Codonics® Virtua™ Operating Software

Version 2.0.2 Release Notes

Summary

Version 2.0.2 software provides improvements and corrects defects for the Codonics Virtua Medical Disc Publisher. The software is compatible with all Virtua systems.

This document details only changes from Version 2.0.1 software. If you are upgrading from an older software version, previous Virtua Release Notes can be downloaded from the Codonics web site.

Product Improvements

◆ Provided capability to store DICOM files on disc with a specific file extension (e.g., ".dcm"). Some programs require a specific extension (e.g., ".dcm") to open DICOM files. Virtua provides a new configurable Job Profile parameter, dicomFileExtension = extension, that indicates the file extension to be used with DICOM files recorded to disc. An extension can have up to 30 alphanumeric characters; non-alphanumeric characters will be stripped and longer extensions will be truncated. The default is no extension.

NOTE: Discs created with DICOM files containing extensions are not IHE/PDI compliant.

NOTE: A non-blank extension will result in a slight loss of performance when creating a disc.

NOTE: When using a file extension, ensure the application used to view the disc's images can open the files.

Provided ability to match studies using Patient ID only. A new Job Profile for matchPatientUsing=id_only allows a site to match patient studies using patient id only to record multiple studies on a single disc. It is recommended that the matchPatientUsing setting is the same for each Job Profile.

WARNING: Using matchPatientUsing=id_only requires using unique patient IDs. If unique patient IDs are <u>not</u> used, or there is a potential that duplicate patient IDs could be used (e.g., in an emergency situation), there is a risk that multiple patients could be inadvertently recorded on a single disc and that such patients may be misidentified by the user interface, label, and viewer. Contact Codonics Technical Support for further understanding of using matchPatientUsing=id_only.

◆ Added OEM specific features to Direct to Disc. For more information on OEM specific features, see the Codonics Setup for McKesson Horizon technical brief (Codonics part number 901-177-001). Contact Codonics Technical Support or your Sales Representative to purchase a feature key to enable features not included with your system.

Defects Repaired

• Multiple studies with different patient name formatting are now displayed properly using the Codonics Viewer. Previously, in certain patient name formatting situations (e.g., case sensitive, middle name), all of a patient's studies could not be viewed with the Codonics Viewer. To view the studies properly, patient matching was modified in the DICOMDIR using the fields specified by the parameter matchPatientUsing in the default Job Profile. The current default setting, matchPatientUsing= name_id_dob remains the default setting to preserve compatibility with modalities that do not specify unique patient ids.
matchPatientUsing=id_only is provided as an option to match in situations where matching on name, id, dob, and/or sex do not work and unique patient ids are used.

NOTE: The parameter matchPatientUsing is only configurable once, at system startup, in the default Job Profile. It is recommended that the matchPatientUsing setting is the same for each Job Profile.

WARNING: Using matchPatientUsing=id_only requires using unique patient IDs. If unique patient IDs are <u>not</u> used, or there is a potential that duplicate patient IDs could be used (e.g., in an emergency situation), there is a risk that multiple patients could be inadvertently recorded on a single disc and that such patients may be misidentified by the user interface, label, and viewer. Contact Codonics Technical Support for further understanding of matchPatientUsing=id_only.

♦ The connection between a Virtua and a RIS/HL7 interface was not being properly closed when Virtua timed out. Previously, a RIS/HL7 interface was not aware that a Virtua was no longer receiving messages. Virtua now communicates with a RIS/HL7 interface and provides a disconnect message to properly close out a connection.



◆ Allow a RIS to establish and hold open a single connection for transmission of all HL7 Messages to Virtua. If a RIS opens a single connection at start up and sends messages across that connection when it is ready, Virtua is now capable of receiving and processing messages as they are received. A new configurable option in the HL7 profile, connectionTimeout = 0, determines how long the connection will remain open. The default is 0 and means that the connection will stay open indefinitely. Previously, Virtua expected that messages were sent in discrete connections. For more information on HL7 Reports configuration and setup, see the HL7 Reports technical brief (Codonics part number 901-173-002).

Known Common Issues

This section details common issues with Virtua Version 2.0.2 software that are likely to be experienced by most users.

