

SecurView®

Breast Imaging Workstation



Release Notes

MAN-06321 Revision 001

HOLOGIC®

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Breast Imaging Workstation

Release Notes

For Software Version 10.4

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Product Support

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1. Introduction

The Release Notes provide a listing of New Features, Problems Corrected, and Known Issues in the most recent release of the SecurView® DX/RT Workstation software. The 10.x releases include:

Version	Release Date
10.0	March 2016 (OUS)
10.1	November 2016
10.1.2	July 2017
10.3	November 2018
10.4	September 2019

Version 10.4 requires the Windows 10 (standalone, client) or Windows Server 2016 (manager) operating system. Windows 7 and Windows Server 2008 operating systems are not supported. Version 10.3 introduced Windows 10 and Windows Server 2016 operating system support.

2. Notes for Version 10.4

2.1. New Features in 10.4

2.1.1. Smart Mapping

The Focus feature is replaced with a new Smart Mapping feature, to select a point in a Hologic synthesized 2D image that contains a C-View or Intelligent 2D Map and have the best representative reconstructed slice or SmartSlice display automatically in an adjacent viewport. A ReportFlow step is available to activate Smart Mapping.

2.1.2. 3D CAD Results Display

CAD marks from applications such as iCAD or ScreenPoint that analyze tomosynthesis reconstructed slices can be displayed on the referenced reconstructed slices. The Tomo Slider indicates which slices have 3D CAD marks. Whether or not to display CAD score and case score with 3D CAD marks is configurable as a system setting. Mammography breast density outline is displayed with black line on white background. Calcifications outline is displayed with white line on black background.

The CAD marks can be projected onto corresponding conventional 2D images, synthesized 2D images or slabs of the same view and tomosynthesis acquisition. Projection of CAD marks is configurable as a system setting per tomosynthesis image manufacturer and image type.

2.1.3. Enhanced Tomo Slider Labeling

The Tomo Slider label starts with Slice, SmartSlice, or Slab, followed by the currently displayed slice or slab number, the total number of slices or slabs, and the depth in mm of the current slice or slab in the breast relative to the first slice or slab.

2.1.4. Improved Linked Tomosynthesis Scrolling

The Tomo Slider position is synchronized when toggling between reconstructed slices and Smart Slices. The scrolled distance in mm in the breast is synchronized across linked viewports. When linked viewports contain a mixture of reconstructed slices and Smart Slices, no reconstructed slices are skipped during Cine mode, or when manual scrolling is controlled in a reconstructed slices viewport.

2.1.5. Prior Images Eligible as Scaling Master

For Same Size and Right Size scaling, in previous versions the largest image of the most recent study was used as the scaling master. If prior images were larger than current images, the prior images could be cut off. The new default is to select the largest image from current and prior studies as the scaling master. The scaling master selection to include prior images or not is configurable as a user preference.

2.1.6. Intelligent Roaming Persistence

In previous 10.x versions, Intelligent Roaming ended upon changing the displayed image in a viewport using drag and drop or advancing the stack. These actions now reset Intelligent Roaming to the first quadrant.

2.1.7. New ReportFlows for Implant Displaced and I-View

Four new ReportFlows are available for procedures with Implant Displaced views.

Two new ReportFlows are available for procedures with I-View images.

2.2. New Features in 10.3

2.2.1. Image Preparation, Distribution, and Display Performance Improvements

Image distribution between a manager and its connected clients is improved with clients performing some of the distribution to reduce load on the manager.

The preparation of tomosynthesis images is accelerated by automatically determining the number of parallel tomosynthesis preparers to use based on available hardware.

Scrolling performance of Clarity HD reconstructed slices has been improved.

Maximum cine scrolling speed is now configurable, with a default of 30 frames per second.

2.2.2. Improved Multi-Vendor Tomosynthesis Hanging

Non-Hologic tomosynthesis images are now included in the tomosynthesis navigation buttons and associated Hanging Snapshot configuration settings.

- The **MG Images** button stacks any vendor's conventional 2D and synthesized 2D images.
- The **Reconstruction** button stacks any vendor's reconstructed slices and slabs.
- The mammography and tomosynthesis Hanging Snapshot settings apply to any vendor's tomosynthesis procedures.
- Tomosynthesis User Preferences include a setting to configure whether slices or slabs are displayed on top when multiple reconstructions are available.
- The tomosynthesis slider tool indicates whether slices or slabs are currently displayed.

The tomosynthesis thumbnails in the MammoNavigator® are now labeled as follows:

- 'M' for conventional 2D mammography and CE2D (contrast-enhanced 2D mammography) low-energy images
- 'G' for synthesized 2D images
- 'T' for tomosynthesis reconstructed slices
- 'V' for tomosynthesis reconstructed slabs
- 'P' for tomosynthesis projection images
- 'S' for CE2D subtraction images

2.2.3. No Currents Available Warning User Preference

A User Preference setting specifies whether or not to display the No Currents Available Warning.

