



CODONICS



Integrity™ Reference Guide

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European Authorized Representative:



CEpartner4U
Esdoornlaan 13,
3951DB Maarn
The Netherlands
Tel.: +31 (0)6.516.536.26

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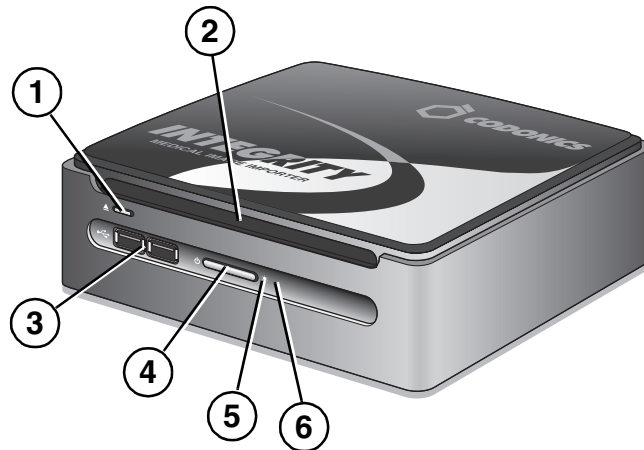
Components

Unpacked Components



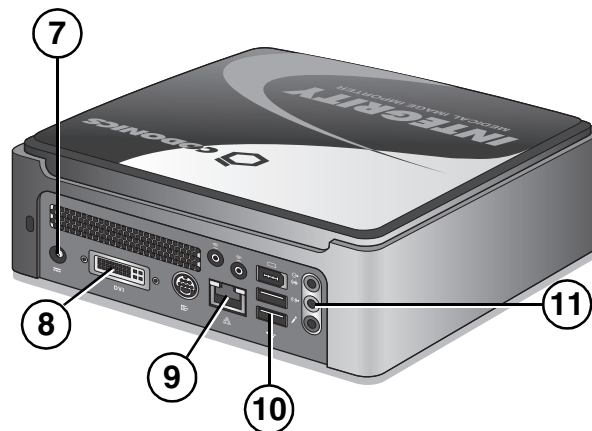
1. Integrity
2. Speaker and speaker-USB cable
3. DVI-to-VGA monitor adapter
4. Power supply
5. Power cord
6. Ethernet cable
7. SmartDrive
8. Installation disc/Operating Software
9. User's Manual disc

Integrity Front



1. CD/DVD Eject button
2. CD/DVD slot
3. USB connectors
4. Power button
5. Power indicator
6. Hard disk activity indicator

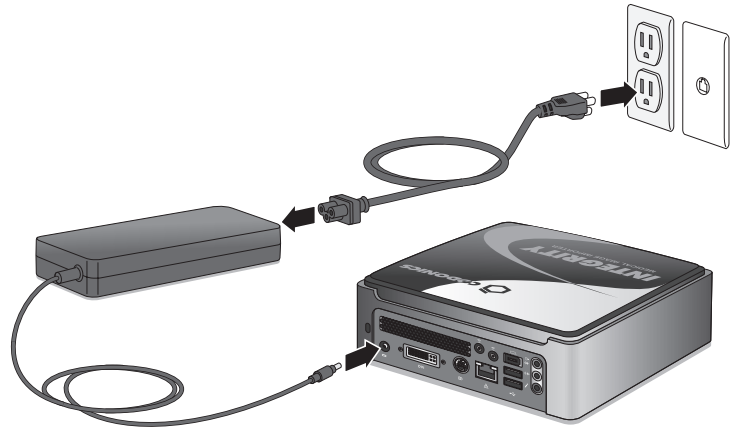
Integrity Back



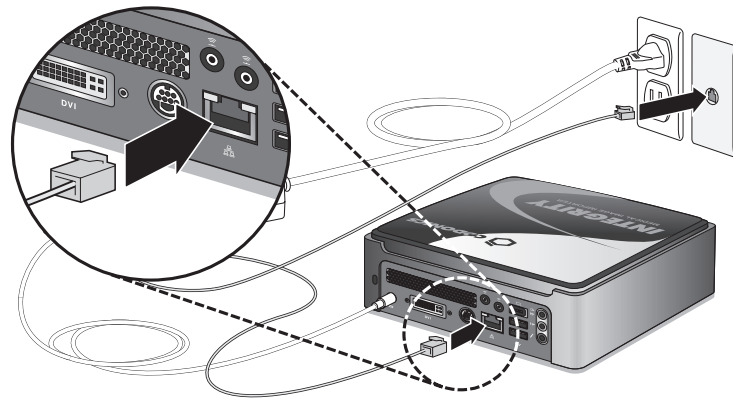
7. Power connector
8. Monitor connector (monitor is optional)
9. Ethernet connector
10. USB connectors
11. Audio Out connector

