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Velox PACS Radiology Version 1 Build 1.0.47.05

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.

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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 <u>login.veloximaging.net</u>. 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.

Certain actions depicted in this manual may differ mildly 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, and general advice about a section.	

\bigotimes	Clock	This box discusses information that has been significantly changed in a system update.
		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.

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	A cloud-based RIS-PACS software suite used by medical imaging clinics and their staff.	
	Clinical and management tasks are done from the web-based RIS.	
	Physician reading is generally performed in the Velox Radiology Viewer. Each option may feature a number of sub-components.	
The RIS	The web-based portion of the Velox Suite, accessible by visiting login.veloximaging.net.	
	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.	
	Reading physician capabilities are generally limited on the RIS unless additional account permissions have been granted.	
Velox Radiology Viewer	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.	
	A.k.a.: "the Radiology Viewer", "the Viewer", "the Velox Viewer", "the Rad Viewer", "the PACS".	
Velox User Account	Refers to a username and password provided by an issuing clinic for use in the Velox Suite.	
	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.			
	Not to be confused with a Fluency MModal account, or a Worklist Assistant master account. For more information, see <u>Account</u> <u>Management</u> .			
	A.k.a.: "clinic account", "clinic profile", "user", "user account", "user profile", "Velox account".			
The Worklist Assistant	A supplementary application used to manage multiple Velox Radiology accounts at the same time.			
	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.			
	For more information, see The Worklist Assistant.			
	A.k.a.: "the WLA", "the assistant".			
Master Account	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.			
	For more information, see The Worklist Assistant.			
	A.k.a.: "master login", "WLA account", "master profile", "master username".			
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	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.		
	A.k.a.: "a case", a "patient encounter".		
Service	A distinct procedure, treatment, or service performed at the clinic, typically grouped within a patient encounter.		
	Each status in an encounter can be independently assigned to technologists and reading physicians and have service statuses applied.		
	e.g., an ultrasound of the left tibia.		
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	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.		
	This value can be found on the worklist.		
MRN Number	ber 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.		
	This value can be found on the worklist.		
Installation Wizard	A downloaded application used to install the Radiology Viewer. It contains a step-by-step menu to guide the user through the installation process.		
	A.k.a.: "the wizard", "installer".		
Two-factor authentication	An optional process to require additional verification before you are able to log into the Viewer.		
	For more information, see <u>Two-Factor Authentication</u> .		
	A.k.a.: "2FA", "authenticator".		

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 <u>Account Management</u> 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)	8 GB		
	Recommended: 16 GB or higher		

Disk Space	500 GB (< 500 studies per day)			
	Recommended: 2 TB			
Display	1 or more Windows-compatible displays			
	• as required for modality (i.e., resolution, size, amount)			
	Recommended: Two or more monitors			
	 We support any number of monitors, although multiple is recommended to allow for easier viewing of files 			
Microphone	Any Windows-compatible microphone			
	 Microphone must be the system's default recording device 			
	Recommended: Philips SpeechMike (Classic or Premium)			
	 The Philips SpeechMike is the only microphone with supported physical control buttons in Velox 			
Internet Connection	10 Mbps download – Ultrasound and X-Ray			
speed	50 Mbps download – Mammography, Cardiology, PET/CT, MRI			
	 Download speed will impact average wait times 			

Running the Viewer on Mac

As a Windows-based application (*.exe*), the Velox Radiology Viewer generally cannot run on a Mac. However, you may be able to run it on a Mac computer with some alternatives:

- Install a Windows partition using Boot Camp
- 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 items 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 <u>https://update.veloximaging.net</u>.

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 <u>https://velox.help/install</u>.

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.
- 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.

🜒 Velox Radiology		- 🗆 X
Choose Components Choose which features of Velox	x Radiology you want to install.	V
Select the components you wa	nt to install.	
Select components to install:	Radiology Viewer Plugins MModal MModal Dictation Power Scribe 360 Swodin	Description Position your mouse over a component to see its description.
Space required: 20.7 MB	Worklist Assistant	
Velox Radiology		
	< Back	Next > Cancel

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.

CH C	noose Components Choose which features of Velox Radiology you want to install.			V
	Hanging Protocols			
	Don't install			
	O 1 Monitor			
	🔿 2 Monitors			
	◯ 3 Monitors			
Velo	× Radiology	tall	Ca	ncel

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 <u>The Worklist Assistant</u>.

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 <u>The Encounter View</u>.

🕐 Ve	lox PACS: Screen 1															- 0	×
	Worklist	~	¥.	С _р	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	٤						5	<u>(</u>)):00	
				\bigcirc	₩	Q [®] @) D ·	- 🕎	×	Ø	 -	×	C :	5 • • C			*
		^															
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*	Will Smith (dv. Smith)	V1)									Build 1.).46.15 (64-	bit) <u>Char</u>	ige Versio	on <u>U</u> :	ser manu	ial

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 <u>The Worklist View</u>.

These tabbed options include:

<u>Radiology</u> <u>Worklist</u>	Shows your currently assigned encounters, allowing them to be selected, viewed, and read.
<u>To Sign</u>	Shows your completed but unsigned reports, allowing them to be reviewed and signed off.
Peer Reviews	Shows your assigned peer reviews. Also allows peer reviews to be assigned and verified.
My Archive	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.

