

APEX[™] Data Archiving Best Practices

MAN-03906 Revision 006

Part Number MAN-03906 Revision 006

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Overview

1 Audience

This document explains Hologic APEX Data Backup Best Practices and includes recommendations to help users understand the capabilities of the DXA product.

This discussion is intended for the following audiences:

- DXA supervisors
- IT managers
- PACS administrators
- Account sales managers
- Sales support specialists
- Product managers
- Application specialists
- Field service engineers
- Technical support
- Training specialists
- Biomed engineers

2 Purpose

This use case guidance is intended to help the user understand how the DXA system can be set up to provide data management and disaster recovery. It is important to understand what the data is and the difference between archiving scans and performing an APEX System Backup. A discussion with the customer helps to determine the best method for providing continued support of the APEX data. If there is a need for disaster recovery, the APEX data is available so that service personnel can restore the DXA system.

Q: Why is it necessary to Back Up Data?

A: Backing up is the way to protect patient data and scans. Users are responsible for backing up the data. If the computer fails, recovery can be difficult and costly. Understanding the backup process is crucial to a successful disaster recovery. Backing up only takes a few minutes and is worthwhile.

Q: What is a Scan Archive?

A: The archive process transfers a copy of the selected scans to removable media, such as a DVD+RW, a folder on a network drive, an external drive, or PACS. The DXA system maintains two archive locations, a primary and secondary in the database.



Caution Hologic recommends that scans be archived (saved) twice when the archive system is not backed up to ensure that a scan is not lost.

Q: What is APEX System Backup?

A: APEX System Backup is the function used to save your *system files* (calibration files, patient scan database, reference and report database, step phantom and APEX registry information). These files are different from scan data files. APEX System Backup does not save scan image files.

Q: When is a System Recovery necessary?

A: It is not necessary to perform a System Recovery unless there is a serious problem with the hardware or software.



Caution If a serious problem occurs, do not attempt a System Recovery. Contact Hologic Customer Support for help.

3 Terminology

APEX	DXA operating system.
APEX Data	Includes patient scans, patient data, APEX configurations and calibration information, all archive media and APEX System Backup media.
APEX Data Backup	Consists of both APEX System Backup and Patient Scans Archiving.
APEX System Backup	Weekly backup of the APEX application database, system calibrations, and configurations.
DVD	Hologic approved Verbatim 4x DVD+RW media.
DXA (dual energy x-ray absorptiometry)	Imaging technique that uses a very low dose of radiation to measure bone density for the diagnosis of osteoporosis.
DXA Data Storage Kit	A 2 nd Internal Drive and One USB External Drive
DXA PC	Hologic provided computer to operate the Bone Densitometer.
IRIS-Enterprise Option	Hologic provided connectivity suite.
Legacy Archive Media	Hologic approved media associated with all versions of Hologic DXA systems prior to APEX 3.5 Discovery or APEX 5.5 Horizon. Includes Floppies, LS-120 Super Disk, Jaz Cartridges, MO Cartridges, Mini-MO Cartridges, and CDs.
Network Drive	Facility provided data storage.
PACS	Facility provided Picture Archiving and Communication System for storing scans.
Patient Scans Archive	Daily copying of patient scans to media for off system storage.
Query Retrieve	The process of locating and restoring scans archived to PACS.
USB External Drive	Hologic provided USB drive.
Use Case	How the DXA system is configured for archiving scans and APEX System Backup.
Windows 7 Backup	Backup Image of APEX Data.
Second Internal Drive	Hologic provided hard drive.

4 Part Numbers

- Verbatim 4x DVD+RW (CMP-01358)
- DXA Data Storage Kit PRD-03074
 - Internal Hard Drive
 - Hard Drive Data Cable
 - USB External Drive
- DICOM option IRIS-ENT-APEX Enterprise Data Management with Query Retrieve

5 Use Cases Summary

Use Case 1 Physician Office — 1 DXA, No Network: Minimal Cost

Minimum Requirements

• Customer purchases Verbatim 4x DVD+RW

Best Practices

- Patient scans are archived daily, twice (primary and secondary) to formatted CDs.
- APEX System Backup performed weekly to a formatted CD.

Use Case 1: Physician Office — 1 DXA, No Network: Minimal Cost on Page 6.

Use Case 2 Physician Office — 1 DXA, No Network: Some Cost, Some Work

Minimum Requirements

• Customer purchases Hologic Data Storage Hardware Kit

Best Practices

- Patient scans are archived daily to the primary archive location on the 2nd drive.
- APEX System Backup is performed weekly on the 2nd drive.
- Windows 7 Backup of the 2nd drive is performed weekly to the USB-connected external drive.
- Optional: Perform one time copy of legacy archive media to the 2nd drive.

Use Case 2: Physician Office — 1 DXA, No Network: Some Cost, Some Work on Page 7.

Use Case 3 Hospital — 1 DXA, Managed IT Network: No Cost

Minimum Requirements

• Network drive is provided and backed up on a regular schedule by the facility

Best Practices

- Patient scans are archived daily to a network drive.
- APEX System Backup performed weekly to a network drive.
- Optional: Perform one time copy of legacy archive media to a network drive.

