Codonics Virtua Operating Software

3.1.2 Release Notes

Summary

Version 3.1.2 software provides product improvements for the Codonics Virtua® Medical Disc Publisher.

> **CAUTION:** Version 3.1.2 software is intended for use on all Virtua systems except for the Virtua-1 model. Version 3.1.2 software will not install on the Virtua-1 model (controller serial numbers beginning with 70C).

This document details the changes from Version 3.1.0 software. Virtua User's Manuals provide further information on the use of Virtua systems. If you are upgrading from an older software version, previous Virtua Release Notes can be downloaded from the Codonics web site.

New Features

◆ **Virtua Robotic Arm Calibration.** Virtua now has an improved Robotic Arm Utility. This feature is used to help assure that the Virtua Medical Disc Publisher's robotic arm is properly calibrated for regular transport of discs. It is strongly recommended that this process be performed upon initial Virtua system installation or after major system repair or transport. This Utility will not run or appear on Virtua ECO units.

For more information see the Robotic Arm Utility Technical Brief (Codonics Part No. 901-222-001).

◆ **Print any DICOM tag on disc label.** This feature allows user to configure the Virtua to print the value of any DICOM tag on the disc label. The user can specify a text prefix to be used on the label

The file fields.default.txt in the \labels directory on the SmartDrive controls what information will be printed for each field in a study (reference Virtua User's Manuals).

To include the value of any DICOM tag as a field on the label, add or modify the custom1, custom2, custom3, and/or custom4 parameters in the 3FieldStudies and 4FieldStudies sections.

To include identifier text as a prefix for a custom field, enter a space after the DICOM tag number. See the 4FieldStudies example below. This same technique can be used to include identifier text as a prefix for a standard field.

> **NOTE:** Since there is limited space on the label, do not use prefixes that are too long. Configuring this feature may slightly reduce system throughput.

Parameter:	**custom1, custom2, custom3, custom4**
Settings:	*Index Tag_Number [Prefix]*
Default:	Blank
Description:	Controls position of custom DICOM tag in the study block on the disc label.

Index controls the position within the study block. *Tag_Number* indicates the DICOM tag to include a value from (such as **0010,1010** which is Patient's Age). *[Prefix]* is an optional part of the parameter which indicates a prefix to use for this field.

> **NOTE:** There must not be a space in between the parts of the DICOM tag number. **0010,1010** will work, but **0010, 1010** will not work.

> **NOTE:** If a blank value, a value that cannot be found in the DICOM file or cannot be converted to a string of text, or a value is within a DICOM sequence tag and is used, the value will be blank on the label.

In the example below, the setting **custom1=1 0010,1010 Age:** will produce a label with the following text:

Age: 57y

Example profile:

fields.default.txt
[3FieldStudies]
patientName=3
patientID=
studyDate_Modality=
studyDescription=
referringPhysician=
patientDOB=
custom1=1 0010,1010 Age:
custom2=2 0008,0023 Content Date:
custom3=
[4FieldStudies]
patientName=2
patientID=
studyDate_Modality=
studyDescription=4 Description:
referringPhysician=
patientDOB=
custom1=1 0010,1010 Age:
custom2=3 0008,0023 Content Date:

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Product Improvements

◆ **Optical drive tray retry.** If either of the optical drive trays begin to experience difficulties in opening and closing, Virtua will issue a message on the dashboard warning of this condition and to contact Codonics Technical Support. If the condition deteriorates to the point where multiple attempts to open or close the tray are not successful, Virtua will stop processing jobs.

◆ **Transfer syntax selection for job profiles.** Medical devices can transfer images using any of the three basic DICOM transfer syntaxes. Typically, a device can negotiate for any of these and the Virtua will allow the transfer. Sometimes, it is desirable to disallow one or more of these basic transfer syntaxes when negotiating with a particular device.

Job Profiles can be configured to not accept any of the basic three transfer syntaxes. To control this behavior, edit the Job Profile parameter for the desired syntaxes as shown below. Job Profiles are in the \profiles\job folder on the SmartDrive.