Velox PACS: Screen 1															-	
Radiology Worklist 🖸	To Si	ign 😔	Pee	r Revie	ws My	Archive	0	Search								
My Worklist	6 R					🛃 Re	lease to	o Shared	P	Park	(1) Reassign	🛃 Fet	ch	Ð	Refreshed <1	min ago
	omntv			In	s.ID	Patient N	ame			Sex T	DOB		S/D		Modality	Services
				78	89433	Velmac, V	/alery				08-Oct-1986	37 Y.O.	18-May-202	3 06:28 AM	MG, US	Mammo
	empty		R	<		Examplet	on, Car	oline			01-Jul-1999	24 Y.O.	03-Jan-202	1 06:13 AM	MG	Bilateral
Parked	empty		R			Examplet	on, Car	oline			01-Jul-1999	24 Y.O.	03-Jan-202	1 06:13 AM	MG	Mammo
Shared Worklist	s		R	< 98	76543	Test, Test	MRI				16-Dec-1980	43 Y.O.	04-Jan-202	1 06:13 AM	MR	Ankle
REAST/MAMMO	3 R		R			Test, X-Ra	ay			М	12-Nov-1994	29 Y.O.	17-Nov-202	1 05:27 AM	CR	Knee 2V
	empty		R	< 78	89433	Velmac, V	/alery				08-Oct-1986	37 Y.O.	18-May-202	3 06:28 AM	MG, US	Mammo
E Echo	5 🗖															
Example Shared	empty															
	1 <u>R</u>															
🛃 Urgent	empty															
🛃 US	empty															
																•
🛠 Will Smith (dv. Sm	ithW1)											Build 1.0.	46.20 (64-bit)	hange Versi	on <u>User</u> n	

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 &</u> Username	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, <i>creating an encounter</i> with services in the <i>Checked-in</i> 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 be interpreted a	ve been attached, the technologist verifies that the service is ready to nd manually updates the status to Images Attached .								
Images Attached	Applied by clinic staff once the images are ready to be interpreted.								
Allached	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. 								
	<i>Images Attached</i> is the only state in which services can be read/interpreted and submitted.								
The service stat	us can then go into one of three categories, depending on the prior								

The service status can then go into one of three categories, depending on the prio 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 stat	us can then go into one of two categories, depending on the prior

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. <i>If the report was transcribed,</i> 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 <i>sign off</i> the reports. If <i>auto-fax</i> 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. 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 enabled for the required.	is delivered, either manually or automatically (if <i>auto-archive</i> is clinic), the service is set to <i>Archived,</i> denoting that no further action is
Archived	The report has been completed and delivered to the referrer. No further clinical action is required.

Reading Physician Rejected	Applied when a reading physician is unable to interpret a service and requires the technologist to review it.
•	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.

After reviewing the encounter, the technologist will manually set the service status back to *Images Attached* to be read by the physician.

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

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

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, view the Settings menu and click 'Other Settings'.

Go to the 'Plugins' tab and 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 <u>Report Sign-off Policy</u> 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 the <u>Submission Delay</u>. 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:

Velox PACS: Screen 1															-	
Radiology Worklist 🖸	To S	ign 😔	F	Peer R	eviews	My	Archive 😔	Search								
My Worklist	6 🗖						Releas	e to Shared	ø	Park	🕼 Reassign	🛃 Fet	tch	÷	Refreshed <1	min ago
					Ins.ID		Patient Name	•		Sex	DOB		S/D		Modality	Services
	empty				78894	33	Velmac, Valer	у			08-Oct-1986	37 Y.O.	18-May-2023	06:28 AM	MG, US	Mammo
U All Urgent	empty		R	= <			Exampleton,	Caroline			01-Jul-1999	24 Y.O.	03-Jan-2021	06:13 AM	MG	Bilateral
Parked	empty		R				Exampleton,	Caroline			01-Jul-1999	24 Y.O.	03-Jan-2021	06:13 AM	MG	Mammo
Shared Worklist	s		R	<	98765	43	Test, Test MR				16-Dec-1980	43 Y.O.	04-Jan-2021	06:13 AM	MR	Ankle
BREAST/MAMMO	্র 🗖		R				Test, X-Ray			М	12-Nov-1994	29 Y.O.	17-Nov-2021	05:27 AM	CR	Knee 2V
			R		78894	33	Velmac, Valer	у			08-Oct-1986	37 Y.O.	18-May-2023	06:28 AM	MG, US	Mammo
	empty															
Echo	5 R															
Example Shared	empty															
🛃 MRI / CT	1 R															
🛃 Urgent	empty															
🛃 US	empty															
🛠 🛛 Will Smith (dv. Sm	ithW1)											Build 1.0	.46.20 (64-bit) Ch	ange Versi	on <u>User</u> n	nanual

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

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	A symbol that shows the image download status of a given case.
Indicator	The icon may appear as follows:
	Ready with history (green circle)Ready with no history (blue triangle)

	Downloading (rotating circle)Waiting to download (yellow square)							
	Mousing over the image status indicator will display additional information, such as the downloaded image count.							
Priority	 A symbol that displays the encounter's priority. The symbol can represent multiple meanings: Report addendum requested (red warning symbol) Stat priority (red S) Urgent priority (orange U) Regular priority (grey R) Higher priority items will be displayed at the top of the worklist. Encounter priority can be changed from within the Encounter View. 							
Ins. ID	The institution's identifier number.							
Patient Name	The name of the patient. Uses format (Lastname, Firstname).							
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	Shows the download status and image count of a given case.							
	Before the download has started, the indicator will show 'Waiting'.							
	When downloading files, the amount of images currently downloaded will be shown, along with the total number of images.							
	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.							

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.

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.

-	Modality T	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 - J12	7 (R)	J127
06:24 AM	US	Breast - J12	7 (R)	J127
06:28 AM	US	Breast - J12	7 (L)	

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

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.

