

Vitrear[®] Advanced Visualization

Vitrear[®] Advanced Visualization 7.16.0.SU02
Release Notes



VPMC-17248D

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Contact Us:

Any serious incident that has occurred in relation to the device should be reported to Canon Medical at 1.800.208.3005 and the competent authority of the Member State in which the user and/or patient is established. See mi.medical.canon/contact-us for more detailed contact information.



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2. Introduction

This document contains the following information:

- a listing of the features that are new to the Vitrea Advanced Visualization 7.16.0, 7.16.0.SU01, and 7.16.0.SU02 release;
- the additional software enhancements in the Vitrea Advanced Visualization 7.16.0, 7.16.0.SU01, and 7.16.0.SU02 release;
- the cautions and notes for the Vitrea Advanced Visualization 7.16.0, 7.16.0.SU01, and 7.16.0.SU02 release;
- any deprecated functionality for the Vitrea Advanced Visualization 7.16.0, 7.16.0.SU01, and 7.16.0.SU02 release;
- the known software limitations for the Vitrea Advanced Visualization 7.16.0, 7.16.0.SU01, and 7.16.0.SU02 release;
- the resolved and known issues for the Vitrea Advanced Visualization 7.16.0, 7.16.0.SU01, and 7.16.0.SU02 release.



CAUTION: For general Safety and Regulatory Considerations, refer to the appropriate Education and Reference Guide.



CAUTION: Federal law restricts this device to sale by or on the order of a physician, as directed by 21 CFR 801.109(b)(1).

NOTE: You can find the Intended Use Statements in the *About Vitrea Advanced Visualization Guide*.

3. Contact Us

- For general, non-technical support questions, contact us through our Web site: mi.medical.canon/HIT
- For customer technical support, contact us at:
 - In the U.S., call the Customer Support line at 1.800.208.3005; or
 - Outside the U.S., contact your Canon Medical distributor; or
 - Send an email to support@mi.medical.canon.
- To provide feedback about this document or other Canon Medical product documentation, send an email to feedback@mi.medical.canon.
- Contact Customer Support for a printed version of the release notes, education and reference guide, or installation guides.

4. New Features and Enhancements

The following features, functionality and enhancements have been incorporated into Vitrea Advanced Visualization 7.16.0, 7.16.0.SU01, and 7.16.0.SU02. This section describes new clinical, system, and administrative features and enhancements specific to a corresponding Canon Medical and partner software product.

Key	Fix Version/s	Release Notes
PI-28199	7.16.0.SU02	Nvidia Render Benchmarking (2024 Q2) We regularly update the recommended version of Nvidia drivers to keep up with the latest releases and benefit from security patches. The latest Nvidia drivers were assessed against our render benchmark testing to ensure they support our rendering engine and algorithms.
PI-28151	7.16.0	AV AP Integration Single Server Deployment Enhancements AV filters out all studies with image size greater than 512x512 pixels and doesn't send it to Automation Platform. In addition to that, the display names for applications/packages displayed in the Algorithm Processing Tab are configurable via System Settings.
PI-28150	7.16.0	7.16.0 Application Platform Improvements User session timeout configuration was simplified and some unused Ultrasound permissions were removed. The platform was updated to resolve CORS issues for multi-node enterprise deployments on mixed (public and private) networks. This also contains security fixes in the form of OTS library version updates.
PI-27457	7.16.0	External Integration (Conduit) Persists Last Used Monitor Radiologists want their multi-monitor layout to be consistent once set. Previously, radiologists would have to move and resize the Vitrea AV window on every launch. That extra work costs time and causes user frustration. Now it is possible to persist the last used monitor for external integrated launches.



Key	Fix Version/s	Release Notes
PI-27297	7.16.0	Nvidia Render Benchmarking (2024 Q1) We regularly update the recommended version of Nvidia drivers, to keep up with the latest releases and benefit from security patches. The latest Nvidia drivers were assessed against our render benchmark testing to ensure they support our rendering engine and algorithms.
PI-27231	7.16.0	DICOM transfer syntax support The DICOM SCP has been updated to support receipt of the JPEG-LS (.80) transfer-syntax
PI-27225	7.16.0.SU02	Improvements to data storage and loading performance Several improvements were made to improve the way DICOM data is loaded and retained in the AV cache. <ul style="list-style-type: none">• Only stores the optimized DAR format, instead of also keeping the redundant Part10 DCM files.<ul style="list-style-type: none">• Reduces the required disk space per study by at least half.• Reduces I/O overhead of storing duplicate data in the AV study cache.• This default policy can be overridden using the ProduceDCM registry key.• Optimized data loading for Desktop applications<ul style="list-style-type: none">• Much more efficient data transfer from storage, with reduced I/O overhead• A progress indicator provides visual feedback during extended data-load operations (for apps that require Part10 DCM files)
PI-27213	7.16.0	Vitrea Advanced now supports MeVis Visia Lung CAD 5.8.2 MeVis Visia LungCAD 5.8.2 update removes End of Life software, PostgreSQL 9.5, from Visia LungCAD. This update also removes support of Windows Server 2012 R2.