Hardware Setup

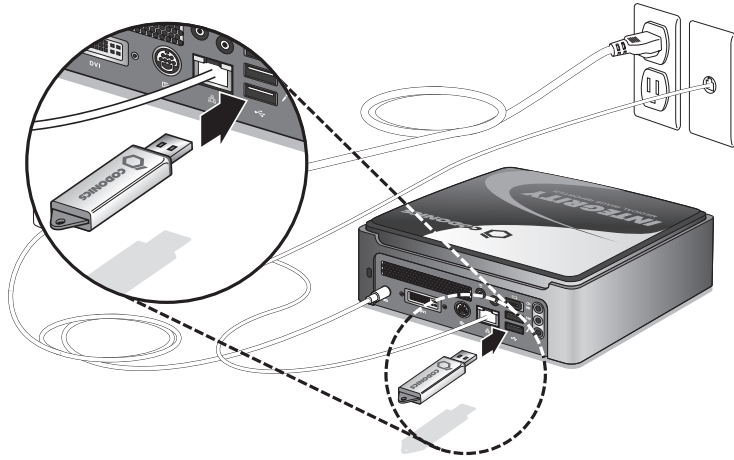
1. Unpack hardware and remove any packing material.
2. Place Integrity on a solid level surface.



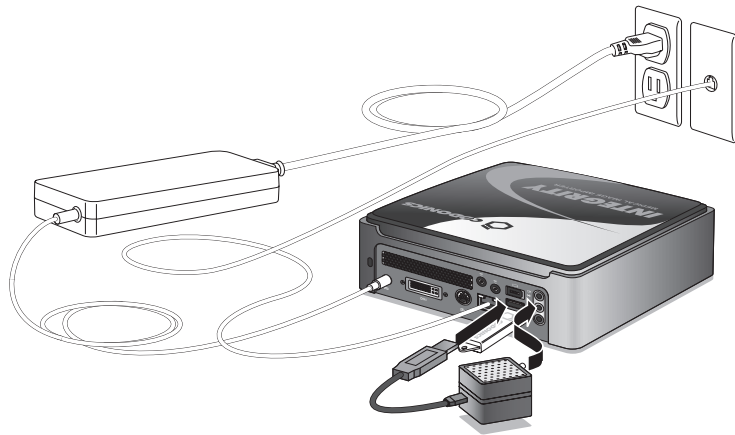
3. Connect the power supply.



