

RCI Full Release notes Version 116

Your acquisition agent **ONLY** needs updating to benefit from the changes marked with '**AA Update Required**'. You will benefit from **ALL** other changes as soon as the release is live.

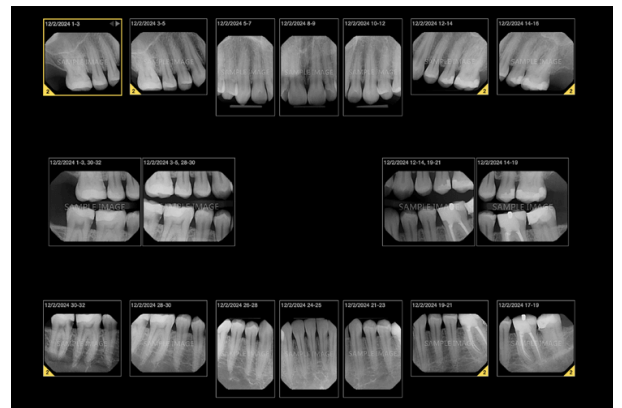
New Features

SuperFMX/ Modality View:

The **SuperFMX/Modality** view introduces a new level of flexibility and efficiency to imaging workflows.

You can now choose between the traditional exam-based workflow (**Exam** view) and a newly developed modality or anatomical workflow (**Modality/SuperFMX**) view.

This update accommodates diverse operational preferences and clinical needs, allowing you to select the workflow that best supports your diagnostic processes.



Improvements

Vatech EzDenti SW Bridge - Check DCM Files for Full 2D Image

AA Update Required

Improved handling of images acquired via the Vatech EzDenti SW Bridge. If the saved file is a DCM file, the system now checks if it contains a 2D image and ensures the full image is pulled into the imaging software. Previously, only a thumbnail image was displayed.

Dentally Add Telemetry - Image Deletion, Tools Usage, and PsP Stacking

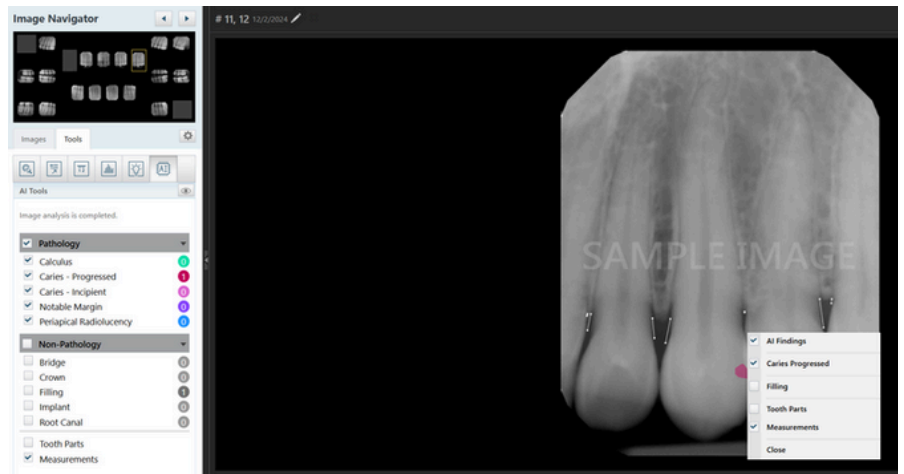
Enhanced telemetry tracking in Dentally with the following updates:

- **Track Image Deletion:** Records when an image is permanently deleted, not just when the "Delete" button is clicked.
- **Assign/Edit Teeth Tracking:** Tracks events for assigning or editing teeth on images.
- **Expand PsP Stacking Information:** Includes the template index in the onImageAcquired post-back for all acquisition types, allowing better tracking of stacked images.
- **AI and UI Interactions:** Tracks interactions with the AI findings button, Tooth Parts button, and Pearl submit button for improved analytics.