To Sign 😏 Peer Reviews	My Archive 😌 Search			
Assign to My Worklist	Release to Shared 🛛 🕑 P	'ark 🛈 Reassign	🛃 Fetch	Refreshed <1 min ago
Ins.ID Pa	Patient Name	Sex 🗉 DOB	S/D	⊤ Modality ⊤ Services

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, applies 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	 Downloads ("fetches") images belonging to your selected cases. This option is only used if your Auto-download setting is set to 'Manual'. Options include: Current Only Only downloads files from the current case. No priors will be included. Current and Relevant History Downloads files from the current case and relevant priors only. Current and History Downloads files from the current case and relevant priors only. 					
Refresh	Displays last refresh time.					

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.

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 Ressign.

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.
- 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 (Λ).

ACS: Screen 1									
v Worklist 🛛 😯	To Sig	jn 🕂	Peer	Re	views My	Archive 😔	Search		
orklist	9 R		Assig	n to	My Worklist	Release	to Shared 🛛 🕐	Park	E
AT	empty				Ins.ID	Patient Name		Sex T	C
					7889433	Velmac, Valery		F	0
gent	empty		R	<		Exampleton, C	aroline	F	0
d	empty		R			Exampleton, C	aroline	F	0
ared Worklists			R	<	9876543	Test, Test MRI		F	1
ST/MAMMO	empty		R	<	9686805	Montes Abasto	, Wendy Charlotte	e F	2
			R			Test, X-Ray		М	1
ac	empty		R	<	1827747	Rubio, Molly		F	1
	4 R		R	<	7778930	Orange, Patrici	a	F	0
ple Shared	empty		R	<	7889433	Velmac, Valery		F	0
ст	1 R								

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

Addendum Request		×
From: Doe, James		
Images updated, please review		
	🖉 Addendum	
If you do not want to create an Addendum you can <u>cancel</u> the Addendum Re	for this Report, equest.	

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.

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. This will take the longest time and take up considerable storage space. Not typically recommended.
Worklist and Relevant History	Automatically downloads the files from the current case and any relevant priors for this patient.
	most users.
Worklist Only	Automatically downloads the files from the current case only. This will take up the least amount of storage and download files quickest. Recommended for situations where the internet connection is
	slow/unreliable or if the computer has a very low amount of storage space.
Manual	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.
	This is recommended only in the most restrictive situations, such as very poor internet connections or extremely limited system storage.
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 the System Configuration section 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	Located on the far left. Holds patient information and shows patient
Documents Bar	documents & images from current and 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	Located at the center of the screen. Documents and images may be viewed here.

If a relevant hanging protocol has been set up for this encounter's parameters, it will automatically be applied.

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:



Encounter Information

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

Below, the current encounter priority and teaching collection are displayed. Clicking on either field will allow these options to be changed.

Encounter Services

Any services assigned to this encounter will be displayed within this section. Note that some services within the same encounter may be assigned to different reading physicians.

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.

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.

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.

Patient Encounter Files & History

The patient's history will be stored in chronological order, with the currently open encounter always at the top.

Each encounter's header shows a time and date, along with a \leq symbol if the case has been imported from an outside system. Clicking on the encounter header expands any documents, notes, and images contained within the encounter.

Any cases not assigned to the same body part as the current encounter are 'Not Relevant' and will be placed in a grouped section at the bottom. To see these priors, click on the 'Not Relevant' heading.

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

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.

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.

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 images have not yet been viewed, highlighting unseen sections on the scroll bar blue.

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

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:

	Supports standard DICOM images (. <i>dcm</i> files).
inages	Some files feature special viewing options, such as cineloop & Cineloop files. SR (structured reporting) data files are supported and displayed in a table format by default.
Documents	Documents uploaded by the clinic. Files in this category may be either requisition sheets or worksheets .
	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.
	Supported file types: png, jpg, pdf, doc, docx.
Final Reports	 Electronic reports assigned to the current encounter. Reports can be edited within the Viewer and can come in three statuses: Draft To Sign Signed
	If a report has been saved as a draft, it must be signed off before it can be sent to the referrer.
	Any report labelled 'To Sign' can be signed by dragging it into the View Field and clicking the 'Sign' button at the bottom left.
	Reports can also be in non-editable formats, such as <i>png, jpg, pdf, doc</i> , and <i>docx</i> .
History Reports	Reports automatically retrieved from prior relevant encounters.
Electronic Worksheets*	*Requires the 'Enable Electronic Worksheets' setting to be enabled.

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'. New e-worksheets can be created by clicking 'New Worksheet' at the top-right
Worksheet at the top-nght.

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 **II** 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.

The list of displayed tags can be modified by editing the ImageOverlays.cfg file within your user folder. See **System Configuration Files** 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

Your toolbar settings can be used to hide or rearrange any grouped toolbar category. 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.

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.

Note that settings generally fall into two types, differed 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	Once a tool is selected, the tools are applied and controlled with a defined mouse button.
	The default mouse button used for each tool can be reassigned via the 'Mouse Tools' settings menu.

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

Drawing Tools

Tools under certain categories, such as the Measurements, Cardio Tools, and Reimer/Acetabular tools, are considered 'drawing' functions and will allow the user to place measurements or shapes onto an image. These drawings may be adjusted after placement using the mouse cursor, either by moving the vertices of the shape or by moving the shape's edges.

If any drawings have been applied to the encounter, the user will be prompted to save their drawings when closing the current encounter.



Drawings may be deleted from an image by:

- In groups, using the 'Delete All Annotations' tool (and 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).

Note that if the 'Save Measurements as Annotations' setting is disabled, measurements will no longer be counted as annotations.

Split Settings

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.

Multi-planar Reconstruction

Will apply the selected angle or selected projection type to the currently highlighted view.

Selecting "No Reconstruction" will remove any angles or projections from the highlighted view.