Key	Fix Version/s	Release Notes
VTL-10630	7.16.0	Perivascular CT Density The following usability improvements have been made to the Perivascular CT Density application: <ul style="list-style-type: none">• Batch or movie rotation includes cover page that contains color key for Perivascular and SurePlaque regions• Perivascular Density histogram dialog size and location saved
PI-26836	7.16.0	Improvements to VIMS TLS on Upgrade Previously, our services were not set up to keep the TLS 1.2 configuration enabled after an upgrade. We have improved our services to keep the existing TLS 1.2 configuration in place during an in-place upgrade
PI-26703	7.16.0	Medis® Suite Updates Medis Suite 4.0.62.4 has been updated for Vitrea AV 7.16.0. Note: QFlow, QFlow4D, QMass, and QStrain are no longer delivered as individual applications, but are encompassed within the MedisSuite MRCT product. Release Notes for this application can be found on Help Central.
PI-26035	7.16.0, 7.15.7, 7.15.8	User Interface updates The Study List and +Tab are using a new User Interface with new colors and fonts. Status icons have also been updated. This brings Vitrea more in line with other Canon Medical products.
PI-24810	7.16.0	CT 1K Scanner Evaluation Configuration details have been added to our documentation to support 1K data on an ESS deployment.



Key	Fix Version/s	Release Notes
PI-20158	7.16.0, 7.15.5	Improvements to Retrieved DICOM Lifecycle Management Architectural improvements: the traditional manner to manage imaging data within Vitrea has been updated to a more modern framework. StudyTracker replaces a few legacy components (namely VSPNotificationService) and provides improved reliability for data management. These modernization efforts also bring improved security.

14 issues

5. Feature Requests Addressed

This section relates to enhancements to the product based on prioritized customer requests addressed for the 7.16.0, 7.16.0.SU01, and 7.16.0.SU02 release.

Feature	Description
Compression for Vitrea AV - JPEG-LS (.80) (FRDB-6139)	JPEG-LS, Lossless (UID = 1.2.840.10008.1.2.4.80) has been adopted.

6. Cautions and Notes

As of Version	Deployments	Description
7.16.0	All	Vitrea may not be able to process large (with regard to matrix size and/or number of slices) datasets in some circumstances. Contact your system administrator or Canon Customer Support for more information.
7.15.8, 7.16.0	All	For the <i>Operation Manual for Auto MPR</i> , the following updates should have been included: <ul style="list-style-type: none"> On page 14, change the series description from "Brain Scan" to "Head Scan". On page 18, update the "Terminating the application" subsection to 4.2.5
7.15.7	All	.NET 6.0 runtimes for .NET, ASP.NET Core, and .NET Desktop are installed automatically by the InstallVitrea.exe file as a part of the software installation process. These runtimes should be updated regularly with up-to-date security patches and bug fixes. Contact Canon Customer Support for more information about updating .NET runtimes. While .NET 6.0 is a Microsoft product, it is distinct from .NET Framework 4.8. .NET Framework 4.8 is a component of the Windows Operating System whereas .NET 6.0 is an independent product. These products have different support policies. Contact Canon Customer Support for more details.

As of Version	Deployments	Description
7.15.7	All	<p>In the <i>Multi Modality Viewer Education and Reference Guide</i>, the following NOTE belongs in the "Understanding Measurement Values and Units" section:</p> <p><i>For a DX image to show "mm", it needs:</i></p> <ul style="list-style-type: none"> • Tag (0018,1164) <i>ImagerPixelSpacing</i> • Tag (0018,1114) <i>EstimatedRadiographicMagnificationFactor</i> <p><i>This will show "mm ERMF"</i></p> <p><i>or:</i></p> <ul style="list-style-type: none"> • Tag (0028,0030) <i>PixelSpacing</i> • SOP class UID of "X-Ray 3D Angiographic Image Storage" - 1.2.840.10008.5.1.4.1.1.13.1.1 <p><i>This will show "mm".</i></p> <p><i>The dataset in question has no EstimatedRadiographicMagnificationFactor tag, so it cannot show "mm ERMF". And the SOP class UID is "Digital X-Ray Image Storage - For Presentation", so it cannot show "mm".</i></p> <p><i>Thus it falls back to "pixels".</i></p>
All	All	<p>Canon Medical strongly recommends that Vitrea AV software be installed on currently Microsoft-supported Windows Operating Systems. We can not guarantee that the Vitrea AV Workstation or Vitrea AV clients for multi-user systems like Extend and Enterprise will continue to function properly on Windows Operating Systems that Microsoft no longer supports. Contact Canon Medical Customer Support for more information.</p>

7. Known Limitations

As of Version	Deployments	Description
7.16.0	All deployments	Multi Monitor limitation Multiple Monitor configurations are supported on two homogeneous monitors. All connected monitors must be configured with the same resolution, DPI, and orientation settings regardless of whether or not the monitors are used for the Vitrea application.

