CODONICS®

We bring the future into focus

Integrity™ Medical Image Importer

User's Manual

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Preface

Conventions Used in This Manual

Bulleted Lists

Bullets are used to display a list of nonprocedural items. For example:

The unpacked components include the following items:

- Integrity
- Power supply
- Speaker
- User's Manual CD
- Integrity QSG
- Software Installation Disc

Numbered Steps

The ☞ icon indicates the beginning of a procedure. The steps in a procedure are numbered. For example:

To reconcile a study

1. Click the **Studies** tab on the Main screen.

2. Click the study that you want to reconcile.

3. When you have selected the study you want to reconcile, click the **Reconcile** button.

Notes and Tips

Notes contain additional information related to a topic or procedure. For example:

NOTE: Integrity will automatically scan discs for viruses. To improve performance when virus scan is enabled, verify that the anti-virus client does not have real-time file protection enabled. Disabling virus scanning will also improve system performance.

Tips provide additional insights about a topic or procedure (such as, why you may want to do something or a faster way to perform an operation). For example:

TIP: Copying an existing user profile to create a new one
*Four user profiles are preinstalled on every SmartDrive: **user.admin.txt** (administrator user), **user.importer1.txt** (read, reconcile, store user), **user.reconciler1.txt** (read and reconcile user), **user.reader1.txt** (read user). To create new profiles, you can copy these files, rename them, and modify the parameters as necessary.*

Cautions and Warnings

Cautions alert you to actions or situations that could cause harm to equipment or data. For example:

CAUTION Do not insert non-standard sized discs (i.e., less than 120 mm in diameter or not round) into Integrity.

Warnings alert you to actions or situations that could result in personal injury. For example:

WARNING The cartons are heavy. To avoid injury, use two people to unpack and position the components.

Important Information and Filenames

Bold type is used for emphasis, command names, and paths or filenames. For example:

- The user interface includes separate **Store** and **Save** buttons.

- User accounts are created by adding a user account text file to the **\profiles\user** directory on the SmartDrive.

Purpose and Scope

Refer to this user manual for procedures on how to perform the Integrity user operations, including:

- Setting up the hardware and software

- Importing studies from a CD/DVD

- Reconciling studies

- Storing studies

- Maintaining Integrity

- Troubleshooting common problems

Product Information

For technical assistance with Integrity, call the Codonics Technical Support System at the following number:

Phone: **+1.440.243.1198**
Toll Free: **800.444.1198 (USA only)**

The Customer Service System is available weekdays from 8:30 AM to 5:30 PM EST (U.S. holidays excluded). Technical Support is also available online via e-mail and the Codonics web site:

E-mail: **support@codonics.com**
Web site: **www.codonics.com**

General product information can also be requested by sending e-mail to:

E-mail: **info@codonics.com**

Please include your postal mailing address and telephone number in the e-mail message. Basic product information is returned via e-mail. Complete product literature and sample prints are sent by postal mail.

Warnings and Limitations of Use

Safety and Compliance Labels

Codonics is in compliance with various regulations, of which details are listed in Appendix B.

The Integrity safety and compliance label, shown below, is located on the bottom of the unit.

Integrity safety and compliance label, on bottom of Integrity

The Integrity power supply safety and compliance label, shown below, is located on the bottom of the power supply.

Integrity power supply safety and compliance label

Voltage Warning

NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. REMOVAL OF LABELS, COVERS, OR ENCASEMENT FASTENERS VOIDS THE WARRANTY.

THIS APPARATUS MUST BE ELECTRICALLY GROUNDED.

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS DEVICE TO RAIN OR MOISTURE.

WARNING The power cord plug is the main disconnect for the device. The power outlet should be near the device and be easily accessible.

WARNING Remove the power cord plug from the power outlet to disconnect overall power to the device.

Dangers Électriques

AUCUNE PIECE NE PEUT ETRE CHANGEE PAR L'UTILISATEUR. ADRESSEZ-VOUS AU PERSONNEL QUALIFIE. LE FAIT DE RETIRER LES ETIQUETTES OU DE DEMONTER LE CAPOT ANNULENT LA GARANTIE.

CET APPAREIL DOIT ETRE RELIE A LA TERRE.

N'EXPOSEZ PAS CET APPAREIL À LA PLUIE OU L'HUMIDITÉ, EN RAISON DU RISQUE DE FEU OU DE DÉCHARGES ÉLECTRIQUES.

Laser Warning

The Codonics Integrity Medical Image Importer contains a Class 1 laser product. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.

Danger du Faisceau Laser

Le système "Codonics Integrity Medical Image Importer" contient un lecteur de CD dont la diode laser est de classe supérieur à 1. Pour votre sécurité, n'enlevez pas les caches, n'essayez pas d'ouvrir l'appareil. Adressez-vous au personnel qualifié en cas de panne.

Serial Number

The serial number label is located on the side of the unit.

Potential for Radio Frequency Interference on Device Operation

Both portable and mobile RF communications equipment can affect medical electrical equipment, including the Codonics Integrity Medical Image Importer. Keep such RF communications equipment out of the immediate area.

Potential for Radio and Television Interference

The Codonics Integrity Medical Image Importer generates and uses radio frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. Do not change the Display refresh rate, which is set for 75 Hz. The device has been type tested and found to comply with Class B emission limits for a computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operating in a commercial environment. Operation of the equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be appropriate to correct the interference. If your device does cause interference to radio or television reception, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna
- Relocate the device with respect to the receiver

If necessary, you should consult Codonics Technical Support or an experienced radio/television technician for additional suggestions. You may find the following booklet prepared by the Federal Communications Commission helpful: *How to Identify and Resolve Radio-TV Interference Problems*. This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock No. 004-000-00345-4.

This product is in conformity with the protection requirements of EC Council directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. This product satisfies the Class B limits of EN55022. A declaration of conformity with the requirements of the Directive has been signed by the Director of Quality Assurance and Regulatory Affairs.

Le présent appareil numérique n'émet pas de bruits radio-électriques dépassant les limites applicables aux appareils numériques de la Classe B prescrites dans le Réglement sur le brouillage radioélectrique édicté par le ministére des Communications du Canada.

Safety Precautions

- Never connect this device to any outlet or power supply that has a voltage or frequency different than that specified.

- Use only the power supply provided with the unit.

- When servicing the device, always power it off using the power button at the front of Integrity, then unplug the device.

- Damage to the power cord may cause fire or shock hazard. When unplugging the power cord, hold it by the plug only and remove the plug carefully.

- If the power cord needs to be replaced, replace it only with another Codonics power cord manufactured specifically for your power configuration.

- If the device is smoking or making unusual sounds, power off and unplug the device immediately.

- Do not insert foreign objects of any kind into the device; doing so can constitute a safety hazard and cause extensive damage.

- Do not place any liquid containers on the device. If, for some reason, liquid seeps into the device, power off the device and unplug the power cord from the source outlet. If used without corrective measures, the device may be damaged.

- Do not use the device near flammable gases.

Précaution d'Emploi

- *Ne jamais brancher cet appareil sur une source d'alimentation électrique dont la tension ou la fréquence diffèrent des valeurs indiquées.*

- *Utiliser uniquement le bloc d'alimentation fourni avec l'appareil.*

- *Avant d'intervenir sur l'appareil, veillez à toujours l'éteindre en utilisant le bouton d'arrêt vert sur le panneau avant puis l'interrupteur situé à l'arrière et enfin, n'oubliez pas de débrancher le câble secteur.*

- *Un cordon d'alimentation endommagé peut être une cause d'incendie ou de décharge électrique. En déconnectant le cordon d'alimentation, tenez-le seulement par la prise et retirez la prise soigneusement.*

- *Si le cordon d'alimentation doit être remplacé, utilisez un cordon d'alimentation Codonics fabriqué spécifiquement pour votre appareil.*

- *Si l'appareil fume ou émet des bruits inhabituels arrêtez-le immédiatement et débranchez le câble secteur.*

- *N'introduisez aucun objet étranger dans l'appareil, cela peut être une source de danger et peut causer de graves dommages.*

- *Ne déposez aucun récipient à coté de l'appareil. Si pour une raison quelconque un liquide est renversé à l'intérieur, arrêtez immédiatement l'appareil et débranchez le câble secteur. Toute nouvelle utilisation de l'appareil sans intervention peut causer de graves dommages.*

- *Ne pas utiliser l'appareil à coté d'une source de gaz inflammable.*

Location Precautions

- The device's operating ambient temperature range is 15–30ºC (59–86ºF), with a relative humidity of 20%–80%.

- If the device is moved quickly from an extremely cold place to a warmer one, condensation is likely to form. Do not use the device if condensation has formed. Wait until the condensation has evaporated. You can speed up the evaporation time by moving the device to a drier location.

- Ventilation slots and holes are provided on the rear of the device. Place the device on a level, stable surface and locate it at least 10 cm (4 in.) from walls to ensure proper ventilation.

> **CAUTION** Adequate ventilation is required for proper operation of the device.

- Do not place objects on top of the device. They can either block proper ventilation or crack the cover.

- Do not place objects in front of the device. They can block a disc from being ejected.

- Integrity is an Information Technology (IT) device, not a medical device. It should not be located in Patient Care environments.

- Do not place device in a high humidity or high dust area. Airborne dirt particles can cause interference with the operation of the device. Avoid placing the device in areas where ventilation ducts, open doors, or frequent passers-by might expose the device and media to high levels of debris.

- Do not locate the device in hot-springs areas where hydrogen sulfide and acidic ions are likely to be generated.

- Do not locate the device where there are oily fumes and vapors.

- Do not locate the device in direct sunlight.

- Do not locate device near sources of high RF energy.

- Do not locate the device where it might be subject to jarring or vibrations, such as a table or desk in a high-traffic area. Jarring and vibrations can affect the importing of discs.

Environnement de Fonctionnement

- *Les conditions normales d'utilisation de l'appareil sont : une température de 15 à 30ºC et une humidité relative de 20 % à 80 %.*

- *En cas de variation rapide de la température, de la condensation peut se former. Dans ce cas n'utilisez pas l'appareil, attendez que la condensation se soit évaporée. Vous pouvez accélère cette évaporation en déplacent l'appareil dans un endroit sec.*

- *Les fentes de ventilation se trouvent sur les côtés et à l'arrière du appareil. Placez l'appareil sur une surface stable et au moins 10 cm à des murs pour assurer une ventilation correcte.*

⚠ **ATTENTION** *Une ventilation correcte est nécessaire au bon fonctionnement de l'appareil.*

- *Ne pas poser d'objets sur l'appareil. Ils risqueraient de bloquer la ventilation ou de fendre le capot.*

- *Ne pas placer d'objets devant l'appareil. Ils risqueraient de bloquer l'éjection d'un disque.*

- *Integrity est un appareil de Technologie d'Information (IT), pas un appareil de catégorie médicale. Il ne doit donc pas être placer dans un environnement de soin du patient.*

- *Ne placez pas l'appareil dans une zone propre et non-humide. Des particules de poussières peuvent causer des disfonctionnements. Évitez de placer l'appareil à proximité d'une bouche de ventilation, d'une porte, ou d'un lieu très fréquenté car cela pourrait exposer l'appareil ainsi que les médias à la poussière.*

- *Ne placez pas l'appareil à proximité d'une source de chaleur ou de substances acides.*

- *Ne placez pas l'appareil dans une pièce où il y a des vapeurs huileuses et grasses.*

- *N'exposez pas l'appareil à la lumière directe du soleil.*

- *Ne placez pas l'appareil près d'une source haute fréquence.*

- *Ne placez pas l'appareil dans un lieu où il pourrait être exposé à des vibrations, car cela peut nuire à l'enregistrement et à l'impression des média.*

Cleaning Precautions

- Plastic components are used in the device's construction. Coat flecking and deformation are likely to occur if the device is wiped with chemical dusters, benzene, thinners, insecticides, or other solvents. Rubber and PVC materials left in contact with the device for extended times will cause damage. Never use petroleum-based solutions or abrasive cleaners.

- To clean the unit cover, first power off the unit using the power button at the front of Integrity, then unplug the device. Clean the cover with a soft cloth slightly moistened with a mild soap and water solution. Allow the cover to completely dry before operating the device again.