Use Case 3: Hospital -1 *DXA, Managed IT Network: No Cost* on Page 22.

Use Case 4 Hospital — 1 or more DXA, Managed Radiology Network: Some Cost

Minimum Requirements

- IRIS-ENTERPRISE-APEX Option
- PACS that supports Query Retrieve
- Network drive provided and backed up on a regular schedule by the facility

Best Practices

- Patient scans are archived daily to the primary location on PACS.
- Patient scans are archived daily to a secondary location on a network drive.
- APEX System Backup performed weekly to a network drive.
- Optional: Perform a one-time copy of legacy archive media to a network drive.



Caution Hologic recommends that scans be archived (saved) twice when the archive system is not backed up to ensure that a scan is not lost.

Use Case 4: Hospital — 1 or more DXA, Managed Radiology Network: Some Cost on Page 30.

6 Use Case 1: Physician Office — 1 DXA, No Network: Minimal Cost

Minimum Requirements

• Customer purchases Verbatim 4x DVD+RW

Best Practices

- Patient scans are archived daily, twice (primary and secondary) to formatted CDs.
- APEX System Backup performed weekly to a formatted CD.

6.1 In the APEX application

6.1.1 Archive Scans

Primary CD

- 1. Format the CD if it is new.
- 2. Place the primary CD in the drive.
- 3. Click the **Archive Scans** icon.
- 4. On the **Un-archived** tab, click **Select All**.
- 5. Click **Archive Scans**.
- 6. Click OK.
- 7. Wait for the drive LED to stop blinking.
- 8. Eject the CD.
- 9. Label the CD

Secondary CD

- 1. Place the secondary CD in the Drive.
- 2. Select the **Archived Once** tab.
- 3. Click Select All.
- 4. Click **Archive Scans**.
- 5. Click **OK**.
- 6. Wait for drive LED to stop blinking.
- 7. Eject the CD.
- 8. Label the CD

6.1.2 APEX System Backup

Best Practices for APEX System Backup

- Minimally performed once a week
- Requires two CDs, labeled #1 and #2
- Alternate between CDs every week

Procedure

- 1. Insert the APEX System Backup CD in the drive.
- 2. Click System Backup.
- 3. Click OK.
- 4. Click **OK** (when complete).
- 5. Wait for drive LED to stop blinking.
- 6. Eject the CD.
- 7. Alternate between CDs every week.



Note

A set of CDs (Secondary Archive and one of the APEX System Backup should be stored off-site.

7 Use Case 2: Physician Office — 1 DXA, No Network: Some Cost, Some Work

Minimum Requirements

Customer purchases Hologic Data Storage Hardware Kit

Best Practices

- Patient scans are archived daily to the primary archive location on the 2nd drive.
- APEX System Backup is performed weekly on the 2nd drive.
- Windows 7 Backup of the 2nd drive is performed weekly to the USB-connected external drive.
- Optional: Perform one time copy of legacy archive media to the 2nd drive.

7.1 Configuration

7.1.1 Create Folders

Create folders on the 2nd drive and perform an APEX System Backup in Windows 7

- 1. Click the **Start** button > **Computer** and browse to the 2nd disk.
- 2. Create two new folders on the 2nd disk (Figure 1).
 - Name the 1st folder **YYYYPrimary** (YYYY represents current year).
 - Name the 2nd folder **System Backup**.

Figure 1 Folders on Second Disk

Organize 👻 Include in library 👻	Share with 🔻	Burn New folder		se 🔹 🗖	0
🛠 Favorites	-	Name	*	Date modified	Тур
📃 Desktop		2013Primary		7/2/2013 11:52 AM	File
Downloads		🔰 System Backup		7/2/2013 11:52 AM	File
🖳 Recent Places					
📜 Libraries	=				
Documents					
J Music					
E Pictures					
Videos					
Computer					
🚢 Local Disk (C:)					
and Disk (E:)			III		

- 7.1.2 Configure Setup in the APEX Application
 - 1. From the application main screen, select **Utilities > System Config-uration**.
 - 2. Click the **Archive** tab (Figure 2).

Use Case 2: Physician Office — 1 DXA, No Network: Some Cost, Some Work

Location Management		
Default Location A	dd New Location	
A:\	Add Brow	se
Location Pool		
A:I		
1		
	Dates 1 Conditional sector	1
	Set Default Location	
Raw Data Files	1772 F	
Include Raw Data When Transferring	Scans	
mender num Data mien mansterning s		
Delete Coons After Archiving		
Delete Scans After Archiving		
Celete Scans After Archiving	C Delete After Archiving Once	
Construction of the second se	 Delete After Archiving Once Delete After Archiving Twice 	
Celete Scans After Archiving Control Delete Scans Control Delete Scans Control Delete Only Non-Baseline Scans Control Delete All Scans Control De	 Delete After Archiving Once Delete After Archiving Twice 	
Delete Scans After Archiving Delete Scans Delete Only Non-Baseline Scans Delete All Scans Do Not Delete Most Recent Scans	 Delete After Archiving Once Delete After Archiving Twice 	

Figure 2 System Configuration

- 3. In **Add New Location**, click **Browse** and search for **YYYYPrimary** on the 2nd drive.
- 4. Select it (Figure 3).