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.

Magnifying Glass

When holding down the applied mouse button, a section of the image is magnified. [screenshot here]

[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

Plays 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] Calibrate Measurements:

Hold down the applied mouse button to place your starting point, and release it to place your endpoint. A window will appear, allowing the distance and unit of measure to be entered. This scale will be applied to all measurements for this image series.

[dropdown] Delete Calibration:

Selecting this will reset your calibration back to image defaults.

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.

To use:

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

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.

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 <u>Tool Presets</u> 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 <u>Hanging Protocols</u> for more information.

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.

To use:

- 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

Scrolls through a series of images using the mouse cursor.

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.

Stack Frames

Scrolls through Cineloop DICOM frames.

To use:

Select the **Stack Frames** mouse tool. While viewing a multi-frame cineloop, hold down the mouse button, then move the cursor horizontally to scroll through frames. Playback is paused when the tool is applied.

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 <u>Hanging</u> <u>Protocols</u> 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.

Open Worklist	Clicking here opens the worklist window on top of the current screen.
WORKIISt	The color of the button will change to red if there is an unread

	stat-priority encounter on the worklist. 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	Submits the current audio recording for transcription by a typist. If there is no recorded audio, a warning will be given.
	If 'Open Next Encounter After Submission' is enabled, the next encounter in the worklist will be opened.
Submit	Submits the current report as signed.
Signed Report	If 'Open Next Encounter After Submission' is enabled, the next encounter on the worklist will be opened.
Technologist QA Review	Allows the reading physician to leave a quality assurance comment on the technologist's work and/or to reject a study with issues.
	See Rejecting an Encounter for more information.
Skip to Next Encounter	Opens the next encounter on the worklist without making any changes to the current encounter. You may be prompted to save any incomplete work.
Reassign Encounter	Allows the current encounter to be reassigned to a different person or worklist.
Reassign Encounter	Allows the current encounter to be reassigned to a different person or worklist. Clicking here will display any shared worklists or other Reading Physicians. Selecting one will reassign the encounter to the selected worklist.
Reassign Encounter Sync Fluency*	Allows the current encounter to be reassigned to a different person or worklist. Clicking here will display any shared worklists or other Reading Physicians. Selecting one will reassign the encounter to the selected worklist. * The 'MModal Dictation' plugin must be enabled for this option to appear.
Reassign Encounter Sync Fluency*	 Allows the current encounter to be reassigned to a different person or worklist. Clicking here will display any shared worklists or other Reading Physicians. Selecting one will reassign the encounter to the selected worklist. * <i>The 'MModal Dictation' plugin must be enabled for this option to appear.</i> Clicking this will reload any integrated copies of MModal Fluency, resolving common synchronization errors.
Reassign Encounter Sync Fluency* Sync PowerScribe*	 Allows the current encounter to be reassigned to a different person or worklist. Clicking here will display any shared worklists or other Reading Physicians. Selecting one will reassign the encounter to the selected worklist. * <i>The 'MModal Dictation' plugin must be enabled for this option to appear</i>. Clicking this will reload any integrated copies of MModal Fluency, resolving common synchronization errors. * <i>The 'PowerScribe 360' plugin must be enabled for this option to appear</i>.
Reassign Encounter Sync Fluency* Sync PowerScribe*	 Allows the current encounter to be reassigned to a different person or worklist. Clicking here will display any shared worklists or other Reading Physicians. Selecting one will reassign the encounter to the selected worklist. * The 'MModal Dictation' plugin must be enabled for this option to appear. Clicking this will reload any integrated copies of MModal Fluency, resolving common synchronization errors. * The 'PowerScribe 360' plugin must be enabled for this option to appear. Clicking this will reload any integrated copies of PowerScribe 360, resolving common synchronization errors.
Reassign Encounter Sync Fluency* Sync PowerScribe*	Allows the current encounter to be reassigned to a different person or worklist. Clicking here will display any shared worklists or other Reading Physicians. Selecting one will reassign the encounter to the selected worklist. * The 'MModal Dictation' plugin must be enabled for this option to appear. Clicking this will reload any integrated copies of MModal Fluency, resolving common synchronization errors. * The 'PowerScribe 360' plugin must be enabled for this option to appear. Clicking this will reload any integrated copies of PowerScribe 360, resolving common synchronization errors.

New Report	Open the Report Editor menu.	
	See Electronic Reports for more information.	
New Worksheet*	* The 'Enable Electronic Worksheet Feature' setting must be enabled for this option to appear.	
	Open the Worksheet Editor menu.	
	See Electronic Reports for more information.	
Audio	This section contains tools for recording and playing back audio.	
Tools	See Audio Dictation for more information.	

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.

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	Eav. 1 (999) 766 0055 Change				^
	ax. 1 (000) 700 9955 Change				
Notes:					
Type notes here				^	
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▼ Hospital				USH	
MRI (Without Contrast)				MR	
▼ MRI (With Contrast)				MR	
▼ MRI				MR	
▼ Cardiac_new				US	
▲ Ultrasound_NEW 1				US	
BREAST	GENERAL ULTRASOUND	MUSCULO-SKELETAL	Cardiac		
Axilliary - Bilateral - J182	Abdomen	L R Achilles Tendon - J182	Echo		
Breast - Bilateral - J127	Pelvic / Abdomen / TR	L R Ankle Left - J182	Stress Echo		
Report 1197	Abdomon/Polvic/TV	Anklo Dight			×

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 available templates, or existing worksheets can be edited.