Pearl - AI Menu - Sort the List of Findings

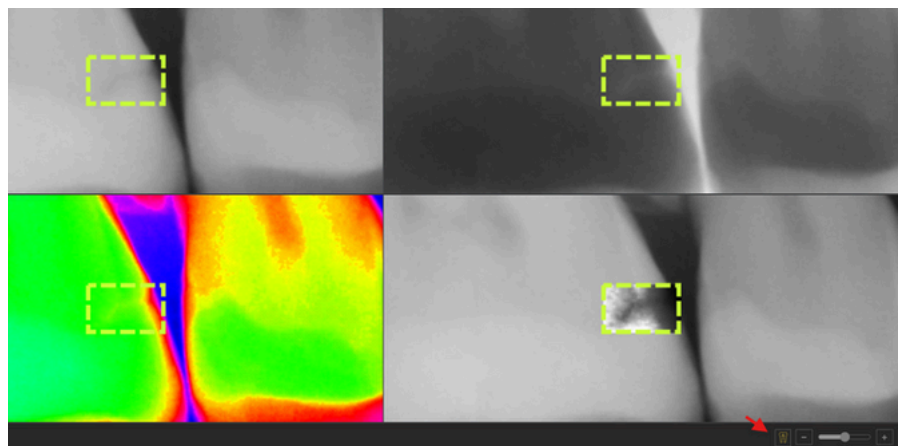
Enhanced the AI findings menu for improved navigation and usability.

Findings are now ordered based on the AI tool tab, with Pathology and Non-Pathology findings separated by a grey line. 'Tooth Parts' and 'Measurements' toggles are distinctly separated and renamed for clarity.



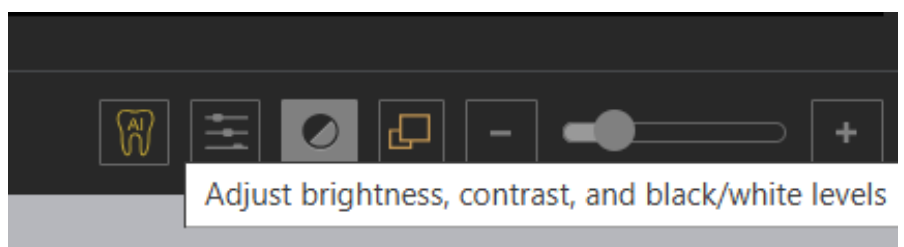
AIDE - Update the Eye Button to the AI Findings Button

Replaced the eye button with a dedicated AI findings button for consistency. Telemetry tracking was added for the show/hide AI findings feature.



Update Title for 'Brightness/Contrast' Dialog

Updated the title of the 'Brightness/Contrast' dialog to reflect the addition of levels adjustment. The new title is 'Brightness/Contrast/Levels'.



DEXIS Software Bridge - 3D Volume Acquisition - Optimise Folder Search

AA Update Required

Improved the efficiency of 3D volume acquisition by prioritising searches within the patient's folder. This enhancement significantly reduces processing time while maintaining a full directory scan as a fallback option.

macOS - Update PSPIX and SOPIX Helper Apps

AA Update Required

Updated the helper apps for PSPIX and SOPIX devices on macOS to enhance compatibility and performance across various macOS versions. Updated versions:

- SOPIX helper app: v1.32
- PSPIX helper app: v1.0.31

Auto-Select New GxPicture Option for Existing Users

AA Update Required

Resolved an issue where users updating to the latest Acquisition Agent version did not have the correct GxPicture device option auto-selected. The new "GxPicture Sensor" is now automatically selected for relevant procedures.

New/Updated Devices

Update Athlos SDK for DC Air Sensors (Windows)

AA Update Required

Integrated the latest version (2.16.1) of the Athlos SDK for DC Air sensors. This update ensures compatibility and addresses breaking changes in prior SDK versions. The changes enhance sensor performance and reliability. **Windows Only.**

Third Party

Planmeca 3D Volume Acquisition - Handle Scout Images

Resolved an issue where scout images from Planmeca devices interrupted 3D volume transfers via the Romexis software bridge. Scout images are now discarded, ensuring only 3D volumes are processed.

Dentally - Peek Not Meeting Minimum Resolution

Addressed an issue where Dentally's Peek feature used a low resolution that partially hid the AI popup menu. Updated the minimum resolution to 998x653 for proper display.

Nemo - Volume Sharing Issues

Fixed an issue where Nemo shared the patient name but not the volume due to a missing StudyDate attribute in the DICOM file. Coordinated with Nemo to resolve the error.

Tasks

API - Add Health Check Endpoint

Implemented a new health check endpoint in the API to monitor system status and ensure service availability.

.NET Core - Add Health Check Endpoint

Added a health check endpoint to .NET Core for improved system diagnostics and monitoring.

