imaging and does not apply to alternative versions of 3M's Fluency.

This section includes abridged information on installing and getting started with Fluency MModal. For the full MModal Fluency Direct User Guide & other resources, please see <https://apps.3mhis.com/docs/ClinicianSolutions/FluencyDirect/index.html>.



The Radiology Viewer version 1.0.47+ is only compatible with MModal Fluency Direct 14.1.16.8 or higher. Previous versions may not be supported.

Installing MModal Fluency Direct

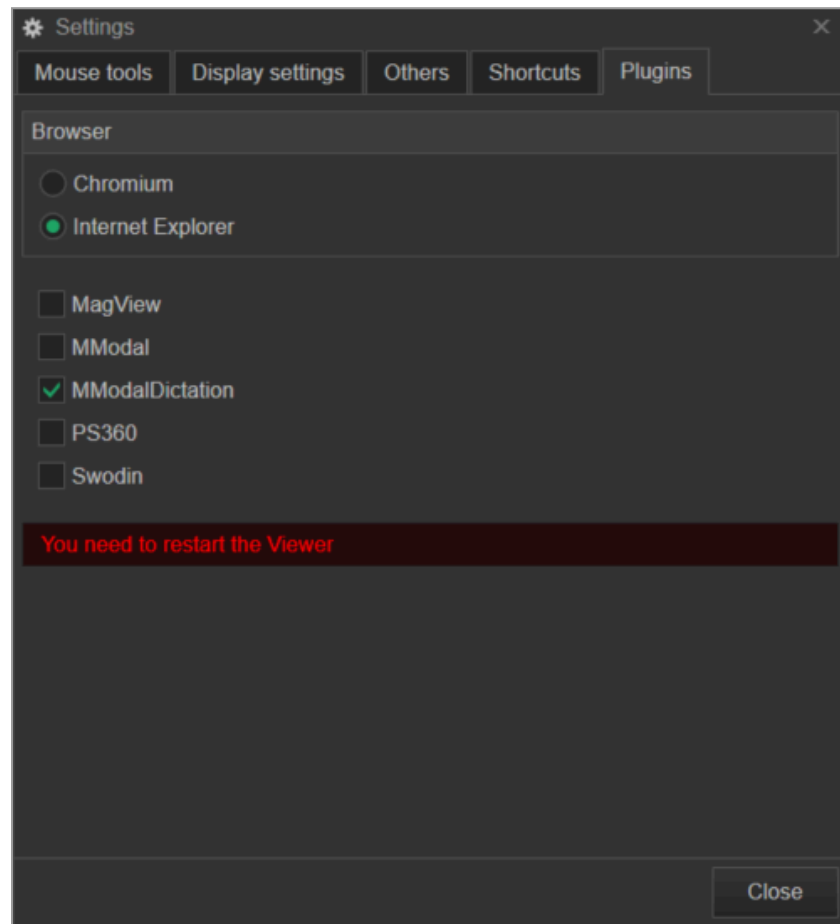
To install MModal Fluency Direct, please contact Velox Technical Support, or follow the dedicated instructions provided.

Enabling MModal Fluency Direct

If MModal is installed on your device, it must be enabled for your account.

- 1) Log into the Radiology Viewer under the account you wish to enable
- 2) Select **Settings > Other Settings > Plugins**.
- 3) Check off '**MModalDictation**'.
- 4) Close the Radiology Viewer entirely.
- 5) Open the Radiology Viewer and log into the same user account as before.

- 6) The MModal splash screen will appear, along with a login window. Enter your MModal credentials here, and select **OK**.
- 7) The Viewer will open, along with the MModal control window.



After entering your MModal username and password for the first time, your credentials will be saved, and you will not be asked again for future attempts under this user profile.

A screenshot of the 'MModal Authorization' dialog box. It has a title bar with 'MModal Authorization' and a close button. Inside, there are two text input fields: 'Login:' and 'Password:'. Below the fields are two buttons: 'OK' and 'Cancel'.

Installing MModal with other versions of Fluency

If Fluency MModal is installed with Fluency for Imaging on the same PC, issues with dictation may occur. To allow compatibility for multiple installations of Fluency products:

- 1) Access C:\MModal\FluencyForImaging\Reporting\Bin\CaptureUIIntegrationKit\lib\
- 2) Delete the file AnyModalCaptureUILib.tlb
- 3) Access C:\MModal\FluencyForImaging\Reporting
- 4) Delete the folder FDPortable

API Settings

MModal can run in two modes, with API enabled and disabled. Enabling the API will allow non-MModal compatible reporting templates from being used, and mildly change some app behaviours.

- 1) Access C:\ProgramData\Velox\Configs\BlinkViewer
- 2) Edit Default.cfg
- 3) Set UseAPI= value to 1
- 4) Save the file, and relaunch the Viewer.

To revert the API settings, change the UseAPI= value to 0. If UseAPI is disabled, then any templates must be set up for use with MModal, such as the "MModal Basic" template.