8. Deprecated Functionality

As of Version	Deployments	Description
7.16.0	All deployments	As of October 2023, Microsoft ended support of Windows Server 2012 R2. Beginning with the Vitrea 7.16.0 release, the software will no longer be installed on the retired operating system.

9. Documentation Changes

This section lists the changes included within the 7.16.0, 7.16.0.SU01, and 7.16.0.SU02 installation, administration, integration, and upgrade guides.

Guide	Content Change
Enterprise Deployment Operating System Setup Guide	<ul style="list-style-type: none"> In the Configure Windows Server 2016/2019/2022 topic, updated the NVIDIA driver version
Enterprise Deployment Upgrade Guide	<ul style="list-style-type: none"> In the Prepare of Upgrade topic, updated the NVIDIA driver version, added a note regarding iCAD software, added a Note stating the account used to complete the upgrade must have SYSADMIN privileges to the SQL database In the Upgrade Enterprise deployment from 7.12.x/7.14.x/7.15.x to 7.16.0.SU02 topic, revised the "Connect to the Database Server" section, revised the "Install the Management Server software" procedure to add new Caution, added a new "How to resolve more than one Vitrea instance listed in the Add or Remove Programs Control Panel" troubleshooting procedure, revised the "Install the Application Server software" procedure to add new Caution Added a new Appendix D: Run the Manage-VitreaServices script with the settings.ini file
Enterprise Single Server Installation Guide	<ul style="list-style-type: none"> In the Enterprise Single Server Installation topic, added the "Configure SQL Server Permissions" procedure In the Post Installation Procedures topic, added a "Modify the default size limit of DICOM instances and non-DICOM evidence" optional procedure In Appendix A: Hardware and Software Requirements, updated the NVIDIA driver version
Enterprise Single Server Upgrade Guide	<ul style="list-style-type: none"> In the Prepare of Upgrade topic, updated the NVIDIA driver version, added a note regarding iCAD software In the Upgrade from 7.12.x/7.14.x/7.15.x to 7.16.0.SU02 topic, revised the "Connect to the Database Server" procedure to clarify instructions, revised the "Configure SQL Server Permissions" procedure to clarify instructions, revised the "Install the Vitrea software" procedure to add new Caution, added a new "How to resolve more than one Vitrea instance listed in the Add or Remove Programs Control Panel" troubleshooting procedure
Management Server Install Guide	<ul style="list-style-type: none"> In the Install the Management Server software topic, added a "Modify the default size limit of DICOM instances and non-DICOM evidence" optional procedure

Guide	Content Change
Quick Start Guide	<ul style="list-style-type: none"> In Appendix A: Supported Third Party Applications, added a note regarding iCAD software
Upgrade Enterprise Single Server to Six-User Application Server Guide	<ul style="list-style-type: none"> In the Upgrade a DL380 Enterprise Single Server to a Six-User Application Server topic, updated the NVIDIA driver version In the Upgrade an ML350 Enterprise Single Server to a Six-User Application Server topic, updated the NVIDIA driver version In Appendix A: Hardware and Software Requirements, updated the NVIDIA driver version
Vitrea Administration and Troubleshooting Guide	<ul style="list-style-type: none"> In the Administration Procedures topic, revised the "Configure SQL Server Permissions" procedure to clarify instructions, revised the "Database Backup and Restore Procedures" section to clarify the "Connect to the Database Server" instructions, updated the "Use System Health" section to include revised NVIDIA driver version, revised the "Configure CT Colon CAD" procedure to add a note regarding iCAD software In the Troubleshooting Procedures topic, removed the "Vitrea 7.5 and newer does not work after installing Windows Creators Fall Update" section, and revised the URLs listed within the "Determine if the Vitrea License Server is working correctly" section
Vitrea Automation Platform Integration Guide	<ul style="list-style-type: none"> In Appendix C: Upgrade 7.15.8.SU01 to 7.16.0.SU02 with AV AP Integration, revised the "Configure SQL Server Permissions" procedure to clarify instructions, revised the "Connect to the Database Server" procedure to clarify instructions, added a note regarding iCAD software, updated the NVIDIA driver version
Vitrea Install Guide for Extend Deployment	<ul style="list-style-type: none"> In the Install and License Vitrea software topic, revised the "Configure SQL Server Permissions" procedure to clarify instructions, updated the NVIDIA driver version, added a "Modify the default size limit of DICOM instances and non-DICOM evidence" optional procedure In Appendix A: Hardware and Software Requirements, updated the NVIDIA driver version
Vitrea Install Guide for Workstation Deployment	<ul style="list-style-type: none"> In the Install the Vitrea software topic, revised the "Configure SQL Server Permissions" procedure to clarify instructions, updated the NVIDIA driver version, added a "Modify the default size limit of DICOM instances and non-DICOM evidence" optional procedure In Appendix A: Hardware and Software Requirements, updated the NVIDIA driver version