Précautions d'Entretien

- *Cet appareil comporte plusieurs pièces en plastique. Des taches et des déformations peuvent être provoquées par l'utilisation de chiffon imbibé de benzène, d'essences, d'insecticides, ou d'autres solvants. N'utilisez jamais solution à base de pétrole.*

- *Pour nettoyer l'appareil, veuillez d'abord l'éteindre en utilisant le bouton d'arrêt vert sur panneau avant, puis l'interrupteur situé à l'arrière, et n'oubliez pas de débrancher le câble secteur. Nettoyez l'extérieur de l'appareil avec un tissu doux légèrement humidifié avec un une solution à base d'eau et de savon non corrosif. Laissez sécher avant de remettre en fonction le système.*

Media and Image Formats Supported

Integrity supports standard size CDs/DVDs in the following formats:

- CD-R
- CD-RW
- DVD-R
- DVD-RW
- DVD+R
- DVD+RW

The following CD/DVD types are not supported:

- Blu-ray Disc™
- HD-DVD
- Music CDs/DVDs
- Video DVDs
- Software installation CDs/DVDs

NOTE: *Integrity does not support CDs/DVDs with a non-circular shape, or with a diameter less than 120 mm.*

Integrity supports the following image formats:

- DICOM 3.0
- IHE PDI
- ACR NEMA
- Older DICOM image files

Type de Disques et Formats d'Image Acceptés

Integrity accepte les CD/DVD de taille standard dans les formats suivants:

- *CD-R*
- *CD-RW*
- *DVD-R*
- *DVD-RW*
- *DVD+R*
- *DVD+RW*

Les types de CD/DVD suivant ne sont pas acceptés:

- *Blu-ray Disc™*
- *HD-DVD*
- *CD/DVD musical*
- *DVD vidéo*
- *CD/DVD logiciel*

NOTE: Integrity n'accepte pas les CD/DVD de forme non circulaire ou d'un diamètre inférieur à 120 mm.

Integrity accepte les formats d'image suivants:

- *DICOM 3.0*
- *IHE PDI*
- *ACR NEMA*
- *anciens fichiers d'image DICOM*

Medical and Patient Information

Integrity log files might contain patient information. Use caution when distributing log files.

Disposal Requirements

Disposal of this product and consumables shall be in accordance with all applicable laws and regulations in effect at the locality at the time of disposal. For additional information, refer to Appendix A, Hazardous Material Information.

Conditions et Règles d'Utilisation

L'utilisation de ce produit doit être conforme à toutes les lois et règlements applicables sur le lieu d'utilisation.

European Disposal Requirements

Codonics imagers and electronic accessory devices are not to be discarded or recycled; rather they are to be returned to the manufacturer. Contact Codonics directly or by the e-mail link provided for the latest information concerning:

- Identification of the country specific Importer/Distributor/Producer

- Product return and treatment of our electronic products

> Manufacturer: Codonics Incorporated
> 17991 Englewood Drive
> Middleburg Heights, OH 44130 USA
> Phone: +1.440.243.1198
> Fax: +1.440.243.1334
> E-mail: WEEE@codonics.com
> www.codonics.com

Codonics imagers and electronic accessory devices bearing the following symbol are subject to European Directive on Waste Electrical and Electronic Equipment (WEEE) 2002/96/EC, amended by Directive 2003/108/EC. The EN 50419 symbol indicates separate collection and return required.

EN 50419 symbol

Indications for Use

Integrity is intended for digital medical image importing. Functions include transferring images and related study demographic data from CD/DVD media, reconciliation with a facility's Modality Worklist (MWL) and local PACS, and sending images and data to storage or recording destinations. When configured, the ability to re-direct a study to a Codonics Virtua™ Medical Disc Publisher is provided. Typical users of this system are trained professionals, including but not limited to physicians, nurses, and technicians.

1

Introduction

Welcome and Congratulations

Congratulations on your purchase of the Codonics® Integrity™ Medical Image Importer!

We are pleased you chose Integrity. We are confident that it will provide fast, reliable importing of medical images from CD/DVD media for your demanding data storage and distribution applications.

Product Features

The Codonics Integrity Medical Image Importer is a powerful, yet simple, solution for importing medical studies from disc into a PACS. Integrity imports medical studies from discs using advanced, rule-based search capabilities to quickly reconcile external studies with the facility's Modality Worklist (MWL) and local PACS. This saves time by automatically performing multiple searches to match study demographics even when patient names are represented in different character sets.

The Integrity Image Importer sets the industry standard for optimizing image-import workflow by bringing the work to the user, instead of the user to the work. The main system can be located where patients arrive with discs to be imported, while reconciliation can occur at any network computer with a web browser. The receptionist or clerical staff can insert the disc into the system to be automatically read and reconciliation can then be done by a different user in the facility.

Integrity provides the following benefits:

- Improves workflow by bringing the reconciliation process to the user.

- Uses the same intuitive, web based interface as Codonics Virtua™ Medical Disc Publisher.

- Automatically scans for viruses to protect your data.

- Reconciles patient data with facility's own Modality Worklist (MWL) and/or PACS.

- Displays the original imported data as well as the matching MWL or PACS data.

- Allows users to verify the match is correct and directly edit the study attributes if required.

- Stores to the PACS, local archive, or Virtua using DICOM Store.

- Fully compliant with the IHE Portable Data for Imaging (PDI) and Import Reconciliation Workflow (IRWF) integration profiles.

Integrity is the perfect companion to Codonics Virtua for a complete medical disc management system.

Introduction

2

Setting Up the Hardware

Finding a Location

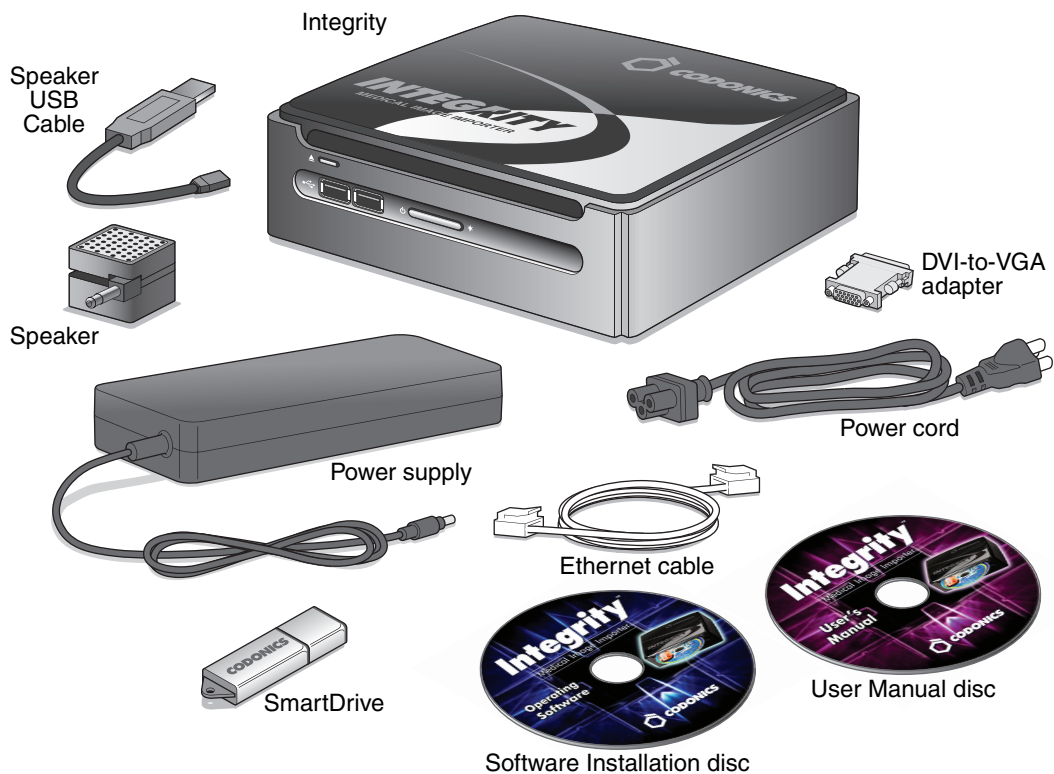When finding a suitable location for Integrity, use the following
guidelines:

- Place Integrity on a flat, hard surface and in a location with
  adequate air circulation to prevent internal heat build up.

- Do not place Integrity near heat sources such as radiators or air
  ducts, or in a location subject to direct sunlight, excessive dust,
  mechanical vibration, or shock.

- Do not block air ventilation on the sides or rear of Integrity.

- Make sure that the countertop or work surface will not vibrate or
  shake when Integrity is operating.

For additional location precautions, refer to "Location Precautions"
on page xviii.

Components

Unpacked Components

The device is shipped in one carton, which contains the components shown in the following illustration.

Integrity

Speaker
USB
Cable

DVI-to-VGA
adapter

Speaker

Power cord

Power supply

Ethernet cable

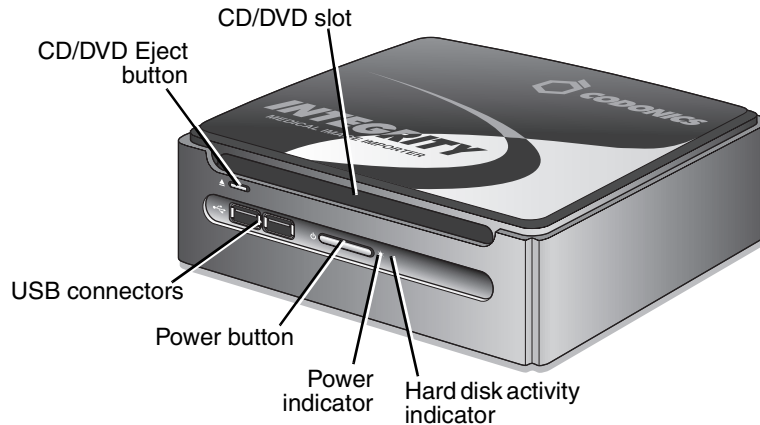SmartDrive

User Manual disc

Software Installation disc

Unpacked Integrity components

Inspect the carton for damage that might have occurred during shipping. Report any damage to the shipping company.

Save the carton and packing materials, in case you ever need to transport Integrity later.

Integrity Front Components

The following illustration shows the components at the front of Integrity.

CD/DVD slot
CD/DVD Eject button
USB connectors
Power button
Power indicator
Hard disk activity indicator

Integrity front components

- The **CD/DVD Eject button** ejects the CD/DVD from the slot.

- CD/DVD discs are inserted into the **CD/DVD slot**.

- The **USB connectors** can be used to connect USB devices, such as a keyboard or mouse.

- The **Power button** is used to power Integrity on and off.

- The **Power indicator** is on when power is being applied to Integrity.

- The **Hard disk activity indicator** is on when the Integrity hard disk or a CD/DVD is being read from or written to.

Setting Up the Hardware

Integrity Rear Components

The following illustration shows the input/output ports at the rear of Integrity.

Power input
port

Monitor (DVI) port
(monitor is optional)

Ethernet
port

USB
ports

Audio Out
port
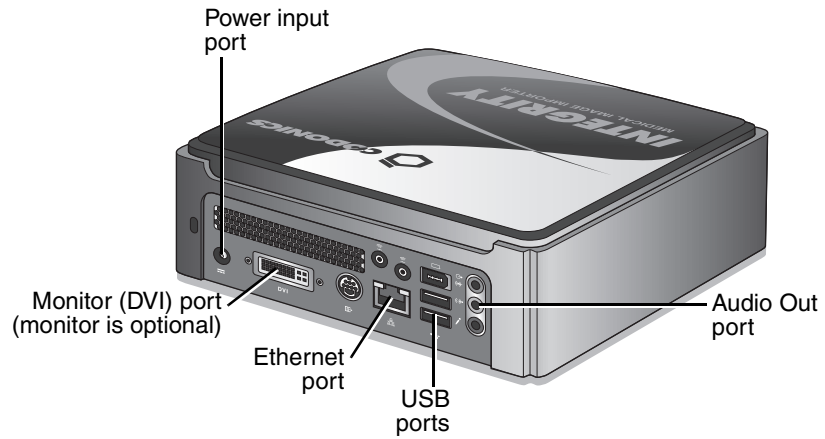
Integrity rear ports

Setting Up Integrity

👉

To set up Integrity

1. Unpack the hardware and remove any packing material.

2. Place Integrity on a solid level surface.

3. Connect the power supply.
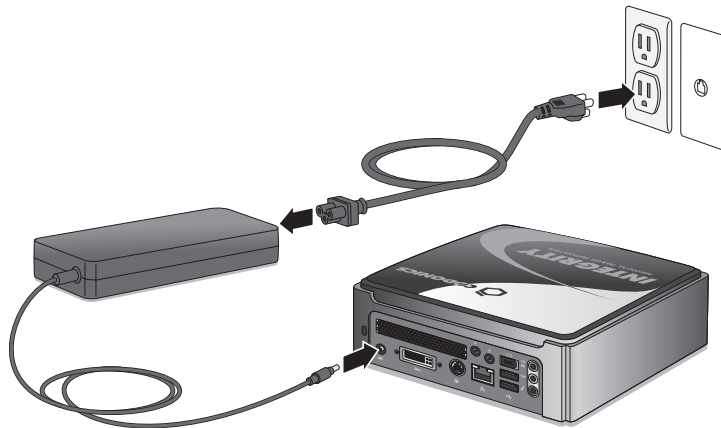
⚠️ **WARNING The power cord plug is the main disconnect for Integrity. The power outlet should be near Integrity and be easily accessible.**