4. Connect the Ethernet cable.

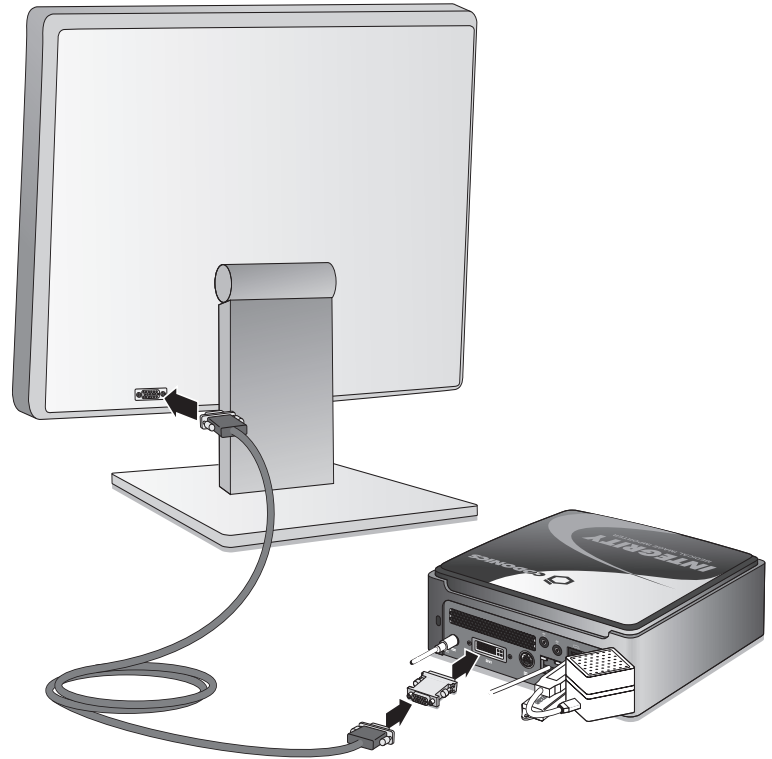


5. Insert the SmartDrive.

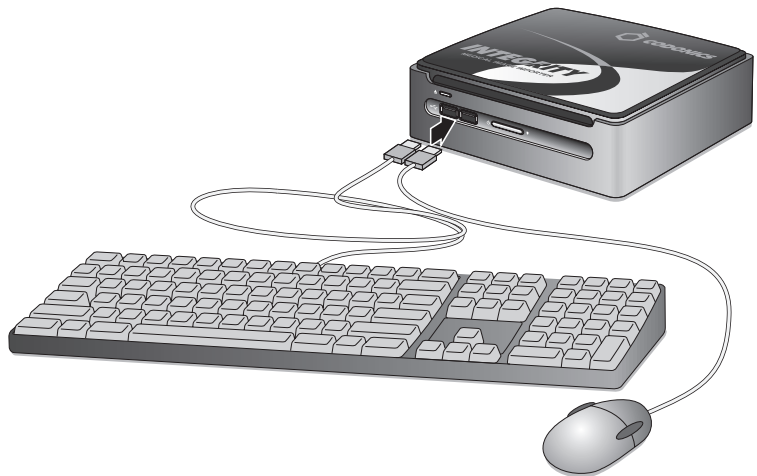


6. Connect the speaker using the speaker-USB cable. Turn on the speaker.

Monitor, Keyboard, and Mouse (Optional)

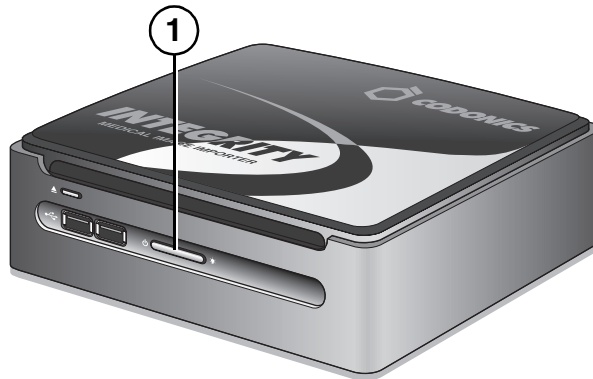


1. Connect the monitor.

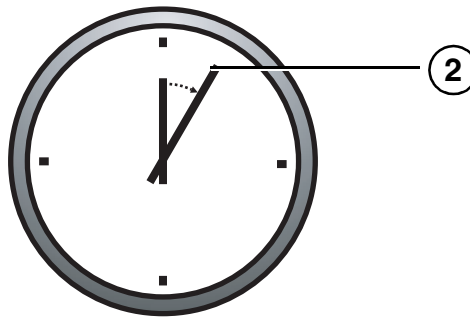


2. Connect the keyboard and mouse.

Startup



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

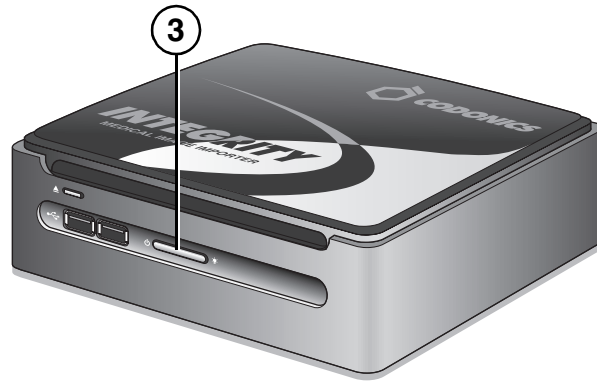


2. Wait 3 to 5 minutes for startup to complete.

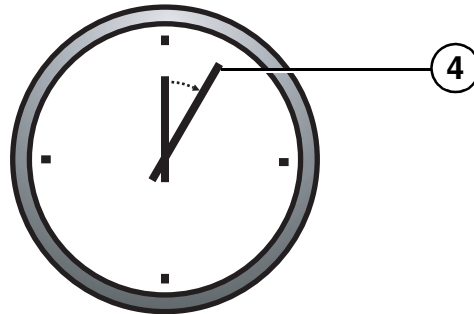
An audible tone indicates when the Integrity application is running, users can log in, and discs can be imported.

Shutdown

1. Wait for all Integrity activity to complete.
2. Log out of all user sessions.



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



4. Wait 1 minute for shutdown to complete.

Configuration

Move the SmartDrive to a PC

1. Shut down Integrity.
2. Remove the SmartDrive.
3. Insert the SmartDrive in a Windows PC.

Set Up the Network Profile

1. On the SmartDrive, open the file:
`\network\network.default.txt`.
2. Enter the IP addresses for: ipAddress, gateway, and netmask.