Guide	Content Change
Vitreia Upgrade Guide	<ul style="list-style-type: none"> In the Prepare for Upgrade topic, updated the NVIDIA driver version, added a note regarding iCAD software In the Upgrade Vitrea Workstation deployment from a previous version to 7.16.0.SU02 topic, revised the "Connect to the Database Server" procedure to clarify instructions, revised the "Configure SQL Server Permissions" procedure to clarify instructions, revised the "Install the Vitrea software" procedure to add new Caution, added a new "How to resolve more than one Vitrea instance listed in the Add or Remove Programs Control Panel" troubleshooting procedure In the Upgrade Vitrea Extend deployment from a previous version to 7.16.0.SU02 topic, revised the "Connect to the Database Server" procedure to clarify instructions, revised the "Configure SQL Server Permissions" procedure to clarify instructions, revised the "Install the Vitrea software" procedure to add new Caution, added a new "How to resolve more than one Vitrea instance listed in the Add or Remove Programs Control Panel" troubleshooting procedure

10. Resolved Issues

Key	Fix Version/s	Fixed Issues
MEDIS-86	7.16.0	QStrain with Enterprise deployment Previously, studies did not launch Medis Qstrain on Vitrea AV Enterprise systems.
PI-15455	7.16.0	Backslash character () causes rest of patient data to be cutoff In the Study List, if a patient was edited with a backslash in any of the fields, then it would cut off the rest of the text in that field.
PI-26389	7.16.0	Report tab and + tab are overlapped when many tabs are open Previously, in certain screen resolutions and with many tabs open, the Report button and + tab overlapped on the tabs.
PI-26954	7.16.0.SU02	Open Rib Advanced Processing icons Previously, the Advanced Processing icons in the Study List did not display properly for Open Rib studies. This issue has been fixed.
PI-26992	7.16.0	SeriesAutoExport takes 1-2 minutes longer than expected Previously, SeriesAutoExporter would send separate export requests for each series and overall the whole export would take longer. This has now been fixed by grouping all the series to export into one request.
PI-27249	7.16.0, 7.15.8.SU01	SQL Server Express Cumulative Update 23 In previous releases, multiple security vulnerabilities were reported by Microsoft. SQL Server Express CU 23, which addresses these vulnerabilities, is automatically installed as part of the Vitrea 7.15.8.SU01 software.
PI-27264	7.16.0	Multiple AV Services did not start on boot Previously for lower spec systems, on system startup, some services were observed to not startup and required manual startup.



Key	Fix Version/s	Fixed Issues
PI-27451	7.16.0	Restore Medis session when movie included Previously, when using the Medis applications and a movie was created, the session did not restore.
PI-27686	7.16.0, 7.6.1508	There were missing subfolders under the Document folder Previously, the Administration, Installation, and Upgrade guides in the Documents folder were not nested in subfolders.
PI-28698	7.16.0.SU02	Open Rib Auto Export Not Occurring Using Enterprise Deployment Previously, Open Rib would not auto export series for Enterprise Deployments. This issue has been resolved.
PI-28885	7.16.0.SU02	SystemHealth service occasionally restarts Previously, the Vitrea.SystemHealth service restarted intermittently on Vitrea AV Enterprise systems.
PI-28887	7.16.0.SU02	Notifications for apps launching when study data is not ready Previously, a misleading error message was shown in rare cases where the user was able to launch an application before all necessary processing of newly-imported data was complete. The misleading error message stated that stacks were missing, and the user should contact their system administrator. Instead a new error message in this case tells the user that data processing is not complete, and that they should re-try the launch after a short wait.
PI-28901	7.16.0.SU02	Finding limit alert was cut-off in Study List and +Tab The notification for indicating that the number of findings exceeds the limit was cut off and hard to read.
PI-28908	7.16.0.SU02	Apps would not show for a study if clicked on during ingestion in certain circumstances Previously, if a study was imported immediately after Vitrea was launched, and then selected before it had finished importing, then no apps would display for the study.