Use Case 2: Physician Office — 1 DXA, No Network: Some Cost, Some Work

Figure 3 New Location



- 5. Click OK.
- 6. In Add New Location on the Archive tab, Click Add (Figure 4).

Use Case 2: Physician Office — 1 DXA, No Network: Some Cost, Some Work

Default Location	Add New Location			
A:\	E:\2013Primary	Add Brow	vse	
Location Pool				
	DeleteSt	et Default Locatio	n	
aw Data Files	Seans	et Default Locatio	n	
Raw Data Files Include Raw Data When Transferring Delete Scans After Archiving	Se	et Default Locatio	n	
aw Data Files Include Raw Data When Transferring Delete Scans After Archiving	Scans	et Default Locatio	n	
aw Data Files Include Raw Data When Transferring Pelete Scans After Archiving Do Not Delete Scans Delete Only Non-Baseline Scans	Scans C Delete After Archivi	ng Once ng Twice	n	
Raw Data Files Include Raw Data When Transferring Delete Scans After Archiving Do Not Delete Scans Delete Only Non-Baseline Scans Delete All Scans	C Delete After Archivi	ng Once ng Twice		

Figure 4 Add New Location

7. "Do you want to make YYYYPrimary the default location?" (Figure 5)

Figure 5 Selecting Primary Default Location



- 8. Click OK.
- 9. Click OK.

7.2 Archiving Scans

1. On main application screen, click **Archive Scans** icon.

Use Case 2: Physician Office — 1 DXA, No Network: Some Cost, Some Work

- 2. On the Un-archived tab, click **Select All**.
- 3. Click Archive Scans (Figure 6).

Figure 6 Archive Scans

ALL ADD FU							
ng Cabinet QC Exam	Archive Ba	ckup Utilities	Help				-
hive Selected Scan(s)	Are	hive Location					- HOLOG
	AIC						
	Pat	n: E:\2013Pri	imary	<u> </u>			
narchived Archived Or	nce All Scans	1					
atient Name						Dataile	Patients
						Details	
Patient Name *	Patient ID	Scan Date	Scan Type	Scan ID	Analysis Date		
iirk, Carolyn H	335468	04/29/2013	x Lumbar Spine	A042913	04/29/2013 18	· · · · · · · · · · · · · · · · · · ·	
irk, Carolyn H	335468	04/29/2013	x Left Hip	A042913	. 04/29/2013 18		
							Scans
							Archive Sca
		Select	All Deselect	: All			Archive Sca
		Select	All Deselect	: All	Archive Scans	Close	Archive Sca
		Select	All Deselect		Archive Scans	Close	Archive Sca
		Select	All Deselect		Archive Scans	Close	Archive Sca
		Select	All Deselect		Archive Scans	Close	Archive Sca
Daily QC	Perform Exam	Select	All Deselect	All	Archive Scans	Close	Archive Sca Archive Sca System Back

4. Click **OK** (Figure 7).



Transfer resul	lts	X
2 of 2	scans archived successf	ully.
	ок	

7.3 Performing an APEX System Backup

1. On the main application screen, click **System Backup** icon.

- 2. Click **Browse** and navigate to the **System Backup** folder on the 2nd drive.
- 3. Click OK (Figure 3).

Figure 8 APEX System Backup

System Backup sav database. U	es the information Ise Archive Scans	contained in your system's to save scan data.
Select the location wh	ere you want to sav	ve your System Backup file.
E:\System Backup		Browse
Enter the file name for	our System Backu	ıp file.
201307020101.CAB		
	4	

- 4. Click **OK** (when complete).
- 5. Click Exit on the Main Application Screen.
- 6. Select Exit without Shutdown.



If DXA computer requires replacement, the DXA Data Storage Kit must be removed and installed in the replacement PC.

7.4 Windows 7 Backup

Note

7.4.1 Create and Schedule the Backup of the Second Disk

Best Practices

- Backup the 2nd drive weekly to the USB-connected external drive.
- Do not perform Windows 7 Backup during patient scanning; it can result in aborted scans.
- Do not turn off the DXA PC during Windows 7 backup.

Procedure

- 1. Click the **Start** button, type **backup** in the search box and click **Backup and Restore**.
- 2. If you have never used Windows Backup before:
 - Click Set up backup, and then follow the steps in the wizard.
 - If you are prompted for an administrator password or confirmation, type the password or provide confirmation.

Backup Location

3. Select where you want to save your backup? - Select **My Passport** (Figure 9).

Figure 9 Backup Location

Ve recommend that you save your backup on an estination	n external hard drive. <u>Guidelines</u>	for choosing a back
ave <u>b</u> ackup on:		
Backup Destination	Free Space	Total Size
DVD RW Drive (D:)	0 bytes	485.32 MB
2nd Disk (E:) [Recommended]	465.66 GB	465.76 GB
✓ My Passport (G:)	249.46 GB	465.65 GB
Refrech	Sa Car	ve on a network
Other people might be able to access your	backup on this location type. <u>N</u>	fore information

- a. Click **Next**.
- b. What do you want to back up? Select let me choose (Figure 10).

