QuantorDent Server User Manual

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Warnings and used symbols

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If using the **QuantorMed+** software, please read the respective manuals for any connected devices, such as the X-ray generator, sensor, or reader, before attempting to use the **QuantorMed+** software.



WARNING

This function, if used improperly, may result in a loss of functionality or data. Do not use before reading the warning.



ΝΟΤΕ

A note is just information that is important to know, but that does not affect the functionality of the system.

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1. Introduction

The *QuantorDent* Software can either be used in a stand-alone mode, for single user environments, or clie nt-server mode, for multi-user environments. With client-server mode, acquired images are stored on a cen tral computer, the *QuantorDent Server*, and shared with client computers. The server stores the image info rmation in a local database, specifically a PostgreSQL Database. It stores the actual images in a Windows Shared Data Folder, hereafter referred to as a Repository.

Because of how **QuantorDent Server** stores images, all client PC's must be on the <u>same network</u> as the server PC. This can easily be verified by checking to see if the client/server is visible under the network fold er. It can also be verified by checking the IP address of the computers. If the first three numbers match, the y are on the same network.

1.1. Recommended Server Requirements

Operating System	Microsoft Windows 7, 8, 10 32bit/64bit
CPU	Intel Core i5 2.0 GHz
Memory	4 GB RAM
Hard Disk Space	1 TB
Network	1 Gbps Ethernet

Recommended client computer requirements are listed in the QuantorDent User Manual.

1.2. Minimum Server Requirements

Operating System	Microsoft Windows 7 32bit
CPU	Intel Pentium 1.20 GHz
Memory	2 GB RAM
Hard Disk Space	500 GB
Network	1 Gbps Ethernet

Minimum client computer requirements are listed in the **QuantorDent** User Manual.

2. Server Installation

1. Software Installation

- 1. Download the latest QuantorDent server version from the partner's area of the *Digiray Corp. Digiray Corp.* website.
- 2. Once downloaded, unzip and run the setup .exe file.
- 3. Proceed through the installation process by pressing next on each window.



Figure 1: Welcome



Figure 2: Choose Components

4. Chose the destination folder, and click the "Install" button, as shown in Figure 3

🌍 QuantorServer 1.0.7.7 Se	tup		_		×
3DISC	Choose Install I Choose the folde	.ocation r in which to install Qu	uantorServer	1.0.7.7.	
Setup will install QuantorSe click Browse and select and	erver 1.0.7.7 in the t	following folder. To in stall to start the insta	stall in a diffe llation.	erent folde	er,
Destination Folder			Brow	se	
Space required: 283.9MB Space available: 8.7GB Nullsoft Install System v2.46 -					
		< <u>B</u> ack	<u>I</u> nstall	Cance	el

Figure 3: Choose Install Location

5. The next window will display your installation progress.

G QuantorServer 1.0.7.7 Se	tup		_		\times
3DISC	Installing Please wait while	e QuantorServer 1	l.0.7.7 is being ir	nstalled.	
Execute: C:\QuantorServe	r\RegistService.ba	t			
Show <u>d</u> etails					
Nullsoft Install System v2,46 -		< <u>B</u> ack	<u>N</u> ext >	Canc	el

Figure 4: Installation Progress

6. After the install is finished, a restart is required for the server to start. If the Server PC already ha s a password-protected account, restart the PC and proceed with any client PC installations. If not, consult the section below to create such an account.



Figure 5: Install Complete!

2.2. Creating New User Account

For security reasons, the client PC can only access the server through a secure, password protected acco unt on the server PC. Skip this section if such an account already exists on the server. Otherwise, follow th e steps below to create one. Note that these steps do require administrator access.

For windows 7/ Windows 10 before Creators Update:

- 1. Open the Control Panel, click User Accounts and click Manage another account.
- 2. Create a Standard User Account as shown in Figure 6. Set a password for the account. *If a pass word is not created, access to the shared image folder will be rejected.*
- 3. Record the account name and password. These will be used in the client installation.