Key	Fix Version/s	Fixed Issues
PI-28913	7.16.0.SU02	New JIT display names should apply even if you changed a previous JIT display name If an Algorithm Processing JIT task has been renamed, this name now persists after an upgrade.
PI-28915	7.16.0.SU02	System Configuration showed two Trigger Events called "Stack Creation" In System Configuration, Just-In-Time Processing had two trigger events called "Stack Creation", even though one event was for any stack created, and the other was for all. They now have names to help distinguish them.
SUSENG-6815	7.16.0.SU02	DICOM image receive aborts Prior versions of the AV VIMS (DIMSE) ingestions intermittently could abort image receiving due to the VI.Enterprise.Servers.AssocServant process crashing. Changes have been made to improve the reliability of this process
SUSENG-7211	7.16.0	CEF libraries CEF libraries introduced security vulnerabilities have been resolved by upgrading the CEF version in Vitrea.
SUSENG-7268	7.16.0	IntelliSpace PACS Integration not launching properly Previously in all Vitrea AV 7.15 releases, the IntelliSpace integration would require an AV login immediately on launch of the IntelliSpace client. This has been resolved, and the AV login is now deferred until the first AV launch request from the IntelliSpace client.
SUSENG-7272	7.16.0	Auto-bone segmentation for the Carotid app or the Vascular: Carotid CT / 3D Analysis preset would not segment when using a custom preset. Previously, the auto-bone segmentation for the Carotid app or the Vascular: Carotid CT / 3D Analysis preset would not automatically segment when using a custom preset.

Key	Fix Version/s	Fixed Issues
SUSENG-7276	7.16.0	<p>First attempt after load to rename a vessel probe or region by typing in a name would not allow you to type in the new name.</p> <p>Previously, the first time the rename dialog popped up for a vessel or region rename after starting Vitrea, text could not be typed in.</p>
SUSENG-7280	7.16.0	<p>In TAVR, the space bar was not working when you hover over the camera button.</p> <p>Previously, in the TAVR or EVSP app, if you took a snapshot by clicking the in-viewer camera button and then clicked the space bar while the mouse still hovered over the camera button, another snapshot would be taken, instead of showing the next measurement.</p>
SUSENG-7281	7.16.0	<p>Issues with expected annotation label functionality</p> <p>In 7.15.0 an issue was introduced which caused the following issues in the annotation dialog:</p> <ul style="list-style-type: none"> • Traversing the list by pressing letter keys • Traversing the list with up/down arrow keys • Choosing a label, press enter to apply the label to the current viewport, then click in another viewport and press enter again to apply the same label to that viewport • Upon opening the dialog forgot if focus was on the edit box or the annotation list the last time it was opened. <p>These issues are now resolved.</p>
SUSENG-7285	7.16.0	<p>Crosshair changed on vessel probe extend</p> <p>Previously, if a vessel was extended, or a display format was changed, or a different vessel was selected, the inset zoom was updated to make the vessel fit in the inset. The side effect of this was that the vessel was re-centered and/or the crosshair would update to be the center of the vessel. Now, when the zoom is updated, the position does not change.</p>

Key	Fix Version/s	Fixed Issues
SUSENG-7289	7.16.0	<p>When doing a Scripted Batch in the Batch tab, clicking on the line behind the bar to adjust the step size in the Output Control section works differently than it used to</p> <p>The slider bar in the batch tab that adjusts the spacing between images was making a 1 mm step when clicking on the bar itself. It is now making a step of 0.1 mm again, as originally intended.</p>
SUSENG-7291	7.16.0	<p>Unable to use a period in TAVR Measurement Names</p> <p>Vitreva previously disabled the use of periods in measurement names in TAVR and other protocols due to issues seen on the report page. This functionality has now been enabled.</p>
SUSENG-7296	7.16.0	<p>Batch Collage in Brain Perfusion is skewed upon export</p> <p>Taking a batch collage in Brain Perfusion using a 4K monitor (3840x2160) and 150% scaling resulted in a skewing of the image when exported. This has been resolved by performing rounding on the image dimensions to ensure the image is no longer skewed due to resolution scaling.</p>
SUSENG-7310	7.16.0	<p>Left Ventricle Does Not Stay Tinted When Changes Made in Functional Analysis Applications</p> <p>In version 7.14 and earlier, Vitrea would keep the LV region tinted in CFA and Myo while modifying the LV axis. This behavior had been modified to hide the tinting in 7.15. It has now been restored to the 7.14 behavior.</p>
SUSENG-7313	7.16.0	<p>Measurement options do not display when a large quantity are available in the list</p> <p>If a TAVR/EVSP worksheet has many measurements, the right click menu did not display all of them as options to apply for the highlighted ruler. This issue has been resolved by placing all of the possible measurement names under a right click sub menu option named "Measurements".</p>

