Codonics Virtua Operating Software

Version 5.1.1 Release Notes

Summary

Version 5.1.1 software provides product improvements for the Codonics Virtua® Medical Disc Publisher.

CAUTION: Version 5.1.1 software is intended for use on all Virtua systems except for the Virtua-1 model. Version 5.1.1 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.

CAUTION: Newer Virtua systems which utilize a single color ink cartridge require Version 5.1.1 software or later to function properly. These systems can be identified by the first three characters in the serial number of the Recorder, 84C.

This document details the changes from Version 5.1.0 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.

Adaptive Updates

No new features were added to Version 5.1.1.

Perfective Updates

This section details product improvements included in Version 5.1.1 software.

- Incorporated Windows Embedded 8 Standard (WE8S) security patches through September 2017. Due to the size of the security patches, the space allocated to the C: drive was increased from 10 GB to 20 GB.
- Changed the underlying database management system.
 Virtua now uses MariaDB.
- Viewer Updates. The following viewer update is included in Virtua 5.1.1:
 - ◆ Clarity Viewer 8.1.9

- Non Standard DICOM format. Allowed Virtua to receive DICOM images sent in a particular, nonconformant way. With a new Job Profile parameter, Virtua can receive and correct images sent in an Explicit syntax which have a DICOM tag that:
 - Has the Value Representation (VR) set to Unknown (UN).
 - Is actually a Sequence (SQ) tag with an undefined length.
 - ◆ Is encoded in an Explicit syntax.

The following parameter can be configured in the profiles\jobs\job.XYZ.txt profiles:

Parameter: decodeUnSqAslle Values: true | false

Default: true

Description: When receiving an image in an Explicit

transfer syntax, the system may encounter a DICOM tag that is a Sequence with undefined length, but actually has the VR 'UN'. If this parameter is true, attempt to decode the UN Sequence contents using Implicit Little Endian (as specified by the DICOM Standard). If it is false, attempt to decode the UN Sequence contents using Explicit Little Endian (which is needed in

rare real-world scenarios).

Corrective Updates

This section details issues that have been corrected in Version 5.1.1 software.

- The logs now show unique serial numbers for individual TEAC 5500 and 5600 optical drives.
- Fixed problem with jobs failing due to how the software managed NTFS hard links for Viewers.
- Fixed issue converting multi-frame images with OW pixel data and 8 bits-allocated to JPEG for image preview or when creating JPEG images for a job.
- Fixed Virtua touch screen calibration utility to support dragging finger during calibration process.
- Fixed issue where deleting a series from the Study Details -> Series tab and then sending more images for that study prevented some images on a disc from being viewed.



 Fixed Clarity Japanese Viewer and Japanese 3D Fusion Viewer 8.1.9 to use the proper order for slices that had been displayed in the improper order in Clarity Viewers 7.5.6 - 8.1.5.

Known Common Issues

This section details common issues with Version 5.1.1 software are likely to be experienced by most users.

- ♦ Occasional boot failures. Virtua XR systems with 5.0.0 SW or newer and an SSD connected through an IDE-converter card may fail to boot up properly some of the time. Manually powering the system off and back on should allow the system to startup properly. To permanently correct the problem, a minor hardware modification is required. See Technical Brief 901-613-002 for details.
- 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 newer browsers. There are minor cosmetic problems when remotely connecting with some browsers.
- ◆ During the software installation process, there is a period of time where a static blue Windows 8 icon is displayed. However, the LED on the optical drive is lit, indicating the installation is progressing. This period of time may be well over a minute, which could lead some users to question whether the install process has failed when it is actively installing.
- ◆ Erroneous Drive Tray Error. A heuristic designed to detect failing optical drives can be improperly triggered on Virtua C and Virtua E models under some heavy use scenarios. If this message is observed and the drive appears to work properly, the heuristic can be turned off.
- Input Bin Calibration. The calibration for the input bins for the 84C-series Recorder is slightly different from older Recorders. See Technical Brief 901-222-003 for details.

Known Uncommon Issues

This section details uncommon or obscure issues with Version 5.1.1 software that are unlikely to be experienced by most users.

- The Clear Database utility reboots the system. Clearing the entire database by using the "Clear database" command will clear the database and reboot. Previous versions of software did not trigger a reboot.
- ◆ Reinstalling 5.1.1 SW requires a full install on a Virtua XR with internal RAID drives. Even though reinstalling 5.1.1 SW on a Virtua XR with internal RAID drives should not require a full install, the installer always prompts the user to perform a full installation.
- ◆ Attempting to open the Virtua's index.html webpage (Fast JPEG viewer) from a standard Windows 10 system using the Edge browser will not display the webpage. The index.html webpage must be manually opened using the Edge browser, or a different default browser must be used.
- Virtua software can fail to start up while displaying the startup splash screen. Manually powering the system off and back on should allow startup to continue.
- ◆ 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 timeremaining 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 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.
- ◆ 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 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.
- **USB drive error message.** Inserting a USB drive that was improperly ejected from another PC may result in a Windows error message that overlays the User Interface screen. The message is only present for a few seconds and has no effect on the functionality of the unit.
- Improper shutdown warning. Improper shutdown of Virtua can result in a warning screen on the next start up. The screen is displayed by the Operating System and advises the user that the system was not properly shutdown and may need to be repaired. Rebooting the system clears the issue.
- Automatic requeuing of interrupted jobs. If a job is interrupted prior to being completed and a power failure occurs, the job may not resume automatically.
- Removable Storage Device Error Message. When installing Virtua 5.0.0 or later software, Windows might display a light-blue screen with the message "There was a problem with a device connected to your PC. This problem can happen when a removable storage device is removed while it is in use or is failing". If so, the user must manually power off and then power on the system in order for the installer to proceed.
- **Phase 3 Installation issue.** If the software appears to stay in Phase 3 of the software installation process without proceeding, take the following steps:
 - 1. Power off the unit.
 - 2. Re-seat the DVD drive cables (at connection points to both the Controller and the Recorder).

- 3. Re-seat the SmartDrive.
- 4. Power on.
- 5. Phase 3 should detect all the drives properly and proceed as normal through the rest of the install.
- 6. If the software installation continues to fail during Phase 3, reinstall software.

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).

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