Codonics Integrity Operating Software

Version 1.6.0 Release Notes

Summary

Version 1.6.0 software provides new features and product improvements and corrects defects for the Codonics® Integrity® Medical Image Importer found in Version 1.5.0. The software is compatible with all Integrity systems.

This document only details changes from Version 1.5.0 software. If you are upgrading from an older software version, previous Integrity Release Notes can be downloaded from the Codonics web site.

New Features

◆ *Integrity Surgical Light Box^{TM}.* The Integrity Surgical Light Box includes a medical image reference viewer for surgical utilization. Reference review includes a full-feature tool set for viewing and manipulating DICOM studies upon import into Integrity. The viewing of the studies is not intended for primary intepretation for patient consultations, operating room procedure preparation or in-procedure review.

> **NOTE:** The medical image reference viewer for the Integrity Surgical Light Box is available with an English or French user interface. The Integrity Surgical Light Box includes a flat-panel monitor, keyboard and mouse for easy deployment and surgeon-friendly utilization.

◆ **Compatibility with the Apple® iPad® using the Safari^{TM} web browser.**

◆ **Non-DICOM image import.** Provides for specific image file types (.bmp, .png, .jpg, .jpeg, .tif and .tiff) to be imported (along with a DICOM study) and encapsulated in DICOM.

> **NOTE:** The import of these image file types is dependent upon the disc having only one DICOM study. If the disc file structure includes a directory named "IHE_PDI", non-DICOM images will only be imported from this directory. This is based upon expected PDI compliancy standards for the disc data.

◆ **KARL STORZ Surgical Navigation Cockpit non-DICOM image import.** OEM version (KARL STORZ VIEW1® Image Station®) provides for bitmap (.bmp) images to be imported (along with a DICOM study) and encapsulated in DICOM.

◆ **Hosted Cloud Integration.** OEM version (KARL STORZ VIEW1 Image Station) provides for patient's DICOM studies to be imported from a hosted cloud storage solution. Physicians are able to register for the hosted cloud accounts directly from the KARL STORZ VIEW1 Image Station. Once registered, physicians are able to send email requests to patients for uploading their DICOM studies to the hosted cloud.

◆ **MWL Local Accumulator.** Integrity can periodically query a MWL or QR server for some or all available results, store those results in a local list, and keep any result in the local list even after that result has been removed from the actual server. When Reconciliation is performed, the local list is queried instead of the actual server. If the information needed to reconcile a study previously existed on the actual server but was removed before Reconciliation could be performed on the Integrity, studies can be reconciled using information from the server.

The following parameters can be configured in the profiles\reconciler\queryserver.xxx.txt profile.

> **NOTE:** Configuration is required for the localFilterMatchRule and/or localFilterAutoMatchRule parameters in the Query Server profile to search the list of results returned from the actual server. The useMatchRule parameters are only used when querying the actual server in non-accumulation mode.

Parameter: **enableLocalWorklistAccumulation**
Settings: **True** or **False**
Default: **False**
Description: When set to False, this Query Server Profile will be directly queried for specific results when Reconciliation is performed. When set to True, this Query Server Profile will be automatically queried for new results on a configurable periodic basis, and those results will be retained in a local list. When Reconciliation is performed, the local list will be queried for results (instead of the actual server) using the configured localFilterMatchRule and/or localFilterAutoMatchRule parameters.

Parameter: **localWorklistAccumulationUpdateMinutes**
Settings: **1**-**5000**
Default: **2**
Description: The number of minutes between automatic queries to the actual server in order to update the local list with new results or remove expired results.

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Parameter:**localWorklistAccumulationRetentionHours**

Settings: **1**-**1000**

Default: **8**

Description: The number of hours after which a result that has been removed from the real server will expire and be removed from the local list.

Product Improvements for Version 1.6.0

- **LogMeIn® Rescue remote connection capability is now integrated with the Integrity interface.** This capability will provide better technical support for remotely diagnosing reported concerns.

- **Updated ClamAV® to version 0.97.3 with virus definition updates through October 21, 2011.**

- **Updated user interface translations for the following languages:** French, German, Italian, Spanish, Portuguese and Japanese.