Sample for Network Profile

```
[ NetworkProfile]
networkProfileName_ = default
ipAcquisitionType_ = dynamic
ipAddress_ = 192.168.1.201
gateway_ = 192.168.1.1
netmask_ = 255.255.255.0
networkName_ = CODONICS_INTEGRITY
port_ = 104
isBehindFirewall_ = false
doUseDefaultNetworkName_ = true
speedDuplex_ = 0
firewallEnabled_ = false
httpFirewallPortOpen_ = true
telnetFirewallPortOpen_ = false
smbFileShareFirewallPortOpen_ = true
ipAliasingEnabled_ = false
```

Set Up a Query Server Profile

1. If using a Modality Worklist, open and edit the SmartDrive file:
`\profiles\reconciler\queryserver.mwlwithsps.txt.`

Sample for Modality Worklist (MWL) Server

```
[ QueryServerProfile ]
host = IP Address
port = 104
queryType = MWL
calledAeTitle = MWL_SCP_AE
callingAeTitle = MWL_SCU_AE
useMatchRule = ExactNameDobSex
useMatchRule = LastNameDobSex
useMatchRule = DobSex
maxNumberOfMatches = 100
```

2. If using a PACS style Query, open and edit the SmartDrive file: `\profiles\reconciler\queryserver.qr.txt.`

Sample for Query/Retrieve (Q/R) Server

```
[ QueryServerProfile ]
host = IP Address
port = 104
queryType = QR_STUDY_ROOT
calledAeTitle = QR_SCP_AE
callingAeTitle = QR_SCU_AE
useMatchRule = ExactNameDobSex
useMatchRule = LastNameDobSex
useMatchRule = DobSex
maxNumberOfMatches = 100
```

Set Up the Reconciler Profile

On the SmartDrive, edit the file:
`\profiles\reconciler\reconciler.default.txt.`

Sample for Reconciler Profile

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

where *NameOfServer* is either `mwlwithsps`, `qr`, or the name included in the filename of `queryserver.NameOfServer.txt.`

Create a Destination Profile

1. On the SmartDrive, edit existing profiles or copy the file:
`\profiles\storeclient\destination.default.txt`.
2. Name the file **destination.*DestName*.txt**.
3. Edit the new Destination profile file.
4. Repeat for each destination.

Sample for Destination Profile

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

Create a Destination Group Profile

NOTE: A destination group profile is required for one or more destinations.

1. On the SmartDrive, edit existing profiles or copy the file:
`\profiles\storeclient\destinationgroup.default.txt`.
2. Name the file **destination.*DestGroupName*.txt**.
3. Edit the new Destination Group profile file to include each destination in this group.
4. Repeat for each group of destinations.

Sample for Destination Group Profile

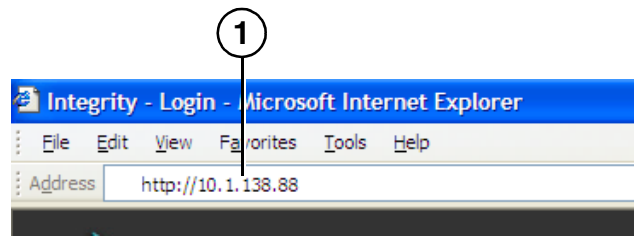
```
[ DestinationGroupProfile ]
destinationProfile = DestName
destinationProfile = DestName
```

where *DestName* is the name included in the filename **destination.*DestName*.txt** file.

Move the SmartDrive Back to Integrity

1. Remove the SmartDrive from the PC.
2. Insert the SmartDrive in Integrity.
3. Power on Integrity.

Log in as Administrator



1. Enter the Integrity IP address in a customer-supplied PC web browser.

The Integrity Login screen displays.



2. Type **admin**.
3. Type **codonics**.
4. Click the **Log In** button.

Set Default User Passwords



1. Click the **Setup** button.
2. Click the **Users** tab.
3. Scroll to the desired user.
4. Enter the new password.
5. Enter the new password again.
6. Click the **Save** button.