2.3. New Features in 10.1.2

2.3.1. DICOM Breast Projection X-ray Image Support

SecurView workstations are now able to receive and display Tomosynthesis projection images transferred using the DICOM Breast Projection X-ray Image – For Presentation format.

2.3.2. Unique Device Identifier Information (UDI)

The About tab displays additional UDI information.

2.3.3. Improved Tomosynthesis Scrolling Performance

Several optimizations improve the performance of tomosynthesis scrolling to provide a smoother experience. Improvements include multithread usage and increased concurrent processing.

2.4. New Features in 10.1

2.4.1. Hanging Snapshot Extensions for Selected Image Required

Hanging Snapshot configuration now includes a separate 'Selected image required' option that applies to reconstructed slices or tomosynthesis projections when selected to be on top.

2.4.2. Support of JPEG 2000 Transfer Syntax for Color Images

SecurView workstations are now able to receive and display color images transferred using the DICOM JPEG 2000 Lossless compression transfer syntax.

2.4.3. ComboHD Options Extended to include CEDM Subtraction

Contrast enhanced digital mammography images, generated as part of a Tomosynthesis Combination procedure, will be stacked accordingly with 2D images in the Tomosynthesis Navigation buttons. User preference can be set to conventional 2D or subtraction image on top. Tomosynthesis license is required.

2.4.4. View Modifiers Added to Existing Hanging Snapshots

View modifiers AC, AX, IMF, and NP have been added to existing Hanging Snapshots so these images will be stacked with the corresponding views, to match the preferred behavior in SecurView versions prior to 9.0.1.

2.5. New Features in 10.0

2.5.1. Tomosynthesis Preparation Accelerated with Multiple Preparers

The preparation of tomosynthesis images is accelerated by using two parallel working preparers.

2.5.2. Support of JPEG 2000 Transfer Syntax

SecurView workstations are now able to receive and display grayscale images transferred using the DICOM JPEG 2000 Lossless compression transfer syntax.

2.5.3. Mark Studies Read Automatically from Third-Party Application

Third-party applications that can send update patient state messages to Hologic Application Synchronization can now automatically trigger the marking of a study as "Read" in SecurView software. Examples of such applications are reporting and dictation. Contact your Hologic Service representative to ensure that Application Synchronization supports receiving this message from your third-party application.

2.5.4. Unique Device Identifier Information (UDI)

The About tab displays UDI information.

2.5.5. Intelligent Roaming Available for All Mammography Vendors and C-View™ 2D Images

Images from all mammography vendors and C-View 2D images are now sized and positioned optimally for Intelligent Roaming and other sizing modes. This applies to images that meet IHE requirements.

Sizing for non-Hologic mammography images and C-View 2D images is now maximized and in the position determined by the sizing mode.

2.6. Problems Corrected in Version 10.4

2.6.1. GE 2D Mag/Spot Images Stacked in MG Tomosynthesis Navigation Button

When Create Combination Procedure By View is enabled for GE tomosynthesis images, magnification, spot compression, and specimen images of a 2D procedure were stacked in the MG tomosynthesis navigation button. This problem has been corrected.

2.6.2. Giotto Synthesized 2D Displayed as Reconstruction

Giotto synthesized 2D images received as DICOM Breast Tomosynthesis Image were displayed in the Reconstruction tomosynthesis navigation button, stacked with the reconstructed slices when Image Type GENERATED_2D was not identified in the DICOM header. These images were displayed with poor contrast. This problem has been corrected.

2.7. Problems Corrected in Version 10.3

2.7.1. Memory Leak When Using the Focus Feature

There is no longer a risk of reduced performance when the Focus feature is used.

2.7.2. Long Login Delays After Client Is Idle

Users experienced long delays when logging in after a client workstation had been idle for some time. This problem has been corrected.

2.7.3. Giotto Tomosynthesis Images Displayed with Poor Contrast

Giotto tomosynthesis images were displayed with poor contrast. This problem has been corrected.

2.7.4. Preparation Time for Tomosynthesis Reconstructed Slices as CT Images

If the patient was already open while tomosynthesis reconstructed slices in the CT image format were being received, longer than normal preparation times occurred for images to display. This problem has been corrected.

2.7.5. Images not Displayed due to Decompression Failure

When decompressing images received using JPEG Lossless compression, occasionally an error was reported that prevented the images from being prepared and displayed. This problem has been corrected.

2.8. Problems Corrected in Version 10.1.2

2.8.1. Memory Leak When Decompressing JPEG Lossless Compressed Images

In SecurView software version 10.1.1, a memory leak occurred when an error was encountered while decompressing JPEG lossless compressed images. The memory leak is now fixed.

