

RCI Full Release notes

Version 118

To benefit from the updates marked with '**AA Update Required**' you **MUST** update your acquisition agent. Keep in mind that your acquisition agent is still backwards compatible and you will still benefit from all other updates below.

New Features

PreXion Software Bridge: Initial Phase

Integration to retrieve CBCT volumes from the Prexion software bridge through a file-based bridge setup has been initiated.

Improvements

Custom Procedure Enhancements

We've made several improvements to Custom Procedures to give you more flexibility and control:

- You can now scope Custom Procedures by **Organisation, Location, or User**, ensuring better customisation.
- The **Custom Procedures tab** now includes filters for Organisation, Location, and User, with your selections saved for convenience.
- We've introduced **new permissions** to manage who can create, edit, or delete Custom Procedures at different levels.

Improved Image Scaling in Chrome

We've enhanced image downscaling quality in Chrome by implementing a **WebGL-based scaling solution**. This improves visual clarity and reduces aliasing artifacts by bypassing Chrome's default sampling method, ensuring sharper and smoother images.

Enhanced Image Details

The **Image Details** dialog now displays **Black and White level information**, helping you better evaluate image quality.

Improved Compare Mode with AI Findings Toggle

We've added a **'Show/Hide AI Findings'** button in Compare Mode, making it easier to toggle AI-generated insights across all compared images. This gives you more control over how AI findings are displayed during image comparison.

Jazz Sensor Image Enhancement

We've updated the **Jazz sensor rendering** to include **black corners**, ensuring a more uniform and consistent image display by leveraging the latest Jazz SDK.

iRay Sensor Image Quality Improvements - (Windows Only)

AA Update Required

We've updated the **default Gamma and Pre-Smoothing settings** in the Acquisition Agent (*Windows only*) to enhance image quality for the **iRay sensor**.

Add Pixel Size

Image metadata for **e2v direct acquisitions** now includes **pixel size (19 microns)**, providing more detailed and accurate imaging information.

Pearl Backfill Historical API Enhancements

We've improved the **Pearl Historical Submission API** with:

- **Better error reporting** for clearer issue identification
- **Callback support** for improved workflow integration
- **Image query by Analysis ID** for easier data retrieval

Acquisition Improvements

AA Update Required

We've enhanced the **Acquisition Agent (AA)** to improve reliability across multiple acquisition workflows:

- **Single X-ray acquisition** now benefits from increased robustness.
- **Import, Phosphor, Camera, and 3D acquisition** workflows have been optimised for better stability.
- **Template-based acquisition**, including **Camera Templates**, now includes improved recovery mechanisms.

Improved 3D Volume Sharing

You can now **download 3D volumes directly via the browser** without requiring the Acquisition Agent.

When the **Acquisition Agent is running**, the Share dialog will **send 3D volumes for rehydration** before downloading, ensuring optimal file handling.

3DIEMME Integration Enhancement

We've added a **configurable default path** for **3DIEMME (RealGuide) software** in the Acquisition Agent .ini file, allowing for easier setup and customisation.

Tasks

Expanded iRay Pluto Sensor Options (Windows Only)

AA Update Required

The **iRay Pluto sensor** dropdown now includes **Woodpecker and Eighteeth** options, ensuring compatibility and allowing users to select these sensors during acquisition.

Billing UI Adjustment for Canada

The **'Bill to Insurance'** checkbox is now **hidden for Canada (CA)** to ensure consistency with other regions like **Australia (AU) and Great Britain (GB)**.

Improved Pearl AI Error Messages

We've updated **Pearl AI error messages** to provide **clearer explanations** when authentication fails due to network restrictions, making troubleshooting easier.

Software Version Update to 118.0

All necessary components have been updated to **version 118.0**, ensuring compatibility with the latest software updates.

NuGet Package Security Enhancements

We've **updated NuGet packages** and resolved vulnerabilities in transitive dependencies, improving security and stability.

Expanded postMessage Events for Custom Procedures

We've enhanced **postMessage events** to better support external workflows:

- Events are now triggered when a **custom procedure is edited or deleted**, not just when created.
- This ensures **real-time updates** for integrated systems and workflows.

Performance & Stability Improvements

Fixed **warnings in HealthCheck and PearlTaskService** by ensuring async methods run correctly and preventing null value issues.

Updated Copyrights to 2025

All **software copyright statements** have been updated to reflect the current year.

New HTTP/TLS Debugging Settings

Added **override options** for **HTTP1 and TLS 1.1**, making it easier to debug connectivity issues.

Gallery Mode Filtering Investigation

We investigated an issue where **Gallery Thumbnail mode displayed deleted images**, while **Gallery Exam mode did not**. This analysis helped determine whether a filtering parameter is needed to **exclude deleted images when not filtering by ID**.