Using Fluency MModal

This section is only intended to provide a brief overview as it relates to the Velox Radiology Viewer. For a complete user guide, including a list of inbuilt commands, see the Fluency manual:

<https://apps.3mhis.com/docs/ClinicianSolutions/FluencyDirect/en/fluency-direct-user-guide.html>

Log-in


MModal will automatically launch when logging into the Radiology Viewer.

If this is your first time logging into this account on this PC, you will be prompted to enter your MModal username and password. In all subsequent attempts, your MModal credentials will be preserved, skipping this step.

Operations

After logging in, MModal will automatically launch with a floating control bar. This control bar can be clicked and dragged to be repositioned where needed, anchoring where placed. If placed on the left/right border of your display, it will automatically be docked onto the side.

With the Velox reporting window open, select **Record** (or use your assigned shortcut) to begin dictating into the report.

 If the UseAPI value is set to 0, you may face issues dictating into non-MModal compatible report formats. If this occurs, select a reporting format labelled “MModal” (if applicable), or change your UseAPI settings. See [API Settings](#) for more information.

Troubleshooting

With MModal enabled in the Viewer, a button labelled ‘Sync Fluency’ will become available on the main panel. This button will quickly reload Fluency, resolving a number of typical issues. This includes:

- Text not capturing properly,
- Formatting problems,
- Newly added commands, dictionary items, and abbreviations not being recognized.

The Worklist Assistant

The Velox Worklist Assistant (abbreviated as ‘WLA’) is an optional supplementary software component that allows users to manage multiple clinic accounts more easily.

The worklist assistant is installed alongside the Radiology Viewer. After entering your user-defined Master Username and Master Password, the WLA menu will allow users to save their radiologist profiles to their master credentials, which can be switched to and from with the click of a button. The WLA menu will indicate how many cases are waiting to be read, as well as the priority of these cases.

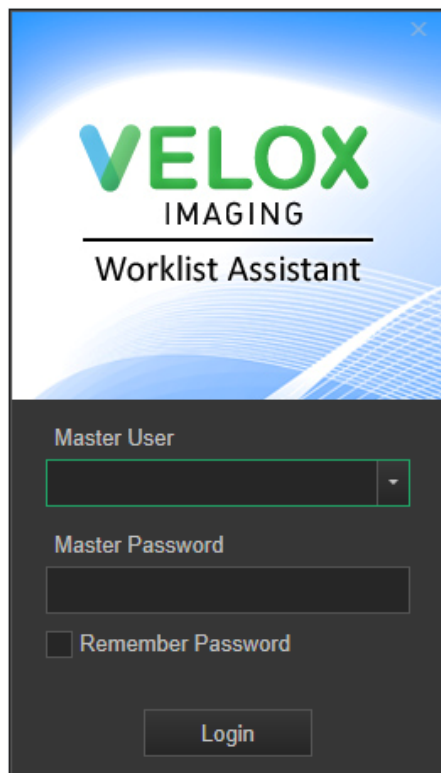
Creating a Master User

To use the Worklist Assistant for the first time, a Master User must be created.

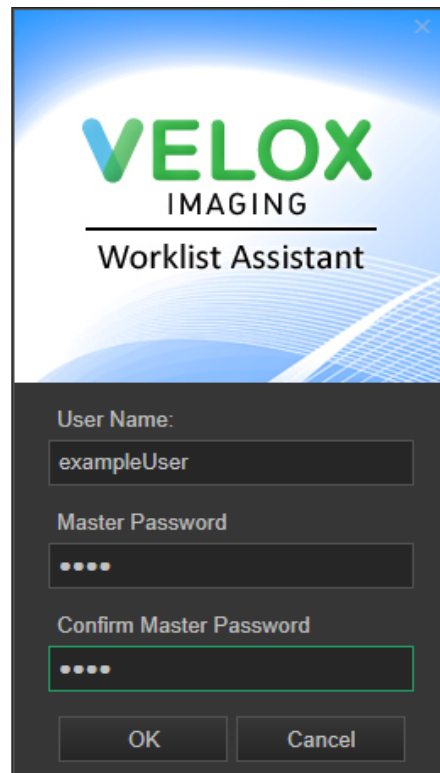
- 1) Open the Worklist Assistant program.
- 2) Select the **dropdown** on the right side of the username field. Select **New Master User**.
- 3) A new window will open. Enter your desired username and password, and re-confirm your password. The password cannot already exist; if you have entered a username that is already in use, you cannot proceed.
- 4) Select **OK** to continue.

If successful, you will be automatically signed into your account.

Click 'Cancel' at any time to return to the previous menu without registering your account credentials.



(fig. 1) Login screen




(fig. 2) Creating a new master user

Signing into the Worklist Assistant

If you already have a master account, you will be able to log in to the Worklist Assistant immediately. To sign into your master account:

- 1) Launch the Worklist Assistant program.
- 2) Enter your master username and master password. Select **Login**. Upon successfully logging in, the program will open.

If you have previously logged into the Worklist Assistant on this device, your username will be saved in the program. To see all saved usernames, select the dropdown next to the username field. Choosing a saved name will immediately populate it into the username field.