Use Case 2: Physician Office — 1 DXA, No Network: Some Cost, Some Work

Figure 10 Backup Options

What do ye	u want to back up?		
Let Window	s choose (recommended)		
Windows v These item <u>up?</u>	ill back up data files saved in libraries, o will be backed up on a regular schedu	on the desktop, and in default V Ie. <u>How does Windows choose</u>	Vindows folders. what files to back
Let me cho	ise		
You can se The items	ect libraries and folders and whether to ou choose will be backed up on a regu	include a system image in the lar schedule.	backup.

- c. Click Next.
- d. Select 2nd Disk (Figure 11).

Use Case 2: Physician Office — 1 DXA, No Network: Some Cost, Some Work

Figure 11 Select Second Disk

Vhat do you want to b	back up?
elect the check box of the ite fault from the backup?	ms that you want to include in the backup. What files are excluded by
Data Files	
Back up data fo	or newly created users
Administrator	's Libraries
Admin's Librar	165
Des Local Disk (C:)	
> 🔽 and Disk (E:)	
Include a system image of	driver (C)
The share the training of	
The selected backup locat	ion does not support the creation of system images.

e. Click Next.

Review your Backup Settings

1. Select **Change Schedule** and choose how often you want to back up.



Note

Hologic recommends that you run Windows 7 Backup on a weekly schedule (Figure 12).

Figure 12 Change Schedules

Set up backup

How often do you want to back up?

Files that have changed and new files that have been created since your last backup will be added to your backup according to the schedule you set below.

Run backup on a schedule (recommended)

How often:	Weekly	•
What day:	Friday	•
What time:	5:00 PM	-

OK	Cancel	

2. Click **OK** to save changes.

Use Case 2: Physician Office — 1 DXA, No Network: Some Cost, Some Work

Figure 13 Saving Backup Settings

😥 Set up backup	and the second s	· · ·
Review your bac	kup settings	
Backup Location: Backup Summary:	My Passport (G:)	
Items		Included in backup
))) E:\		All local data files
Schedule:	Every Friday at 5:00 PM	<u>Change schedule</u>
		Save settings and exit Can

- 3. Click Save Settings and exit (Figure 13).
- 4. Click **Backup** now.
- 5. Close **Back up** or **restore your files** when it has completed (Figure 14).

Use Case 2: Physician Office — 1 DXA, No Network: Some Cost, Some Work



Figure 14 Backup and Restore



Note

After you create your first backup, Windows 7 Backup will add new or changed information to your subsequent backups.

7.5 Optional:

Perform One-time Copy of Legacy Archive Media to the Second drive

7.5.1 Best Practices

The preferred way to preserve DXA scans archived on legacy media is to copy the scans to the 2nd drive.

- 1. Write down the archive label of the archive media on paper (e.g., 072308-00-82983).
- 2. Insert the media in the drive.

Use Case 2: Physician Office - 1 DXA, No Network: Some Cost, Some Work

7.5.2 Procedure

In Windows

- 1. Click the **Start** button > **Computer** and browse to the 2nd drive.
- 2. Create a folder named **Bone Density** on the 2nd drive.
- 3. Open the Bone Density folder and
- 4. create a new folder named **DXA SCANS**.
- 5. Open the DXA SCANS folder and create a folder. Use the same naming convention as the archive label that you wrote down in Step 1 (Figure 15).

Figure 15 DXA Scans Folder



- 6. Open the Legacy Archive Media to view contents.
- 7. Hold down **Ctrl-A** performs Select All of the media contents.
- 8. Hold down **Ctrl-C** performs Copy of the media contents.
- 9. Open the **new folder** in DXA SCANS folder from Step 5 (e.g., 072308-00-82983).
- 10. Hold down **Ctrl-V** to paste of all the copied content.
- 11. Repeat steps 5 10 for all remaining legacy media.

In APEX

Add the new archive location to the archive location pool

- 1. Select Utilities > System Configuration.
- 2. Click **Archive** tab.
- 3. In Add New Location, click Browse and select: E:\Bone Density\DXA SCANS.
- 4. Click Add (Figure 16).

Figure 16 Add a New Location

Default Location	Add New Location	-
E:\2013Primary	E:\Bone Density\DXA SCAN: Add Browse	
Location Pool		
A:\		
aw Data Files	Delete Set Default Location	
aw Data Files Include Raw Data When Transferring	Delete Set Default Location	
aw Data Files Include Raw Data When Transferring elete Scans After Archiving	Delete Set Default Location	
aw Data Files Include Raw Data When Transferring elete Scans After Archiving Do Not Delete Scans	Delete Set Default Location g Scans C Delete After Archiving Once	
aw Data Files Include Raw Data When Transferring elete Scans After Archiving Do Not Delete Scans Delete Only Non-Baseline Scans	Delete Set Default Location g Scans C Delete After Archiving Once C Delete After Archiving Twice	
aw Data Files Include Raw Data When Transferring Pelete Scans After Archiving Do Not Delete Scans Delete Only Non-Baseline Scans Delete All Scans	Delete Set Default Location g Scans C C Delete After Archiving Once C Delete After Archiving Twice	

- 5. In the Window, **Do you want to make "E:\Bone Density\DXA SCANS**" the default location?, click **No** (Figure 17).
- 6. Click No (Figure 17).