The DBC 2.47 MIL Technike			
🚱 🕞 📲 « User Accounts 🔸 Manage Accounts 🔸 Create New Account 👻	4 9	Search Control Panel	Q
Name the account and choose an account type This name will appear on the Welcome screen and on the Start menu. Institute Standard user Standard account users can use most software and change system settings that do re the security of the computer. Administrators Administrators have complete access to the computer and can make any desired ch notification settings, administrators may be asked to provide their password or conf making changes that affect other users. We recommend that you protect every account with a strong password. Why is a standard account recommended?	not afi iange:	fect other users or 5. Based on Ion before	
Create Acco	ount	Cancel	

Figure 6: Create New Account

For Windows 10 After Creators Update:

1. Open Settings, go to Accounts, then the "Family & other people" tab. Click on "Add someone el se to this PC", as shown in figure 7.

Home	Family & other people		
Find a setting	P Your family		
Accounts	We couldn't connect to Microsoft family right now, so your family on this device might not be up to date.		
AE Your info	Add your family so everybody gets their own sign-in and desktop. You can help kids stay safe with appropriate websites, time limits, apps, and games.		
🖾 Email & app accounts			
🖏 Sign-in options	+ Add a family member		
Access work or school	Learn more		
R _v Family & other people	Other people		
♂ Sync your settings	Allow people who are not part of your family to sign in with their own accounts. This won't add them to your family.		
	+ Add someone else to this PC		
	Set up assigned access		
	Have a question?		
	Get help		
	Make Windows better.		
	Give ut feedback		

Figure 7 Windows 10 Account Settings

2. Click the "I don't have this person's sign-in information" text in the lower right.

How will this person sign in?	
Enter the email address or phone number of the person you want Windows Office Outlook com OneDrive Skyne or Xbox enter th	to add. If they use e email or phone
number they use to sign in.	e entail of priorie
Email or phone	
I don't have this person's sign-in information	
Privacy statement	

Figure 8 Microsoft account registration

3. Click the "Add a user without a Microsoft account" text in the lower right. (Figure 9)

QuantorDent Server	
--------------------	--

Windows Office (utlook.com	OneDrive Sh	me Xhov Ti	nev/re all het	ter and more
personal when you	sign in with	your Microso	ft account.*	Learn more	
someone@exam	ple.com				
Get a new email ad	idress				
Password					
United States			~	-	
Birth month	~	Day ~	Year ~	-	

Figure 9: Microsoft account setup

4. Finally, you can now create a new user account. (Figure 10). Make sure to set a password for the ac count. *If a password is not created, access to the shared image folder will be rejected.*

Create an accou	unt for this PC		
If you want to use a pass but hard for others to gu	sword, choose somethin uess.	ng that will be easy for	r you to remember
Who's going to use this	PC?		
User name			
Enter your user name. Make it secure. Enter password			
Enter your user name. Make it secure. Enter password Re-enter password			
Enter your user name. Make it secure. Enter password Re-enter password Password hint			
Enter your user name. Make it secure. Enter password Re-enter password Password hint			

Figure 10: Windows Local Account Creation

5. Record the account name and password. These will be used in the client installation.

3. Repository Management

The repository is simply a shared folder where the acquired images are stored. When the QuantorDent Se rver was installed, a default repository was also created on whatever drive had the most free space. Shoul d the repository become full, a new repository will need to be created. The tool used for managing and cre ating new repositories is the QuantorServerAdminTool. The tool is password protected to prevent unautho rized persons from manipulating the repositories. The password is "fireadmin", in all lower-case letters. Th e admin tool will display information on: available drives and free space on each, all existing repositories, and which repository is active. It will also allow you to add new repositories, delete old ones, and change t he active repository.