 If you would like your account to automatically log in by remembering your account credentials in the future, check off 'Remember Password'. You can later disable this from your WLA settings.

Using the Worklist Assistant

The Worklist Assistant will allow you to add Velox accounts to your master account. After an account has been added, it will display the number of outstanding encounters on your worklists, sorted by priority. If you are a part of a shared worklist under an account, the shared worklist(s) will be displayed beneath your personal worklist.

Selecting a saved worklist from the Worklist Assistant will automatically launch the Viewer and auto-fill the saved credentials, negating the need to enter passwords manually.

This is most helpful when a user reads for several different clinics, as the Worklist Assistant will save time and effort in remembering user profiles and proactively notify users of any encounters to be read without needing to log in first.

If you are already logged into the Radiology Viewer when selecting an account from the WLA, the Viewer will be closed and reopened under the new account.

The Worklist Assistant will run in the background until it is exited. Otherwise, users may run the program from either their file system or taskbar to re-open the Worklist Assistant window.

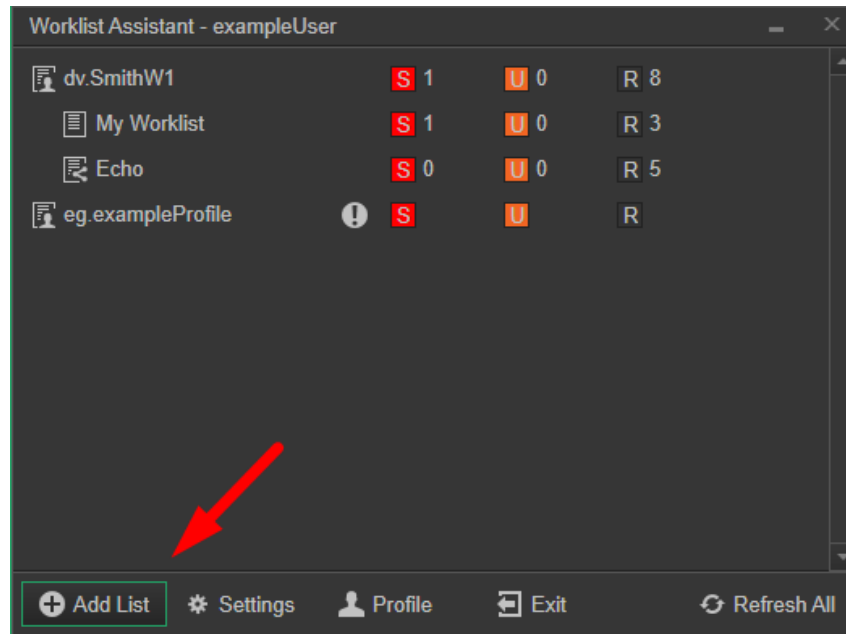
Once you are signed into the Worklist Assistant, your radiology accounts may be added as required. Once added, simply double-clicking on an entry will attempt to close the Viewer and re-open it with the account credentials you have selected.

Interacting with Radiology Accounts

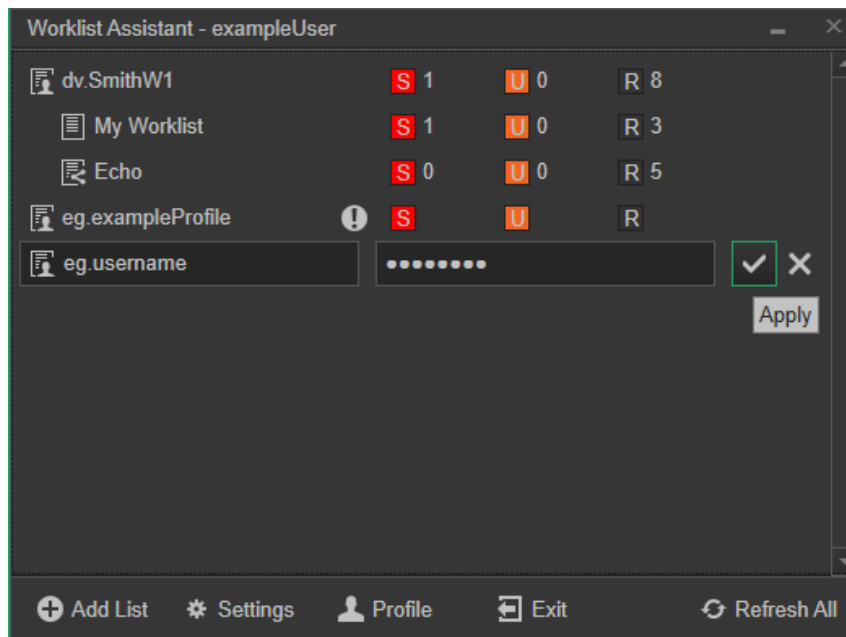
Adding Radiology Accounts

Your radiology profiles must be added to your master account before the Worklist Assistant can be used. To do so:

- 1) Launch & sign into the Worklist Assistant.
- 2) Click 'Add List' at the bottom-left of the WLA menu. Two boxes will appear at the bottom of your list.



- 3) Enter your radiology profile username in the first field and the radiology profile's password into the second field. Click the checkmark icon to proceed.