Figure 17 Default Location Options



7. Click **OK** to save changes and exit.

8. From the **Main Application Screen**, use **Locate Scans** to restore scans.

8 Use Case 3: Hospital — 1 DXA, Managed IT Network: No Cost

Minimum Requirements

• Network drive is provided and backed up on a regular schedule by the facility

Best Practices

- Patient scans are archived daily to a network drive.
- APEX System Backup performed weekly to a network drive.
- Optional: Perform one time copy of legacy archive media to a network drive.

8.1 Configure the Network Drive

8.1.1 In Windows

Map a Drive (e.g., **U**:)

- 1. Create folders.
- 2. Create a folder named **System Backup**.
- 3. Create a folder named **Bone Density**.
- 4. Open Bone Density Folder and create a folder named **DXA SCANS**.
- 5. Open DXA SCANS Folder.
- 6. Create a folder **YYYYPrimary** –(YYYY represents current year).

8.1.2 In APEX

- 1. Select Utilities > System Configuration.
- 2. Click **Archive** Tab (Figure 18).

APEX Data Archiving Best Practices Use Case 3: Hospital — 1 DXA, Managed IT Network: No Cost

Default Location	Add Now Location	
A:\	Add New Location	2
Location Pool		
A:1		
7		
1		
	Delete Set Default Location	
Data Files		
aw Data Files	Scane	
include Naw Data when nansiering	ocans	
Delete Scans After Archiving		
Do Not Delete Scans	C Delete After Archiving Once	
	C Delete After Archiving Twice	
Delete Only Non-Baseline Scans		
Delete Only Non-Baseline Scans Delete All Scans		
 Delete Only Non-Baseline Scans Delete All Scans Do Not Delete Most Recent Scans 		

Figure 18 Archive Tab

3. In Add New Location, click Browse and select YYYYPrimary.

Use Case 3: Hospital — 1 DXA, Managed IT Network: No Cost

4. Click **OK** (Figure 19).

Figure 19 New Location



5. Click Add (Figure 20).

Use Case 3: Hospital — 1 DXA, Managed IT Network: No Cost

Evenueri munugemen				
Default Location	Add New Location			
U:\2013Secondary	U:\2013Primary	Add Browse		
Location Pool			-	
U:\2013Secondary C:\DXA Scans D:\ \\bed-fs1\home U:\SCANS1 U:\2013Primary				
U:\Bone Density\DXA Scans				
U:\Bone Density\DXA Scans		afault Location		
U:\Bone Density\DXA Scans Raw Data Files Include Raw Data When Transferring Delete Scans After Archiving	Delete Set De	afault Location		
U:\Bone Density\DXA Scans Raw Data Files Include Raw Data When Transferring Delete Scans After Archiving	Delete Set De Scans	afault Location		
U:\Bone Density\DXA Scans Raw Data Files Include Raw Data When Transferring Delete Scans After Archiving Do Not Delete Scans	Delete Set De g Scans © Delete After Archiving C © Delete After Archiving T	afault Location		
U:\Bone Density\DXA Scans Raw Data Files ☐ Include Raw Data When Transferring Delete Scans After Archiving @ Do Not Delete Scans @ Delete Only Non-Baseline Scans @ Delete All Scans	Delete Set De Scans © Delete After Archiving C © Delete After Archiving T	efault Location		

Figure 20 Add New Location

6. Click **OK** to make **YYYYPrimary** the default location (Figure 21).

Figure 21 Default Location



- 7. Click Archive Scans icon.
- 8. On the Unarchived tab, click **Select All**.
- 9. Click Archive Scans (Figure 22).

Use Case 3: Hospital — 1 DXA, Managed IT Network: No Cost

Figure 22 Archive Location

	Archive Loc	ation				
	Path: U:\20	13Primary		Label:		
Unarchived Archived Once Al	I Scans					
Patient Name		1			Details	
Patient Name *	Patient ID	Scan Date	Scan Type	Scan ID	Analysis Date	Γ
Horizon, BMI 22	Removed	05/31/2013	a Whole Body	A05311309	05/31/2013 15:26	
Horizon, BMI 22	Removed	05/31/2013	a Lumbar Spine	A05311307	05/31/2013 15:14	
Horizon, BMI 22	Removed	05/31/2013	a Right Hip	A05311305	05/31/2013 15:11	
Horizon, BMI 24.8	Removed	05/24/2013	a Left Hip	B05241306	05/24/2013 12:31	
Horizon. BMI 24.8	Removed	05/24/2013	a Whole Body	A0524130B	05/24/2013 11:33	
IVA Case Study 1. 35F04	090511725	07/01/2006	a SE R/L La	A02150604	08/27/2013 13:28	
IVA Case Study 2, D5B25	90783C65D	07/01/2006	a SE R/L La	A03220606	08/27/2013 13:28	
IVA Case Study 3. DF1DA	A389D2C57	07/01/2006	a SE R/L La	A05020606	08/27/2013 13:29	
Rate of Change, 613		02/24/2000	f SE R/L La	A0224000L	08/27/2013 13:22	
TUCKER, BARBARA A	07740103	07/01/2013	x Left Hip	A0701130J	07/01/2013 10:47	
TUCKER, BARBARA A	07740103	07/01/2013	x Lumbar Spine	A07011301	07/01/2013 10:45	
	S	Select All	Deselect All			
		Select All	Deselect All			

10. Click OK.

8.2 Perform an APEX System Backup Weekly to the Network Drive

8.2.1 In APEX

- 1. On the **Main Application** Screen, click the **System Backup** icon.
- 2. Click **Browse** and navigate to the **System Backup** folder on the mapped drive.
- 3. Click **OK** (Figure 23).

