



SHOWCASE® Image Center Configuration

This guide describes how to configure the ShowCase Image Center to receive and store images from DICOM imaging devices (e.g. ultrasound machines) and how to configure local and remote access for ShowCase Premier viewers.

Firewall and Network Settings

By default, the Image Center uses **port 104** for DICOM network traffic and **port 8080** for ShowCase Premier and ShowCase Viewer for iPad access. These ports need to be open in your firewall. The Image Center computer should also be configured with a **static IP address**. Your imaging devices need this as do your ShowCase viewer clients.

Default Configuration

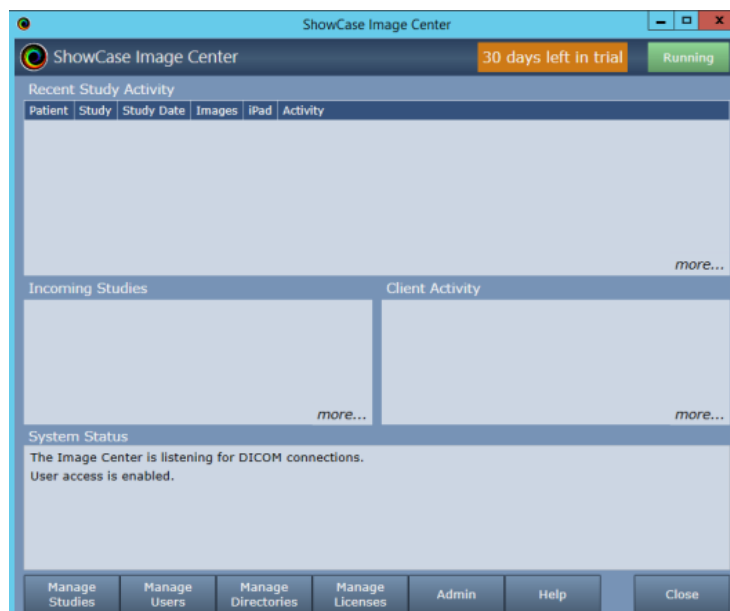
When first installed, the Image Center has default DICOM settings of **AE_Title = SHOWCASE_SCP**, **port=104**. There is a default user created using the Windows Login of the person logged into the machine when the installer was run. **You must create an Image Directory to store images before sending studies to the Image Center. See Step 2 in this guide.**

NOTE: The Image Center runs as several Windows Services in the background. The Console is used to monitor and configure the Image Center services, and does not have to be running for the Image Center to work. You do not have to be logged in to your computer for the Image Center to run.

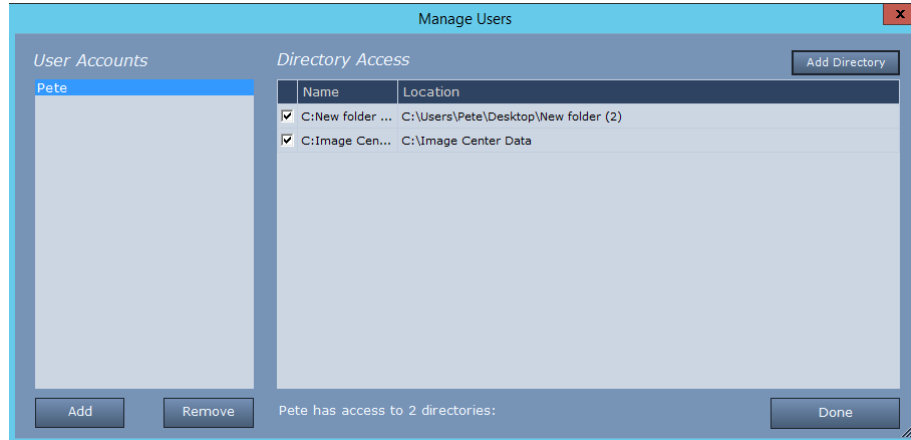
Step 1. Add Users to the Image Center

The Image Center uses Windows user name and passwords to control access to studies. Everyone who needs access to images must have a Windows user name and password on the Image Center machine.

1. If needed, add Windows Logins to the computer where the Image Center is installed. Consult with your IT department how best to do this.
2. Run the Image Center Console as **Administrator**.



3. Click the **Manage Users** button at the bottom of the console.



4. Click on the **Add** button at the bottom of the User Accounts list.
5. An Add User dialog allows you to type in the Windows User Account name for each user who needs access to studies. After you enter the name, click **Add** or hit the **Enter** key. When you are finished adding users click on the **Done** button.