- 4) If the account information entered is correct, the WLA will show how many Stat, Urgent, or Regular priority cases you have waiting for you.

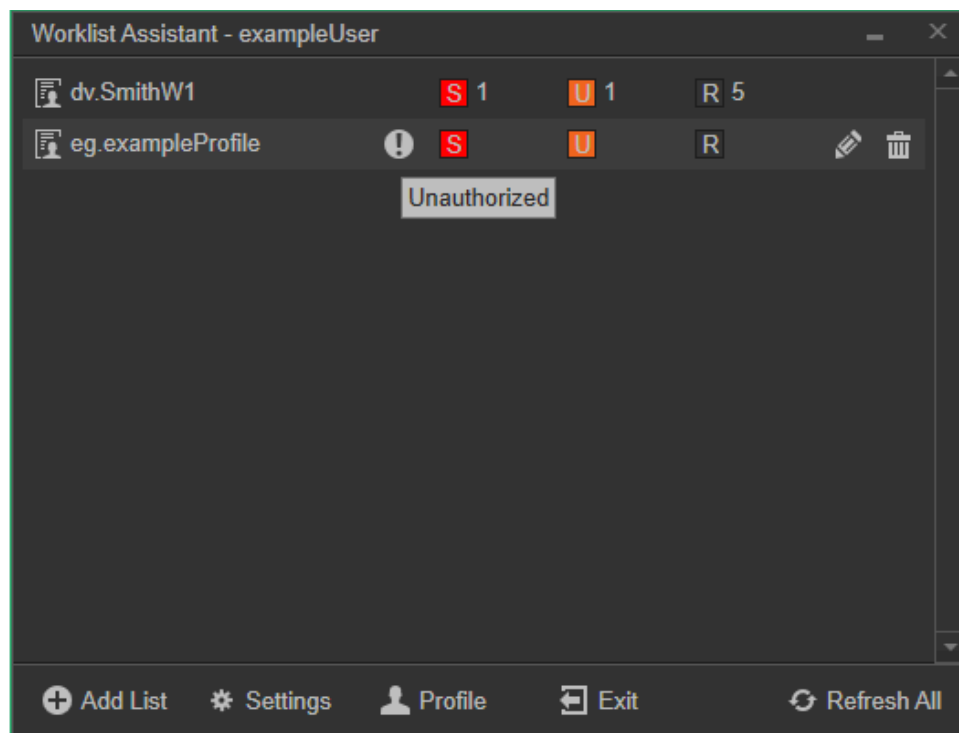
Editing Radiology Accounts

If your account information is incorrect, a warning icon will be shown next to your username, with the message reading 'Unauthorized'. To edit your account credentials:

- 1) Hold your mouse cursor over the radiology profile you wish to edit.
- 2) Click on the 'Edit' button (pencil icon) on the right side.
- 3) Enter your radiology username into the first field and your radiology account password into the second field.
- 4) Click the checkmark icon to save your updated credentials or the X button to cancel your change.

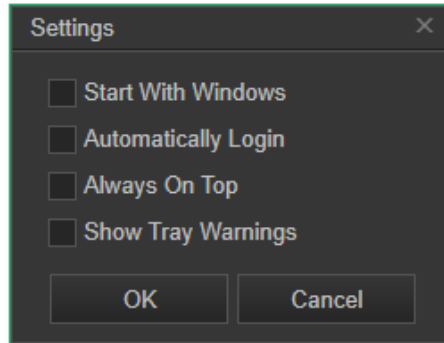
Removing Radiology Accounts

If you would like to delete a saved account from the Worklist Assistant, place your mouse cursor over the account you wish to remove. Then, click the 'Delete' button (trash can icon) on the far-right side.



Worklist Assistant Settings

Settings for the Worklist Assistant can only be accessed after signing into the Worklist Assistant. After logging in, click 'Settings' at the bottom of the window.



These settings include:

Start With Windows	Adds the Worklist Assistant to your Windows launch applications, which will open automatically upon signing into your Windows account. Enabled by default.
Automatically Login	Automatically signs into the Worklist Assistant with your current master username and master password when the application is launched. Can also be enabled by clicking 'Remember password' on the initial login.
Always on Top	Prevents the Worklist Assistant from being positioned behind other application windows on your device.
Show Tray Warnings	Displays a popup notification when new services are assigned to you.

Updating Your Worklist Assistant Master Credentials

You can update your master account username or password at any time. To do so, sign in, then click 'Profile' at the bottom-middle.

A new window will open, allowing you to update your current username or enter a new password. All changes will be applied to the account currently logged in, and you must confirm your current password before any changes will be accepted.

