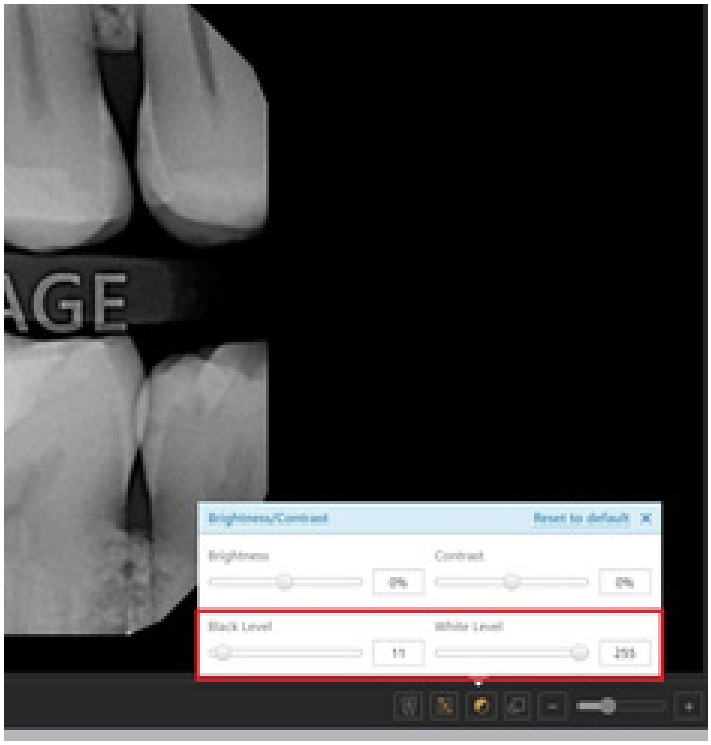
dentally vision | dentally visionAI

RCI Full Release notes
Version 115

Improvements

Implement 'Levels' Adjustment Tool for 2D X-ray Images

The 'Levels' adjustment tool has been implemented for 2D grayscale X-ray images, allowing users to manually adjust the black and white pixel levels. This tool enhances image clarity and contrast by giving users more precise control over image exposure. It has been added to the existing Brightness/Contrast popup window, introducing two new sliders—one for adjusting the maximum black pixel value and another for the minimum white pixel value.

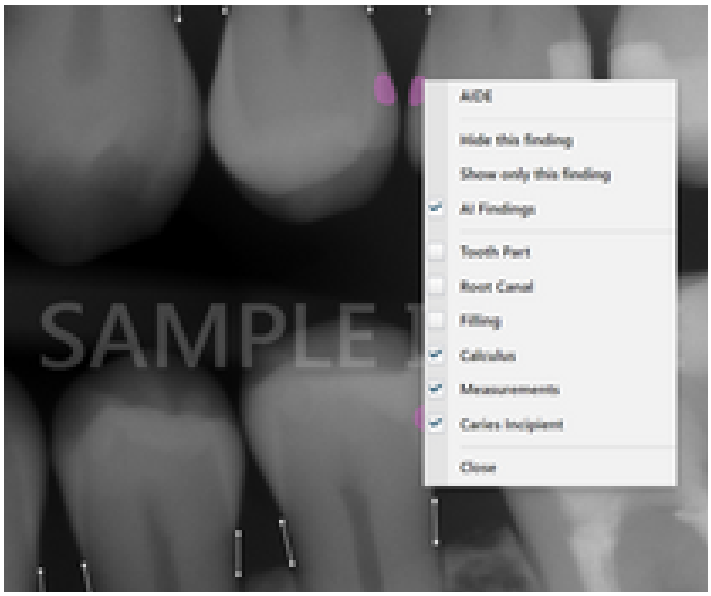


Key Features:

- **Black Level Slider**: Adjusts the threshold below which all pixel values are set to black (0).
- **White Level Slider**: Adjusts the threshold above which all pixel values are set to white (255).

AI Menu - Leave menu open when toggling which results are shown

The AI menu will now remain open while users toggle the display of AI results, allowing for easier selection of multiple options without closing the menu.