Parameter:	**acceptExplicitLittleEndian**
Settings:	**true** or **false**
Default:	**true** (accept)
Description:	If this setting is **false**, Virtua will not accept the transfer syntax Explicit Little Endian during association negotiation.
Parameter:	**acceptImplicitLittleEndian**
Settings:	**true** or **false**
Default:	**true** (accept)
Description:	If this setting is **false**, Virtua will not accept the transfer syntax Implicit Little Endian during association negotiation.
Parameter:	**acceptExplicitBigEndian**
Settings:	**true** or **false**
Default:	**true** (accept)
Description:	If this setting is **false**, Virtua will not accept the transfer syntax Explicit Big Endian during association negotiation.

> **NOTE:** Each Job Profile that is intended to control these transfer syntaxes must be modified.

◆ **Additional viewers.** These viewers have also been released on the Virtua Accessories and Manuals Disc Version 3.1.2.

  ◆ **MIMViewer®** (version 1.1.1)
  ◆ **eFilm Lite™** (version 3.1)
  ◆ **Keosys VISIO+** (updated version 1.1.0)

◆ **Additional viewers** only on the Virtua Accessories and Manuals Disc Version 3.1.2.

  ◆ **Three Palm MammoViewer™** (version 1.1.1)
  ◆ **Invia Corridor4DM** (version 5.2)

◆ **Configurable readme.txt on encrypted discs.** By configuring the following parameter in the /profiles/encryption/encrypt.default.txt file on the SmartDrive, Virtua can now exclude the Study Information Section in the readme.txt file included on the unencrypted portion of an encrypted disc. This Section normally includes Patient Name, Patient ID, Study Date, Modality, etc.

Parameter:	**doIncludePlaintextStudyInfo**
Settings:	**true** or **false**
Default:	**true**
Description:	If **false**, Virtua will exclude the Study Information Section from the readme.txt file.

◆ **Windows® XPE security patch updates thru April 2009.**

◆ **Japanese voice messages for Virtua ECO.**

◆ **McKesson D2D software patch included.**

◆ **Disclaimers modified for LaunchPad & Clarity™ Viewer (version 6.1.8).**

Defects Repaired

This section details issues that exist with 3.1.0 software and are corrected in 3.1.2 software.

◆ **Clarity Viewer in Japanese.** Enables the Save As button for image screenshots.

◆ **Patient Matching configurations in the Job Profile will be applied to the first job Virtua records after booting up.** When recording multiple studies for the same Patient, the Clarity Viewer can now open every study on these discs.

◆ **Improved handling of patient name capitalization in DICOMDIR.** When Virtua receives DICOM files for separate studies with patient names having different capitalization than in other files (SMITH vs. smith vs. Smith), the Clarity viewer can now view all of the images on the disc.

◆ **Improved support for many User Profiles.**

◆ **Improved anonymization.**

  ◆ Anonymized the Study ID on the disc label
  ◆ Anonymized Patient DOB to a valid value
  ◆ Clarity Viewer can now view all anonymized images for multiple patients and studies on the same disc

Known Common Issues

This section details common issues with 3.1.2 software that are likely to be experienced by most users.

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

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

Discs-required counts are 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.

Known Uncommon Issues

This section details uncommon or obscure issues with 3.1.2 software that are unlikely to be experienced by most users.

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.

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.

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.

The LaunchPad does not work on Windows NT or Windows 98 OS. 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. Users of Windows NT or Windows 98 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.

Receiving a study while a previously sent version is recording can cause the recording job to fail or produce an unusable disc.

Changes to the HIPAA log during software changes. Since the extension to the HIPAA log file log.job is changing from .txt to .csv in this software version, entries made after an upgrade will only occur in the .csv file. Therefore, refer to the .csv file for those entries if a subsequent downgrade occurs. Following entries will then go back to the .txt file.

Unable to anonymize large DICOM image files (> 256 MB). The system can become unresponsive and will then need to be rebooted.

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 Manual (Codonics Part No. CLARITY-MNLU) 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 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: 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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