Use BitConverter in .NET Core Session

Replaced bit-shifting logic with BitConverter in SessionVariables for improved efficiency and maintainability.

iTero - Increase Polling Interval

Increased the polling interval for the iTero software bridge from 250ms to 2s to reduce network load on the API.

Move Version.txt from RealCloud.zip to Root of Deployment

Adjusted the deployment process to move the Version.txt file from the ASP.NET deployment zip to the root directory for easier access.

Add AWS KMS to RealCloud.Core

Enabled configuration of AWS KMS for secure key management in RealCloud.Core, improving encryption capabilities in web farm instances.

Update Versions to 116

Updated all necessary versioning references to 116

Update System.Text.Json Nugets

Updated System.Text.Json nuget packages to address a critical vulnerability (CVE).

API - Background Task Updates

Added Created and Completed DateTime properties for background task status. Purged completed tasks from the task list after 24 hours. Limited task failure details to 100 entries. Added an endpoint to manually purge completed tasks for integrators.

Update SampleDB for Postgres

Enhanced sample scripts to support deployments using Postgres for the Modern tier.

Core - Return 404 Instead of 500 Error for Missing Files

Added File.Exists checks to ensure missing files return a 404 error, reducing unnecessary 500 error logs.

Add Documents to Repo and Artifact Bucket

Ensured up-to-date configuration and usage documentation for Dentally are maintained in the Imaging repo and included these documents in release artifacts for easier accessibility.

Bugs

Carestream Software Bridge Fix

AA Update Required

2D image links now correctly transfer to the patient's exam list.

Handy Sensor Integration Fix

Image quality matches the TWAIN source, improving clarity.

'Finish Acquisition' Button Enabled Before Upload Completion

The 'Finish Acquisition' button is now disabled until uploads complete to prevent errors.

Blocking Brightness/Contrast Reset Fix

Double-click resets brightness and contrast for AI results.

Uncaught TypeError drawImage Fix

Fixed intermittent error (TypeError: this.drawImage is not a function) during image operations.

Pearl - Tooth Parts Button Fix

The 'Tooth Parts' button now stays toggled on when the feature is enabled, even after leaving AIDE

AI Findings Tooltip Clipping Fix

Tooltips no longer clip into the bottom toolbar after zooming.

Rearrange Exam - Rotate Button Direction Fix

Flipped images now rotate in the correct direction.

Measurement Reset Fix

Measurements now require calibration after straightening to ensure accuracy.

API Data Conversion Fix

Byte data types are now properly converted for APIs.

Rearrange Exam Fix

Rearranging exams works without requiring AI credentials.

DEXIS Image Rotation Fix

AA Update Required

X-ray images now arrive in the correct orientation.

Image Pan Fix

Users can now zoom and pan on images correctly after rotation

Empty Exam List Fix

Exam lists display even if the top exam is empty.

Big Template Mode Fix

X-rays stay in slots when the 'Big Template Mode' window is resized.

Modality View - Date Dropdown Fix

Date drop-downs no longer freeze when in Modality View.

Narrow Down Results - Image Preview Fix

Previews match the selected exam layout.

SuperFMX - Options Cancel Fix

Changes are reset when canceling in the 'More Options' menu.

TypeError for No Images Fix

No errors (Uncaught TypeError) occur when toggling patients with no images.

Modality View - Primary Teeth Display Fix

Primary teeth now display anatomically in Modality View.

Modality View - Deleted Exam Image Fix

Deleted exam images no longer show in Modality View.

Modality View - User Can Delete Final Image of an Exam

Deleting the final image removes the entire exam.

Exam View - Deleting All Exams Fix

Deleting all exams no longer causes errors.

Peek Exam Error Fix

Peek Exam loads without errors.

Undeleting Image Slot Fix

Undeleted images now reappear in their slots in the image navigator.

Exam View - Image Clipping Fix

Borders don't overlap or clip through other images in Exam Viewer.

Images Stack Deletion Fix

Deleting all images in a stack keeps the slot intact.

Pearl - Flipped Images Orientation Fix

Flipped images retain correct orientation with Pearl.

Exam Selection Fix

Exams are selectable even if the top one is empty.

Menu Formatting Fix

'More Options' menu formatting is consistent across all platforms (macOS, ChromeOS, and iPad).

Graphic Fix

'No images available to load' graphic is now centred.

Dentition Toggle Fix

Teeth can be toggled between primary and permanent dentitions.

Tools Tab Selection Fix

The 'Tools' tab stays selected when switching images in exam view.