Codonics Virtua Operating Software

Version 4.2.0 Release Notes

Summary

Version 4.2.0 software provides product improvements for the Codonics Virtua® Medical Disc Publisher.

> **CAUTION:** Version 4.2.0 software is intended for use on all Virtua systems except for the Virtua-1 model. Version 4.2.0 software will not install on the Virtua-1 model (Controller serial numbers beginning with 70C).

> **CAUTION:** A full install is required when upgrading a standard Virtua system running 4.0.1 or previous software, during which all patient studies will be removed. Virtua XR/E/C will not require a full install to upgrade from previous software.

This document details the changes from Version 4.1.1 software. The Virtua User's Manual, Reference Guide, Operating Software Release Notes, and Technical Briefs provide further information on the use of Virtua systems. If upgrading from an older software version, previous Virtua Release Notes can be downloaded from the Codonics website.

New Features

This section details new features in Version 4.2.0 software.

◆ **Query/Retrieve Kiosk Mode.** This feature provides a flexible, configurable solution for enabling non-radiology clinicians to record studies to disc based on only key information about the study, such as the accession number. The Virtua administrator can restrict what fields certain Virtua users may query on when using the existing Virtua Query/Retrieve interface.

◆ **Copy to USB.** Virtua can copy studies to a USB flash drive or hard drive, rather than to optical media. USB drives may be preferable to optical media in some circumstances. When a single preformatted USB drive is inserted, the user can manually copy studies to the USB drive. Virtua will automatically remove the USB drive when the copy completes.

> **NOTE:** The quality of USB media varies considerably. For best results, Codonics recommends using only USB media that is of known quality.

> **NOTE:** USB media can contain viruses. Codonics recommends running a virus scan on USB media prior to use with this feature.

◆ **New feature keys.** Feature keys are required for the new Kiosk Mode and Copy to USB features. Contact Codonics Technical Support or your Sales Representative to purchase feature keys to enable features not included with your system.

Product Improvements

◆ **Viewer Updates.** The following viewer updates are included in Virtua 4.2.0:

  ◆ Syngo Plaza Viewer updated to VB10A

  ◆ Philips DICOM Viewer updated to v3.0 SP4

◆ **Control of Manual Record Disc Study Grouping improved.** In previous software, all manually selected studies could be recorded on the same disc even if they were for more than one patient. There are now System Profile and Job Profile parameters to control what types of studies may be recorded onto the same disc or disc set together. The following settings are provided:

1. **allStudies:** all selected studies will be recorded on the same disc or spanned over a disc set (previous software behavior).

2. **byPatient:** each disc or disc set will contain only studies for a single patient. Virtua SW uses the Job Profile parameter matchPatientUsing to determine whether studies are for the same patient.

3. **byStudy:** each disc or disc set will contain only a single study.

The following parameter can be configured in the **profiles\system.txt** profile:

Parameter: **manualRecordStudyGrouping**

Settings: **allStudies** | **byPatient** | **byStudy**

Default: **allStudies**

CODONICS®

Description: Controls how the system groups studies together on study discs. By default, all studies are included on the same disc or disc set. If set to byPatient, only studies for the same patient that fit on a disc are included on each disc or disc set. If set to byStudy, each study is included on its own disc or disc set.

> **NOTE:** This setting can be overridden by the Job Profile parameter:
>
> **manualRecordStudyGroupingOverride**

The following parameter can be configured in **profiles\job\job.XXX.txt** profiles:

Parameter: **manualRecordStudyGroupingOverride**

Settings: **none | allStudies | byPatient | byStudy**

Default: **none**

Description: Controls how the studies for the job are grouped together on study discs. By default, the behavior specified in the System Profile parameter manualRecordStudyGrouping is used. If set to allStudies, all studies are included on the same disc or disc set. If set to byPatient, only studies for the same patient that fit on a disc are included on each disc or disc set. If set to byStudy, each study is included on its own disc or disc set.

◆ **Control of Character Set Overrides improved.** The new Locale Profile parameter overrideForSpecificCharacterSet replaces and extends the functionality of the previous overrideForIR100 parameter and can be configured to allow the Virtua to treat any Specific Character Set (SCS) as any other.