Users are displayed in the User Account list as you add them.

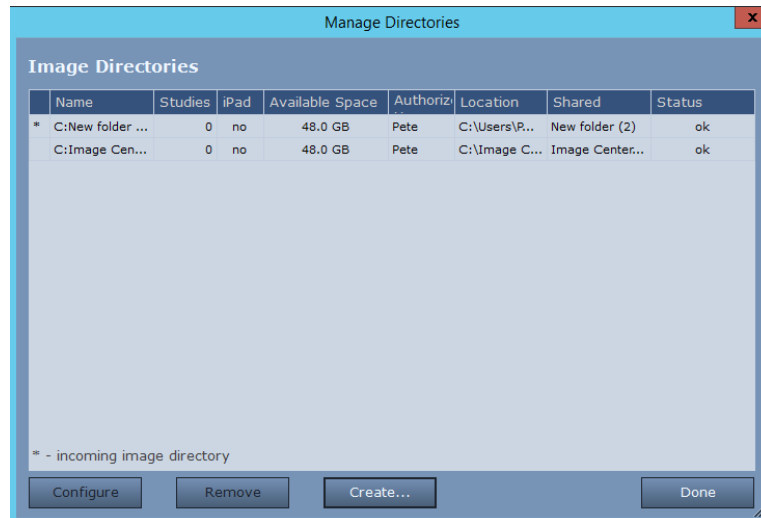


Step 2. Create an Image Directory (or Image Directories)

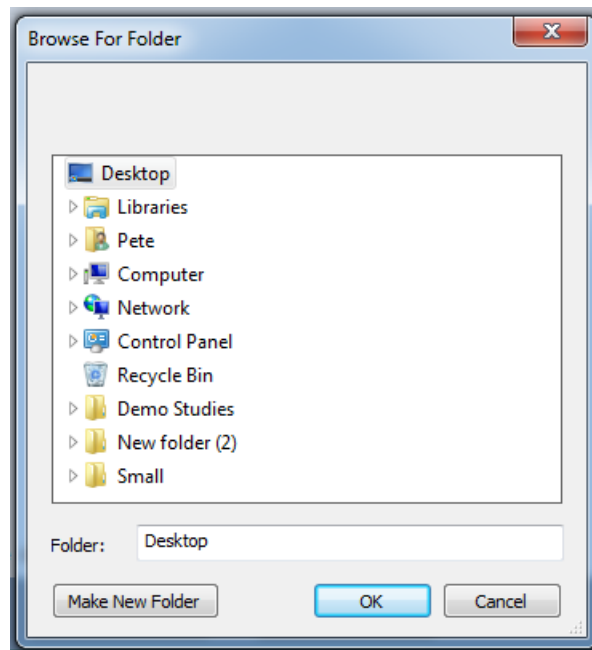
The Image Center stores your DICOM images and DICOM data in Image Directories. A single Image Directory can manage 200,000+ studies. This study data is vitally important to your practice. Most states require that you maintain an archive of this data for 7 years or more, so the choice of where you store your data is important. We strongly recommend using quality hard drives with lots of space in conjunction with offsite backup (like Carbonite, for example).

A rough formula to calculate disk space requirements for 2 years of studies (in gigabytes) is: **#studies done per day x 75**.

1. On the main Image Center console window click **Manage Directories**. A dialog appears.



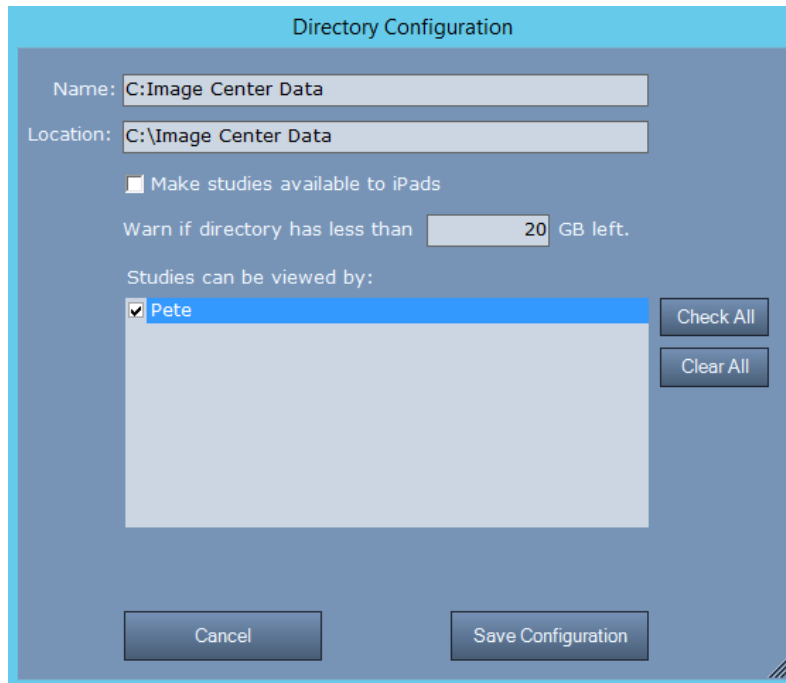
2. Click the **Create...** button. A folder browser appears.



