

cvi42®

v.5.17.1 (3504)

Release Notes

What's New in Version 5.17.1

cvi42 | CORE CT

Coronaries

- Automated coronary labeling of secondary coronary branches
- Easily add and extend vessel centerlines on the 3D view
 - Automatically add a centerline by clicking on a new vessel
 - Extend vessel centerlines by dragging the endpoint of a segmented vessel to a new endpoint
- Ability to show a single vessel centerline and hide others for easier visualization and editing
- Added ROI tool for basic area measurements in MPR views. Measurements include area, perimeter, and diameter.
- Ability to vertically flip a curved MPR view
- Export rotational batch of straightened vessel view
- Removed obscuring vessel centerline annotation from automated curved MPR captures in the report

Calcium

- Calcium labeling edits made on an image now propagate to neighboring slices
- Ability to edit the calcium threshold and mass calibration factor
 - Note: Editing the calcium threshold will reset all contours including manually defined contours.
- Added text description of calcium score and percentile in the data panel and in the report
- Export calcium-annotated images along with calcium score result table as DICOM secondary capture

Miscellaneous

- A notification will be shown when a new release of cvi42 is available

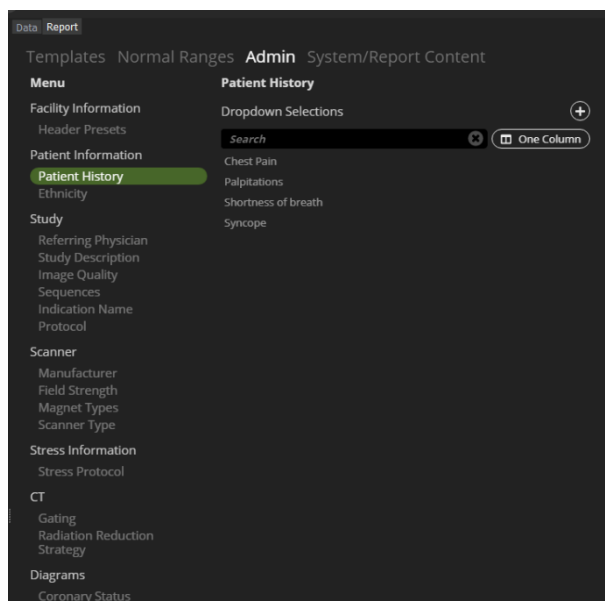
cvi42 | 4D Flow

- The loading of Philips studies from the Study List is up to 10 times faster
- The loading and preparation of series in the 4D Flow module is around 30% faster *

*Performance improvements depend on vendor, study size and hardware

Report

- CAD-RADS results now included in HL7 and bulk csv export
- Calcium score percentile value (%) can be displayed in the report
- Users have access to all the configuration options in the *Admin* section



Installer

- Simplified installer now observes custom information from prior installations for data storage, report, ports, etc., to streamline installation process
- IT administrators can enable automatic client updates for future cvi42 releases

Integration with ADAS 3D v2.12.1

Segmentation

- Automated identification of coronary vessels, left chambers, and aorta from CTA
- Automated identification of left atrium endocardial and epicardial walls from CTA
- Automated identification of left ventricle from 2D DE-MRI
- Automated identification of left ventricle from 3D DE-MRI
- Automated identification of and left atrium, pulmonary veins, left atrial appendage, and mitral valve from 3D DE-MRI

Quantification

- Automated identification of coronary vessels, left chambers, and aorta from CTA
- Automated LA Wall Thickness analysis from CTA
- LV Wall Thickness analysis from CTA
- Automated LA and LV Iso-distance Maps to measure and visualize the distance from left atrium and left ventricle to surrounding heart structures such as the esophagus, aorta, etc.

Tools: New and Improved

- New Measurements tool, to measure distance between two or more points, including surface constraint distances along surfaces.
- New Layer Region Tool, enabling users to define the boundaries of the left atrium and compute statistical information for any heart chamber.
- Additional Tissue characterization threshold method n-Standard Deviations (NSD) in the Threshold Adjustment tool to improve the analysis of the enhancement in the left ventricle for non-ischemic patients.
- Improved the Exclude Image Region Tool for CTA images by using a 3D sphere tool, facilitating more efficient exclusion of image regions.
- Improved the EP STUDY Alignment tool by adding a feature to manually fine-tune the alignment between EP data and surfaces extracted from imaging data.

Miscellaneous

- Optimized memory management and disk space utilization in Image Registration, resulting in improved efficiency and reduced resource requirements.
- Improved export to DIF-5.0 format, for consistent visualization of the layers inside EnSite navigation systems (Abbott).

Resolved Issues

The following list contains resolved usability related issues, in addition to all other internal issues resolved during the product development process.

Number	Summary
CV-21931	More clear indication for cvi42 server installation type
CV-21869	CoreCT client application closes when switching vessels
CV-21858	cvi42 installer using unsigned powershell scripts
CV-21762	cvi42 Strain: Strain data analysis crashes on specific LAX cine series
CV-21722	Flow 2D Module: Correction overlays do not display properly on either VENC or MAGN images in Philips 2D Flow studies
CV-21946	Tissue T1: Auto-processing occurs even when maps exist in workspace
CV-21475	Slices are randomly sorted for every import in cvi42 which could cause the results to be different with specific study
CV-21632	cvi42 4D Flow: switching modules and back to Flow 4D module causes re-processing of data the first time.