Key	Fix Version/s	Fixed Issues
SUSENG-7317	7.16.0	<p>In Viewer Snapshot did not include floating dialogs</p> <p>Previously, if a dialog was displayed (showing, for example, a chart or a graph), taking a snapshot from the global snapshot would include the dialog display in the snapshot image, but taking a snapshot from the viewer would not. Now, if the dialog is completely inside of a viewer and a snapshot is taken of that viewer, the snapshot image will include the dialog display. Note that if the dialog is not completely inside the viewer, the snapshot image will not include the dialog display.</p>
SUSENG-7318	7.16.0	<p>Vi.DicomReceive was holding Memory after the process ended</p> <p>Fixed a small resource leak in the AvDICOM provider that would cause a reduction in available memory after thousands of DICOM Associations were handled by a system.</p>
SUSENG-7331	7.16.0	<p>409 Conflict Error when using CMSC Protocol Management</p> <p>If the Protocol Management API is used to create a file, move the file, and then create a file at the original location, the second creation will no longer succeed, instead of failing with a 409 error.</p>
SUSENG-7368	7.16.0	<p>Poor performance loading</p> <p>Prior to 7.16.0, and on enterprise deployments, where the studies in the study list reside on and are accessed over the network, a performance issue occurred due to transfer of more data than necessary. This is especially problematic for studies that contain many (e.g., 60+) RGB batches. The effect of this issue was a slow response after the user clicks on a study and before they see the series contained within it. It also caused loading the study and restoring snapshots to be slow.</p>
SUSENG-7369	7.16.0	<p>Thumbnails failed to populate after clicking on new study</p> <p>In previous releases, with large datasets, the series thumbnails failed to properly populate when a new study was selected.</p>



Key	Fix Version/s	Fixed Issues
SUSENG-7380	7.16.0	Automatic bone removal fails upon launching a study in the CoW application in 7.15.7SU01 The "Automatically remove bone" checkbox on the Gallery page in the "Vascular: CoW CT" protocol did not appear to remove any bone or probe any vessels.
SUSENG-7385	7.16.0	Wrong application launches on StudyList after restoring results In previous releases, when restoring evidence, the study was not launched in the application where the evidence was taken, but, instead, in the default application for the study type.
SUSENG-7390	7.16.0	Daily Log Collection/Audit Logs were not working In prior releases, for Vitrea AV Enterprise deployments with TLS enabled, the Daily Log, Audit Log, and Performance Log daily collection and archiving features would fail to run for sites that did not also include simple (non-FQDN) hostnames in their certificates. This has been corrected, and will now operate correctly with only the expected FQDN hostnames in the certificates.
SUSENG-7392	7.16.0	Unable to enter a Series Description for Batch Even Though Cursor is Flashing Previously, the series description and cover page edit boxes on the batch tab did not accept keyboard input when windows focus brought to another application and then returned to Vitrea.
SUSENG-7403	7.16.0	VitreaClassic takes too long to launch for average size datasets In certain scenarios, Vitrea AV took excessively long to load relatively small studies and series into Gallery and other applications. Typically this would manifest by showing a grey screen with a status message on the bottom saying "Loading low resolution..." for double digit amounts of seconds. Enterprise was most affected by this slowdown.

Key	Fix Version/s	Fixed Issues
SUSENG-7406	7.16.1, 7.16.0.SU02	<p>Slow for Evidence to get back to the Results tab</p> <p>Previously, when a large number of snapshots were taken together, there was a long delay for them to display on the Results Tab in the StudyList. Alternatively, these snapshots could be viewed within the Plus Tab. This issue has been resolved.</p>
SUSENG-7425	7.16.0.SU02	<p>When launching Olea fMRI study through Vitrea AV, loading time was much longer when compared to Olea Standalone, especially with NAS or slow disk</p> <p>Significantly reduced the amount of time needed to load data into the Olea fMRI application, with the largest improvement in multi-node deployments where data is loaded over the network.</p>
SUSENG-7539	7.16.0.SU02	<p>Archive integration service does not always start up cleanly after reboot</p> <p>Previously, on servers that took longer than three minutes to boot and start the VSP services, the Archive Integration service would time-out and fail to start automatically.</p>
SUSENG-7541	7.16.0.SU02	<p>SystemInfo Service "Warning" level logs bringing unwanted attention to common conditions</p> <p>Some common conditions that previously caused the SystemInfo service to emit warning level logs are now more appropriately logged at the debug level.</p>
SUSENG-7544	7.16.0.SU02	<p>Log Collection - Some servers do not send back a daily rollop</p> <p>Previously, when the PerfLogDir directory specified in the SystemInfoService.exe.config configuration file did not exist, Servers failed to send up daily logs.</p>
TMW-3814	7.16.0	<p>Anonymization with "preserving all PHI option" updating UIDs</p> <p>Previously, exporting an anonymized study with the "preserving all PHI" option did not update UIDs. This could cause changes to existing versions of the study in PACS.</p>