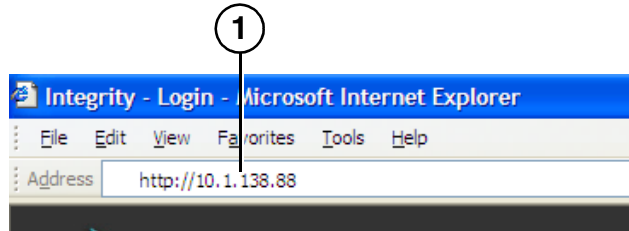
Set Up the Date and Time



1. Click the **Date & Time** tab.
2. Enter the Date.
3. Enter the Time.
4. Click the **Save** button.

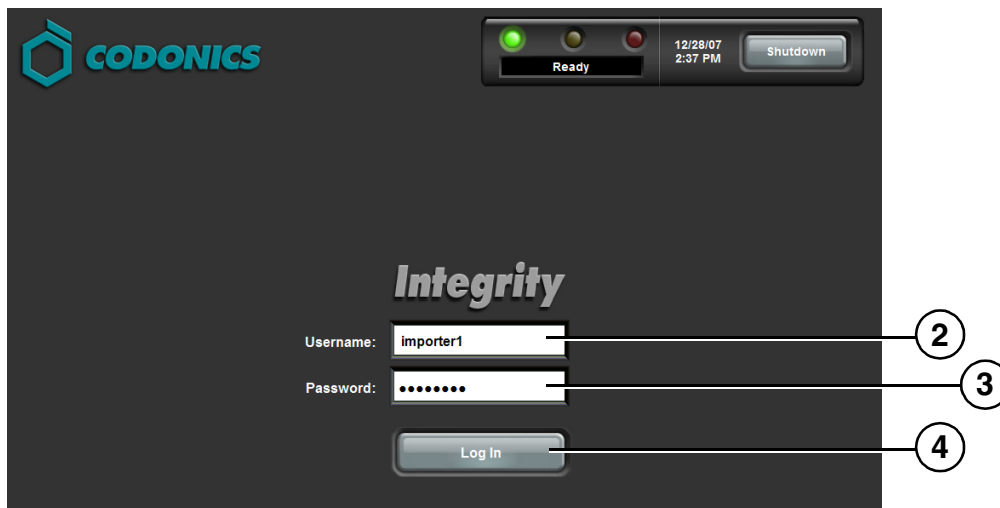
Operation

Opening a User Session



1. Enter the Integrity IP address in a customer-supplied PC (i.e., computer on the network) web browser.

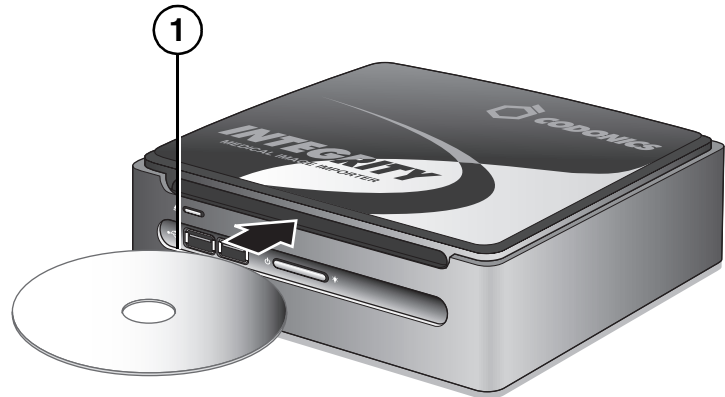
The Integrity Login screen displays.



2. Type a login name.
3. Type the password.
4. Click the **Log In** button.

The **Studies** screen displays (refer to the **Studies** screen on page 15).

Importing a CD/DVD



1. Insert the CD/DVD.



2. The **Studies** screen displays the CD/DVD read status.
3. Integrity will automatically eject the CD/DVD if successful.

Integrity will beep and will not eject the CD/DVD if an error occurs.