Known Issues

Number	Summary
CV-146	Function SAX: Reference lines in the reference viewer are not displayed after switching the viewer from other modules with multiple screens <i>Workaround: Displaying the cine on SAX or LAX will bring the reference lines back.</i>
CV-3778	Loading old studies are slower the first time after a system upgrade <i>Workaround: None</i>
CV-6966	cvi42 Report: Importing Findings/Summary Text in Structured Findings also imports Summary Text

	<i>Workaround: Delete the unnecessary Summary Text from the Structured Findings section in the Admin pages</i>
CV-4852	Function SAX module: Semi-automatic RV contour detection in the current phase does not work if one of the slices of that phase already has one or more RV contour(s) <i>Workaround: Use Ai detection or delete existing RV contour(s) in the selected phase</i>
CV-4739	User with no Delete Study Data and Export Study Data permission shows error on ADAS 3D exit <i>Workaround: User must be assigned these permissions in order to work on ADAS 3D</i>
CV-3479	Flow 2D module: ROI label below the images frames in the Comparison tab do not update if the user loads a new series with same contour type and no label. On-screen report and graph update the contour label and respective values as expected <i>Workaround: Give a label to the ROI contour of the new series</i>
CV-2536	cvi42 Quantitative Perfusion: Refresh lag on Rest and Stress viewers in module when multiple users are reading the same study simultaneously <i>Workaround: Avoid multiple users opening the same study in Quantitative Perfusion module at the same time</i>
CV-3076	Function SAX module: Copying and pasting SAX reference points from one image to another is forwarding them to all the images. <i>Workaround: No workaround. Place a new reference point instead of pasting it</i>
CV-10851	Module Femoral: Study specific femoral rendering issue <i>Workaround: Upgrade hardware/drive to meet the minimum system specification</i>
CV-1467	Flow 2D: Contour detection with threshold mode is erroneously enabled when flow colour overlay is active <i>Workaround: Turn off flow colour overlay when defining the vessel contour to better see vessel borders</i>
CV-9854	cvi42 Report: Text appears in front instead of behind buttons <i>Workaround: scroll past the header, the cvi42 Report header text is gone</i>
CV-9429	cvi42 Report: Too many images causes extreme lag <i>Workaround: Delete report and send again</i>
CV-20775	Derived series are not server processed <i>Workaround: None</i>
CV-14462	cvi42 Strain: Exporting STL file doesn't work in Mac OS <i>Workaround: No workaround.</i>
CV-11598	Flow 2D module: Auto Segmentation Flow sometimes results in poor contours <i>Workaround: Deselect and select the contour again, then press "Segment Flow Contour" to adjust the contour to the correct anatomy</i>
CV-21844	cvi42 Report: Patient Height, Weight, and BSA Index value might fail to send to report patient information section

	<i>Workaround: None</i>
CV-21839	cvi42 Mitral valve: Area and PE measurements missing issue when clicking on capture <i>Workaround: None</i>
CV-21676	cvi42 4D Flow: Series loading performance degradation on loading up to accessing the preprocessing page <i>Workaround: None</i>
CV-21592	cvi42 Flow 2D: Anti-aliasing is different between 5.13.9 and 5.17.0 with specific study <i>Workaround: None</i>
CV-21095	cvi42 CORE CT - Calcium module: May crash when selecting large regions of the spine with the calcium module on Intel Mac <i>Workaround: None</i>
CV-20883	cvi42 CORE CT - Calcium module: Autoloading on certain series might not be accurate <i>Workaround: Manually drag in Calcium scoring series</i>
CV-20871	cvi42 CORE CT: General Preferences missing "Done" option unless full screen in Mac <i>Workaround: Maximize the window to see buttons at the bottom of the screen.</i>
CV-20752	Modules with reference viewers: Reference line may carry over to Viewer module <i>Workaround: Change phase or slice in any other viewer in the Viewer module to remove the reference lines.</i>
CV-20570	User is not able to crop or cut volume mask properly on secondary monitor when one monitor is high DPI on Mac <i>Workaround: Use primary monitor for cutting and cropping.</i>
CV-20535	cvi42 Report: Calendar dropdowns produce white flashing on high DPI monitors <i>Workaround: None</i>
CV-19932	cvi42 Report: Displaying results when data is pushed from Function BiPlanar module may be slightly delayed with multi monitors <i>Workaround: None</i>
CV-19672	cvi42 Report: When no advanced license is installed, webserver shows "No License" instead of "CVI License" <i>Workaround: None</i>
CV-18746	cvi42 Report: After migration, the old default header images are no longer present <i>Workaround: User can add the header back into the report after migration is finished.</i>
CV-18911	cvi42 CORE CT - Calcium module: Modified age on cvi42 Report is not reflected on calcium graph for manually entered study date <i>Workaround: None</i>

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Support

For further information on installing/exchanging the dynamic libraries please contact Circle Cardiovascular Imaging support.

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