Key	Fix Version/s	Fixed Issues
TMW-4007	7.16.0	Failed to "Show DICOM info" on specific steps If you viewed the DICOM info of a study in the Study List, then deleted and reimported the study, the DICOM info would no longer display for that study.
TMW-4245	7.16.0.SU02	AP.OpenRibAP JiT Work Item error when including Auto Export Previously, when including Auto Export with OpenRibAP enabled, AP.OpenRibAP work item would display error within System Configuration\Work Items status.
TMW-4375	7.16.0	Unable to save MPR view snapshots and batches for certain MR data Snapshots failed to create if the original data had a value for DICOM (0018, 0024) "Sequence Name Attribute" which was greater than 16 bytes. Now, if this situation occurs the snapshot will be created but (0018, 0024) will not be included in the snapshot.
TMW-4396	7.16.0	Restoring in "Images" state If you selected the Images view in the Study List Results tab, restored an image, and then went back to the Study List, it would change back to List view.
TMW-4399	7.16.0	Create AP users in AVAP Single Box Previously, the ability to create AP users from the AP Admin Apps integrated in Vitrea AV was not present.
TMW-4408	7.16.0	VSTP2 Applications were listed as "Unconfigured" in Applications Tray Previously, the applications listed in the Workaround procedure were not set in the AppGroups configuration.

Key	Fix Version/s	Fixed Issues
TMW-4430	7.16.0	<p>If the study date and patient birth date is present and the patient age tag is not present, patient age is not displayed in viewport</p> <p>Previously the patient age was not displayed in the upper left corner for the viewport overlay if the study date dicom tag and patient birth date dicom tag were present and had a value but the patient age dicom tag was not present or present without a value.</p>
TMW-4445	7.16.0	<p>Display of thumbnails with the "+ tab"</p> <p>If there were only groups on the Result tab in the Study List, you could not display thumbnails in the +tab.</p>
TMW-4448	7.16.0	<p>The apps listed in the XA data reception message include apps that do not support XA data</p> <p>Previously, all apps would display in the dropdown menu of an XA Alert. This has been fixed to display only apps that support XA datasets.</p>
TMW-4452	7.16.0	<p>[Japan locale only] Age display format language is not unified</p> <p>In Japanese, patient ages in the Study List are now expressed using d, w, m and y instead of 日, 週, 力月 and y.</p>
TMW-4467	7.16.0	<p>The Vessel Tools area was grayed out even after the vessel probed, and some applications could be operated</p> <p>In 7.15.8, the vessel tools were greyed out for some applications.</p>
TMW-4483	7.16.0	<p>Japanese translation Export icon tooltip</p> <p>The Japanese translation for the Export icon tooltip has been improved.</p>
TMW-4545	7.16.0.SU02	<p>You can launch apps that normally cannot be launched by double-clicking them from the "+ tab"</p> <p>Previously, double-clicking a disabled application in the +tab would launch the application anyway. Now, disabled applications cannot be launched.</p>

Key	Fix Version/s	Fixed Issues
VTL-9574	7.16.0	<p>Brain Perfusion study with both 2D & 4D Perfusion sequences incorrectly showed only one group number</p> <p>Previously, in rare circumstances, the Group column in the Study List's Applications tab may have labeled two different perfusion sequences with the same group number.</p>
VTL-10138	7.16.0	<p>Vitrea closed unexpectedly when vessels were selected while in Play mode In Cardiac Analysis</p> <p>Previously, Vitrea intermittently crashed if you selected different vessels while in Play mode. This issue has now been addressed by disabling the vessel list when play mode is on.</p>
VTL-10707	7.16.0	<p>In VScore, the color of scored calcium changed if you go to 3D 4-up, select Inverted MIP, and return to 2D 1-up</p> <p>To address confusion with overlay colors, Inverted MIP, Inverted MinIP, Colored and Lit rendering options are not available in the VScore application.</p>
VTL-10885	7.16.0	<p>Carotid Auto Vessel failed to find vessels for 1K datasets</p> <p>Previously, for large datasets, the Carotid Auto Vessel application failed to find vessels.</p>
VTL-11085	7.16.0.SU02	<p>Sound played inappropriately in some geographic regions</p> <p>When Windows was configured for a language or geographic region that uses a comma as the decimal separator rather than a period, the "ting" error sound was played at inappropriate times, especially during application startup and when selecting a visualization preset. This issue has been resolved.</p>