Figure 23 System Backup

System Backup saves the informatio database. Use Archive Scar	n contained in your system's ns to save scan data.
Select the location where you want to	save your System Backup file
U:\System Backup	Browse
Enter the file name for your System Bac	kup file.
201312090101.CAB	

- 4. Click **OK** (when complete).
- 5. Exit without Shutdown.

8.3 Optional: Perform One-time Copy of Legacy Archive Media to a Network Drive

8.3.1 In Windows

The preferred way to preserve DXA scans archived on legacy media is to copy the scans to a network drive.

- 1. Click the **Start button> Computer** and browse to the network drive.
- 2. Create a new folder on the mapped network drive, name the folder **Bone Density**.
- 3. Open the folder Bone Density and create a folder named **DXA SCANS**.
- 4. Write down the archive label of the archive media on paper (e.g., 072308-00-82983).
- 5. Insert the legacy media in the drive.
- 6. Open the **DXA SCANS** folder and create a folder. Use the same naming convention as the archive label that you wrote down in Step 4 (Figure 24).

Use Case 3: Hospital — 1 DXA, Managed IT Network: No Cost

Figure 24 DXA SCANS Folder

					· [·] · · · · · · · · · · · · · · · ·	114
Edit View Tools Help						
snize - Burn New folder						# • 🖬
2013Primary	•	Name	Date modified	Туре	Size	
2013Secondary		072308-00-82983	12/9/2013 2:04 PM	File folder		
012607-00-80000				Accession of the second		
033004-00-BUZBEE						
Alexa						
Apps & Sales						
📕 Beta Sites						
Bone Density						
Le Connectivity						
L copy						
Jicom samples						
bx Reports						
JA DXA						
Lexpenses 2002						
Lipenses 2003						
LExpenses 2004	E					
JE Fluoroscan						
ESUF						
🏨 hl7 input						
🕌 international						
🔔 mobility cd						
A06039600						
J OS08289500						
Darts List						
J Picture Parts						
Printers						
Projects						
PV 7.0						
🔒 gdr messages						
BDB Archived 2x Scans						
J 060915160623						
June 2010/20141705						
070919164708						

- 7. Open the Legacy Archive Drive to view contents.
- 8. Hold down Ctrl-A to Select All of the media contents.
- 9. Hold down **Ctrl-C** to Copy the media contents.
- 10. Open the **new folder** in DXA SCANS folder from Step 6 (e.g., 072308-00-82983).
- 11. Hold down **Ctrl-V** to Paste of all the copied content.
- 12. Repeat steps 4 11 for all remaining legacy media.

8.3.2 In APEX

Add the new mapped drive archive location to the Archive Location Pool.

- 1. Select **Utilities > System Configuration**.
- 2. Click **Archive** Tab.
- 3. In the Add New Location, click **Browse** and search for **U:\Bone Density\DXA SCANS** folder and select it.
- 4. Click Add (Figure 25).

Use Case 3: Hospital — 1 DXA, Managed IT Network: No Cost

Default Location	Add New Location	57
U:\2013Secondary	U:\Bone Density\DXA Scans Add Brow	se
Location Pool		
C:IDXA Scans D:\ Wbed-fs1\home U:\SCANS1		
U:\2013Primary		
U:\2013Primary Raw Data Files 7 Include Raw Data When Tra		
U:\2013Primary Raw Data Files 7 Include Raw Data When Tra Delete Scans After Archiving -		
U:\2013Primary Raw Data Files 7 Include Raw Data When Tra Delete Scans After Archiving – 9 Do Not Delete Scans	Delete Set Default Location	
U:\2013Primary Raw Data Files 7 Include Raw Data When Tra Delete Scans After Archiving – 5 Do Not Delete Scans 6 Delete Only Non-Baseline S	Delete Set Default Location	
U:\2013Primary Raw Data Files Include Raw Data When Tra Delete Scans After Archiving – Do Not Delete Scans Delete Only Non-Baseline S Delete All Scans	Delete Set Default Location ansferring Scans Delete After Archiving Once Delete After Archiving Twice 	

Figure 25 System Configuration

5. Click No in the Do you want to make "U:\Bone Density\DXA SCANS" the default location? window (Figure 26).

Figure 26 Default Location Option



- 6. Click **OK** to save changes and exit.
- 7. From the main application screen use **Locate Scans** to restore legacy scans.