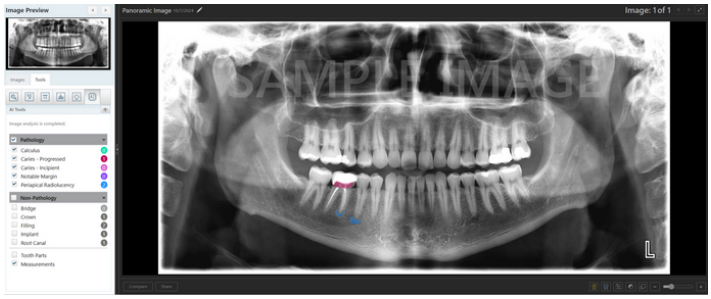


Implement Telemetry for Dentally AI

Telemetry has been implemented to track user interactions with AI features, including event tracking for AI submissions, menu options, and AIDE usage.

Pearl - Add Support for Submitting Panoramic Images

Users can now submit panoramic images to Pearl AI and view analysis results for these images.



Pearl - Remove Findings Total Footer

The findings total footer has been removed from Pearl AI views as it is no longer needed.

Pearl - Historical Submission

Pearl AI can now analyze historical images based on location, with the ability to submit images from the last 12 months that haven't previously undergone analysis.

Show/Hide AI Findings Button Persistence

The show/hide AI findings state defaults to "on". The Show/Hide AI Findings button will now retain its state (on/off) when users switch between images in the same exam and will reset when a new exam is

loaded.

Pearl - Allow AI panel submission for newer images

It’s possible that a user's image may not submit to Pearl because of network issues during acquisition, in response to submission timeout users can now submit AI candidate images that have not been submitted and are less than 48 hours old directly from the Pearl AI panel using a button. The button only appears if the submission fails.

New/Updated Devices

Added Direct Integration to iRay Pluto Sensor

Added direct integration for the iRay Pluto Sensor. Windows compatible.

Hamamatsu - Update integration to use SimpleAcq function

The integration has been updated to use the SimpleAcq function, improving image capture accuracy for Hamamatsu devices. Windows compatible.

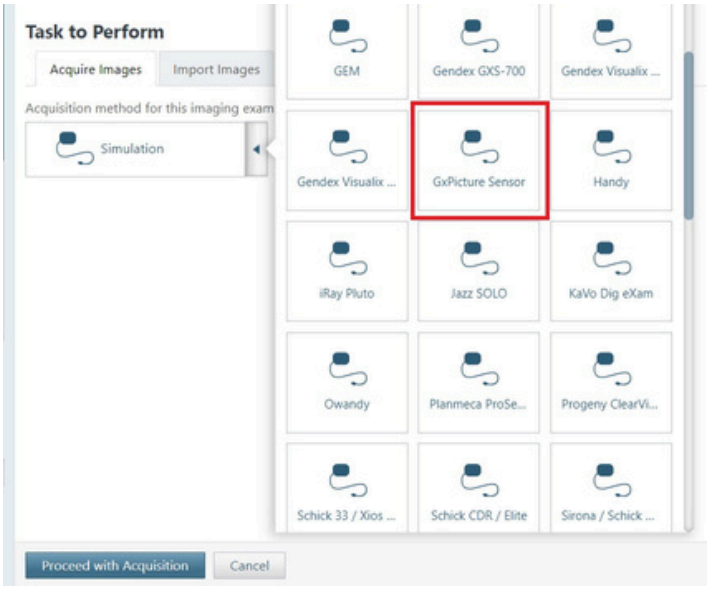
AI-3290 Sirona/Schick Update integration to IOSS version 3.2

Updated integration to support Schick's IOSS version 3.2, ensuring compatibility and improving system performance. Windows compatible.