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

To create a new electronic worksheet, select **New Worksheet** from the top-right of the Action Bar. This will allow you to choose from electronic worksheets based on your existing 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 Audio 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			⊖ 100% ⊕ ×
Discard Submit for Transcription	Submit Signed Report Save as Draft		
Typing Preview		Documents in Dark Moo	de 🛛 🗸 Display Template Panel
Typing Preview Patient Name: Date of Birth: Phone Number: Service Date: Referring Doctor:	Acme Digital Imagin (555) 5555 555 Exampleton, Caroline 01 Jul 1999 03 Jan 2021 Dr. John Doe	Back to list	de Display Template Panel
Dr. Smith, Will The report is generated	l by voice recognition software. Please conta	ct facility if there is any concerns	▼ 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 wherever the mouse cursor is active.

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 themselves are shared between all users and can only be changed from the clinic's 'Typing Templates' RIS page. (Transcription > Typing Templates)

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

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.

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.			

Input types

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	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. 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.				
	Normal 👻	3 <u>I U</u> S	$\mathbf{x}_{2} \mathbf{x}^{2} \mathbf{I}_{\mathbf{x}}$		
	Spellcheck is only available in Internet Explorer mode. It is enable by default and will check typed content for accuracy, underlining words not found in the dictionary. 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.				
	Toolbar options:				
	Undo	Ctrl Z	Undoes the previous action.		
	Font Size		Allows selection of font size. Can be applied to the current selection.		
	Bold	Ctrl B	Applies bold to text.		

	Italic	Ctrl I	Applies italics to text.
	Underline	Ctrl U	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	Ctrl /	Removes all text styles from the selection.
	Numbered List	Ctrl ,	Creates a numbered list. Using this function on an existing list will remove list formatting.
	Bulleted List	Ctrl M	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 a	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 <u>Shortcuts</u> section.

To quickly review a shortcut's key assignments, you can also use the right-click tool menu.

Action Name	<u>Description</u>	<u>Default</u> <u>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.	\rightarrow
Previous Hanging Protocol	Switch to the previous relevant hanging protocol in your list based on your protocols' study matching parameters.	<i>←</i>
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.	0
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.	В
Window / Level	Select the Window / Level mouse tool.	W
Measurement	Select the Measurement mouse tool.	М
Pan	Select the Measurement mouse tool.	Р
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.	С
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.


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.

Radiolo	gy Worklis	st 🚭 🛛 To Sig	n 🕀	Peer Review:	s My A	rchive 🔿	Search						
									- Q Fi	ıd	🛃 Fetch	Status	
My Wo	rklist As	ssign for Review	Pend	ng Review G	QA List	PR Archive	Peer Scores						
	Sex	DOB		S/D		Modality	Service	Accession	Image Status	PR Status	PR Score	Reviewer ID	
R		01-Apr-1999		28-Aug-2023			Abdomen			Pending		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.
- 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				
haemolacria (L) bl	haemolacria (L) bl			
Scoring should include both p findings on the imaging study. included.	rimary findings and incidental Both misses and overcalls can be			
I Agree	1. Concur with original reading			
Understandable Discrepancy	O 2A. Unlikely to be significant			
	2B. Likely to be significant			
Obvious Discrepancy	◯ 3A. Unlikely to be significant			
	3B. Likely to be significant			
Discrepancy				
123				

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 for 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 selected 'Submit for Transcription' and forwarded the dictation audio to transcriptionists.
Finalized	User selected 'Submit Signed Report' to complete/finalize the encounter.
Rejected by Physician	User 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 the encounter has already been read, it must be restored to a prior state before it can be read again. To do so, click on 'Change Status' at the top-right and select any services that apply.

If you've performed any actions and no results are yet visible, use the refresh key to refresh the page.

The Search Tab

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

Radiology Worklist	😌 🛛 To Sign 😌 🔹 Peer Reviews 🔹 My Archiv	re 🚭 Search				
						Q, Find
Ins.ID	Clinics	Modalities	Statuses	Person		
	Demo Clinic	BMD [▲]	Checked-in	Patient		
	New Clinic 1		Images attached			
	Acme Digital Imaging	ECHO	Finalized	Shared Worklist		
	Downtown Imaging		Archived	Any		
	Progressive Cardiology Do not use	OBSP	Rejected by Reading Physician	Emergency		
		US	On Hold	Service Date (٢	
				From		
		MRI (Without Cont				
		MRI (With Contras		То		
		MRI WSIB Tech Fe 🔨	4			
		Teaching Collection		Accession Number		
		All cases				

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 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 o	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, 2CH, PLAX, APLAX, SAX-PM, etc.</i>				
Rules []	Opens up the Grouping Rules menu, allowing users to set up customized grouping rules.				

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.				

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 <u>Creating & Editing Electronic Worksheets</u> 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.
<u>-</u>	

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

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.

Hage Grouping Rules		×
Add 🕇 🖡 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	
	Clos	е

Setting up Grouping Rules

Name

Assign a grouping rule a name to make it easier to identify later.

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., Abdominal Wall

Grouping

Selects which type of grouping is used; select between:

- Group by Study UID
- Group by Series UID
- Group by Modality

Cine Loops as Separate Series

Options to keep your cineloops stored as a separate group and whether you would like to use cardiology grouping settings.