9 Use Case 4: Hospital — 1 or more DXA, Managed Radiology Network: Some Cost

Minimum Requirements

- IRIS-ENTERPRISE-APEX Option
- PACS that supports Query Retrieve
- Network drive provided and backed up on a regular schedule by the facility

Best Practices

Caution

- Patient scans are archived daily to the primary location on PACS.
- Patient scans are archived daily to a secondary location on a network drive.
- APEX System Backup performed weekly to a network drive.
- Optional: Perform a one-time copy of legacy archive media to a network drive.



Hologic recommends that scans be archived (saved) twice when the archive system is not backed up to ensure that a scan is not lost.

- 9.1 Patient scans will be archived daily to primary location to PACS
- 9.1.1 In APEX
 - 1. Select **Utilities > System Configuration**.
 - 2. Click **DICOM Tab**.
 - 3. Click **Send**.
 - 4. Select configured DICOM Send Destination for the PACS and Click **Edit Destination** or click **Add Destination** (Figure 27).

DICOM Send Provider	Storage Commitment Provider
AE Title:	□ Use Storage Commitment
PACS	Select Existing Provider:
Host Name or IP Address:	2
10.10.10.100	Add New Provider
SCP Port:	
105	Enterprise Data Management
Destination Name	I Scan Archive Location
PACS	Query Retrieve Provider
	Select Existing Provider:
Send Parameters	PACS -
Interpreting Physician	Add New Provider
Grayscale Only	
□ Presentation Files	DICOM Send Options
IVA Results File	데 Image
IF Unicode	□ Structured Report

Figure 27 DICOM Send Destination

- 5. In the Enterprise Data Management section Enable Scan Archive Location.
- 6. In **Query Retrieve Provider**, select the existing PACS (Figure 28).

APEX Data Archiving Best Practices Use Case 4: Hospital — 1 or more DXA, Managed Radiology Network: Some Cost

ICOM Send Provider	Storage Commitment Provider
AE Title:	□ Use Storage Commitment
PACS	Select Existing Provider:
Host Name or IP Address:	
10.10.10.100	Add New Provider
SCP Port:	///////////////////////////////////////
105	Enterprise Data Management
Destination Name	In Scan Archive Location
PACS	Query Retrieve Provider
	Select Existing Provider:
end Parameters	PACS -
Interpreting Physician	
	Add New Provider
Grayscale Only	
Presentation Files	DICOM Send Options
✓ IVA Results File	Image
✓ Unicode	C Structured Report

Figure 28 Ouerv Retrieve Provider

7. Or, Click Add New Provider to configure Query Retrieve Provider, if different from PACS (Figure 29).

Figure 29 Add New Provider

OM Query/Retrieve Destination	
E Title:	
ACS_ARCHIVE	
ost Name or IP Address:	
0.10.10.200	_
CP Port:	
05	_
OK Cancel	Ĩ.
OK	

9.2 Patient Scans will be Archived Daily to a Secondary Location to a Network Drive

9.2.1 In Windows

Map a drive (Ex. U:)

- 1. Open **DXA Scans** Folder.
- 2. Create a folder **YYYYSecondary** (YYYY represents current year).

9.2.2 In APEX

- 1. Select **Utilities > System Configuration**.
- 2. Click Archive Tab (Figure 30).

APEX Data Archiving Best Practices Use Case 4: Hospital — 1 or more DXA, Managed Radiology Network: Some Cost

Figure 30 Archive Tab

Default Location A	dd New Location	
A.)	Add Browse	
Location Pool		
aw Data Files	Delete Set Default Location	
elete Scans After Archiving		
Do Not Delete Scans	C Delete After Archiving Once	
	C Delete After Archiving Twice	
Delete Only Non-Baseline Scans		
[^] Delete Only Non-Baseline Scans [^] Delete All Scans		

3. In the **Add New Location**, click **Browse** and select **YYYYSecondary**.

4. Click **OK** (Figure 31).

Figure 31 Add New Location

	2013Primary	
	2013Secondary	
Þ	Alexa	
	Apps & Sales	
Þ	Beta Sites	
Þ	Connectivity	
Þ	сору	
Þ	dicom samples	
	Dx Reports	
Þ	DXA	
	Expenses 2002	

5. Click Add (Figure 32).

Figure 32 Location Management

Default Location	Add New Location	
C:\DXA Scans	U.2013Secondary	Add Browse
Location Pool	1	
C:\DXA Scans D:\ \\bed.fs1\home U:\SCANS1 U:\2013Secondary U.\2013Primary		
	Dielete	Set Default Location

6. Click **OK** to make YYYYSecondary the default location (Figure 33).

Figure 33 Default Location



- 7. Click Archive Scans icon.
- 8. On the Unarchived tab, click **Select Scans**.
- 9. Click Archive Scans (Figure 34).