⚠️ **WARNING Remove the power cord plug from the power outlet to disconnect overall power to Integrity.**

✏️ *NOTE: It is recommended that you connect Integrity to an uninterruptible power supply (UPS). An unexpected power outage could cause a problem restarting Integrity.*

4. Connect the Ethernet cable.
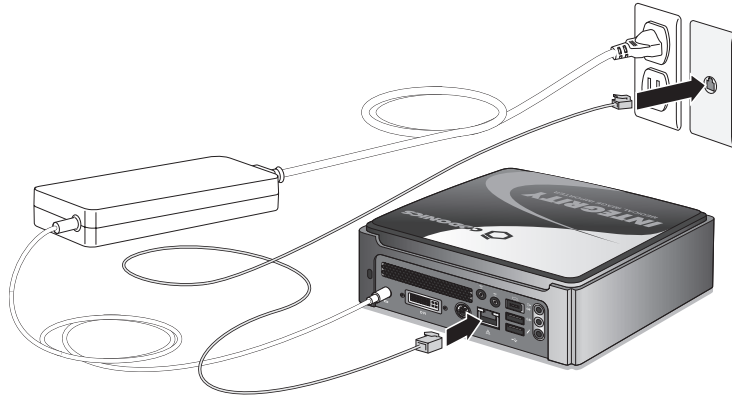
5. Insert the SmartDrive.
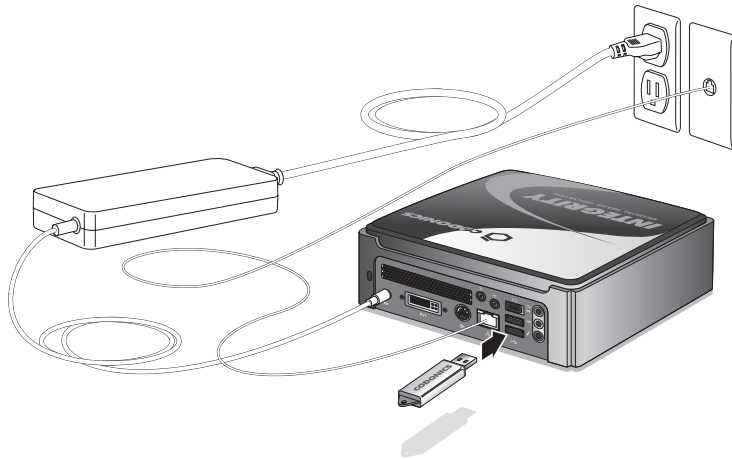
6. Extend the speaker plug and connect the speaker to the Audio Out connector. Then connect the short speaker USB cable between the speaker and Integrity.
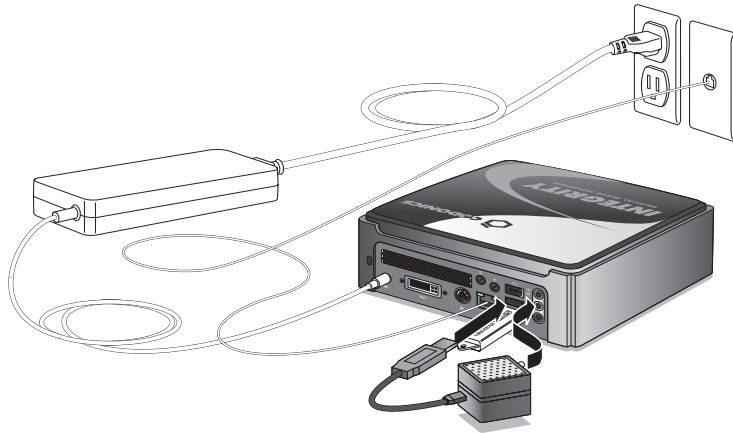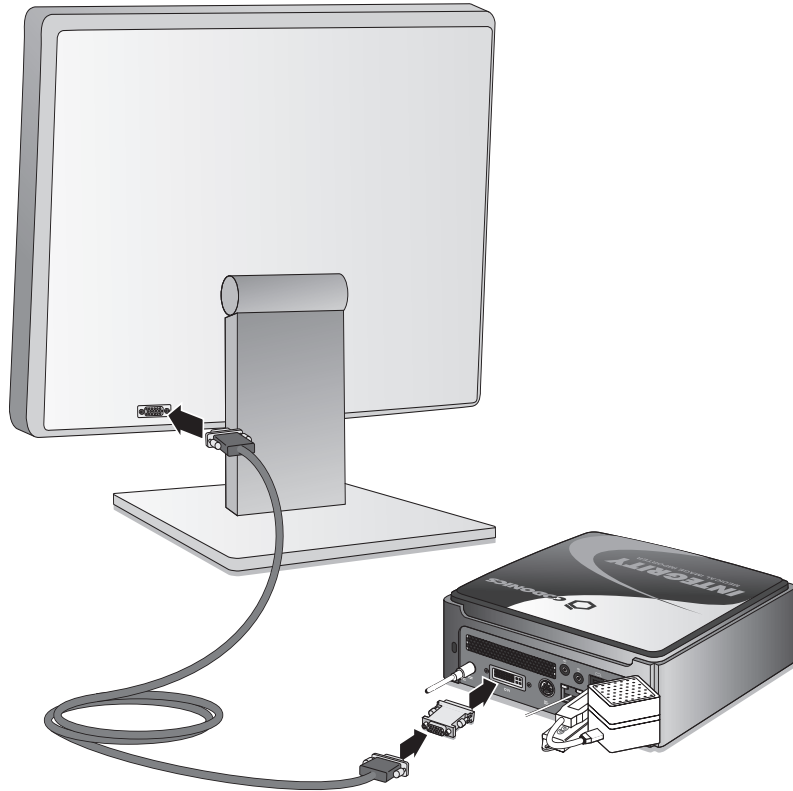
# Monitor, Keyboard and Mouse (Optional)

To connect a monitor, keyboard and mouse

1. Connect the monitor to the monitor port.

   A monitor with a DVI connector can be connected directly to the Integrity monitor port. If the monitor has a VGA connector, use the DVI-to-VGA adapter to connect the monitor to Integrity, as shown below.

2. Connect the keyboard and mouse to the USB ports at the front of Integrity.
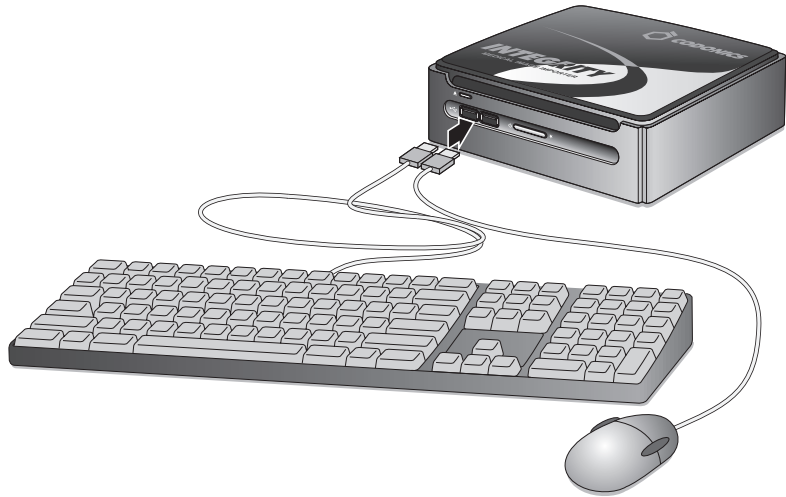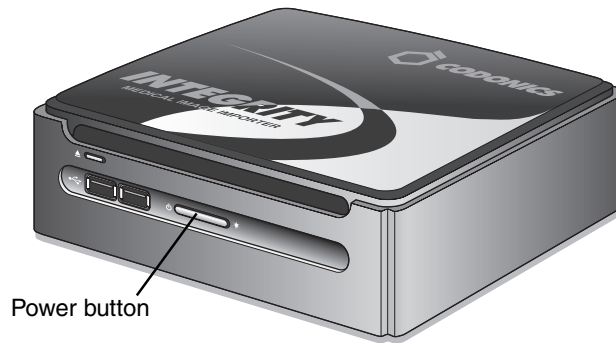
Starting Up Integrity

**To start up
Integrity**

1. Press the Integrity **Power** button.

Power button

2. Wait approximately 3 to 5 minutes for startup to complete.

   An audible tone indicates when the Integrity application is running, users can log in, and discs can be imported.

NOTE: To shut down Integrity, refer to "Shutting Down and Rebooting" on page 3-31.

3

Setting Up the Software

This chapter includes information you will need to set up Integrity's software:

- Setting up user accounts

- Specifying system settings

- Setting the system date and time

- Specifying network settings

- Setting up query server parameters to support the reconcile query function

- Setting up store destinations

The chapter also includes:

- Logging in and logging out of a user session

- Shutting down and rebooting the system

- A description of the SmartDrive and what information is stored on it

For information about setting the locale to ensure proper display of study information, and date and time format, refer to Chapter 5.

Logging In

Preconfigured User Accounts

The following user accounts are preconfigured to allow initial access to the application:

- **admin**, which provides access to both standard and administrator functions

- **importer1,** which can import, reconcile, and store studies

- **reconciler1,** which can import and reconcile studies, but cannot store studies

- **reader1**, which can import studies, but cannot reconcile or store studies

The default password for the preconfigured user accounts is **codonics**.

NOTE: To prevent unauthorized access to the application, you should change the password for these user accounts the first time you log in. For more information, refer to "Changing a User's Password and Privileges" on page 3-11.

Remote Web Access

The device includes a web server, allowing remote web access to the application interface from a web browser. This feature provides true simultaneous multi-user access to Integrity services.

Note the following about remote web access:

- The computer on which the web browser is running must be on the same network as Integrity.

- The supported web browser is Microsoft® Internet Explorer 6. Internet Explorer 7 and Mozilla Firefox® 1.5 can also be used but are not fully verified and supported.

- Cookies must be enabled in the browser.

Login Procedure

To log in

1. Enter the Integrity IP address in a customer-supplied PC web browser.
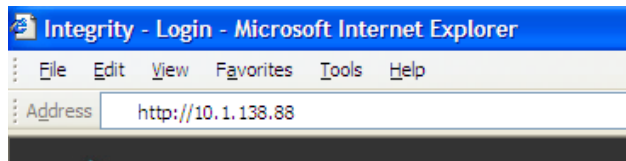
The Integrity Login screen displays.
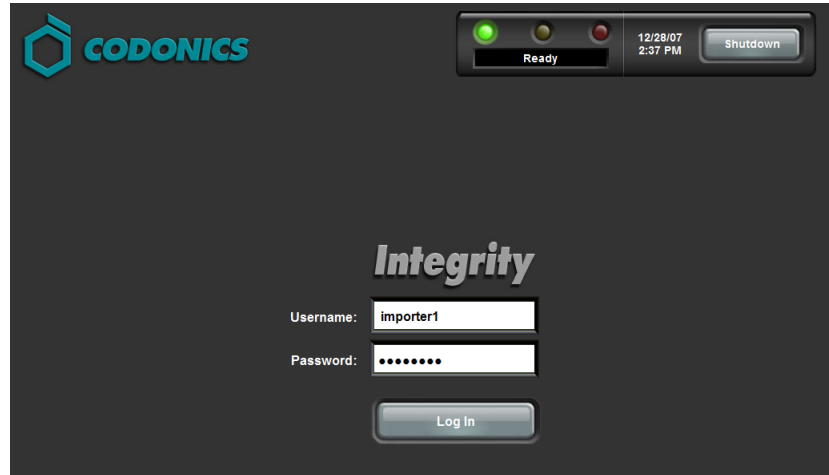
2. On the Login screen, enter a login name and a password, then click the **Log In** button.

The initial screen displayed after logging in is the **Studies** tab screen. This is the most commonly used screen.

For information about how to log out, shut down the system, or reboot the system, refer to "Logging Out" on page 3-30 and "Shutting Down and Rebooting" on page 3-31.

Creating and Modifying Profiles

Profile files are used to define settings for the system configuration, user accounts, site parameters, and Job Profiles (which control how imported studies will be processed). These files are stored on the SmartDrive in the following folders:

- **\profiles\dicom**
- **\profiles\locale**
- **\profiles\network**
- **\profiles\reconciler**
- **\profiles\storeclient**
- **\profiles\user**

Profile files are text files. The general procedure for modifying these files is:

1. Verify that no jobs are currently being processed.

2. Log out and shut down the system (refer to "Logging Out" on page 3-30 and "Shutting Down and Rebooting" on page 3-31).

   The device powers off at the end of the shutdown process.

NOTE: If you do not shut down the system before removing the SmartDrive, a message displays indicating that the SmartDrive has been removed. Once it is reinserted, the system prompts you to reboot.

3. Remove the SmartDrive, which is inserted in a USB port on the rear of Integrity.

4. Mount the SmartDrive in a USB port on a PC.

   The SmartDrive will appear as a standard USB flash drive.

