

# Codonics Virtua Operating Software

### Version 2.2.2 Release Notes

#### Summary

Version 2.2.2 software provides product improvements for the Codonics® Virtua™ Medical Disc Publisher. The software is compatible with all Virtua (includes Virtua-2) and Virtua XR systems.

This document details only changes from Version 2.2.1 software. If you are upgrading from an older software version, previous Virtua Release Notes can be downloaded from the Codonics web site.

#### Product Improvements

- ◆ **Improved support of displayed international character sets for patient name.** Added support for controlling the character set to use when processing DICOM files that incorrectly specify Latin 1 character set. This will allow many sites which use “Western” equipment but input non-Latin 1 data to properly display Patient Names on the Virtua user interface and on printed discs labels. An example is the support of patient names on various systems in China which utilize a non-conformant DICOM behavior. Virtua can be set to ignore the specific character set tag when displaying Patient Name and other attributes and rely only on the Locale of the Virtua to display the name. To control the character set, edit the `overrideForIR100` parameter in the `locale.default.txt` file as shown below. This file is in the `\profiles\locale` directory of the SmartDrive.  
  
Parameter: **overrideForIR100**  
Settings: **None, localeDefault, Character Set**  
Default: **None**  
Description: If the parameter is set to **None**, no override is performed, and Latin 1 text is interpreted with the Latin 1 character set. If the value is `localeDefault`, the overriding character set will be defined by the current Virtua Locale. Any other DICOM defined character set name, such as such as IR 144 (Cyrillic), or IR 13 (Japanese) can be used as an override. See the Virtua DICOM Conformance Statement (Part Number 900-332-006) for a full list of allowable character sets.
- ◆ **Support of international character sets in report text files.** HL7 Patient Reports previously supported ASCII characters only. Latin-1 and other international character sets are now implemented in the XML reports created when studies are recorded. For more information on DICOM Structure Reports or HL7 Reports see the Reports Technical Brief (Codonics Part Number 901-173-003).
- ◆ **“ACC:” prefix is now optional before accession numbers on labels.** Study fields in labels can be selected. The list of available fields is in the `fields.default.txt` file in the `\labels` directory of the SmartDrive. A new field has been added to print the accession number on the label without the **ACC:** prefix. This facilitates sites that use the accession number in barcode form to track discs. This new field is: `accessionNumberNoPrefix`. The pre-existing field `accessionNumber` can continue to be used to prefix the accession number with **ACC:** on the disc label. Typically, labels should contain the `accessionNumber` field or the `accessionNumberNoPrefix` field but not both.
- ◆ **Special processing of McKesson XML files.** Special handling to parse patient information has been implemented to work around problems with handling of some XML files. See Technical Brief for Setup for McKesson Horizon (Codonics Part Number 901-177-022) for more information on this feature.
- ◆ **Special processing of images for Siemens syngo® XS Imaging Viewer.** Studies recorded with this viewer now undergo special processing to insure they are recorded in instance order. This will allow complete functionality of the viewer.
- ◆ **Customer Labels archived with System Logs.** Labels are now part of System Logs to improve problem resolution through Codonics Technical Support.

#### Defects Repaired

- ◆ **Ink cartridge on Virtua XR and Virtua -2 will be homed when system is idle to maximize cartridge life.** Previously, the ink cartridge was left in the center after a recording session. By moving the ink cartridge to the home position it is now capped to maximize cartridge life.
- ◆ **Larger image sets are now supported.** Certain images with a large amount of information in the DICOM headers have experienced `OutOfMemoryError` while archiving.
- ◆ **Direct to Disc improved for handling of large data sets.** Previously a timing defect created incomplete data sets when handling data sets that included both large and small files.

## Known Common Issues

This section details common issues with Virtua Version 2.2.2 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 supported only 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 and Virtua -2 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 shut down (Virtua XR and Virtua -2).** Press the green power button twice on the Controller, or shut down 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 show which bin is configured for which media. **Load only the media that is configured for each bin.** Loading the wrong kind of media will result in incorrect operation (e.g., 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 2,000 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 2.2.2 software that are unlikely to be experienced by most users.

- ◆ **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.
- ◆ **IP address conflict not reported.** If the Virtua system is configured to support a range of IP addresses and there is a conflict, Virtua will not notify the user.
- ◆ **Robot Arm Alignment utility failures on Virtua.** 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.
- ◆ **Time-remaining indicators for jobs inaccurate if 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.
- ◆ **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.
- ◆ **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

- ◆ **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 the *Virtua 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.
- ◆ **Labels may not display patient name as expected.** The font used for patient names is not compatible with all international character sets. New labels can be made using the Sure Thing label maker tool supplied with the Virtua Accessory disc, or contacting Codonics to prepare a custom label.
- ◆ **Site phone numbers with country codes may be truncated on labels.** Most labels support 9 characters for phone numbers for the site details. The Ink Saver label displays more 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*  
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