Use Case 4: Hospital — 1 or more DXA, Managed Radiology Network: Some Cost

Figure 34 Archive Scans

	-Archive Loc	ation		-	
	Path: U:\20	13Secondary		- Label:	120913-00-98765
Inarchived Archived Once A	II Scans				
atient Name					Details
	Transfer results		X		
Patient Name *		and the second		Scan ID	Analysis Date
orizon, BMI 22	2 of 2 sc	ans archived s	uccessfully.	A05311305	05/31/2013 15:11
lorizon, BMI 24.8				B0524130A	05/24/2013 12:23
orizon, BMI 24.8				805241308	05/24/2013 11:39
orizon, BMI 24.8		OK		805241306	05/24/2013 12:31
orizon. BMI 24.8	-	775		A0524130B	05/24/2013 11:33
VA Case Study 1. 35F04	090511725	07/01/2006	a SE R/L La	AD2150604	08/27/2013 13:28
VA Case Study 2. D5B25	90783C65D	07/01/2006	a SE R/L La.,.	A03220606	08/27/2013 13:28
VA Case Study 3. DF1DA	A389D2C57	07/01/2006	a SE R/L La	A05020606	08/27/2013 13:29
ate of Change, 613		02/24/2000	f SE R/L La	A0224000L	08/27/2013 13:22
UCKER. BARBARA A	07740103	07/01/2013	x Left Hip	A0701130J	07/01/2013 10:47
UCKER. BARBARA A	07740103	07/01/2013	x Lumbar Spine	A07011301	07/01/2013 10:45
	5	Select All	Deselect All		

10. Click OK.

9.3 Perform an APEX System Backup Weekly to a Network Drive

9.3.1 In Windows

Map a drive (e.g., Drive U:)

Create a folder named **System Backup**.

9.3.2 In APEX

- 1. On the Main Application Screen, click **System Backup** icon.
- 2. Click **Browse** and navigate to the **System Backup** folder on the mapped drive.
- 3. Click OK (Figure 3).

Figure 35 DXA System Backup

System Backup saves the information database. Use Archive Scan	n contained in your system's s to save scan data.
Select the location where you want to s	ave your System Backup file
U:\System Backup	Browse
Enter the file name for your System Back	kup file.
201312090101.CAB	
Sec. 1 Sec.	4

- 4. Click **OK** (when complete).
- 5. Exit without Shutdown.

9.4 Optional: Perform One Time Copy of Legacy Archive Media to a Network Drive

9.4.1 In Windows

The preferred way to preserve DXA scans archived on legacy media is to copy the scans to a network drive.

- 1. Click the **Start button > Computer** and browse to the network drive.
- 2. Create a new folder on the mapped network drive. Name the folder **Bone Density**.
- 3. Open the folder Bone Density and create a folder named **DXA SCANS**.
- 4. Write down the archive label of the archive media on paper (e.g., 072308-00-82983).
- 5. Insert the legacy media in the drive.
- 6. Open the DXA SCANS folder and create a folder. Use the same naming convention as the archive label that you wrote down in Step 4 (Figure 36).

Use Case 4: Hospital — 1 or more DXA, Managed Radiology Network: Some Cost

Figure 36 Creating a DXA SCANS Folder

🗢 进 U:\Bone Density\DXA Scans					+ + Search DXA Seans		-	
Edit View Tools Help								
nize - Burn New folder						田 -		
2013Primary	•	Name	Date modified	Туре	Size	_	_	-
2013Secondary 012607-00-80000 033004-00-8UZBEE Alexa Apps & Sales		1072308-00-82983	12/9/2013 2:04 PM	File folder				
J. Beta Sites								
Bone Density								
Connectivity								
copy								
Dr Reports								
DXA								
Expenses 2002								
Expenses 2003								
Expenses 2004								
Eluoroscan								
ESUF								
I hl7 input								
international								
all mobility cd								
JA06039600								
J OS08289500								
Darts List								
Picture Parts								
Printers								
Projects								
PV 7.0								
dr messages								
BDB Archived 2x Scans								
060915160623								
070829141705								
070919164708								

- 7. Open the Legacy Archive Drive to view contents.
- 8. Hold down **Ctrl-A** to Select All of the media contents.
- 9. Hold down Ctrl-C to Copy of the media contents.
- 10. Open the **new folder** in DXA SCANS folder from Step 4. (e.g., 072308-00-82983).
- 11. Hold down **Ctrl-V** to Paste of all the copied content.
- 12. Repeat steps 4 11 for all remaining legacy media.

9.4.2 In APEX

Add the new mapped drive archive location to the Archive Location Pool.

- 1. Select **Utilities > System Configuration**.
- 2. Click **Archive** Tab.
- 3. In the Add New Location, click **Browse** and search for U:\Bone Density\DXA SCANS folder and select it.
- 4. Click Add (Figure 37).

Use Case 4: Hospital — 1 or more DXA, Managed Radiology Network: Some Cost

Figure 37	System	Configuration
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Default Leasting	A del Marco I. a castica	
U:2013Secondary	U:\Bone Density\DXA Scans Add Browse	
Location Pool		
U:\2013Secondary C:\DXA Scans D:\ \\bed-fs1\home U:\SCANS1 U:\2013Primary		
aw Data Files	Delete Set Default Location	
Include Raw Data When Transferring	Scans	
elete Scans After Archiving		
Do Not Delete Scans	Pelete After Archiving Once	
Delete Only Non-Baseline Scans	C Delete After Archiving Twice	
Delete All Scans		
Do Not Delete Most Recent Scans		

5. Click No in Do you want to make "U:\Bone Density\DXA SCANS" the default location? (Figure 38).

Figure 38 Default Location Selection



- 6. Click **OK** to save changes and exit.
- 7. From the main application screen use **Locate Scans** to restore legacy scans.