5. Use a text editor that does not perform character formatting (for example, Notepad) to create or open the file, and to edit the file.

6. When finished creating or modifying the file, save it on the
    SmartDrive, unmount the SmartDrive from the PC, then insert
    the SmartDrive back into Integrity.

7. Power on Integrity by pressing the power button on the front of
    Integrity.

When starting up, Integrity will read the updated profile files and
use them for its configurations.

Subsequent topics in this chapter discuss the types of profiles
mentioned here in detail.

Setting Up User Accounts

User accounts define the login names and passwords that can be
used to access the application, along with the function privileges
that user has.

User accounts are created by adding a user account text file to the
\profiles\user directory on the SmartDrive.

Predefined User Accounts

Four preinstalled user accounts are provided that allow the system
to be used without having to create additional user account profiles.

Table 3-1. Default User Accounts

Login	Password	Privileges
reader1	codonics	Read studies from CD/DVD.
reconciler1	codonics	Read studies from CD/DVD, and reconcile them.
importer1	codonics	Read studies from CD/DVD, reconcile them, and send them to a destination device for storage.

Table 3-1. Default User Accounts (Continued)

Login	Password	Privileges
admin	codonics	In addition to all other user functions, administrative functions: changing user passwords and privileges, setting site date/time, setting network parameters, running diagnostic utilities.

Creating a User Account Profile

For general information about creating and modifying a profile, refer to "Creating and Modifying Profiles" on page 3-6.

User account profiles are stored in the **\profiles\user** directory on the SmartDrive. The file name should be in the following format:

    user.*username*.txt

Including the user's name in the file will help you and other administrator users identify the file.

The format and parameters of the user profile text file are defined in the following table.

Table 3-2. User Account Profile Format and Parameters

Parameter	Description
[UserProfile]	Section identifier. This parameter must occur before all other parameters in the file. *NOTE: Do not change this identifier.*
username = *login*	Defines the login for the user.
encryptedPassword = *password*	User's password for Integrity application. Because the system encrypts the password, it cannot be entered manually in this file. When adding a new user account profile, leave the password blank. Always set the password from the application; for more information, refer to "Changing a User's Password and Privileges" on page 3-11.
windowsPassword	User's password for Windows XP. *NOTE: Do not change this password.*

Table 3-2. User Account Profile Format and Parameters (Continued)

Parameter	Description
`[ UserProfile\Roles ]`	Section identifier. This specifies the start of permissions of the user.
	NOTE: Do not change this identifier.
`role1 =`	User role.
	• To assign the user access to only read studies from a CD/DVD, enter **reader**.
	• To assign the user access to only read studies from a CD/DVD and to reconcile studies, enter **reconciler**.
	• To assign the user access to read studies from a CD/DVD, to reconcile studies, and to send studies to a destination for storage, enter **importer**.
	• To assign the user access to administrator functions (viewing site parameters, changing the date and time, changing the network settings, and changing user passwords) in addition to all standard user functions, enter **admin**.

> *TIP: Copying an existing user profile to create a new one*
> *Four user profiles are preinstalled on every SmartDrive: **user.admin.txt** (administrator user), **user.reader1.txt** (read CD/DVDs only), **user.reconciler1.txt** (read CD/DVDs, reconcile studies only), **user.importer1.txt** (read CD/DVDs, reconcile studies, send studies for storage). To create new profiles, you can copy these files, rename them, and modify the parameters as necessary.*

A user profile for a user with full standard user permissions would look like the following:

```
[ UserProfile ]
username = vpatek
encryptedPassword = 28ed19ca7875d23f12e852ad
windowsPassword = 37ed29ca7547d23f12e144em
[ UserProfile\Roles ]
role1 = importer
```

A user profile file for a user with administrator privileges would look like the following:

```
[ UserProfile ]
username = supervisor
encryptedPassword = 45de18ac8783c24e11d962da
windowsPassword = 37ed29ca7547d23f12e144em
[ UserProfile\Roles ]
role1 = admin
```

Once a user account profile is created, the user password and administrator privileges option can be changed from the application, as described in the next topic.

Changing a User's Password and Privileges

You must be logged in as a user with administrator privileges to change user passwords and administrator privileges.

To change a user password or privileges

1. On the Main screen, click the **Setup** button to display the Setup screen, then the **Users** tab to display the user account parameters.

2. Use the scroll buttons to scroll to the user whose parameters you want to change.

Click scroll buttons to scroll through available user accounts.

3. Click the **Password** and **Confirm Password** fields to enter the new password.

4. Select the privilege role for this user.
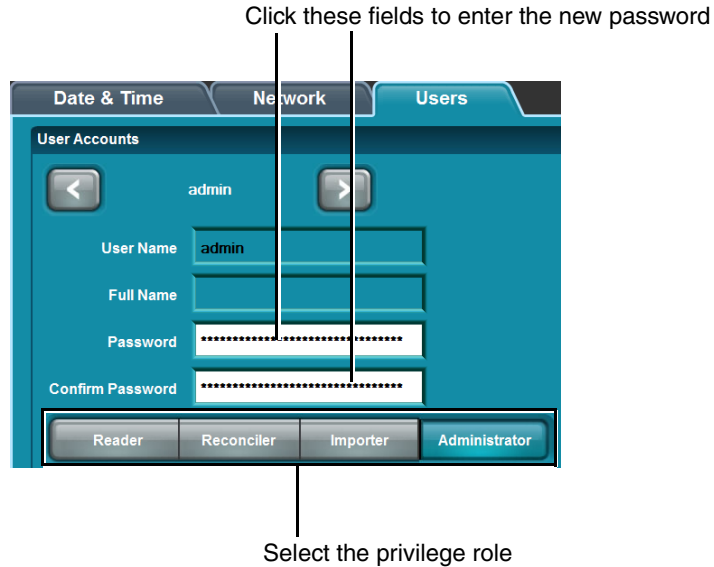
Click these fields to enter the new password

Date & Time	Network	Users

User Accounts

admin

User Name	admin
Full Name	
Password	••••••••••••••••••••••••••••••
Confirm Password	••••••••••••••••••••••••••••••

| Reader | Reconciler | Importer | Administrator |

Select the privilege role

5. To save your changes, click the **Save** button.

   To cancel your changes, click the **Cancel** button.

To save your changes, click the **Save** button

To cancel your changes, click the **Cancel** button

| Save | Cancel |
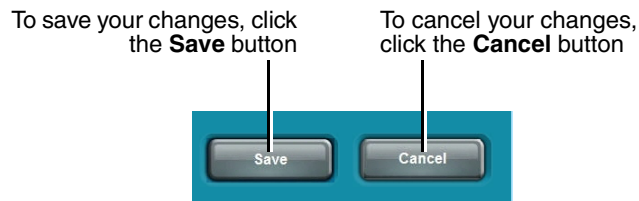
Deleting a User Account

**To delete a
user account**

Delete the user account profile from the SmartDrive.

For general information about accessing the user profile file to delete it, refer to "Creating and Modifying Profiles" on page 3-6.

Note the default user accounts are added automatically with the default password **codonics** if the default user profile files are not present on the SmartDrive when the system is booted.

Setting Up the System Profile

The system profile includes information about Integrity, such as whether an anti-virus scan will be performed automatically when a CD/DVD is inserted.

The system profile file—**system.txt**—is preinstalled on the SmartDrive in the **\profiles** directory. You can modify this file to specify system-specific information. For general information about modifying a profile, refer to "Creating and Modifying Profiles" on page 3-6.

The format and parameters of the system profile text file are defined in the following table.

Table 3-3. System Profile Format and Parameters

Parameter	Description
[SystemProfile]	Section identifier. This parameter must occur before all other parameters in the file.
	NOTE: Do not change this identifier.

Table 3-3. System Profile Format and Parameters (Continued)

Parameter	Description
maxStudyAge =	Specifies the maximum number of days a study will be stored in the system before being removed by the hard drive storage recovery operation. The value **0** (the default) indicates that this removal function not be used. Note that recorded studies will be removed when storage space is needed, regardless of this parameter's setting.
fullInstall =	Specifies whether a full install will be performed during a software installation. Choices are: **True**, **False** (the default). If True, all studies and jobs will be purged during the installation process. If False or blank (that is, no value is specified), stored studies and jobs will remain after the installation process is compete.
beepingDisabled =	Specifies whether the beep is disabled when errors are detected. Choices are: **True**, **False** (the default). If True, the unit will not beep when there is an error. If False, the unit will beep when there is an error.
autoLogoutIdleDelay =	Specifies the amount of time, in minutes, that the web browser will remain active before automatically logging out if there is no activity on the user interface. The value **0** (the default) means the web browser will not autologout.
readDicomDir =	Specifies whether or not a DICOMDIR should be used when reading a CD/DVD, if one is present. Choices are: **True** (the default; use DICOMDIR), **False** (do not use DICOMDIR).

Table 3-3. System Profile Format and Parameters (Continued)

Parameter	Description
DuplicateImageAction =	Specifies how Integrity handles duplicate images if they exist on a disc being imported.
	Choices are: **renumber** (the default; the duplicate image is renumbered to a separate series) and **ignore** (the duplicate image is not imported).
runStorageCommitListener =	Specifies whether or not the Storage Commit SCU should start a listener thread for incoming N-Event-Report requests.
	Choices are: **True** (the default; start listener thread), **False** (do not start listener thread).
storageCommitListenerPort =	Specifies the port on which the Storage Commit SCU listener, if used, will listen.
	The default value is **2000**.
enableAV =	Specifies whether an anti-virus (AV) scan will be automatically performed with a CD/DVD is inserted.
	Choices are: **True** (the default; scan enabled), **False** (scan disabled).
	Disabling the scan will reduce the time required to import studies from a CD/DVD.
defineAV =	Specifies the anti-virus software to run when enableAV = true.
	Choices are: **none** (the default), **SAV** (Symantec Norton AntiVirus™), **CLM** (ClamAV™).
VirusDetectionAction =	Specifies how Integrity handles a CD/DVD if a virus is detected during scanning.
	Choices are:
	• **noReadHold** (the default): When a virus is detected, do not read the CD/DVD but hold it in Integrity until the error is acknowledged on the Dashboard or the manual CD/DVD Eject button is pressed.
	• **noReadEject**: When a virus is detected, do not read the CD/DVD and eject it from Integrity automatically.

A typical system profile would look like the following:

```
[ SystemProfile ]
maxStudyAge = 30
fullInstall = false
beepingDisabled = false
autoLogoutIdleDelay = 0
readDicomDir = true
duplicateImageAction = renumber
runStorageCommitListener = False
storageCommitListenerPort = 2000
enableAV = true
defineAV = CLM
virusDetectionAction = noReadHold
```

Setting the Date and Time

You must be logged in as a user with administrator privileges to set the date and time.

To set up the date and time

On the Main screen, click the **Setup** button to display the Setup screen, then the **Date & Time** tab to display the date and time.

When finished entering parameters, click the **OK** button to save the changes (or the **Cancel** button to cancel them).

Setting the Network Parameters

You must be logged in as a user with administrator privileges to set the network parameters.

To set the network parameters

On the Main screen, click the **Setup** button to display the Setup screen, then the **Network** tab to display the network parameters.

The following table describes the network parameters.

When finished setting the parameters, click the **OK** button to save the changes (or the **Cancel** button to cancel them).

If you are not familiar with network settings, see your network administrator or Internet Service Provider (ISP) for the proper settings.

Table 3-4. Network Parameters

Parameter	Description
DHCP or Static	Specifies how Integrity will be assigned its IP address: • **DHCP.** The address will be assigned automatically by the DHCP (Dynamic Host Configuration Protocol) server on the network. If selected, all other fields are disabled. • **Static.** The address will be a fixed address, as entered in the IP Address field. If selected, the address fields are enabled for editing.
IP Address	The device's IP address, either assigned by the DHCP server (DHCP) or manually entered (Static).
Subnet Mask	Subnet mask being used for the subnetwork to which Integrity is connected.
Gateway	IP address of the gateway for the subnetwork to which Integrity is connected.
DICOM Port Number	The port number required for communication with other DICOM devices. The default port number is **104**.
Network Name	To use the default network name for Integrity, select the **Use Default Network Name** option. To specify the network name, deselect the **Use Default Network Name** option and enter the network name in the format: INTEG_*3rdOctet_4thOctet* where 3rdOctet and 4thOctet are the third and fourth octets of the Integrity IP Address.

Table 3-4. Network Parameters

Parameter	Description
Windows Domain	To have Integrity join a Windows domain, enter the domain name, login username, and password, then click the **Join** button.

Setting Up Query Server Profiles

For the reconcile query function, Codonics Integrity supports multiple Query Server profiles, each of which can define a unique set of parameters for querying Modality Worklist servers (MWL) or Query/Retrieve (Q/R) servers. Parameters include the server's host IP address, TCP port number, and Called AE Title.