- **Improved accuracy and consistency of viewer disclaimer.** Disclaimer has been changed to "Not intended for primary interpretation" and translations have been updated to be more consistent and accurate.

- **User Interface-based User Management.** Improved user management through the Integrity user interface, by additionally allowing adding and deleting.

- **Reconciliation Screen New Search Improvements.** A Clear All button was added to clear all text fields during a New Search.

  The following parameter can be configured in the reconciler\reconciler.default.txt profile.

  Parameter: **useStudyValuesInNewSearch**

  Settings: **True** or **False**

  Default: **True**

  Description: When set to False, the New Search dialog will always be presented with no data pre-filled.

- **Reconciliation Screen User Interface Improvements.** Increased the font size for the label 'Search Results' and for the results count 'X of Y' text at the top of the Reconciliation screen for an improved display.

Defects Corrected

- **External devices (USB flash drive and optical CD/DVD drives) used for importing no longer fail to be recognized.**

- **Corrected the handling for some types of compressed DICOM studies.**

- **Multi-frame compressed studies that contain more than one frame in a single DICOM sequence can now be properly stored.**

- **Improved local filtering reconciliation to allow a search to be performed with only a patient's first name.**

Known Common Issues

This section details common issues with 1.6.0 software that are likely to be experienced by most users.

- **There isn't a way to stop or to delete a study that is being stored.** A user must wait until the store operation is complete before deleting the study.

- **The iPad display may include some additional user interface elements in certain presentation modes.** When zooming in landscape presentation mode or in unzoomed or zoomed portrait mode, there may be some additional graphical lines around fields and selections. This is due to how the iPad software manages the presentation when not using the intended presentation mode of standard landscape display.

Known Uncommon Issues

This section details uncommon issues with 1.6.0 software that are unlikely to be experienced by most users.

- **Re-entering Reconcile page quickly after making a change may not show the change.** The delay in updating Integrity's database can be resolved by waiting a few seconds and then re-entering the page.

- **If a study is in a queued state, it cannot be stored or reconciled.** Additionally, if a study is in the queue, adding more store destinations for that study cannot be done until it has completed the initial store request.

- **Selecting the Study Details Icon (magnifying glass) in some circumstances can show a HTTP 500 Error.** Due to a transient issue with the User Interface, press the F5 key to refresh the screen, then try again.

- **A disc inserted upside-down results in no action on Integrity.** When a disc is inserted upside-down, Integrity shows no recognition that a disc was inserted. The on-screen LEDs show no status change and no status message is displayed.

- **Study deletion stops working if a study is reconciling or storing.** This condition occurs only if the database is full of studies and at the same time a study needs to be deleted that is locked, reconciling, queued, or storing.

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◆ **A study can be locked if a user interrupts the Reconcile page while loading.** If a user selects a study, clicks the Reconcile button, and then interrupts the Reconcile page from loading by clicking on the Help button, the Reconcile page does not load but the Help screen does. However, when the user returns to the Studies screen, the status of the study is locked for Editing instead of Ready. If another user is not currently reconciling the study, then unlock the study by going to the Study Details dialog and uncheck the "Locked for Editing" checkbox.

◆ **The User Interface does not load properly for certain locales.** 1.6.0 software supports English, Japanese, French, German, Italian, Portuguese, and Spanish User Interfaces. Other locales are not fully supported and have not been fully verified.

◆ **Selecting a study that is in the process of being stored causes User Interface issues and incorrectly displays the count to be off by one.** If a study is being stored and a user selects the same study while it is being stored, the study will move to the Stored filter, but the Delete, Store, and Reconcile buttons will remain selectable although there is no longer a selected study on the New filter. The lower left corner will also read 1 of 0 selected.

◆ **After successfully changing the IP address from a remote browser, the "please wait" icon shows indefinitely.** When a user changes the IP address from a remote browser, they will need to browse to the new IP address and log back into Integrity.

Technical Support

If problems occur during software installation, contact Codonics Technical Support between the hours of 8:30AM and 5:30PM EST (weekends and U.S. holidays excluded).

Phone: 440-243-1198
Email: support@codonics.com
Website: www.codonics.com

Get it all with just one call
1-800-444-1198

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