The following parameter can be configured in the **profiles\locale\locale.default.txt** profile:

Parameter: **overrideForSpecificCharacterSet** (multi-valued)

Values: **<IR * | no_SCS> : <IR * | localeDefault>**

Default: **blank**

Description: A multi-valued parameter that allows any DICOM SCS in a DICOM file to be mapped to a different SCS to allow text data to be interpreted correctly when handling non-DICOM-compliant data.

Examples:

overrideForSpecificCharacterSet = IR 6 : IR 100

DICOM files with Specific Character Set IR 6 (ASCII) are treated as IR 100 (Latin 1)

overrideForSpecificCharacterSet = IR 100 : IR 101

DICOM files with Specific Character Set IR 100 (Latin1) are treated as IR 101 (Latin 2)

overrideForSpecificCharacterSet = no_SCS : IR 192

DICOM files with no Specific Character Set tag (or a blank SCS tag) are treated as IR 192 (UTF-8)

◆ **Maximum Database size increased.** In previous software, only up to 80GB worth of studies could be stored to Virtua before DICOM associations were rejected. Now, up to 130 GB (Virtua 2/ECO) or almost 200 GB (XR) can be stored to Virtua before DICOM associations are rejected.

◆ **Virtua can automatically reboot.** The user can configure a time of day at which the Virtua will automatically reboot itself.

The following parameters can be configured in the **profiles\system.txt** profile:

Parameter: **enableAutoReboot**

Settings: **true or false**

Default: **false**

Description: If set to true, causes the system to automatically reboot at the time of day specified in the autoRebotTime parameter.

Parameter: **autoRebootTime**

Settings: **24-hour Time String**

Default: **0400**

Description: Time of day at which to automatically reboot the system.

◆ **Default profile parameters improved.** Some default values have been updated to better account for real-world scenarios.

  ◆ Default Job Profile endOfStudyTimeout set to 120 (instead of 10 or 30)

  ◆ Default Job Profile matchPatientUsing set to id_dob_sex (instead of name_id_dob)

◆ **System Health Report added.** When the log files are captured, the system now creates a Health Report that can be used to more quickly identify if the Virtua is experiencing a common issue experienced in the field.

  ◆ Report possible system degradation if not using Codonics-supported optical media.

  ◆ Report media handling or recording errors that occur.

- Report if usage level of each installed drive is OK (<15k). If not, post Maintenance Needed OIL message.

- Report if usage level of 83C recorder print head is OK (print head counter <10k). If not, post Replace Print Head OIL message. Manual reset of this counter is required.

- Report other information about system state/usage.

- **Chinese (Mandarin) voice messages on Virtua E or Virtua C.** Pressing the Information button on a Virtua E or Virtua C in the Chinese (Mainland) locale will play an audible narrated message in the local language.

- **Configuration of patient matching criteria improved.** In cases where patient names do not exactly match across different modalities, you can now configure the matching criteria to use the Last Name rather than the Full Name, e.g. lastname_dob_sex rather than name_dob_sex. Additionally, the default criteria for this feature has been changed from (name, id, dob) to (id, dob, sex).

Corrective Updates

This section details issues that exist with Version 4.1.1 software and are corrected in Version 4.2.0 software.

- **Job Processing Interrupted.** The potential for the Job Queue to unnecessarily pause processing has been fixed. Studies with HL7 reports with certain content will no longer cause job processing to fail.

- **Disc Label Defects repaired.** The Study Date/Modality field is now wrapped across multiple lines as it was in 4.0.1 and previous software. When the report icon is shown for a patient, the patient name will now be shown properly in all cases.

- **Print to Hub for 83C recorders.** This parameter works properly now for 83C recorders.

- **Improved handling of apostrophes in Direct to Disc control files.**

- **Fixed incorrect reporting of drive open/close issues for 5600 optical drives.**

Known Common Issues

This section details common issues with Version 4.2.0 software that are likely to be experienced by most users.