Added GxPicture Interface Support for PSP Intraoral Acquisition Modes

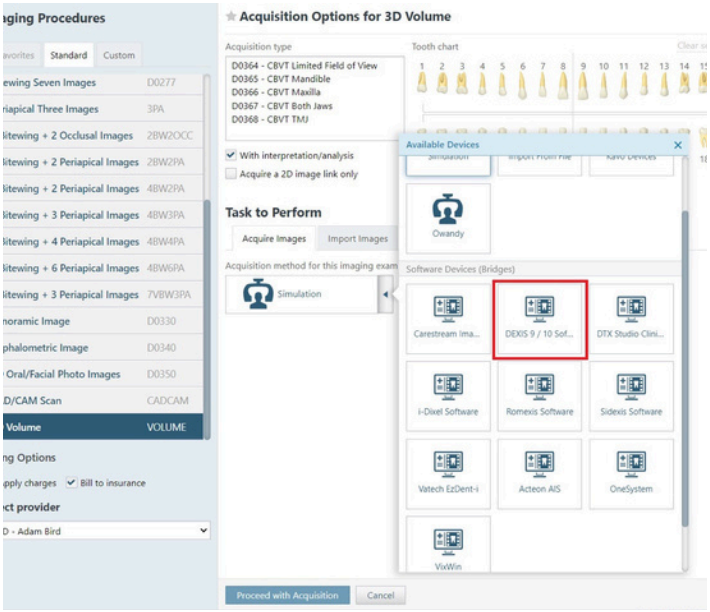
Added support for PSP intraoral acquisition modes using the GxPicture interface. Windows compatible.

- Renamed the existing GxPicture selection from 'GxPicture device' to 'GxPicture Sensor'.
- Added PSP intraoral device selection 'GXPicture Phosphor Plate'.



DEXIS Software Bridge - Support 3D Volume Acquisition

The DEXIS Software Bridge now supports 3D volume acquisition, expanding the range of images that can be captured and analyzed through this integration. Windows compatible.



Vatech Integration: Update Pixel Size

Updated pixel size for Vatech sensors to 29.6 due to binning. Windows compatible.

Extend Romexis SW Bridge Timeout to 1 Minute

Extend timeout for the Romexis Software Bridge to 1 minute to address issues with volume pulls. Windows/Mac compatible.

Tasks

Add RCI .NET Core Deployment

Added an ASP.NET Core server application to support the future deployment solution of Imaging, Offline, and Desktop mode.

Add Version Endpoint

Added GET endpoint to return the assembly version (e.g., 115.0.X.Y).

Pearl: Improve Additional Rotation Code

Adjusted additional rotation code to rotate the context directly instead of recalculating finding points.

Move Dentrix XRef Creator Code Sign to Build Server Only

Moved code signing of Dentrix XRef Creator to the build server to meet new security requirements.

Update Formatting for AI Button Tool Tips

Updated formatting of AI tool tips.

- 'Show/hide AI Findings' → 'Show/hide AI findings.'
- 'Show/hide AI Tooth Parts' → 'Show/hide AI tooth parts.' (For Pearl users)

Only Call get-ai-analysis and Usage Events for AI Candidate Images

Ensured AI candidate images only trigger the 'get-ai-analysis' and 'usage events' calls.

API: Update to Use Latest AWS Credential Best Practices

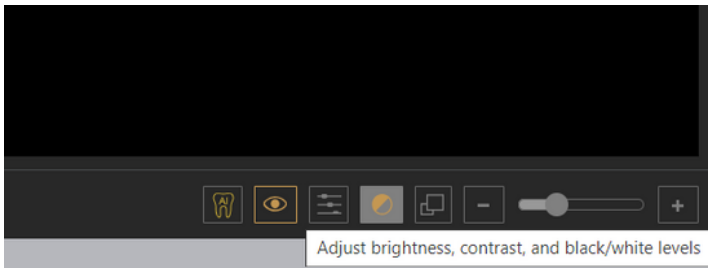
Updated RealCloud API to use the latest AWS .NET Credentials provider.

AI Submission: Add Timeout and Agent Logging

Added timeouts and logging to AI submission methods to improve troubleshooting.

Update Brightness/Contrast Button Tool Tip to Include Black and White Levels

Updated tooltip to reflect that the button now adjusts brightness, contrast, and black/white levels.



Fix Offline Mode Databases Broken by Update

Fixed offline mode databases that were broken by issues from the update to offline mode.

Update API Connection String Setting

Updated the API connection string setting to follow convention used in RealCloud.Core.

Create simulation randomiser for testing

Added a debug setting to have the agent randomly alter simulation images to prevent duplication detection during AI testing.