- Print label quality and ink selection setting is only read from default Job Profile. On standard Virtua models, the printMode parameter is currently only supported in the default Job Profile and cannot be changed once the system is running. Any printMode settings in other Job Profiles will be ignored. On Virtua XR models, the printMode parameter can be set in all Job Profiles and be controlled for each individual job.
- ◆ Two button presses on Controller are required to shutdown (Virtua XR only). Press the green power down button twice on the Controller, or shutdown from the user interface.
- ◆ Flash card reader / USB2 port on front of Controller not supported. These interfaces might be supported in a future software release.
- ◆ The system cannot detect the type of media loaded. The Dashboard media indicators will show which bin is configured for which media. Only load the media that is configured for each bin. Loading the wrong kind of media will result in incorrect operation (for example, a DVD disc being labeled as a CD disc). The problem does not occur on Virtua XR.
- Studies can be lost or corrupted if a hard power-off
 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.
- Some system configuration parameters cannot be programmed from the Touch Screen. Refer to the Virtua User's Manual for instructions on configuring Virtua using the SmartDrive.

- ♦ Discs-required counts inaccurate for multi-disc backup jobs. When multi-disc backup jobs (all studies included in the job will not fit on one disc) are queued, the Discs Required count in the Status Details tab and the "X of Y" discs-recorded count on the Discs tab might contain inaccurate counts. Typically, the count will not increment until the entire set is completed.
- ◆ Studies / Jobs database capacity is 40 GB. This typically allows storage of between 400 and 2000 studies before old (recorded) studies are removed to make room for new studies. Larger Studies / Jobs databases may be supported in a future software release.
- Compatibility problems with Internet Explorer 7. There
 are minor cosmetic problems when remotely connecting
 with Internet Explorer 7. Internet Explorer 6 is
 recommended for remote connections to Virtua.

Known Uncommon Issues

This section details uncommon or obscure issues with Virtua Version 2.0.2 software that are unlikely to be experienced by most users.

- ◆ DICOM association limit may be exceeded. DICOM clients which 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.
- Robot Arm Alignment utility failures. Occasionally, the system gets into a state where the Robotic Arm Alignment utility does not work properly. The problem can normally be cleared by rebooting the system. The problem does not occur on Virtua XR.
- ◆ Time-remaining indicators for jobs inaccurate if more than one 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 timeestimation over again without accounting for the jobs on the previous page.
- ◆ Install disc remains in closed drive after software install. The first startup after a software install closes the drive tray. If another reboot is performed, the installation process repeats. To work around this problem, remove the disc as soon as it ejects (during installation) or manually open the drive and remove the disc after installation is complete.
- ◆ Opening cover does not always silence error beep. If the system is out of only one media (CD or DVD) and the top cover is opened, the error beep will not stop. The Touch Screen must be touched to stop the error beep.



- Page number incorrect after deleting multiple studies. When deleting multiple studies, the current page number does not correctly update.
- Deleting in-process jobs may cause drives to lock up. Deleting jobs that are recording or printing should be avoided if possible. The problem does not occur on Virtua XR.

Known Issues For International Regions

- **Issues with Arabic Locales:**
 - Arabic characters may be clipped on disc labels.
 - Arabic characters are currently not supported by the Codonics Virtua Medical Image Viewer.
- 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 Version 1.2.1 of the Virtual User's Manual (Codonics part number VIRTUA-MNLU).
- **No Unicode support in Viewer.** The Codonics Virtua 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 Codonics Virtua Medical Image Viewer Release Notes (Codonics part number 901-356-001) for details.
- User interface issue with Hong Kong locale. Problems with date formatting may distort the user interface in the Chinese-Hong Kong - zh_HK locale. For Chinese language, it is recommended that one of the other Chinese locales be used.
- No support for Turkish and Indian locales. The Turkish - Turkey - tr_TR locale may cause errors and should not be used. The Tamil - India - ta IN locale does not correctly support Tamil characters.

Technical Support

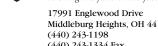
If problems occur during software installation, contact Codonics Technical Support between the hours of 8:30AM and 5:30PM EST (weekends and U.S. holidays excluded).

> Phone: 440-243-1198

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



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