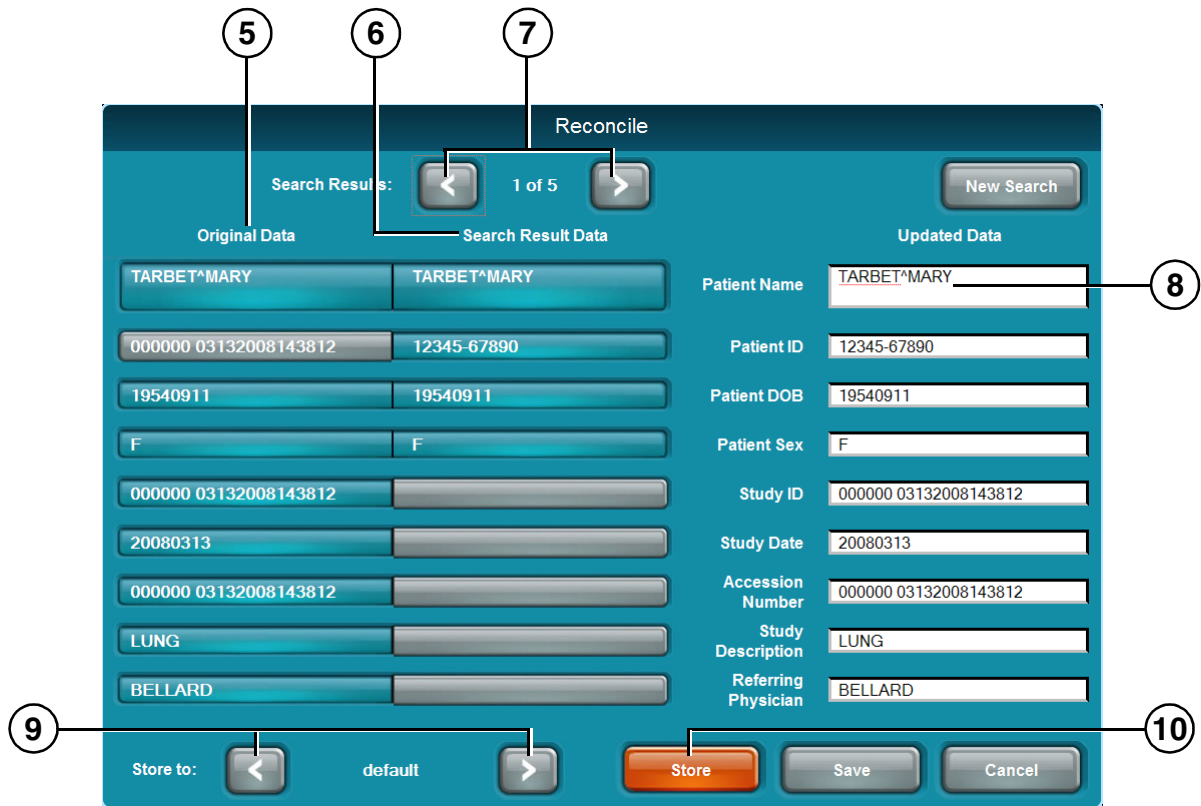
Reconciling and Storing a Study

The screenshot shows the CODONICS interface. At the top left is the CODONICS logo. At the top right, there is a user profile for 'a_smith' with a 'Ready' status indicator, the date '3/14/08', the time '2:23 PM', and a 'Log Out' button. Below the logo is a navigation bar with buttons for 'Studies', 'Setup', 'Utilities', and 'Help'. The 'Studies' button is highlighted. Below this is a sub-navigation bar with 'Studies' and 'Queue' tabs. Under the 'Studies' tab, there are filter buttons for 'New', 'Reconciled', 'Stored', and 'All'. The 'New' filter is selected. Below the filters is a table with the following columns: Patient, Study Description, Modality, Study Date, DOB (Sex), Status, and Actions. The table contains two rows of data:

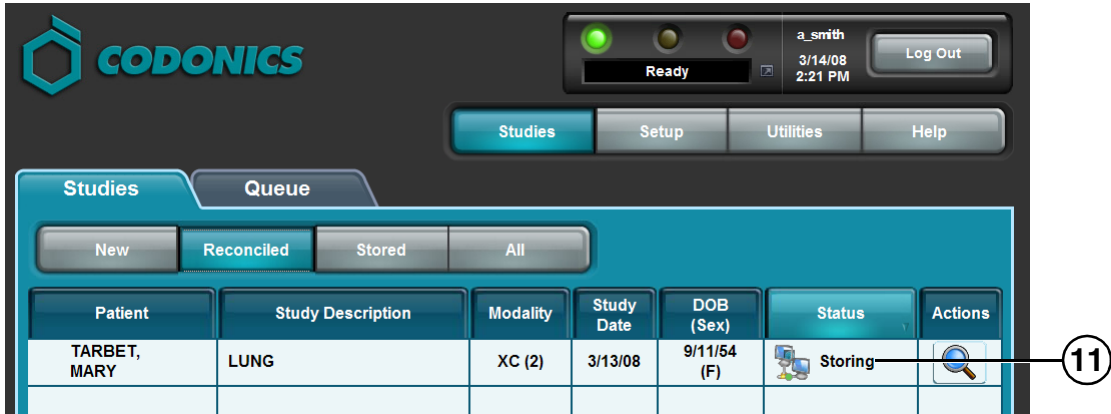
Patient	Study Description	Modality	Study Date	DOB (Sex)	Status	Actions
RHOAN, JAMES	BRAIN	IO (2)	3/14/08	9/15/64 (M)	Ready	
TARBET, MARY	HEART	XC (2)	3/13/08	9/11/54 (F)	Ready	

Below the table, there is a status bar that says '1 of 2 selected' and navigation arrows. At the bottom of the interface, there are three buttons: 'Delete...', 'Store', and 'Reconcile'. The 'Reconcile' button is highlighted in orange. Numbered callouts 1 through 4 point to the 'Studies' button, the 'New' filter button, the 'Ready' status of the second study row, and the 'Reconcile' button, respectively.

1. Click the **Studies** button.
2. Click the **New** filter button.
3. Select a study with Ready status.
4. Click the **Reconcile** button.