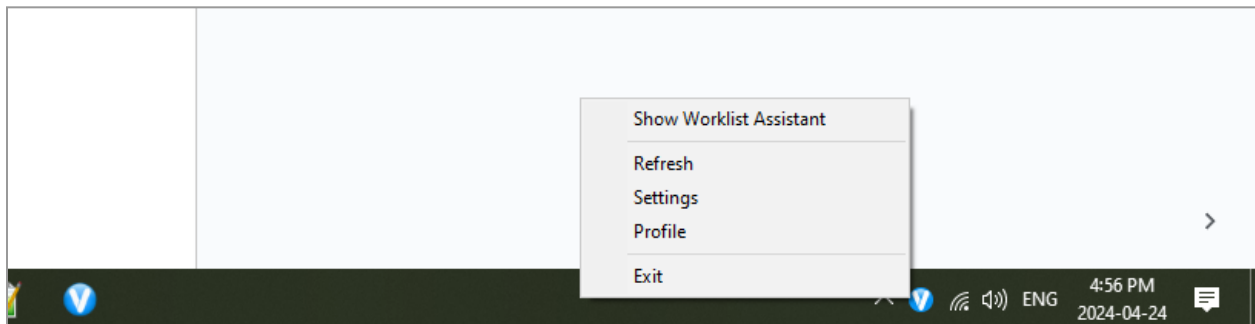
To change your username, simply enter your updated choice of name into the Username field. If you do not wish to update your password, re-enter your current password into the New Master Password field.

When ready, click 'OK' to proceed. Your account credentials will be updated immediately.

Interacting with the Taskbar

After signing in, the Worklist Assistant will automatically dock itself onto the taskbar's notification area. Clicking on the icon will immediately open the Worklist Assistant window. Right-clicking the application will show a number of options, including:

Show Worklist Assistant	Opens the Worklist Assistant window if it has been closed or minimized.
Refresh	Refreshes your Worklist Assistant case counter.
Settings	Open the Worklist Assistant settings menu.
Profile	Opens the Worklist Assistant profile menu, allowing you to update your Master account credentials.
Exit	Completely Exits out of the Worklist Assistant.



Exiting the Worklist Assistant

If you are *not* signed into the Worklist Assistant, selecting the window Close button will close the program immediately.

If you *are* signed in, the program must be exited manually, as it will continue to run in the background until closed. You can close the Worklist Assistant by clicking the 'Exit' button in the program or right-clicking the program icon on the taskbar and selecting 'Exit'.

Troubleshooting & Common Issues

Please use the guide below to troubleshoot some common issues. If you need any assistance, do not hesitate to contact Velox Technical Support.

Installation Issues

“Error opening file for writing” Message on Installation

Problem:	Installation Wizard shows an error message reading “Error opening file for writing”.
Cause:	An important background component (VeloxImaging ViewerProvider) did not properly stop or uninstall itself.
Solution:	Restart the PC and run the installer again. Advanced: From the Services list, stop the VeloxImaging ViewerProvider service and run the installer again.

Login Issues

Incorrect Username or Password

Problem:	The login menu displays an ‘Invalid Username or Password’ message.
Cause:	The username or password you have entered is not valid. This could be due to: <ul style="list-style-type: none">• The username/password is not correct• The username/password is correct, but an error has been made during entry• The host clinic has updated your account credentials• Your account has been locked/deleted by the host clinic
Solution:	Re-enter your credentials, taking extra care to ensure that no typographical errors occur. As the password characters are obscured when entered, it may be difficult to notice if you are making an error. Make sure that the capslock function on your keyboard has not been enabled. Note that while the username is <i>not</i> case-sensitive, the

	<p>password <i>will</i> require exact input.</p> <p>Ensure the password you are entering follows standard convention. A password must include 8+ characters, with at least 1 of each:</p> <ul style="list-style-type: none"> • lowercase letters • uppercase letters • numbers <p>Ensure you include the clinic abbreviation in your username. The username must always start with a clinic abbreviation followed by a period. For example: <i>acme</i>.JohnSmith</p> <p>Otherwise, you may have simply forgotten your username or password. If this happens, contact your clinic management to verify your username or request a password reset.</p>
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Your Account is Blocked

Problem:	The login menu displays the message “Your account is blocked - please contact an administrator.”
Cause:	The account you are trying to access has been disabled or deleted by the host clinic.
Solution:	Contact your clinic management to re-enable your account.

Velox Service Unavailable Message on Login

Problem:	The login menu displays a “Velox service is not available” message.
Cause:	An important background component (VeloxImaging ViewerProvider) is not running.
Solution:	<p>Follow the steps as outlined:</p> <ol style="list-style-type: none"> 1) Open the Task Manager or Services menu in Windows. 2) Find the VeloxImaging ViewerProvider service. 3) Right-click the service, and select ‘Start Service’. 4) Log into Velox again.