2.8.2. Mammography Prior Enhancement™ (MPE) Processing Errors

Some GE images displayed white after MPE processing. These images are now displayed correctly. MPE processing applied to 16-bit GE images caused SecurView image preparation to crash. MPE processing now fails gracefully and the images are displayed unprocessed along with an error message.

2.8.3. Incorrect Digital Marker Displayed in Stacked Images

An incorrect digital marker was displayed on a stacked image for which digital markers were disabled in ManufacturerConfiguration.ini, when mixed in a stack with images for which the digital marker was enabled. This problem has been corrected.

2.8.4. Open Patient Message Sent after Closing a Study

With the user preferences 'When opening a patient' and 'Ask me to select the study to synchronize' enabled, when closing the last patient in a session where the patient had more than one study, the 'Ask me to select the study to synchronize' dialog box would display unexpectedly. As a result, an unexpected Open Patient message was sent. This problem has been corrected.

2.9. Problems Corrected in Version 10.1

2.9.1. Double-click to Single Tiling Behavior with Stacked Images

In previous versions of SecurView, stacked images showed the top time point after the user scrolled to a different time point and then double-clicked on the image. This problem has been corrected.

2.9.2. ERMF Override No Longer Applies to Magnification Views

If the Estimated Radiographic Magnification Factor (ERMF) override is configured for a specific mammography manufacturer and model to correct measurement lengths, the override applies only to images with ERMF = 1.0 so that measurement lengths on magnification views are not affected.

2.9.3. New Secondary Capture with Annotations Changed Study State

Receiving a new Secondary Capture Image with annotations for a prior study or scanned document along with images from the prior study could change the study state from Read or Old to Not Read on the patient list. This problem has been corrected.

2.9.4. Prepared SCO Tomosynthesis Files Corrupted on Client Startup Delayed Image Presentation

After rebooting a SecurView client in a cluster, prepared Hologic SCO tomosynthesis files on that client were corrupted on startup. This problem has been corrected.

2.9.5. C-View BTO Diagnostic Print is now True Size

C-View 2D images did not print in True Size if the received images were in BTO format and were printed in Diagnostic mode. The images were sized to fit the film area. This problem has been corrected.

2.10. Problems Corrected in Version 10.0

2.10.1. Search on PACS Cannot Start from Keypad

It is now possible to initiate a Search on PACS using **Enter** on the keypad.

2.10.2. Cancelled Missed View Safety Warning Ignored

When a user advanced to the next patient with the barcode reader and a Missed View Safety Warning appeared, if the user then pressed the **Cancel** button, SecurView software would continue to the next patient. This problem has been corrected.

2.10.3. Newly Arrived Images not Displayed for Open Patient

When a SecurView workstation was synchronized with MultiView software and 1) a patient was opened that had no images in the MG Viewer, mammography images that arrived while the patient was open were not displayed automatically and no ReportFlow was selected, and 2) a patient was opened that had only prior mammography images in the MG Viewer, new mammography images that arrived while the patient was open were not displayed automatically and the selected ReportFlow was not updated. These problems have been corrected.

2.10.4. Receiving Images May Stop after Receiving Corrupt Image

Corrupt images that are received are now deleted so they no longer prevent receiving additional images.

2.11. Known Issues in Version 10.4

2.11.1. Compressed Ultrasound Color Images Displayed With Incorrect Colors

Ultrasound YBR_FULL color images received using JPEG compression are displayed with incorrect colors. To resolve this problem, disable compression transfer syntaxes when receiving ultrasound images. For assistance, contact Technical Support.

2.11.2. Annotations Not Sent on Secondary Capture Images

When a Secondary Capture Image other than digitized film is the only image in a study, user annotations made on that image are not sent at close study.

2.11.3. Ultrasound Measurement Calculations

When Pixel Spacing and Sequence of Ultrasound Regions are both present in an ultrasound image, SecurView software uses the Pixel Spacing value to calculate measurement lengths.

2.11.4. Preparation Times for Color Ultrasound Images

Longer than normal preparation times may occur when color ultrasound images are sent to SecurView workstations using compression transfer syntaxes. This problem can be resolved by disabling support for compression transfer syntaxes so that ultrasound images are sent uncompressed from PACS or from modalities. For assistance, contact Technical Support.

2.11.5. Annotations Displayed Incorrectly on Reduced Resolution Center Slice of SCO Image

If an annotation is made on a tomosynthesis image that was sent as Hologic SCO to a SecurView workstation, then stored to PACS as a GSPS, the marking may appear at the wrong location on a PACS viewer if it is displayed on the reduced resolution center slice stored in the public pixel data attribute of a Hologic SCO image.