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 defir	nes the center and width window and level values.		
Invert Colors	Enable/disable ir	overted view colours by default.		
Rotation	Rotates image in	90-degree increments.		
Zoom	Zooms into the fi	le based on predefined options.		
	Trim & FitTrims blank space and sets the size of the image to fit into the current view.			
	1:1Displays the image in 1:1 resolution. Equivationthe 1:1 True Scale function in the toolbar.			
	Fit Sets the size of the image to fit into the current view.			
	Fit to WidthSets 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 o	verlays 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:	Hanging Protocol 0		
Hanging Protocol 0	Study Matching			
	Modality: CR	Description:		
	Always apply	o history 💿 With history		
	Layouts			
	1x1 1x1	1x1		
	Layout Properties			
	None OICOM	Document Report H	istory Report	
	Image #:	Study: Prior 1 -	Synchronized Viewing	
	Formula Filter:		fx Ø	
	Series Description:			
	Study Description:			
	Modality: CR	Laterality: View	Position: LAT	
		View Name: Stag	e 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., Abdominal Wall	

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	Filters images by a user-defined formula.

Filter	
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	Enables presets for this Hanging Protocol. Presets can be configured with the adjacent button.
	See Presets for further information.

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 Presets for further 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 reading 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.

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.

	Q @ Ц	• 🐺 🛤	×	0 2	 .	•
✿ Settings						×
Mouse tools	Display settings	Others	Shortcuts	Plugins		
Tool name		Left	Middle	Right	Default	•
Pan		۲			\checkmark	
Zoom				۲	\checkmark	
Magnifying Gla	ISS	۲				
Brightness/Co	ntrast			۲		
Window/Level				۲		
Measurement		٢				
Angle		٢				
Cobb Angle		٢				
Path Length		۲				
Reimer Index		٢				
Acetabular Ind	ex	٢				
Sharp Angle		٢				
Center Edge Angle		۲				
Doppler Veloci	ty	٢				
Doppler Decel	eration	۲				
Doppler Trace						•
Reset to Defa	ult: 📃 New View	New	Encounter	Never		
					Close	

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.

Historical Images Apply options for what is displayed on historical images/priors: Bolded image border Inverted overlay colours Year label

DICOM Trimming

Enter any specified modality code to trim. Use pipe (|) symbols for multiple modalities.

Positron Emission Tomography		
Default Colors	Define default spectrum colors for PET-CTs.	
Show PET-CT Panel	Enable/disable a dedicated PET-CT panel. 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.	

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	Restores all hidden warning messages. (i.e., warning before signing off on a non-existent report).
messages	

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.

✤ Settings					×	✿ Settings					×
Mouse tools	Display settings	Others	Shortcuts	Plugins		Mouse tools	Display settings	Others	Shortcuts	Plugins	
Mouse Double (Click for Edit			Rese	et to Default						Close Editor
Action		Sho	ortcut	Speech	Mike 🔺	Keyboard Sho	rtcut for Pan				
Invert											
Pan			Р								
Measurement			М				Pres	s Keyboar or	d Keys		
Window/Level		١	W				Press A	ssign for N	o Shortcut		
Brightness/Conti	rast		В								Assign
Zoom			Z			SpoochMike B	utton for Dan				
1:1 (True Scale)						opecclimike D					
Magnifying Glass	s										
Cine							Press	SpeechMik or	e Button		
Angle							Press A	ssign for N	o Shortcut		
Cobb Angle											Assign
Flip Horizontally						L					
Flip Vertically											
Reference Lines			R								
Quadrant Zoom											
Synchronize Sta	icking										
					Close						Close
(fig. 1) The shortcuts menu				(fig. 2) Th	e sho	rtcut e	ditor				

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:

- Chromium
- Internet Explorer

Plugins	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.
	Possible choices include: • MModal

)	MModal	Dictation
·	minoual	Distation

- 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.

~ \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 subfold along with recorded audio	ders for encrypted patient download files, files.			

	 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\	This folder holds advanced configuration settings.		
	See the \Configs \ section below.		

		\Configs\		
\ViewerProvide r\	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.			
	Can be edited for the	e following settings:		
		VeloxViewer.cfg		
	MinFreeSpaceMb =	The amount of minimum space (in megabytes) required to run the Radiology Viewer.		
	StoreFilesDays=	Controls the time (in days) that cached files are preserved.		
	DownloadThread Count=	The number of simultaneous download threads being used.		
	DownloadAttempt Count=	The number of times to attempt redownloading failed patient files before failing the download.		
	StoreFilesPath=	Sets the filepath where patient files are stored.		
	UploadTaskPath=	Sets the filepath for temporary file upload storage.		

\WorklistAssist ant\	Contains the Assistant.cfg configuration file, which controls the Worklist Assistant's settings. These largely correspond to settings within the program itself. Can be edited for the following options:				
		Assistant.cfg			
	UpdateInterval Seconds=The amount of time (in seconds) between checking for new worklist encounters.				
	ShowBalloon= Hide/show Windows icon tray warnings. [0/1]				
	LastUser= Displays the username of the last logged in WLA user.				
	AlwaysOnTop=	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.				
	[User_####] Stores the name of the user, and encrypted cached user credentials.				
\BlinkViewer\	This folder holds user configuration settings.				
	See the \BlinkViewer\ section below.				

\BlinkViewer\			
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.			
Default.cfg	Contains MModal setup information, such as the current UseAPI level and any cached Mmodal login credentials.		
	Default.cfg		
	LastUser=	Shows the username of the last logged-in user.	

	UseAPI=	Set the current MModal API level. [0/1]			
	User_[usernam e]=	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.c fg	Stores user-configured toolbar setup.			
	Hotkeys.cfg	Stores user-configured hotkey assignments.			
	ImageOverlay s.cfgControls which overlays are displayed, including font size & style.				
	HangingProto col.cfg	Stores user-configured hanging protocol setups.			
	Assorted 'window' files:	Stores screen & window positions.			
\Default\	If it exists, all cont template for all ne	taining config files in this folder are used as the ew accounts.			
	This folder is created by using the 'Save as Default' function in the Viewer Settings.				

~ \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.

Setup

Installing MModal

MModal should only be installed by an authorized professional.