Could Not Connect to Network

Problem:	The login menu displays a 'Could not connect to [xxx.xxx.xxx.xxx]' message.
Cause:	<p>The login server cannot be reached. This can be due to:</p> <ul style="list-style-type: none"> • Network unavailability (no internet) • Firewall blocking connectivity • Velox system outage • Another type of network error • Unsupported version of the Radiology Viewer.
Solution:	<p>Verify that you have internet connectivity by visiting any other webpage, e.g., www.google.com. If this page does not load in a timely fashion, you may not have a working internet connection.</p> <p>You may be using a discontinued version of the Radiology Viewer. To update to the most recent version, visit https://update.veloximaging.net.</p> <p>Otherwise, contact Velox Support.</p>

Viewer Crashes After Login

Problem:	The Radiology Viewer closes immediately after logging in.
Cause:	<p>Something is going wrong on launch. Potential reasons include:</p> <ul style="list-style-type: none"> • Improper installation • Corrupt settings/configuration files
Solution:	<p>Attempt the following options:</p> <ul style="list-style-type: none"> • Contact Technical Support • Restart your PC • Reinstall the Viewer <p>Advanced:</p> <ul style="list-style-type: none"> • Check the system logs (C:\Velox\Exe\VeloxViewer\current) to view any error messages. • Clear out the user settings folder or the problematic user config file (typically a window position file).

Inadequate Disk Space

Problem:	After signing in, the message "Inadequate Disk Space" is displayed.
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Cause:	Your working disk is nearly full and must be emptied.
Solution:	<p>Clear out excess files, including files stored at C:\ProgramData\Velox\Files.</p> <p>Consider updating your storage settings, or purchasing a larger/separate hard drive to store your DICOM files.</p>

MModal Issues

Error Message on Login

Problem:	When logging into the Viewer with MModal enabled, the following error message is shown: “Error: Unable to sign in. The credentials you entered may be incorrect, or your account may have been disabled”.
Cause:	<p>If you are prompted for MModal credentials:</p> <ul style="list-style-type: none"> • The MModal credentials you are entering are incorrect. • The MModal installation is corrupted. <p>If the error appears automatically:</p> <ul style="list-style-type: none"> • The MModal credentials saved onto this account/PC are invalid and have been changed. • The MModal installation is corrupted
Solution:	<p>Contact Velox Support for further assistance. If assistance is not available, you can also:</p> <ul style="list-style-type: none"> • Perform a ‘repair’ installation of Fluency MModal. • Perform a complete reinstall of Fluency MModal.

Unpredictable Actions when Dictating with MModal

Problem:	When dictating with MModal, the Viewer will randomly activate functions or scroll wildly.
Cause:	<p>The Report input is not being captured correctly, and it is triggering your MModal input as keyboard commands. This usually happens due to three possible reasons:</p> <ol style="list-style-type: none"> a) The Radiology Viewer has lost sync with MModal b) MModal is being used as a standalone and not as a Viewer Plugin.

	<p>c) Incorrect reporting format being used for MModal API version, or API version not set.</p> <p>Check C:\ProgramData\Velox\Configs\BlinkViewer\Default.cfg for your current API level.</p>
Solution:	<p>Attempt the following solutions:</p> <p>a) Click 'Sync Fluency' at the top of the window. If this doesn't help, attempt the following.</p> <p>b) Go into Settings > Other Settings > Plugins.</p> <ol style="list-style-type: none"> 1. Make sure that MModal is checked off. 2. Close MModal and restart the Viewer. MModal should automatically launch without an error message. If prompted for an Mmodal login, enter it here. <p>c) Check your MModal API level from <i>C:\ProgramData\Velox\Configs\BlinkViewer\Default.cfg</i>.</p> <p>If set to UseAPI=0, ensure you are only using reporting formats labelled "MModal" or custom formats which have been explicitly set up for support with MModal.</p> <p>Otherwise, in the text file, set UseAPI= to 1. Save the file, and restart the Viewer.</p>

Dictation Issues

Audio not recording

Problem:	There is no audio being recorded when dictating.
Cause:	<p>Potential causes include:</p> <ul style="list-style-type: none"> • The microphone is not recognized in Windows • The microphone you are using is not set as the default recording device in Windows • The microphone recording volume is too low
Solution:	Check your Windows microphone settings. As the Radiology Viewer uses your system's default microphone settings, this is critical for its function.

No audio playback

Problem:	There is no audio being played when listening to dictations.
Cause:	Potential causes include: <ul style="list-style-type: none">• The speaker turned off / volume too low• The speaker is not recognized in Windows• The speaker you are using is not set as the default playback device in Windows
Solution:	Check your Windows playback settings. The Radiology Viewer uses your system default audio output settings, which are critical for its function.

Account Management

Do not share your account information with anybody.

Note that all Velox account passwords are encrypted once set and cannot be “recovered”. If a password is forgotten, it can only be set to a new value. To avoid losing system access, we recommend keeping a copy of your login information in a secure place, such as a password manager.