Each Query Profile can define up to five Match Rule profiles. A Match Rule profile defines on which fields the query will be performed. Integrity includes several default Match Rule profiles. These profiles can be copied and modified to create custom Match Rule profiles.

When performing a reconcile query, Integrity will query the MWL or Q/R server that is defined in the Reconciler profile.

Creating a Query Server Profile

For general information about creating and modifying a profile, refer to "Creating and Modifying Profiles" on page 3-6.

Query Server profiles are stored in the **\profiles\reconciler** directory on the SmartDrive. The file name should be in the following format:

```
queryserver.profilename.txt
```

Using a descriptive name for the *profilename* portion of the file name will help you and other administrators identify the file and the server.

The format and parameters of the Query Server profile text file are defined in the following table.

Table 3-5. Query Server Profile Format and Parameters

Parameter	Description
[QueryServerProfile]	Section identifier. This parameter must occur before all other parameters in the file. *NOTE: Do not change this identifier.*
host =	IP address of the server.
port =	The port number required for communication with the server. The default port number is **104**.
queryType =	Identifies the type of query that the server supports. Choices are: **MWL** (Modality Work List), **QR_STUDY_ROOT** (Query/Retrieve style).
calledAETitle =	The AE Title that identifies the server.
callingAETitle =	The AE Title that identifies Integrity.
useMatchRule =	Specifies which demographic data to search on the server. Up to five rules can be specified. Each of the available match rules have a corresponding Match Rule profile in the **\profiles\reconciler** directory. The following default Match Rule profiles are provided with Integrity: • ExactNameDobSex • LastNameDobSex • ExactNameDob • LastNameDob • ExactNameSex • LastNameSex • DobSex • ExactName • LastName Custom Match Rule profiles can also be created by copying and then modifying one of the default profiles. For more information, refer to "Creating Custom Match Rule Profiles" on page 3-24.

Table 3-5. Query Server Profile Format and Parameters (Continued)

Parameter	Description
customQueryTag =	Specifies extra tags to include in the query request.
	Tag value entries consist of **DICOM tag = value**, where value can be blank.
	NOTE: The default Query Server profile that uses the queryType of QR_STUDY_ROOT has customQueryTag = 0008,0052 = STUDY *included by default. However, if a site creates their own Query Server Profile, it will not be automatically added.*
maxNumberOfMatches =	Specifies the maximum number of results that can be returned from all the useMatchRules combined. The default is **100**.
	For example, if this query server profile specifies three useMatchRule profiles and each useMatchRule profile was configured to be able to return 50 matches, then the combination of these three useMatchRules could return as many as 150 matches. However, by setting the maxNumberOfMatches = 100 in this reconciler profile, the total number returned to the user interface would be limited to 100.
	This parameter setting provides a limit to the number of results that can be returned if a user specifies many match rules that could result in a very large data set being returned and the resultant very long wait time.

TIP: Copying an existing Query Server profile to create a new one
*To create new Query Server profiles, you can copy an existing Query Server profile—for example, **queryserver.default.txt**, which is preinstalled on every SmartDrive—rename it, and modify the parameters as necessary.*

A sample Query Server profile for querying an MWL server would look like the following:

```
[ QueryServerProfile ]
host = 192.168.0.10
port = 104
queryType = MWL
calledAeTitle = MWL_SCP_AE
callingAeTitle = MWL_SCU_AE
useMatchRule = ExactNameDobSex
useMatchRule = LastNameDobSex
useMatchRule = DobSex
customQueryTag = SPS Modality =
customQueryTag = SPS Station AE Title =
customQueryTag = SPS Start Date =
customQueryTag = SPS Start Time =
customQueryTag = SPS Physician Name =
customQueryTag = Accession # =
maxNumberOfMatches = 100
```

A sample Query Server profile for querying an Q/R server would look like the following:

```
[ QueryServerProfile ]
host = 192.168.0.11
port = 104
queryType = QR_STUDY_ROOT
calledAeTitle = QR_SCP_AE
callingAeTitle = QR_SCU_AE
useMatchRule = ExactNameDobSex
useMatchRule = LastNameDobSex
useMatchRule = DobSex
customQueryTag = Query Level = STUDY
customQueryTag = Accession # =
maxNumberOfMatches = 100
```

Creating Custom Match Rule Profiles

A Match Rule profile defines on which fields a query will be performed when looking for matches to the study being reconciled.

Several default Match Rule profiles are preinstalled in the **\profiles\reconciler** directory on the SmartDrive. Custom Match Rule profiles can be created by copying one of the default Match Rule profiles files, modifying it, and saving the file. The file name should be in the following format:

```
matchrule.profilename.txt
```

Using a descriptive name for the *profilename* portion of the file name will help you and other administrators identify the file and what fields are specified in the Match Rule profile.

For general information about modifying a profile, refer to "Creating and Modifying Profiles" on page 3-6.

The format and parameters of a Match Rule profile text file are defined in the following table.

Table 3-6. Match Rule Profile Format and Parameters

Parameter	Description
[MatchRuleProfile]	Section identifier. This parameter must occur before all other parameters in the file.
	NOTE: Do not change this identifier.
useDicomSpecificCharacterSet =	Specifies whether to use the DICOM specific character set when searching for a match.
	Choices are: **True** (the default) or **False**.
queryOnPatientIdFromStudy =	Specifies whether to include the patient ID in the fields being searched for a match.
	Choices are: **True** (the default) or **False**.
queryOnPatientNameFromStudy =	Specifies whether to include the patient name in the fields being searched for a match.
	Choices are: **True** (the default) or **False**.

Table 3-6. Match Rule Profile Format and Parameters (Continued)

Parameter	Description
queryOnPatientDobFromStudy =	Specifies whether to include the patient date of birth in the fields being searched for a match.
	Choices are: **True** (the default) or **False**.
queryOnPatientSexFromStudy =	Specifies whether to include the patient sex in the fields being searched for a match.
	Choices are: **True** (the default) or **False**.
maxNumberOfMatches =	Specifies the maximum number of results that can be returned from this Match Rule. Querying on this Match Rule is stopped when this number of matching results is received.
	The default value is **25**.

The contents of a sample Match Rule profile is:

```
[ MatchRuleProfile ]
useSpecificCharacterSet = true
maxNumberOfMatches = 25
queryOnPatientIdFromStudy = false
queryOnPatientNameFromStudy = true
queryOnPatientDobFromStudy = false
queryOnPatientSexFromStudy = true
```

Configuring the Reconciler Profile

The Reconciler profile defines which MWL and/or Q/R servers to include in a reconcile query, and what the query rules should be.

The Reconciler profile file—**reconciler.default.txt**—is preinstalled on the SmartDrive in the **\profiles\reconciler** directory. For general information about modifying a profile, refer to "Creating and Modifying Profiles" on page 3-6.

The format and parameters of the Reconciler profile text file are defined in the following table.

Table 3-7. Reconciler Profile Format and Parameters

Parameter	Description
[ReconcilerProfile]	Section identifier. This parameter must occur before all other parameters in the file. *NOTE: Do not change this identifier.*
queryServer =	The name of the Query Server profile for the query server to include in the reconciliation query function. *NOTE: More than one queryServer parameter entry can be included in the Reconciler profile, allowing multiple query servers to be included in the reconciliation query.*
fieldToCopyFromServer =	Specifies the fields to copy from the query server. The value of this parameter is either the English name associated with this field in the Reconciler window or the DICOM tag associated with this field.
stopAfterMatch =	Specifies whether the reconcile query function stops querying once a query returns one or more results. Choices are: **True** (stop querying if one or more results are returned), **False** (the default; continue querying, regardless of whether any results are returned).

A sample Reconciler profile would look like the following:

```
[ ReconcilerProfile ]
queryServer = mwlwithsps
fieldToCopyFromServer = Specific Character Set
fieldToCopyFromServer = Patient Name
fieldToCopyFromServer = Patient ID
fieldToCopyFromServer = Patient DOB
fieldToCopyFromServer = Patient Sex
fieldToCopyFromServer = Accession #
stopAfterMatch = false
```

Setting Up Destination Profiles

Codonics Integrity supports multiple Destination profiles, each of which can define a unique set of parameters for sending studies to a destination. Parameters include the destination's host IP address, TCP port number, and Called AE Title.

Each destination that is displayed in the user interface corresponds to a Destination Group profile. The Destination Group profile includes one or more Destination profile names for each of the destinations to be included in the group. So, for a user to store studies to a destination, its Destination profile must be defined in a Destination Group profile.

Creating a Destination Profile

For general information about creating and modifying a profile, refer to "Creating and Modifying Profiles" on page 3-6.

Destination profiles are stored in the **\profiles\storeclient** directory on the SmartDrive. The file name should be in the following format:

```
destination.profilename.txt
```

Using a descriptive name for the *profilename* portion of the file name will help you and other users identify the file and the destination.

The format and parameters of the Destination profile text file are defined in the following table.

Table 3-8. Destination Profile Format and Parameters

Parameter	Description
[DestinationProfile]	Section identifier. This parameter must occur before all other parameters in the file.
	NOTE: Do not change this identifier.
host =	IP address of the destination DICOM device.

Table 3-8. Destination Profile Format and Parameters (Continued)

Parameter	Description
port =	The port number required for communication with the destination DICOM device. The default port number is **104**.
calledAETitle =	The AE Title that identifies the destination DICOM device.
callingAETitle =	The AE Title that identifies Integrity.
doStoreCommit =	Specifies whether the send operation will perform a store commit to the destination server. Choices are: **True** (perform store commit), **False** (the default; do not perform store commit).
includeContributingEquipmentSequence =	Specifies whether a sequence identifying the hardware used to modify the DICOM data should be added to each header modified. Choices are: **True** (the default; add sequence), **False** (do not add sequence).

> *TIP: Copying an existing Destination profile to create a new one*
> *To create new Destination profiles, you can copy an existing Destination profile—for example, **destination.default.txt**, which is preinstalled on every SmartDrive—rename it, and modify the parameters as necessary.*

A sample Destination profile would look like the following:

```
[ DestinationProfile ]
host = 192.168.0.10
port = 104
calledAeTitle = PACS_Archive_AE
callingAeTitle = Integrity
doStoreCommit = FALSE
includeContributingEquipmentSequence = TRUE
```

Creating a Destination Group Profile

For general information about creating and modifying a profile, refer to "Creating and Modifying Profiles" on page 3-6.

Destination Group profiles are stored in the **\profiles\storeclient** directory on the SmartDrive. The file name should be in the following format:

```
destinationgroup.profilename.txt
```

The *profilename* portion of the file name is displayed as a destination in the user interface, so use a name that will help you and other users identify the destination(s) in this Destination Group profile.

The format and parameters of the Destination Group profile text file are defined in the following table.

Table 3-9. Destination Group Profile Format and Parameters

Parameter	Description
[DestinationGroupProfile]	Section identifier. This parameter must occur before all other parameters in the file.
	NOTE: Do not change this identifier.
destinationProfile =	Specifies which destinations to include in the group, using the profile name in the Destination Profile file names. This parameter is entered for each destination to be included in the group. For example: **destinationProfile = Virtua** **destinationprofile = PACS**

> **TIP: Copying an existing Destination Group profile to create a new one**
> *To create new Destination Group profiles, you can copy an existing Destination Group profile—for example, **destinationgroup.default.txt**, which is preinstalled on every SmartDrive—rename it, and modify the parameters as necessary.*

A sample Destination Group profile would look like the following:

```
[ DestinationGroupProfile ]
destinationProfile = Virtua
destinationProfile = PACS
```

Logging Out

☞

To log out

Click the **Log Out** button at the top right of the screen.

Click **Log Out**

The Login screen displays.

Shutting Down and Rebooting

Before attempting to shut down or reboot the system, make sure that all jobs have finished.

To shut down or reboot the system

1. From the Login screen, click the **Shutdown** button at the top right of the screen.

Click **Shutdown**

You are prompted as to whether you want to shut down the system, reboot the system, or cancel the shutdown.
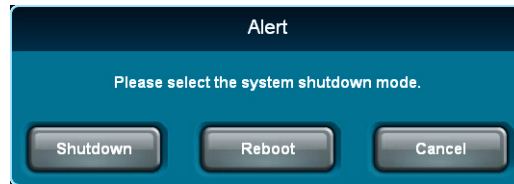
2. Click the desired shutdown option.

After initiating a shutdown or reboot, shutdown messages are displayed.

Integrity SmartDrive

The SmartDrive is a USB flash drive on which critical system information is stored, including configuration data.

⚠️ **CAUTION** The SmartDrive must be inserted for Integrity to operate. If the SmartDrive is not inserted, Integrity can boot up but will not be able to process jobs. A message at the Display will prompt you to insert the SmartDrive.

The SmartDrive also allows you to move a device's configuration to another device. This feature is especially helpful when swapping devices for service purposes.

Note that a SmartDrive cannot be duplicated. That is, it cannot be used in two devices at the same time.