🕉 Admin Tool			-		×
Server Disk Drive Info. SOFTWAREOFFICE0 Disk(C)_free:32.34GB Disk(D)_free:337.44GB	Create New Rep Target Disk Driv Disk Space:	e: (C.) 94.36/226.7GB [Fre	e Space	e:32.34GE	3] e
Repository List Path D:\DefaultRepository		Share Name QuantorRepo1	Stati Activ	us ve	
Dalata Sat &s Arting					
Show Log Show Version				Clos	se

Figure 11 Admin Tool

3.1. Create Repository

To create a new repository:

- 1. Select the target Disk Drive from the Server Disk Driver Info list
- 2. Enter the Folder Name (the local name for the folder)
- 3. Enter the Share name (the folder name visible to the network)
- 4. Click Create
- 5. Verify that the repository information is correct on the Repository List
- 6. Select the new repository and click "Set As Active".

When new images are scanned, they are saved to the active repository. Inactive repositories still retain their old images, and must be maintained unless the QuantorExImport tool is used to merge the inactive reposit ory into another one. Doing so not only moves the images over, but also updates the database with the ne w image locations.

3.2. Share the Repository Folder

Repository folder has to be shared for Quantor Dent to access. You must share a storage folder for Quantor Image sharing. (Be sure to turn off the window firewall.)

^ Name ^		
ApowersoftRecorderTem	p	
Derautivepository	Open	
	Open in new window	
	Pin to Quick access	
	😻 Send with Transfer	
	Scan with Windows Defender	
	Give access to	>
	S 공유 폴더 동기화	> pre
	Restore previous versions	
	👚 Combine files in Acrobat	
	Include in library	>
	Pin to Start	
	Send to	>
	Cut	
	Сору	
	Create shortcut	
~ <	Delete	
1	Rename	
	Properties	

•4 Advanced sharing settings		-	Х
← → 🔹 🛧 📢 > Control Panel → All Control Panel Items → Network and Sharing Center → Advanced sharing settings	vð	Search Control Panel	p
All Networks (A)			^
Public folder sharing			
When Public folder sharing is on, people on the network, including homegroup members, can access files in the Public folders.			
Turn on sharing so anyone with network access can read and write files in the Public folders			
 Tum off Public folder sharing (people logged on to this computer can still access these folders) 			ł
Media streaming			
When media streaming is on, people and devices on the network can access pictures, music, and videos on this computer. This computer can also find media on the network.			
Choose media streaming options			
File sharing connections			
Windows uses 128-bit encryption to help protect file sharing connections. Some devices don't support 128-bit encryption and must use 440 or 56-bit encryption.			
Use 128-bit encryption to help protect file sharing connections (recommended)			
\bigcirc Enable file sharing for devices that use 4D- or 5G-bit encryption			
Password protected sharing			
When password protected sharing is on, only people who have a user account and password on this computer can access shared files, printers attached to this computer, and the Public folders. To give other people access, you must turn off password protected sharing.			
Turn on password protected sharing			
Turn off password protected sharing			~
Sine dunges Cancel			



3.3. Add Windows Credential

1. Open Control Panel and double click the Credential Manager



2. Click Windows Credentials and click Add a Windows credential

Credential Manager			-		×
← → ∽ ↑ 🙆 > Control Pane	→ All Control Panel Items → Credential Manager	~ Ū	Search Control Panel		p
Control Panel Home	Manage your credentials				? ^
	View and delete your saved logon information for website	es, connected app	lications and networks.		
	Web Credentials	Window	s Credentials		
	Back up Credentials Restore Credentials				
See also	Windows Credentials		Add a Windows	credential	
User Accounts	No Windows credentials.				,

3. Enter Windows Credential information.

- A. Internet or network address: Server computer's network name
- B. User name: Your Windows account name created at server computer
- C. Password: Password of the account.