1) In your web browser, go to <u>velox.help/install/Other/Fluency</u>. Select the latest available version of Fluency.Direct.Client.Install.exe. Once downloaded, run the file. The Fluency Direct downloader program will now open.



- 2) In the downloader program, click 'Start Download'. Wait for the download to complete (depending on your internet speed, this may take some time).
- 3) Once the download is complete, select **Open Download Folder**. The File Explorer will now open. In the downloader program, select **Exit**.
- In the File Explorer, locate the file named 'Fluency.Direct.xxxx.Client.zip'. Right-click the file and select Extract All.
- 5) In the dialogue, select **Extract** and wait for the extraction to complete.
- 6) The extracted folder will now open. Navigate through the contained folders to the **fd.client** folder, and run **install.bat**. Two windows will open.
- In the Fluency Direct Setup Wizard, select Next. After accepting the EULA, select Install. Wait for the progress bar to complete, then select Next. Select Finish.
- 8) The installation will be completed in the terminal window. Do not close or interact with the terminal window. Once installation is complete, the terminal will close.

While Fluency Direct can run standalone, it is not recommended, as some functions may not work properly in the Radiology Viewer.

Enabling MModal in the Radiology Viewer

After installing MModal, we must enable it for your account and log in for the first time.

- 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.
- 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, your credentials will be saved, and you will not be asked again for future attempts.

Using MModal with other versions of Fluency

If Fluency MModal is installed alongside Fluency for Imaging, some issues may occur. To allow compatibility for multiple installations:

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

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 "MMobal Basic" template.

Using MModal

For a complete user guide, including a list of inbuilt commands, see the Fluency manual <u>https://apps.3mhis.com/docs/ClinicianSolutions/FluencyDirect/en/fluency-direct-user-guide.html</u>.

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.

On initial login, you will be asked to enter some personal information, configure your controls, and calibrate your microphone and speech profile.

MModal will gradually adapt to your speech patterns as you use it, but it is important to properly train your profile before getting started. Microphone calibration is also important for dictation fidelity; this calibration is affected by microphone quality and background noises, so it can be redone when these factors ever change significantly.

The Control Bar

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.

The MModal control bar displays the currently logged in user, along with a microphone on/off button. While your microphone is recording, the icon will change colour and display the current volume level.

Clicking the MModal control bar will show a settings menu. The most commonly used sections here include:

• Dictionary:

Set up custom words or adjust words to your pronunciation. Can also add words to your blacklist.

• Commands:

Set up commands to be triggered by your voice, such as inserting text or layering other commands.

• Abbreviations:

Set up abbreviated terms to save time when dictating.

• Device button mappings:

Set up controls for your keyboard or SpeechMike to control functions or activate commands with a button press.

• Formatting:

Set your text and contents to be formatted in the way you'd prefer.

• Help:

View the Fluency help site (including manual) or other information.

Operations

With the reporting window open, select **Record** (or use your assigned shortcut) to begin dictating into the report. If UseAPI is set to 0, you may face issues dictating into non-MModal compatible report formats. If this occurs, select a reporting format labelled "MModal", or change your UseAPI settings.

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.
- Select the dropdown on the right side of the username field. Select New Master User.
- 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 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.

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.

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.

- 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	Prevents the Worklist Assistant from being positioned behind other application windows on your device

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

The Worklist Assistant will automatically dock itself onto the taskbar after signing in. 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.

	Show Worklist Assistant	1		
	Refresh			
	Settings			>
	Profile			-
(🕐	Exit	📝 🦟 🕼 ENG	4:56 PM	Ę
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: 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 password <i>will</i> require exact input. Ensure the password you are entering follows standard convention.
	 A password must include 8+ characters, with at least 1 of each: lowercase letters uppercase letters numbers
	username must always start with a clinic abbreviation followed by a period. For example: <i>acme</i> .JohnSmith
	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.

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:	 Follow the steps as outlined: 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:	 The login server cannot be reached. This can be due to: Network unavailability (no internet) Firewall blocking connectivity Velox system outage Another type of network error Unsupported version of the Radiology Viewer.
Solution:	Verify that you have internet connectivity by visiting any other webpage, e.g., <u>www.google.com</u> . If this page does not load in a timely fashion, you may not have a working internet connection. You may be using a discontinued version of the Radiology Viewer. To update to the most recent version, visit <u>https://update.veloximaging.net</u> . Otherwise, contact Velox Support.

Viewer Crashes After Login

Problem:	The Radiology Viewer closes immediately after logging in.
Cause:	 Something is going wrong on launch. Potential reasons include: Improper installation A corrupt settings file
Solution:	Attempt the following options: • Contact Technical Support • Restart your PC • Reinstall the Viewer

 Advanced: Check the system logs to see what error message is occurring. Clear out the user settings folder or the problematic user config file (typically a window position file).
--

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:	 If you are prompted for MModal credentials: The MModal credentials you are entering are incorrect. The MModal installation is corrupted. If the error appears automatically: The MModal credentials saved onto this account/PC are invalid and have been changed. The MModal installation is corrupted
Solution:	Contact Velox Support for further assistance. If assistance is not available, you can also: 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:	 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: a) The Radiology Viewer has lost sync with MModal b) MModal is being used as a standalone and not as a Viewer Plugin. c) Incorrect reporting format being used for MModal API version, or API version not set.

	Check C:\ProgramData\Velox\Configs\BlinkViewer\Default.cfg for your current API level.
Solution:	 Attempt the following solutions: a) Click 'Sync Fluency' at the top of the window. If this doesn't help, attempt the following. b) Go into Settings > Other Settings > Plugins. 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.
	 c) Check your MModal API level from C:\ProgramData\Velox\Configs\BlinkViewer\Default.cfg. 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. Otherwise, in the text file, set UseAPI= to 1. Save the file, and restart the Viewer.