There may be multiple conflicting terminologies for user accounts. Please see a breakdown of account types and recommended procedure below:

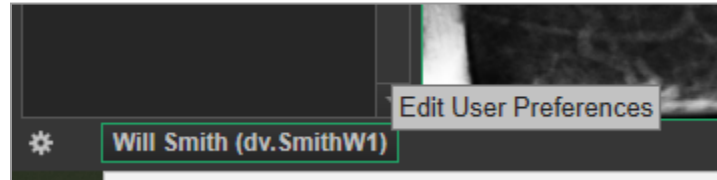
Velox Radiology Accounts	<p>Management Procedure: All Velox Radiology & Velox RIS accounts are to be created and managed <i>solely</i> by the issuing clinic. Clinics may choose to set an expiry date for user passwords, which can be useful in setting a temporary login.</p> <p>Self-update Options: The user may update their usernames, passwords, and two-factor authentication settings within the Radiology Viewer at any time. Additionally, passwords can be set to periodically expire, requiring a new password to be set each time.</p> <p>Reset Procedure: Velox Technical Support <i>cannot</i> directly reset user credentials, as we cannot verify user identities.</p>
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	<p>If you forget your Velox username or password or lose access to your two-factor authentication systems, please <i>contact your clinic administrator directly</i>.</p>
Worklist Assistant Master Users	<p>Management Procedure: Master accounts can be created at any time within the Worklist Assistant.</p> <p>Self-update Options: The user may update their master username and master password at any time within the Worklist Assistant settings menu.</p> <p>Reset Procedure: If you forget your WLA master username or master password, <i>please contact Velox Technical Support</i> to perform a reset.</p>
MModal Fluency Direct	<p>Management Procedure: Velox Imaging is the primary account issuer and technical provider. To create a new account, the contracted client must send a written request to Velox support, and they will be invoiced if applicable.</p> <p>Update Options: Account credentials <i>cannot</i> be modified by any party other than Velox Technical Support.</p> <p>Reset Procedure: If you forget your MModal username or password, <i>please contact Velox Technical Support</i> to perform a reset.</p> <p>As MModal credentials are cached in your system after a successful login, resetting passwords will require the PC's local login cache file to be cleared before the MModal account can be used normally.</p>
Two-Factor Authentication	<p>Two-factor authentication apps are run on personal devices and are not affiliated with Velox.</p> <p>If you lose access to your two-factor authentication apps, ask your clinic administrator to disable two-factor authentication on your account.</p>

Updating Velox User Credentials

Your username or password can be updated within the Radiology Viewer at any time. To do so:

- 1) Log into the Viewer.
- 2) Select **your username** at the bottom-left of any screen. You will be given two options:
 - a) *Change Login and Password*
 - b) *Enable Two-Factor Authentication*



- 3) Select **Change Login and Password**. You will be prompted to exit the Viewer. Select **Yes**, and the 'Change Your Password' window will open.
- 4) Complete this window. Your current password must be included in the 'Current Password' field.
 - a) *If you would like to change your username*, enter your new username at the top. Enter your desired password (it can be unchanged) in all three password fields.

Your username must always begin with the clinic's abbreviated prefix.

- b) *If you would like to change your password*, enter your new password into the sections below, and then confirm it by re-entering the desired password.

Note that passwords must contain 8 or more characters, featuring at least 1 lowercase letter, 1 uppercase letter, and 1 number. If you are not changing your username, the password must be different from your current credentials.

Change Your Password

Login: dv.SmithW1

Current Password:

New Password:

Confirm Password:

Password must:

- Be different from the old one
- Passwords should match
- Be at least 8 characters
- Have at least one lower-case letter
- Have at least one upper-case letter
- Have at least one number

Change Password Cancel

5) Select **Change Password** to finalize your account changes.

Password Expiry

Passwords can be set to periodically expire by the issuing clinic, typically once every 365 days. This is often a legal requirement for healthcare providers.

If your password has expired, a warning message will be displayed upon login, along with a choice to either set a new password or to be reminded again on the next login. After a new password has been set, the expiration timer will be reset.

Two-Factor Authentication

Two-factor authentication (2FA) can be set to provide an additional layer of security when logging into your Velox Radiology account. After logging in with your username and password, you will be asked to perform a secondary authentication step (i.e., "two-factor").

To use 2FA, a third-party authentication app is required and can be used on any supported device. Please exercise caution and only use authentication platforms from trusted sources. Some popular choices include Twilio's Authy, Google Authenticator, 1Password, and more. These apps are typically used from a smartphone, but web/desktop alternatives may exist. To properly utilize 2FA, you must be able to reliably access these apps and devices, and they should only be accessible to you. Should you ever lose access to your authenticator app for whatever reason (e.g., device failure, loss, etc), your clinic is able to disable

Enabling Two-Factor Authentication

To enable two-factor authentication from the Radiology Viewer:


- 1) Download or sign up for an authentication app on any device.
- 2) Log into the Radiology Viewer.
- 3) Select **your username** at the bottom-left of any screen, then select **Enable Two-Factor Authentication**.
- 4) The 'Enable Two-Factor Authentication' window will open. Follow the prompts or instructions below.
- 5) *In your authenticator application*, enter the secret key that Velox provides or use the app's photo function to scan the QR code (functionality may vary). If the key is invalid, click the 'refresh' button to create a new one.
- 6) *The authenticator application* will generate a six-digit verification code. Enter this code into the Velox window.
- 7) **Select** Apply.

Two-factor authentication has now been enabled. Any future logins will require the authenticator app before accessing your account.