The SmartDrive stores the following information:

• **Software license code.** This is the serial number for the Integrity software. All keyed features are keyed off of the License Code. This code is also printed on the SmartDrive's label.

• **Device configuration.** This includes all of the profile files covered in this chapter. It also includes other system profiles.

4

Importing Studies

All jobs that are being or have been imported into Integrity are listed on the **Studies** tab. Study jobs that are currently queued for processing are listed on the **Queue** tab.

From the **Studies** tab, you can:

- Filter, scroll through, and sort the list of studies

- Check the status of a study

- Initiate a study reconciliation with demographic information from Modality Worklist (MWL) and/or Query/Retrieve (Q/R) servers

- Store a study to a destination

- Display detailed information about a study

- Delete a study

From the **Queue** tab, you can:

- Filter, scroll through, and sort the list of queued jobs

- Check the status of a job

- Display detailed information about a job

- Delete a job

These tasks are covered in the topics in this chapter.

Reading a CD/DVD

When you insert a CD/DVD into Integrity, it begins reading the studies stored on it.

To read a CD/DVD

Insert the CD/DVD.

The **Studies** screen displays the CD/DVD read status.

If successful, Integrity will automatically eject the CD/DVD.

If an error occurs, Integrity will sound a beep and not eject the disc until the user acknowledges the error via the Dashboard or manually ejects the disc from Integrity.

CD/DVD Eject
button

Cautions and Notes About Inserting and Removing CDs/DVDs

CAUTION Do not insert non-standard sized CDs/DVDs (i.e., less than 120 mm in diameter or not round) into Integrity.

CAUTION A loose label can cause a CD/DVD to jam. Before inserting a CD/DVD that has an adhesive label, ensure that the label is properly adhered to the CD/DVD.

NOTES:

- *If the CD/DVD is part of a multi-disc set, studies imported from previous CDs/DVDs in the set may be incomplete.*

- *If the CD/DVD contains a study image that has already been imported into Integrity, then the image will either be imported again using a different UID or the image will be ignored. The setting for which approach to use for a duplicate image is defined in the System Profile. For more information, refer to "Setting Up the System Profile" on page 3-13.*

- *To prevent scratching the CD/DVD, do not tilt the CD/DVD when removing it from the drive.*

- *When inserting a CD/DVD, use care that you do not accidentally press the **Power** button, which would start an Integrity shutdown.*

Using the Studies Tab Controls

The following illustration shows how to filter, sort, and scroll through the studies listed on the **Studies** tab.

Use these buttons to filter the jobs that will be listed:

New	Studies that have not been reconciled or stored.
Reconciled	Studies that have been reconciled but not stored.
Stored	Studies that have been stored.
All	All studies, regardless of status.

Click a column heading to sort the list by that column

Patient	Study Description	Modality	Study Date	DOB (Sex)	Status	Actions
SOLARI, MARY	KIDNEY	LP (1)	3/7/08	9/11/54 (F)	Reading	🔍
MAYMI, MARY	PANCREAS	MG (20)	3/7/08	9/11/54 (F)	Ready	🔍
GOODRICK, MARY	HEART	NM (20)	3/7/08	9/11/54 (F)	Ready	🔍
DELAPUENTE, PATRICIA	KIDNEY	HC (20)	3/7/08	5/2/10 (F)	Ready	🔍

0 of 4 selected | Page 1 of 1

Scroll one page at a time

Scroll to beginning or end of list

Reconciling and Storing a Study

Once a study has been imported into Integrity, its demographic information can be reconciled against the study's matching information from the MWL and/or Q/R server(s) that Integrity is configured to query.

To reconcile and store a study

1. Click the **Studies** button.

2. Click the **New** filter button.

3. Select the study.

4. Click the **Reconcile** button.

The **Reconcile** window displays.

Reconcile

	Original Data	Search Result Data		Updated Data
Search Results: ◀ 1 of 5 ▶				New Search
Patient Name	TARBET^MARY	TARBET^MARY	Patient Name	TARBET^MARY
	000000 03132008143812	12345-67890	Patient ID	12345-67890
	19540911	19540911	Patient DOB	19540911
	F	F	Patient Sex	F
	000000 03132008143812		Study ID	000000 03132008143812
	20080313		Study Date	20080313
	000000 03132008143812		Accession Number	000000 03132008143812
	LUNG		Study Description	LUNG
	BELLARD		Referring Physician	BELLARD
Store to: ◀ default ▶				Store Save Cancel

5. Review the study information from the CD/DVD in the **Original Data** column.

6. Review the study information from the MWL and/or Q/R server(s) in the **Search Result Data** column.

7. If required, select a different match using the **Search Results** arrow buttons.

8. If required, edit the **Updated Data** column fields:

   - Click the **Original Data** or **Search Result Data** field to copy that information to the **Updated Data** field.

   OR

   - Manually type in the **Updated Data** field.

9. Select the DICOM Store destination using the **Store to** arrow buttons.

10. Click the **Store** button to save reconciled data and store the study to the chosen destination(s).

The study can be seen in the **Reconciled** or **All** filter, and its status changes to Storing.
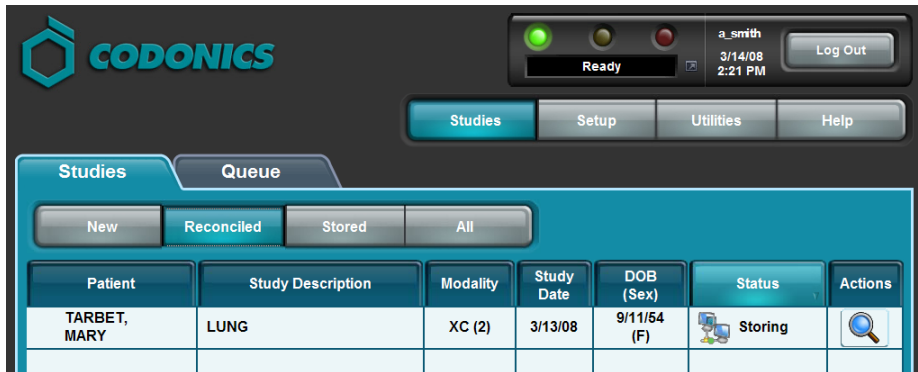
OR

To save the reconciled data to Integrity without storing the study to an external destination, click the **Save** button.

Storing a Study from the Studies Tab

If you have previously reconciled and saved a study, you can store that study directly from the **Studies** tab.

To store a study directly from the Studies tab

1. Click the **Studies** button.

2. Click one of the filter buttons.

3. Select the study.

4. Click the **Store** button.

5. Select the DICOM Store destination using the arrows.
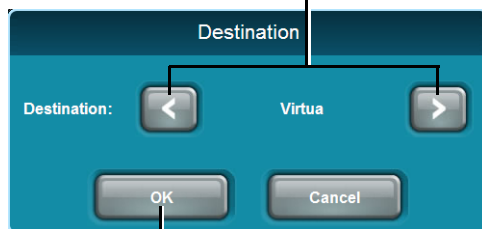
6. Click the **OK** button to store the studies.

The study status changes to Sending.

Viewing Queued Jobs

The **Queue** tab lists all of the study jobs that are currently queued for processing.

The following illustration shows how to filter, sort, and scroll through the jobs queue on the **Queue** tab.

Use these buttons to filter the jobs that will be listed:

All	All queued jobs.
Error	Jobs that failed to complete processing successfully.

Click a column heading to sort the list by that column.

Patient Name	Study Description	Destination	Status	Actions
SOLARI, MARY	KIDNEY	default	Storing	
DELAPUENTE, PATRICIA	KIDNEY	default	Error	

1 Sending, 0 Queued, 0 Errors   Page 1 of 1

Scroll one page at a time.

Scroll to beginning or end of list.

Viewing Study and Job Details

You can view detailed information about a study listed in the **Studies** tab or a job listed in the **Queue** tab.

In the **Studies** tab, click the Details icon for the study.

Details icon

The Study Details window displays.

Study Details	
Patient Name:	MARY BAUMGARTNER
Patient ID:	000000 03142008142256
Patient DOB:	9/11/54
Patient Sex:	F
Study Date:	3/14/08
Study Time:	2:22 PM
Referring Physician:	SANSEVERINO
Study ID:	000000 03142008142256
Accession Number:	000000 03142008142256
Study Description:	HEART
Body Part Examined:	N/A
Modality:	RF
Image Count:	2 images
Study Received:	3/14/08 2:23 PM
Locked for Editing:	

OK

In the **Queue** tab, click the Details icon for the job.

Details icon
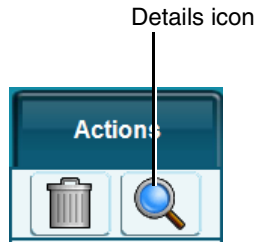
The Job Details window displays.
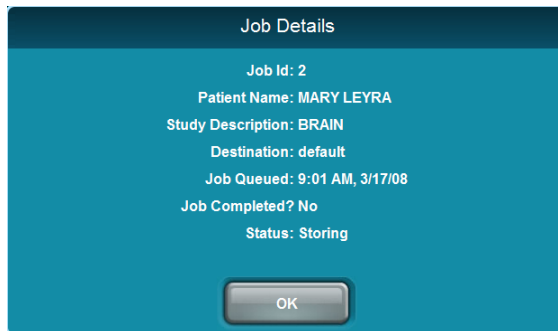
Deleting a Study

While older studies are automatically deleted, studies can be manually deleted to free up additional Integrity storage space.

To delete a study

1. Click the **Studies** button.

2. Click one of the filter buttons.

3. Select the study.

4. Click the **Delete** button.

TIP: Selecting multiple studies to delete
Multiple studies can be included in the delete operation by clicking the studies to select them.

After clicking the **Delete** button, you are prompted to confirm the deletion.

Deleting a Job

Jobs that have been completed should be periodically deleted to free up Integrity storage space.

Click the Delete icon for the job.

To delete a job

Delete icon

You are prompted to confirm the deletion.

5

Working with Locales

Locale-Related Features

The locale setting is used to specify regional information displayed by the system, including language, date and time format, and some study demographic information. Codonics Integrity includes several features to support different locales.

User Interface

The user interface is in English by default, and Japanese is also supported. However, the local language is supported for DICOM demographic information.

Tier 1 and Tier 2 Regions

For locales, languages in Tier 1 regions are fully supported. Languages in Tier 2 regions are configured in Integrity but are not fully verified and supported.

Table 5-1 lists the Tier 1 and Tier 2 locales.

The locale for Integrity is set in the locale profile. For more information, refer to "Setting Up the Locale Profile" on page 5-7.

You should set Integrity to your locale for the best compatibility with studies likely to be read from discs received in the locale. If you set Integrity to your locale, it is more likely that the study information will be readable in the local language.

Table 5-1. Locales—Tier 1 and Tier 2

Locale	Locale Profile Configuration Code	Tier 1	Tier 2
Arabic - Egypt	ar_EG		●
Arabic - Iraq	ar_IQ		●
Arabic - Jordan	ar_JO		●
Arabic - Kuwait	ar_KW		●
Arabic - Lebanon	ar_LB		●
Arabic - Saudi Arabia	ar_SA		●
Arabic - Syria	ar_SY		●
Arabic - U.A.E.	ar_AE		●
Chinese - Hong Kong SAR	zh_HK		●
Chinese - PRC	zh_CN		●
Chinese - Singapore	zh_SG		●
Chinese - Taiwan	zh_TW		●
Danish - Denmark	da_DK		●
Dutch - Belgium	nl_BE		●
Dutch - Netherlands	nl_NL		●
English - Australia	en_AU		●
English - Canada	en_CA		●
English - New Zealand	en_NZ		●

Table 5-1. Locales—Tier 1 and Tier 2 (Continued)

Locale	Locale Profile Configuration Code	Tier 1	Tier 2
English - South Africa	en_ZA		●
English - United Kingdom	en_GB		●
English - United States	en_US	●	
Finnish - Finland	fi_FI		●
French - Belgium	fr_BE		●
French - Canada	fr_CA		●
French - France	fr_FR		●
French - Luxembourg	fr_LU		●
French - Switzerland	fr_CH		●
German - Austria	de_AT		●
German - Germany	de_DE		●
German - Luxembourg	de_LU		●
German - Switzerland	de_CH		●
Greek - Greece	el_GR		●
Hebrew - Israel	iw_IL		●
Hungarian - Hungary	hu_HU		●
Italian - Italy	it_IT		●
Italian - Switzerland	it_CH		●
Japanese - Japan	ja_JP	●	
Korean (Extended Wansung) - Korea	ko_KR		●
Latvian - Latvia	lv_LV		●

Table 5-1. Locales—Tier 1 and Tier 2 (Continued)

Locale	Locale Profile Configuration Code	Tier 1	Tier 2
Lithuanian - Lithuania	lt_LT		●
Malay - Brunei Darussalam	ms_BN		●
Norwegian - Norway (Bokmål)	no_NO		●
Polish - Poland	pl_PL		●
Portuguese - Brazil	pt_BR		●
Portuguese - Portugal	pt_PT		●
Romanian - Romania	ro_RO		●
Russian - Russia	ru_RU		●
Serbian - Serbia (Cyrillic)	sr_CS1		●
Serbian - Serbia (Latin)	sr_CS2		●
Spanish - Argentina	es_AR		●
Spanish - Chile	es_CL		●
Spanish - Colombia	es_CO		●
Spanish - Dominican Republic	es_DO		●
Spanish - Mexico	es_MX		●
Spanish - Peru	es_PE		●
Spanish - Puerto Rico	es_PR		●
Spanish - Spain (International Sort)	es_ES		●
Spanish - Venezuela	es_VE		●
Swedish - Finland	sv_FI		●
Swedish - Sweden	sv_SE		●

Table 5-1. Locales—Tier 1 and Tier 2 (Continued)

Locale	Locale Profile Configuration Code	Tier 1	Tier 2
Tamil - India	ta_IN		●
Thai - Thailand	th_TH		●
Turkish - Turkey	tr_TR		●
Vietnamese - Vietnam	vi_VN		●

Working with Locales

Character Sets Supported by DICOM

Integrity contains the following characters sets that are supported by DICOM.