Add a Windows Credential			_		×
\leftarrow \rightarrow \checkmark \Uparrow 🙆 « Credential Manager » Ad	dd a Windows Credential 🛛 🗸 🖑	Search Contr	ol Panel		Q
Type the address of the website of Make sure that the user name and password Internet or network address (e.g. myserver, server.company.com): User name: Q Password:	or network location and your cr rd that you type can be used to access the PENT-MASTER QuantorCS	edentials location.			^
		OK	Cancel]	-

4. Check whether Windows Credential is added successfully

🧧 Credential Manager			-		×
\leftarrow \rightarrow \checkmark \bigstar \blacksquare > Control	Panel > All Control Panel Items > Credential Manage	r ~ گ	Search Control Panel		٩
Control Panel Home	Manage your credentials				? ^
	View and delete your saved logon information for	websites, connected applic	ations and networks.		
	Web Credentials	Windows (Credentials		
	Back up Credentials Restore Credentials				
See also	Windows Credentials		Add a Windows c	redential	I
User Accounts	DENT-MASTER		Modified: Too	day 😔	
					~

3.4. Delete Repository



WARNING

Inactive repositories contain old images, and deleting them may result in a loss of data. Deleting a repository does not remove the shared fol der, which may still contain old images. It does remove the repository information from the database, making the files inaccessible to Quant orDent. Use the QuantorExImport tool to merge the old repository wit h the current active one to save the existing images for use with Qua ntorDent.

- 1. Select the target repository in the repository list
- 2. Click Delete

4. Data Migration

When transitioning from stand-alone to client/server mode, the local database of stored images needs to b e exported to the server. Likewise, when transitioning from client/server, the images on the server need to b e imported to the local machine. This is done using the QuantorExImport.exe tool. This tool allows you to i mport/export data between computers, as well as merge two databases together. While this tool can be us ed on the server, provided that QuantorDent is installed, for import and export it is easiest to use it on the cli ent, or stand-alone, machines.

Source Database	Clien	t/Server						
IP Addr: 10.1.10.10			Target Data Folder					
Source Repository		->	Select a	Select a source database by dicking the browse button Export				
\/DESKTOP-D9PM324\Se	erver2							
							Cancel	
Select the studies from t	he source data (Option)	Load Stu	dies					
Study Date/Time	Patient Name	Patient ID	Sex	Description	Images	Data Path		

Figure 12 QuantorExImport tool

4.1. Migrating from Client/Server to Stand-Alone

- 1. Install the latest version of QuantorDent in stand-alone mode.
- 2. Run QuantorExImport.exe (Found in the QuantorDent installation folder)
- 3. Switch to the Export tab, if it is not already active.
- 4. Click the Client/Server checkbox, telling the program to search for the local server's database
- 5. Verify that the displayed source database and repository information is correct, modify as needbe.
- 6. Browse for and find the local database.
- 7. Click export
- 8. Done!

4.2. Migrating from Stand-Alone to Client/Server

- 1. Install the latest version of QuantorDent in stand-alone mode.
- 2. Run QuantorExImport.exe on the client machine (Found in the QuantorDent installation folder)
- 3. Switch to the Import tab, if it is not already active.
- 4. Click the Client/Server checkbox, telling the program to search for the local server's database
- 5. Verify that the displayed source database and repository information is correct, modify as needbe.
- 6. Browse for and find the local database.
- 7. Click Import
- 8. Done!

4.3. Merging databases



NOTE

Merging can be done from any computer, and can also be used to me rge two repositories on different computers, provided that the user has access to the source and target files. It is easiest, however, to access the repositories from whatever computer hosts them. To do this from th e server, QuantorDent must first be installed.

- 1. Run QuantorExImport.exe, found in the QuantorDent installation folder.
- 2. Switch to the merge tab, if it is not already active.
- 3. If on a Client machine, and needing to merge repositories on the server, check the Client/Server ch eckbox. This switches the target repository to the server's active repository.
- 4. Verify that the displayed target database and repository information is correct, modify as need be.
- 5. Brows for and find the source database. If on a client and merging server repositories, you may ne ed to navigate to the server computer in the network folder.
- 6. Click Merge
- 7. Done!