Enable Two-Factor Authentication

1. Please download Authenticator Application (e.g. Twilio Authy, Google Authenticator, Duo Mobile, 1Password, etc.)

2. Scan QR code below or enter Secret Key manually using Authenticator Application:



Secret Key

HS3M

3. Type 6-digit code from Authenticator Application:

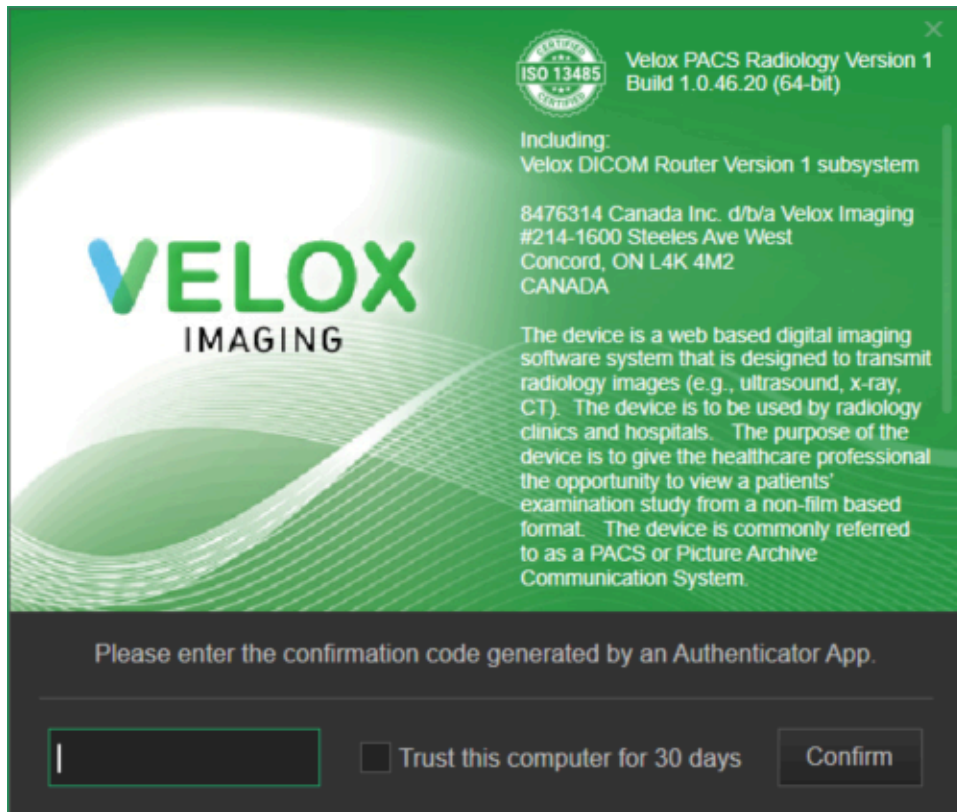
Apply

Cancel

Using Two-Factor Authentication

After logging into your account (either with your username/password or with the Worklist Assistant), you will be prompted to enter a six-digit confirmation code from your authenticator app before you can proceed.

If this is a trusted computer, you may choose to pause the authentication process for the next 30 days.

The image shows a web-based authentication interface for Velox PACS Radiology. The top section has a green background with the 'VELOX IMAGING' logo on the left. On the right, it displays 'ISO 13485' and 'Velox PACS Radiology Version 1 Build 1.0.46.20 (64-bit)'. Below this, it lists 'Including: Velox DICOM Router Version 1 subsystem' and the company address: '8476314 Canada Inc. d/b/a Velox Imaging #214-1600 Steeles Ave West Concord, ON L4K 4M2 CANADA'. A paragraph describes the device as a web-based digital imaging software system for radiology clinics. The bottom section is dark grey and contains the prompt 'Please enter the confirmation code generated by an Authenticator App.' followed by a text input field, a checkbox labeled 'Trust this computer for 30 days', and a 'Confirm' button.

ISO 13485

Velox PACS Radiology Version 1
Build 1.0.46.20 (64-bit)

Including:
Velox DICOM Router Version 1 subsystem

8476314 Canada Inc. d/b/a Velox Imaging
#214-1600 Steeles Ave West
Concord, ON L4K 4M2
CANADA

The device is a web based digital imaging software system that is designed to transmit radiology images (e.g., ultrasound, x-ray, CT). The device is to be used by radiology clinics and hospitals. The purpose of the device is to give the healthcare professional the opportunity to view a patients' examination study from a non-film based format. The device is commonly referred to as a PACS or Picture Archive Communication System.

Please enter the confirmation code generated by an Authenticator App.

☐ Trust this computer for 30 days

Confirm

Disabling Two-Factor Authentication

Two-factor authentication can be disabled from within the Radiology Viewer, or from within your clinic profile. The latter option can be used by the clinic management to reset your account if you are unable to access your authenticator app.

To disable 2FA from within the Radiology Viewer:

- 1) Log into the Radiology Viewer.
- 2) Select **your username** at the bottom-left of any screen, then select **Disable Two-Factor Authentication**.

- 3) The 'Enable Two-Factor Authentication' window will open. Enter the six-digit code from your authenticator app, then select **Apply**.

Two-factor authentication on this account will be disabled, and you will no longer be prompted upon login. Remove this account from your 2FA application menu.