Table 5-2. Integrity Character Sets Supported by DICOM

DICOM-Defined Term	Common Name	Description
ISO_IR 6	US-ASCII	7-bit characters (Default)
ISO_IR 100	ISO 8859-1	Latin Alphabet No. 1, Western European
ISO_IR 101	ISO 8859-2	Latin Alphabet No. 2, Eastern European
ISO_IR 109	ISO 8859-3	Latin Alphabet No. 3
ISO_IR 110	ISO 8859-4	Latin Alphabet No. 4
ISO_IR 144	ISO 8859-5	Latin/Cyrillic Alphabet
ISO_IR 127	ISO 8859-6	Latin/Arabic Alphabet
ISO_IR 126	ISO 8859-7	Latin/Greek Alphabet
ISO_IR 138	ISO 8859-8	Latin/Hebrew Alphabet
ISO_IR 148	ISO 8859-9	Latin Alphabet No. 5
ISO_IR 13	JIS X 0201-1976	Katakana Alphabet
ISO_IR 166	TIS 620 (1990)	Thai Alphabet
ISO_IR 14	JIS X 0201-1976	Romaji Alphabet (Japanese ASCII)
ISO_IR 87	JIS X 0208-1990	Kanji Alphabet
ISO_IR 159	JIX X 0212-1990	Supplementary Kanji Alphabet
ISO_IR 149	KS X 1001-1997	Hangul and Hanja Alphabets (Korean)
ISO_IR 192	ISO 10646	Unicode in UTF-8
GB18030	GB18030	Simplified Chinese, PRC standard

This DICOM character encoding support allows patient and study data to display properly.

Setting Up the Locale Profile

The Locale profile includes configuration parameters that define locale-specific display elements and functions.

The Locale profile file—**locale.default.txt**—is preinstalled on the SmartDrive in the **\profiles\locale** directory. You can modify this file to specify locale configuration information. For general information about modifying a profile, refer to "Creating and Modifying Profiles" on page 3-6.

The format and parameters of the Locale profile text file are defined in the following table.

Table 5-3. Locale Profile Format and Parameters

Parameter Name	Description
[LocaleProfile]	Section identifier. This parameter must occur before all other parameters in the file. *NOTE: Do not change this identifier.*
localeProfileName =	The name of the locale profile. Only **default** is supported in the current release.
doAdjustForDaylightSavingsTime =	Not currently implemented.
twelveTwentyfourDisplay =	Specifies whether to use a 12- or 24-hour time format. Currently supported only for Japanese. Other languages default to a 12-hour format. Choices are: **12**, **24**.
timezone =	Not currently implemented.

Table 5-3. Locale Profile Format and Parameters (Continued)

Parameter Name	Description
personNameFormat =	Defines the complete format of a patient's name as displayed on the user interface.
	Given a DICOM person name of the form:
	nameA=nameB=NameC
	Valid entries are:
	1: use nameA
	2: use nameB
	4: use nameC
	3: use nameA and nameB
	5: use nameA and nameC
	6: use nameB and nameC
	Because there is room in the user interface for only two names, when personNameFormat = **7** or **0**, the first two names that are defined are displayed.
column2 =	Not used.
locale =	Specifies the locale to be used in Integrity.
	Choices are listed in the second column of Table 5-1 on page 5-2.

A typical Locale profile would look like the following:

```
[ LocaleProfile ]
localeProfileName = default
doAdjustForDaylightSavingsTime = true
twelveTwentyfourDisplay = 24
timezone = EST
personNameFormat = 0
column2 =
locale = en_US
```

6

Maintenance

Backing Up Integrity Files

Integrity maintains log files of all stored studies and processing activities. If required to meet your organization's HIPAA regulations, you can save these files to the SmartDrive and then copy them to a PC for backup purposes.

As a security measure in the event that the SmartDrive is not working properly or is lost, you may also want to back up all of the other files on the SmartDrive.

The following two procedures describe how to capture log files to the SmartDrive and how to copy files on the SmartDrive to a PC.

Capturing Log Files to the SmartDrive

You must be logged in as a user with administrator privileges to perform this procedure.

CAUTION Integrity log files might contain patient information. Use caution when distributing log files.

1. Click the **Utilities** button.

    The **Diagnostics** tab displays.

2. Use the **Capture Logs** scroll buttons to select the log file type to capture, then click the **Capture** button.

A confirmation alert displays.

Alert

This operation will capture the selected logs to the SmartDrive. It takes about a minute to capture the data to the SmartDrive.

Do you want to continue?
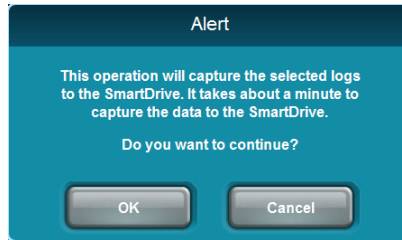
OK   Cancel

3. Click the **OK** button to continue with the capture (or the **Cancel** button to cancel it).

   Status information displays.

Info

Initiating capture of system logs...
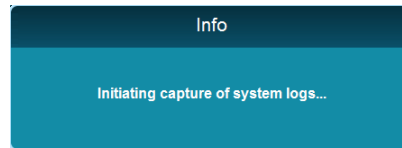
   When the capture is complete, the **Diagnostics** tab displays.

4. Continue capturing the other log file types that you want to back up.

The captured log files are stored in Zip files in the SmartDrive root directory.

Copying SmartDrive Files to a PC

To copy SmartDrive files to a PC

1. Notify all Integrity users to log out.

2. On the Queue tab, verify that no jobs are being processed.

3. Log out and shut down the system (refer to "Logging Out" on page 3-30 and "Shutting Down and Rebooting" on page 3-31).

   The device powers off at the end of the shutdown process.

Maintenance

4. Remove the SmartDrive, which is inserted in a USB port at the rear of Integrity.

5. Mount the SmartDrive in a USB port on a PC or other USB-compatible computer.

   The SmartDrive will appear as a standard USB flash drive.

6. Copy the desired directory and files on the SmartDrive to a directory on the PC.

7. When you have finished copying the log files to the PC, unmount the SmartDrive from the computer, then insert it back into the Integrity USB port.

8. Power on Integrity by pressing the power button at the front of Integrity.

Cleaning the Integrity Cover

To clean the Integrity cover, log out and shut down the system (refer to "Logging Out" on page 3-30 and "Shutting Down and Rebooting" on page 3-31). Integrity powers off at the end of the shutdown process. Then unplug Integrity. Clean the cover with a clean soft cloth or towel slightly moistened with a mild soap and water solution. Allow the cover to completely dry before operating Integrity again.

CAUTION Always power off Integrity and disconnect its power cord before cleaning. Resume operation only after the surfaces are completely dry.

Installing Integrity Software

If you have to reinstall Integrity software due to a system problem, or are installing a software upgrade, use the following general procedure.

⚠️ **CAUTION** Integrity is designed to run only authorized Integrity software. Do not install other software applications. This includes unauthorized anti-virus software. Installation of unauthorized software applications can affect system performance or interfere with system operation.

To install Integrity software

1. Wait for all Integrity activity to complete.

2. Log out of all user sessions.

3. Press the Integrity **Power** button.
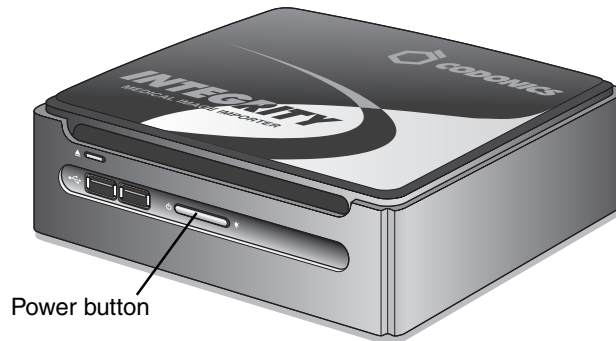
Power button

4. Wait one minute for shutdown to complete.

   The blue Power indicator light at the front of Integrity will go off when shutdown is complete.

5. Press the Integrity **Power** button.

Maintenance

6. Immediately insert the Operating Software disc.

The Operating System disc will eject after 20 minutes.

7. Wait 30 to 60 minutes for installation to complete.

An audible tone indicates when the Integrity application is running, users can log in, and discs can be imported.

Preparing Integrity for Shipping

If you have to ship Integrity for any reason (for example, to return it to Codonics for service), you must use the original box and packing materials. If you do not have the original box and packing materials, contact your Codonics representative for instructions on how to return it.

7

Status Indicators and Troubleshooting

Status Indicators

The Dashboard includes the following status indicators:

- **LED status indicators.** The three LED-style lights indicate the overall status of Integrity.

- **Status messages.** Messages that provide basic information about Integrity's operating state. Clicking the Dashboard displays more detailed status information.

On: Ready
Flashing: Processing

Alert condition: Device can still process jobs but requires user attention

Fault condition: Device cannot process jobs and requires user attention

admin
12/28/07
2:42 PM

Ready

Status messages   Logged in user
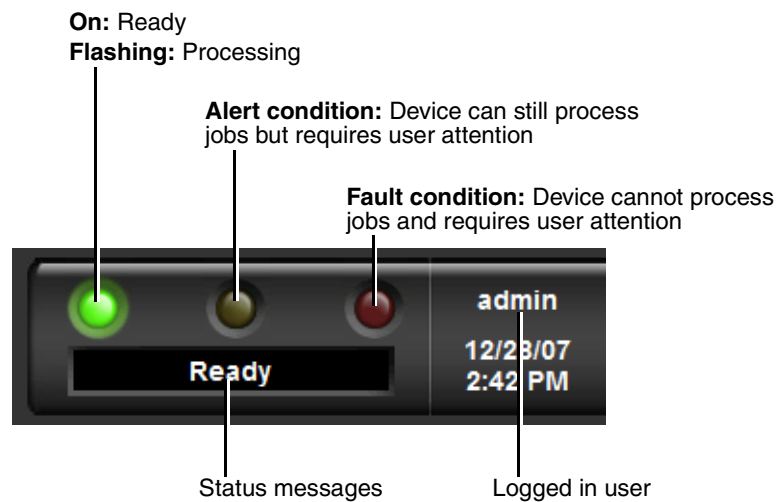
The following table explains how to interpret the state of the LED status indicators.

Table 7-1. LED Status Indicators

Status Icon	Description
Green: On	Ready condition. The ready condition indicates that Integrity is properly configured and can accept CD/DVD discs for processing. The message "Ready" also displays in the Dashboard status message area.
Green: Flashing	Processing. This processing state indicates that Integrity is reading a CD/DVD or storing study.
Yellow: On	Alert condition. An alert condition indicates that Integrity requires user attention but can still process studies. The specific alert condition is displayed in the Dashboard status message area. An example is that a feature key has expired.
Red: On	Fault condition. A fault condition indicates that Integrity cannot process studies and requires user attention. The specific fault condition is displayed in the Dashboard status message area. Examples are a read error or a virus has been detected.

Displaying Status Details

You can display the Status Details window to view more detailed information about Integrity status than is available on the Dashboard.

**To display
detailed
information
about Integrity
status**

Click any portion of the Dashboard.

The Status Details window displays.