5. Review the study information from the CD/DVD in the **Original Data** column.
6. Review the study information from the modality worklist server in the **Search Result Data** column.
7. If required, select a different match using the **Search Results** arrows.
8. If required, edit the **Updated Data** column fields:
 - Click the **Imported Data** or **Search Results 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 arrows.
10. Click the **Store** button to store the study.

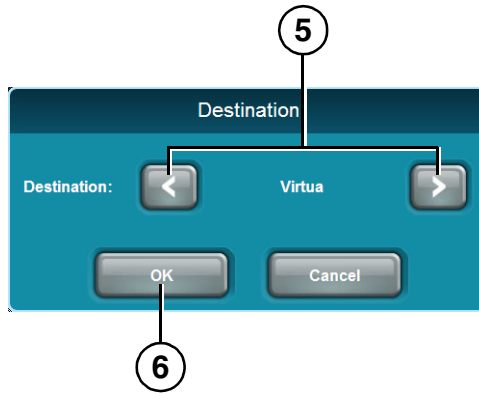


11. The study status changes to Storing.

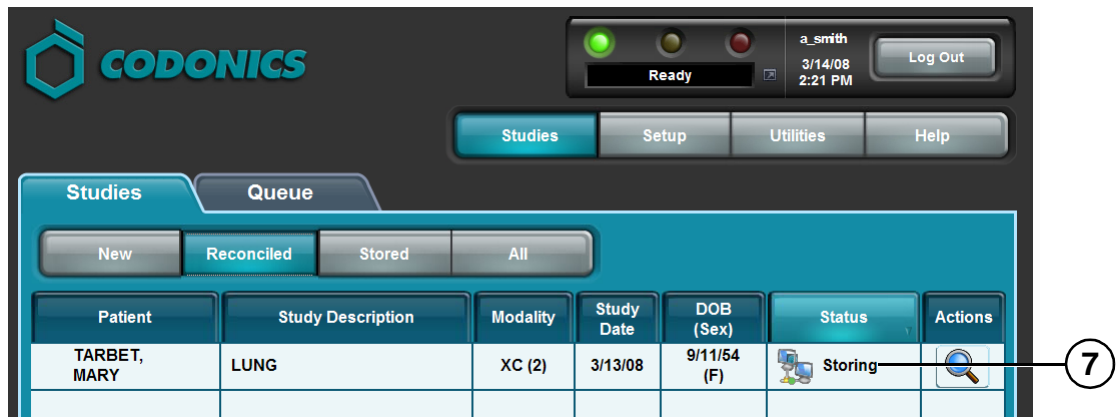
Storing a Study Directly from the Studies Screen



1. Click the **Studies** button.
2. Select a filter.
3. Select the studies to be stored.
4. Click the **Store** button.



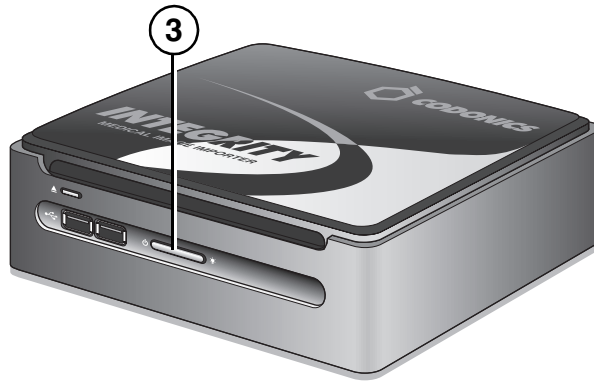
5. Select the DICOM Store destination using the arrows.
6. Click the **OK** button to store the studies.



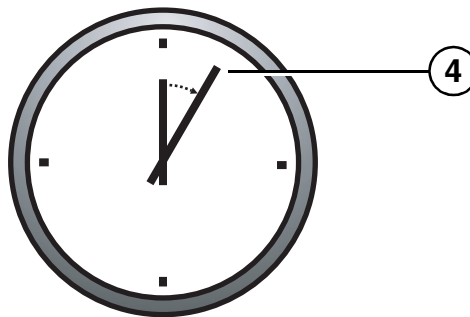
7. The study status changes to Storing.

Software Installation

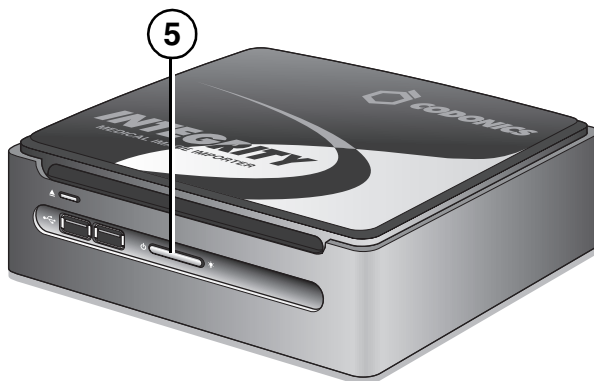
1. Wait for all Integrity activity to complete.
2. Log out of all user sessions.