- **Changing ink cartridges without using the Ink Cartridge Load button on the top of an 83C-series Recorder may cause a label with poor quality on the first disc printed with the new cartridges.** To prevent this issue, press the Ink Cartridge Load button before removing old ink cartridges or an old print head. This issue only applies to newer engines that use separate ink cartridges for each color.

- **Studies can be lost or corrupted if a hard power down occurs.** Loss of power during some operations can result in lost or corrupt data. An uninterruptible power supply and proper shutdown procedure are strongly recommended.

- **Compatibility problems with Internet Explorer® 7 or greater and Firefox® 3.** There are minor cosmetic problems when remotely connecting with both browsers. Internet Explorer 6 is recommended for remote connections to Virtua.

Known Uncommon Issues

This section details uncommon or obscure issues with Version 4.2.0 software that are unlikely to be experienced by most users.

- **Virtua may stop processing jobs and an error dialog may appear on the touch screen.** Pressing OK on the error dialog will allow the system to continue processing jobs. Discs that were in-process may be ejected without a printed label but will automatically be rerecorded and reprinted.

- **Process may stop during software installation.** Leaving the network cable connected may cause installation to stop during Phase 4. Disconnect cable prior to installation.

- **DICOM association limit may be exceeded.** DICOM clients that open many simultaneous associations might exceed Virtua's limit of 24 simultaneous connections. This can cause the system to stop receiving DICOM jobs, requiring the system to be rebooted.

- **Time-remaining indicators for jobs are inaccurate if there is more than one Jobs page.** If there is more than one page of jobs queued (eight or more jobs), the time-remaining indicator on the Discs tab will not be accurate on any pages other than the first page. Each page starts the time-estimation over again without accounting for the jobs on the previous page.

- **Special handling for Recorder cover when installing software on the Virtua ECO family systems**. When media Smart Detect mode is enabled, leave the Recorder cover open when installing software. Closing the cover with Smart Detect mode enabled will cause Virtua ECO to load another disc on top of the installation disc.

CODONICS®

◆ **The LaunchPad does not work on Windows NT®, Windows 98® or Windows 2000® OS with Internet Explorer version lower than 5.5.** When discs created on Virtua are installed on PCs, the LaunchPad is initiated. The LaunchPad can be used on Windows 2000/XP/Vista® and Windows ME® with Internet Explorer v5.5 or higher. Users of affected platforms can use Windows Explorer to navigate to and launch viewers or open reports.

◆ **Virtua ECO family system CD and DVD status lights unexpectedly alternate green and off for longer than two minutes.** In some circumstances, Virtua ECO may show an unexpected shutdown taking longer than two minutes. The workaround is to perform a hard shutdown (press the System power button for about five seconds). Power on the system to return to normal operations when desired.

◆ **IP address conflict is not reported.** If Virtua is configured to support a range of IP addresses and there is a conflict, Virtua will not notify the user.

◆ **Successfully archived studies not marked as archived.** Aborting a Scheduled Archive while a label is being printed may not mark studies successfully archived as archived. Studies will be re-archived during the next Scheduled Archive session.

Known Issues for International Regions

◆ **No Unicode support in Viewer.** The Clarity Medical Image Viewer does not correctly display Unicode characters. It is uncommon for DICOM files to be encoded in Unicode.

◆ **Limited Viewer support for international characters.** Refer to the Clarity Viewer User's Manual (Codonics Part Number CLARITY-MNLU) for details.

◆ **No support for Indian locales.** The Tamil, India (ta_IN) locale does not correctly support Tamil characters.

◆ **Site phone numbers with country codes may be truncated on labels**. Most labels support nine characters for phone numbers for the site details. The Ink Saver label displays more characters.

◆ **Cannot set date and time from Virtua user interface in some Tier 2 locales.** The workaround for this problem is to run the system in the en_US locale (which is the factory setting), set the local time and date correctly, and then change the system to the desired operating locale. A list of Tier 2 locales and instructions for changing the locale are in the Virtua User's Manual.

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: +1.440.243.1198

Email: support@codonics.com

Website: www.codonics.com

Get it all with just one call
800.444.1198

CODONICS®
We bring the future into focus