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11. Known Issues

Key	Affected Version/s	Unresolved Issues	Workaround
OLEA-469	7.15.7, 7.16.0	<p>Batch images saved with "Include annotations on images" turned on cannot be displayed in OMDV</p> <p>In Olea Medical DICOM Viewer, batches with the "Include annotations on images" options cannot always be displayed.</p>	User can see images by using other DICOM viewer
PI-27952	7.16.0	<p>Pending reboot warning message disappears for Enterprise profiles</p> <p>This behavior only occurs after a user would already have seen and disregarded the message by clicking through the prompt. This behavior will be investigated in a following release.</p>	Reboot at the end of installation.
PI-28942	7.16.0, 7.16.1	<p>Partner applications (such as INVIA) may silently lose too-large evidence sent to Vitrea</p> <p>Occasionally, some partner apps might produce results that are larger than 600MB and fail to save.</p>	Increase the System Setting value for dicomArtifactSizeLimit and/or nonDicomArtifactSizeLimit in the FMSTGeneral component by following the installation guide.
SUSENG-7270	7.14.3, 7.15.7, 7.16.0	<p>3DMPR does not allow user to adjust the image orientation during batch</p> <p>In the 3DMPR application, when users create a batch, the image orientation resets and will not allow the user to change it during the batch process.</p>	Create multiple 3D batches with different axis of rotation, e.g. z axis rotation, plus x or y axis rotation.



Key	Affected Version/s	Unresolved Issues	Workaround
SUSENG-7505	7.15.8, 7.16.0	“AddTo” dialog won’t expand in multi-monitor configuration The "Add To:" dropdown menu in the segmentation dialog does not appear if Vitrea is used in a multi monitor configuration. As a workaround, type in the desired segmentation region name.	Manually type category in selection box.
SUSENG-7531	7.16.0	Dotnet core mismatch causes installation roll back into defunct state This can be avoided by checking .NET runtimes prior to running installer.	1- Install missing .net packages or uninstall new ones that do not match 2- Delete our state file from package cache to resolve issue with installer.
TMW-4209	7.15.8, 7.16.0	Body DWI Score - when saving a movie an error message may display Sometimes, when saving a movie in the Body DWI Score application, an error message displays.	Try to save the movie again.
TMW-4542	7.16.0, 7.16.1	AutoMPR and AutoMPR Spine export will not work on Enterprise For the AutoMPR and AutoMPR Spine applications on an Enterprise deployment, results will not be auto-exported.	Manually export the results from the Results tab.

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12. Versioning Information

Product Name	Version Number
Corridor 4DM - INVIA	2018.0.0.180
Cedars Cardiac Suite	2017.10.0.31473
CMSC Clinical Applications	CMSC Clinical App 8.10.89.0314 CMSC Clinical App US 8.10.10.415 CMSC Clinical App US Lib 8.10.1.402 CMSC Vitrea Help 8.10.12.727 Filming 8.10.81.0314
CMSC Clinical Applications VSTP2A	CMSC Clinical App Auto MPR 2.0.1.9 CMSC Clinical App Auto MPR Spine 2.0.1.7 CMSC Clinical App Body DWI/DWI Stitching 18.5.0.1 CMSC Clinical App Head Reformatting Plugin 1.1.0 CMSC Clinical App SkeletalInfoExtractor Plugin 1.1.2 CMSC Clinical App Subtraction Viewer 2.0.1.15 CMSC VSTP2 Help 2.0.1.13
iCAD VeraLook® CT Colon CAD	1.1.10 for US / 1.1.5 for OUS
Medis® Suite Cardiovascular MR	Medis® Suite 4.0.62.4 QMass® 8.1.160.6 QFlow® 8.1.160.4 QFlow 4D® 1.1.88.2 QStrain 4.3.6.2
Mevis	Visia™ CT Lung CAD 5.8.2
Mirada Medical	XD 3.6.11.39438 NMX 4.4.4.38411 RTx 1.8.6.44363



Product Name	Version Number
Olea	Olea Sphere™ 3.0 SP33.1 Breastscape® 1.0 SP11 Olea Nova+ 1.0 SP7 Functional MR 1.0 SP2 OMDV 1.2.0
Syntermed	NeuroQ™ 3.80.20210429.143255
TomTec™	TTA 2.51.00
Vitrea® Advanced Visualization	7.16.0.SU02

Vitrea Lifecycle Updates:

As Canon Medical continues to develop value added solutions that enhance your organization's patient planning, important product lifecycle notifications will keep you informed about any changes to the software solutions.

For Vitrea product lifecycle information, access the Canon Medical website.
mi.medical.canon/support-and-education/customer-support/product-lifecycle

Release Notes template: SOP-301.760.T0010