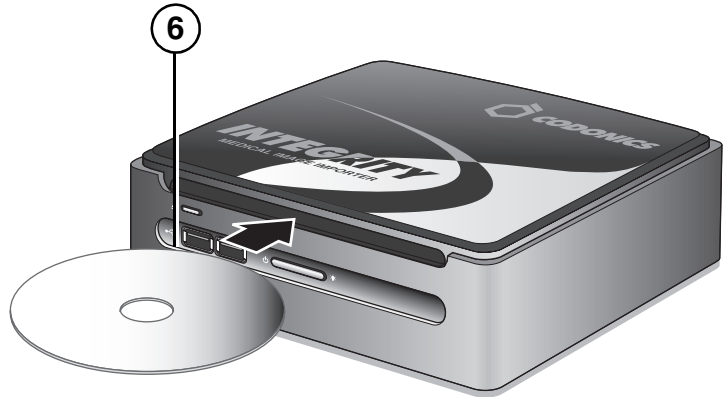
3. Press the Integrity **Power** button.



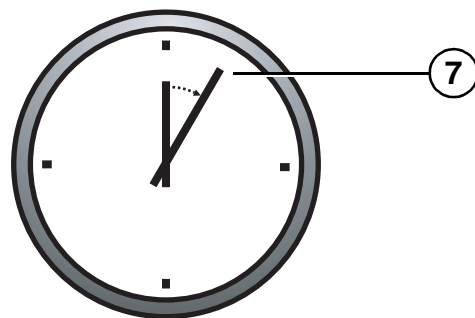
4. Wait 1 minute for shutdown to complete.



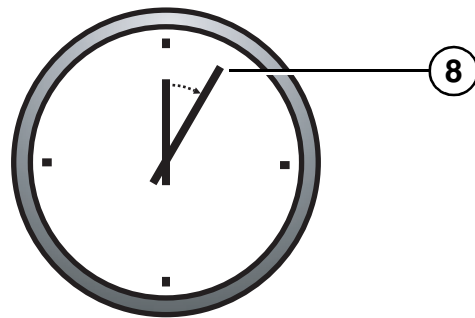
5. Press the Integrity **Power** button.



6. Immediately insert the Operating Software disc.



7. The Operating System disc will eject after 20 minutes.



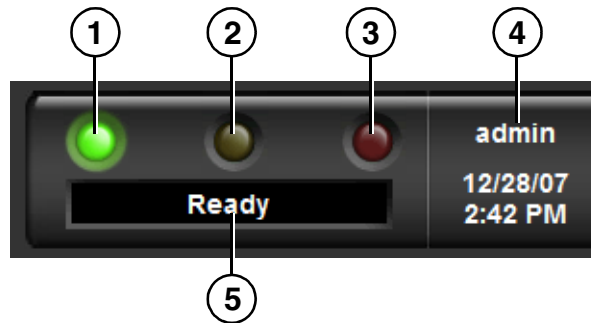
8. Wait 30 to 60 minutes for installation to complete.

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

Dashboard Indicators



NOTE: Dashboard indicators are displayed from a web browser in a customer-supplied PC.



1. On: Ready.
Flashing: Processing.
2. Alert condition: Device can still process jobs but requires user attention.
3. Fault condition: Device cannot process jobs and requires user attention.
4. Logged in user.
5. Processing status, alert, or fault description.

Troubleshooting

Problem	Solutions
Integrity startup fails.	Check the power cable. Verify SmartDrive is connected.
Login fails.	Verify username and password. Verify password case (upper-case and lower-case).
Network not responding.	Check network settings. Verify network cable is connected. Verify SmartDrive is connected.
Integrity is not responding.	Verify that Integrity is powered on. Cycle power to Integrity.
Display shows read error.	Verify CD/DVD is IHE-PDI compliant.
CD/DVD does not eject after read; Integrity continuously beeps.	Verify CD/DVD contains DICOM data. Verify CD/DVD is not scratched or damaged. 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.	Make sure that the speaker is connected to Integrity and turned on.
Reconciling studies have unexpected results	Make sure you are logged in using one of the standard user names.
System responses are slow.	Wait for jobs to complete. Reduce the number of web connections being utilized by Integrity users. Delete unnecessary studies. Perform a fresh Integrity software installation.