Status Details	
Queue:	**Stores in Progress:** 0
Network:	**IP Address:** 10.1.136.173
	Netmask: 255.255.0.0
	Gateway: 10.1.1.1
	DICOM Port: 104
	MAC Address: 00-00-50-1D-83-42
	Network Speed: Connected at 100Mbps
Current Status:	Ready

OK
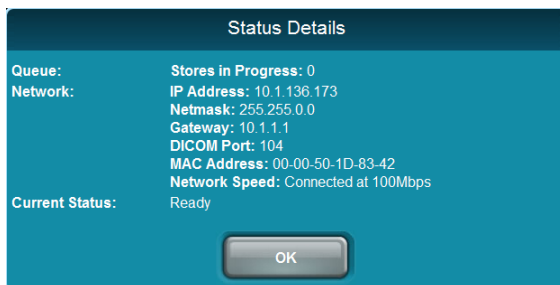
Troubleshooting Common Problems

The following table lists common problems, their possible causes, and how to solve them.

Table 7-2. Troubleshooting

Problem	Possible Causes	Solutions
Integrity startup fails.	Integrity does not have power.	Check the power cable.
	The SmartDrive has been removed.	Verify SmartDrive is connected.
Login fails.	An incorrect username or password is being used.	Verify username and password.
		Verify password case (upper-case and lower-case).
Network not responding.	The network settings are not configured properly.	Check network settings.
	The network cable is not connected.	Verify network cable is connected.
	The SmartDrive has been removed.	Verify SmartDrive is connected.
Integrity is not responding.	Integrity does not have power.	Verify that Integrity is powered on.
		Cycle power to Integrity.
Display shows read error.	The CD/DVD is not IHE-PDI compliant.	Verify CD/DVD is IHE-PDI compliant.
CD/DVD does not eject after read; Integrity continuously beeps.	The CD/DVD does not contain DICOM data.	Verify CD/DVD contains DICOM data.
	The CD/DVD is scratched or damaged.	Verify CD/DVD is not scratched or damaged.
	The CD/DVD contains a virus.	Click anywhere in the Dashboard to display the status details and see if a virus has been detected.
Audible tone is not being sounded when errors occur or Integrity successfully starts up.	Speaker is not connected.	Make sure that the speaker is connected to Integrity.

Table 7-2. Troubleshooting (Continued)

Problem	Possible Causes	Solutions
Reconciling studies has unexpected results	You are logged in as the user **demo**.	Make sure you are logged in using one of the standard user names.
System responses are slow.	Multiple jobs are being processed at the same time.	Wait for jobs to complete.
	Large jobs with many images are being processed.	
	Too many remote web connections are active.	Reduce the number of web connections being performed by Integrity users.
	Too many studies are stored in Integrity.	Delete unneeded studies. Refer to "Deleting a Study" on page 4-13.
	There is a problem with the system software.	Perform a fresh Integrity software installation.

Displaying Support Information

The Help screen includes support information, such as Codonics contact information, as shown below.

To display support information

Click the **Help** button.

The Help screen displays.

Allowing Remote Access

Integrity provides a Connect to Support utility that allows Codonics Technical Support personnel to access Integrity remotely and help users with configuration, troubleshooting, and general product usage questions.

You must be logged in as a user with administrator privileges to run this utility.

NOTE: Only a user at the site can initiate the remote access connection to Codonics Technical Support. This prevents unauthorized access to Integrity.

CAUTION Initiate a remote access connection to Codonics only when requested by Codonics Technical Support personnel.

Integrity must be connected to a LAN that has Internet access for this utility to work. Remote access requires that the firewall at the customer site allow outgoing and incoming network connections to Integrity on TCP port 5500.

When a connection is made, Codonics Technical Support personnel can see the same screens as you and have the same control over Integrity as you do. This allows you and Codonics to work cooperatively to solve problems.

You can disconnect the session at anytime. If either Codonics or a user at the site disconnect, only a user at the site can initiate a new connection.

1. Click the **Utilities** button.

   The Utilities screen displays.

2. If not already displayed, click the **Diagnostics** tab.

3. Click the arrow buttons to select the appropriate connection, as directed by Codonics Technical Support.

Select the connection,
as directed by Technical Support
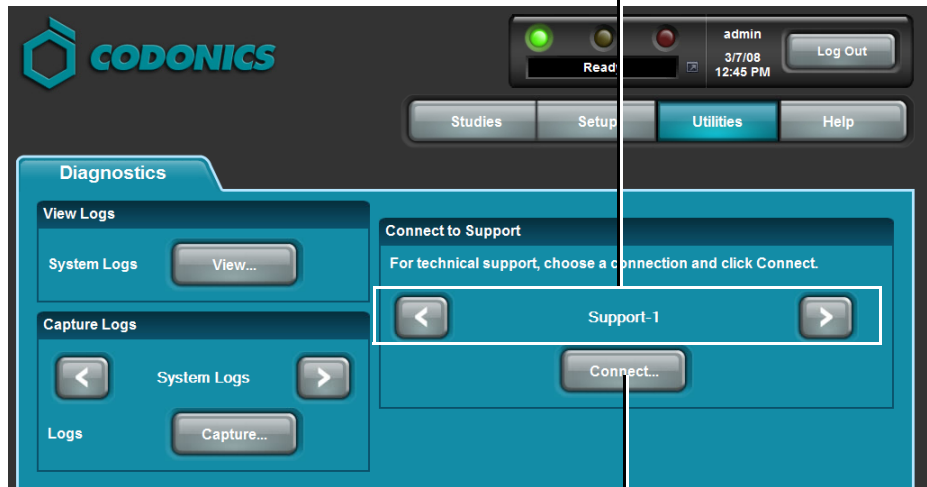
Click **Connect** to open the connection

4. Click the **Connect** button to open the connection to Codonics Technical Support.

   Technical Support can now view the Integrity interface and control Integrity. While connected, the **Connect** button changes to **Disconnect**.

5. When the session is complete, click the **Disconnect** button to end the connection.

System Logs

If your Integrity device is experiencing problems, Codonics Technical Support might ask you to access the system log files that are maintained by Integrity. The following topic explains how to access the system logs.

Technical Support might also ask you to send copies of the system log files to them. This can be done by capturing the log files to the SmartDrive, copying them from the SmartDrive to a PC, and then either e-mailing them or burning them to a CD/DVD and sending the disc. For more information on how to capture the log files and copy them to a PC, refer to "Backing Up Integrity Files" on page 6-1.

Accessing Log Files

You must be logged in as a user with administrator privileges to access the log files.

CAUTION System logs do not have the same user interface appearance and behavior as other screens. These logs should not be accessed unless requested by Codonics Technical Support personnel.

To access system logs

1. Click the **Utilities** button.

   The Utilities screen displays.

2. If not already displayed, click the **Diagnostics** tab.

3. In the View Logs panel, click the **View** button.

Click **View** to open the Log Files page
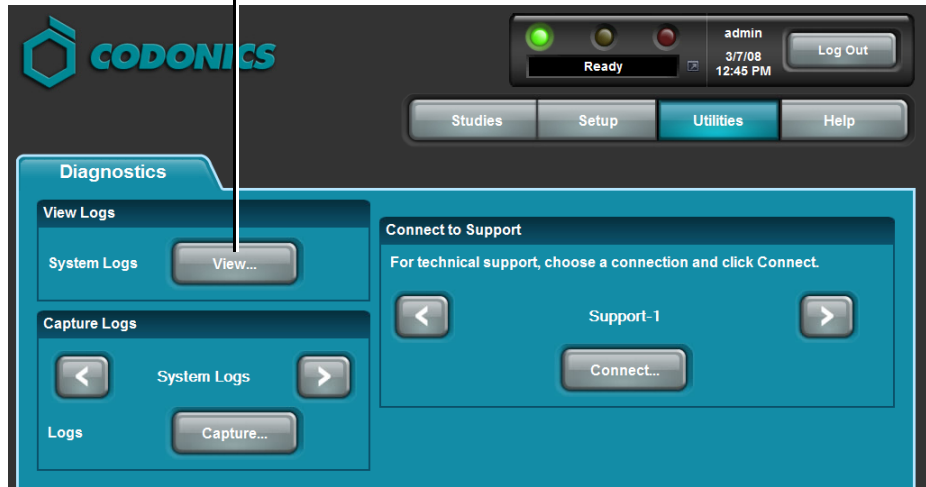
The Log Files list displays. Technical Support will direct you regarding which log files to access.

4. To close the Log Files screen and return to the Utilities screen, click the **Back** link on the Log Files home page.

A

Hazardous Material Information

Materials of Construction

The Integrity unit is RoHS compliant.

Codonics has set very stringent standards for evaluating products to ensure the marketing of regulatory compliant products worldwide.

We do not intentionally add, nor are we aware, that the products or packaging contain the following materials:

- Bioavailable arsenic (small amounts of arsenic used in glass, LEDs, and semiconductors are not considered to be bioavailable).

- Bioavailable crystalline silica (small amounts of crystalline silica are used in certain paints, coatings, and filler materials).

- Polychlorinated biphenyls (PCBs).

- Asbestos.

- Organic tin (not used in tin lead solder applications).

- Ozone-depleting substances such as chlorofluorocarbons, methyl chloroform, and carbon tetrachloride.

Matériaux de Construction

L'appareil Integrity est conforme à la norme RoHS et par conséquent ne contient aucun des composants suivants:

Afin d'obtenir les certificats de conformité de ses produits dans le monde entier, Codonics utilise les standards d'évaluation les plus contraignants pour tester ses produits.

Codonics assure notamment n'avoir ajouté ou avoir été informé que soit ajouté les composants suivants dans son produit et son emballage:

- *Arsenic (de très faible quantité d'arsénic sont présents dans le verre, les leds et les semi-conducteurs sans portée atteinte à l'organisme)*

- *Cristaux de silicium*

- *Biphenyls polychlorés*

- *Amiante*

- *Matières organiques*

- *Substances portant atteinte à la couche d'ozone tels que des carbones chlorofluorés du chloroforme et des tétrachlorures de carbone*

Manufacturing

During manufacturing operations that produce Codonics products (including packaging), no ozone depleting substances (such as chlorofluorocarbons, methyl chloroform, and carbon tetrachloride) are used.

Fabrication

Aucun composant susceptible de détruire la couche d'ozone ne sont utilisés lors de la fabrication (emballage inclus) des produits Codonics.

B

Specifications

Specifications (English)

User Interface:	Remote web browser access
Media:	CD-R, CD-RW, DVD-R, DVD-RW, DVD+R, DVD+RW
Input Formats:	DICOM 3.0, IHE PDI, ACR NEMA, older DICOM image files
Processor:	Intel® Pentium® Dual-Core
Memory:	2 GB
Hard Drive:	80 GB
Interfaces:	10/100/1000 Auto Sensing Ethernet (RJ-45) 4 USB-2.0 host-side ports
Search Rules:	Configurable
Store Destinations:	Configurable (10 maximum)
Anti-Virus:	Factory installed, alternate configurations optional
Power:	90 W AC-DC adapter (19 V, 4.74 A)
Input Voltage:	100–240 Vac, 50/60 Hz
Temperature:	Operating: 15–30°C (59–86°F) Storage: -22.2–51°C (-8–123.8°F)
Humidity:	Operating: 20%–80% noncondensing Storage: 85% maximum, noncondensing
Dimensions:	6.49 in. (16.5 cm) W, 6.49 in. (16.5 cm) D, 1.96 in. (5 cm) H
Weight:	2.41 lbs (1.46 kg)
Medical Compliance:	FDA Class 1 listed device

U.S. Regulatory:	Safety: UL 60950-1 1st Edition EMI: FCC Part 15 Subpart B Class B
Canada Regulatory:	Safety: CSA C22.2 No. 60950-1-03 1st Edition EMI: ICES 003

Spécifications (Français)

Interface Utilisateur:	Accès à distance par navigateur Internet
Média:	CD-R, CD-RW, DVD-R, DVD-RW, DVD+R, DVD+RW
Formats d'image acceptés:	DICOM 3.0, IHE PDI, ACR NEMA, anciens fichiers d'image DICOM
Microprocesseur:	Intel ® Pentium ® Dual-Core
Mémoire:	2 GB
Disque Dur:	80 GB
Interfaces:	Ethernet à détection automatique 10/100/1000 (RJ-45) 4 ports hôtes USB-2.0
Critères de Recherche:	Configurable
Destinations de Stockage:	Configurable (10 maximum)
Anti-Virus:	Installé en usine, autres configurations en option
Alimentation:	90 W AC-DC adaptatuer (19 V, 4.74 A)
Tension d'entrée:	100–240 Vac, 50/60 Hz
Température:	En fonctionnement: 15–30°C (59–86°F) Stockage: -22.2–51°C (-8–123.8°F)
Humidité:	En fonctionnement: 20%–80% sans condensation Stockage: 85% maximum sans condensation
Dimensions:	6.49 in. (16.5 cm) P, 6.49 in. (16.5 cm) L, 1.96 in. (5 cm) H
Poids:	2.41 lbs (1.46 kg)
Certification Médicale:	Appareil classé "Class 1" par la FDA
Réglementation aux USA:	Sécurité: UL 60950-1 Première Édition EMI: FCC Partie 15 Subpart B Classe B
Réglementation au Canada:	Sécurité: CSA C22.2 No. 60950-1-03 Première Édition EMI: ICES 003

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