API - Add additional debug logging for Pearl

Added debug logging to the API for pearl historical submission.

Bugs

Offline Sync Simulation - Acquisition Device Missing

Offline Sync Simulation will simulate as if the user is using an offline sync feature

Peek and Dashboard - Keyboard Shortcut Issues

The following keyboard shortcuts no work as expected...

- The following keyboard shortcuts now work as expected:
- The arrow keys now work in Peek for changing which image is currently shown.
- 'E' does opens the currently viewed image in Peek to the exam view.

Note: These selections do not have a solution at this time.

- ‘Esc’ does not close the Peek window.
- ‘Esc’ only works for Dashboard if the user clicks the image window before clicking the shortcut.
- 'i' does not open Peek for the selected tooth numbers.

Resize Uncaught Type Error

The ability to scale a placeholder will only be available if the placeholder is highlighted/selected.

Rotate and Flip

Image Navigator and Exam View will now properly update when images are rotated or flipped.

Custom Templates

The remove button will not be enabled when no image template is selected.

Zooming

Zooming in on an image and having an AI result overlap the footer causes buttons to not be clickable, this has now been resolved.

Annotations

Reaching annotation limit with Pearl enabled will no longer throw error messages or remove AI results.

Peek

The AI menu will now open at the appropriate location when a result is clicked.

Pearl - Tooth Parts

The Tooth Parts checkbox in the AI Tools menu should remain checked when tooth parts are shown.

Freehand Draw Annotations Disappearing

Annotations will no longer disappear while drawing them.

Share Volume to Nemotec

'The JSON value could not be converted' Error has been resolved and you will now be able to share your volumn successfully.

Resuming an Exam

Resuming an exam will now select the same device that was used for the initial examination.

Vatech Integration

You can now capture images with a Vatech sensor using the Vatech device option.

Pearl - AI buttons

Toggling the AI finding button should turn off the measurements checkbox in the AI panel.

Compare - Uncaught type error

Compare should not throw an error when there is only one image and should display only one image in the zoom panel.

AI - Blocking brightness/contrast adjustment

You can now adjust brightness/contrast by clicking and dragging on an AI result.

Endo Mode

Endo mode will now only acquire only one image per acquisition attempt.

Custom Procedure

Resizing custom image tiles should not result in console errors.

Pearl AI Panel - Legend not loading correctly

The Pearl AI panel now loads correctly with colour-coded numbers next to the results.

3D Model/Volume - Cancel button not aligned

The Cancel button is now right-aligned when loading a 3D model or volume.

Inconsistent drawing of Annotations/Measurements

Annotations and measurements will always be drawn when the respective options are enabled.

Jazz Sensor - Sometimes Gets Stuck When Rearming

The Jazz sensor should rearm successfully after each capture during acquisition.

AI Findings Toggled Off When Changing Images

AI Findings will remain toggled on when AI results are shown.

Annotations Not Rotating/Flipping with the Image

Annotations will now rotate or flip along with the image during Rearrange.

Brightness/Contrast Changing When Adding Measurements

Brightness/contrast will now remain unchanged while adding measurements.

AI Menu Opening

The AI menu should not open when using Annotations, Density, or Spotlight tools.

Compare - Compared Image Issues

Measurements and annotations should show on compared images, and the "Show/Hide annotations and measurements" button should function correctly.

Dexis Software Bridge - Not Bridging 2D Images

The software bridge should transfer 2D images from Dexis into our imaging system.

Pearl AI - Results Not Matching on Rotate

Clicking on an AI result will open the AI menu with options for that specific result, regardless of the image orientation.

Straightening Image

You can manually enter a rotation value in the straighten field when switching between exams.

Third Party

CS 7600 - Scanning window does not always open

Resolved an issue with the CS 7600 device where the scanning window did not always open during acquisition.

Dentally: Reassign Exam - Patient List Limitations

Fixed a limitation where the reassign exam feature in Dentally only displayed 12 names in the dropdown, regardless of the total number of eligible patients.

Pearl - Findings Rotation Info is Incorrect

Corrected the findings rotation and flip information returned by the Pearl API to properly orient findings with the image’s current rotation.