Dictation Issues

Audio not recording

Problem:	There is no audio being recorded when dictating.						
Cause:	 Potential causes include: 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 View uses your system's default microphone settings, this is critical for if function.						

No audio playback

Problem:	There is no audio being played when listening to dictations.						
Cause:	 Potential causes include: 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 us 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	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.				
	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.				
	Reset Procedure: Velox Technical Support <i>cannot</i> directly reset user credentials, as we cannot verify user identities.				
	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>				

Worklist Assistant Master Users	Management Procedure: Master accounts can be created at any time within the Worklist Assistant.Self-update Options: The user may update their master username and master password at any time within the Worklist Assistant settings menu.				
	Reset Procedure: If you forget your WLA master username or master password, <i>please contact Velox Technical Support</i> to perform a reset.				
MModal Fluency Direct	 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. Update Options: Account credentials <i>cannot</i> be modified by any party other than Velox Technical Support 				
	Reset Procedure:If you forget your MModal username or password, please contact Velox Technical Support to perform a reset.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.				
Two-Factor Authentication	Two-factor authentication apps are run on personal devices and are not affiliated with Velox.				
	If you lose access to your two-factor authentication apps, ask your clinic administrator to disable two-factor authentication on your account.				

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	Ð					
3. Type 6-digit code from Authenticator Application:						
Apply Canc	el					

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.



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.

The RIS

Certain functions can only be accessed from the clinic's RIS page, which is accessible by visiting **login.veloximaging.net** in your internet browser.

The RIS is a dedicated component of the Velox Suite and will not be covered in this manual in its entirety. This section will only cover a handful of useful functions which can only be accessed from the RIS.

For an overview on how to use the RIS, there are a number of video guides available for new users. To review video guides amongst other documentation, please visit our self-help resource site at <u>sites.google.com/velox.me/guides/training-homepage</u>.

Your RIS access may differ depending on if your profile has been correctly set up. If some options are not available, please speak to your clinic management to update user permissions accordingly.

If your account lacks appropriate access to a page you are attempting to access, you will be returned to your dashboard.

Getting Started

Logging In

In your internet browser, access visiting **login.veloximaging.net**. Enter your username and password to proceed.

System Navigation

Most navigation is performed using the headings located at the top of the page. After mousing over a heading, additional options are displayed. Depending on your user permissions, you may not be able to see certain pages.

The Reading Physician Dashboard

The Reading Physician Dashboard is the default page in most circumstances. This page will list out your clinic's locations, along with a running total of active services for each status.

Clicking on any number in these results will perform an encounter search for the selected criteria.

Finding & Viewing Encounters

Patient encounters can be viewed from multiple primary methods.

- A. **Selecting results off the dashboard.** This will execute an Encounter Search with pre-defined filters, which you can always modify afterwards.
- B. Manually performing an Encounter Search. This can be accessed from Management > Encounter Search. By clicking on the bar at the top of the page, filters can be added for a variety of options,
- C. **Performing a Patient Search.** This can be accessed from the Management > Patient Search, or from the search bar at the top-right. As information is entered, you will be shown possible options to search by.

After executing a search from either method and identifying your desired search result, the encounter can be viewed and edited by mousing over the result to reveal additional options, and selecting 'Edit Encounter' on the right.

Encounter Search

The Encounter Search menu can be accessed from **Management** > **Encounter Search**, or by selecting an entry on the Reading Physician Dashboard.

In the Encounter Search menu, clicking the filter dialogue at the top of the page will allow additional filters to be applied, narrowing down your search results. This can include a variety of filters; including the service date, the assigned radiologist, the technologist, and the referrer information, the service's accession number, and much more.

After applying any necessary filters, select Filter to perform your search.

Once results are populated, they can be sorted and adjusted via the tools at the top-right. You can use the checkboxes on each search result to select multiple encounters at the same time.

To view or edit an encounter, mouse over the search result, and select the Edit (pencil icon) button on the right-hand side.

Patient Search

The Patient Search is used to find encounters belonging to matching patient details. The Patient Search menu can be accessed from **Management** > **Patient Search**, or by using the search bar at the top-right of any page.

After selecting the search bar, begin typing, and select the desired search format from the dropdown menu. The search formats will be selectable depending on the data entered.

Search options include:

• Patient name (format: *surname firstname*)

- Patient HIN
- Patient MRN
- Patient birthdate (format: YYYYMMDD)
- Patient phone number

To execute a search, after having typed in your search term, select the desired search format, or select the Search button.

Once results are populated, they can be sorted and adjusted via the tools at the top-right. You can use the checkboxes on each search result to select multiple encounters at the same time.

To view or edit an encounter, mouse over the search result, and select the Edit (pencil icon) button on the right-hand side.

Typing Templates

Typing Templates can be accessed and modified from the **Transcription** > **Transcription Templates** menu. The following sections are mandatory when creating a transcription template.

Name	Defines the template name. This will be shown under applicable services.
Body	The contents of the text that is autofilled when the template is selected.
Services	Assigns the template to specific services, determining which services this template appears for.

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▼ CM 0/1								Select all	СМ

Editing an Existing Template

On this page, an existing typing template can be opened by selecting **Open template** and selecting an existing template off the list. Selecting **Save Template** will update any changes made.

Creating a New Template

If you have not yet selected an existing template, fill in all available fields. Make sure to assign the template to any services it is intended to appear under. Then, click **Create template** on the top-right.

If a template has already been selected, select **New template** to create a brand new blank template and follow the steps above.