3. Select an empty folder (or click **Make New Folder**) on a disk that has plenty of disk space. If you want to set up Image Center to use a network share, see “Setting up Image Directories on Network Shares” at the end of this document for details.

Note: Only create Image Directories in empty folders. Never try to place an Image Directory inside of another Image Directory.

4. Click OK. A Configuration screen appears:

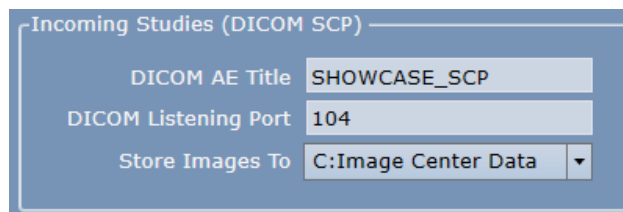


5. Select all of the Users that will need access to this Image Directory.
6. Click **Save Configuration**.
 - If you get a warning about the folder not being shared, you most likely did not run the Image Center Console as Administrator and you will need to manually share the Image Directory you just created.

Warning: Image Directories are managed solely by the Image Center. **Do not** move, delete, or modify the files stored in an Image Directory, or you may lose all access to your studies or even experience permanent loss of your study data. **Do not** “Browse” to an Image Directory using ShowCase; Instead, configure access through the Image Center Settings in the ShowCase Edit menu. **Do not** move an image directory without following the instructions outlined in the Image Center Administrator’s Guide, available on <http://www.triltech.com/documents.html>.

Step 3. Configure Settings for Incoming Studies (SCP Settings)

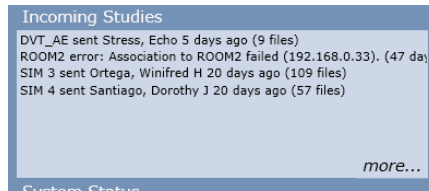
1. On the main Image Center console window click **Admin**. The DICOM settings are in the Incoming Studies portion of the dialog:



2. Set the AE Title and DICOM port as needed, or leave the default SHOWCASE_SCP / port 104.
3. Select the Image Directory where studies should be saved.

Test your DICOM configuration

1. Close the Admin dialog.
2. Configure an ultrasound machine to send to the Image Center.
3. Send a study. If it is successful, you will see activity in the Incoming Studies window on the main console:



You will also see the study in the Recent Study Activity window on the main console:

Recent Study Activity					
Patient	Study	Study Date	Images	iPad	Activity
M-MODE		6/6/2009 7:14:24 AM	13	0	sent from ROOM2
PW/CW DOPPLER		6/6/2009 6:52:44 AM	36	0	sent from ROOM2
COMPLETE, ECHO M MR III	Echo Study	8/23/2005 7:28:02 AM	10	0	sent from ROOM2
COMPLETE, GYN M MS III	OB/GYN Study	8/19/2005 8:02:55 AM	6	0	sent from ROOM2
ECHO, PHILIPS HD15		3/30/2009 5:15:49 AM	47	0	sent from ROOM2

4. If it is not successful, check your firewall settings and your ultrasound machine settings. If that does not solve the problem, please see the "Image Center Study Transfer Troubleshooting" guide for detailed instructions for diagnosing your problem.

[Optional] Setting up Image Directories on Network Shares

When creating a new Image Directory, use full UNC path names. Mounted drives or other folder sharing techniques that rely on the login credentials of the current user will not work. Full UNC names are the most reliable means to place an Image Directory on a shared folder.

The Image Center has two services that access Image Directories: the ShowCase Image Center Service and the ShowCase Image Center Web Service. In order for the Image Center to use network shares, these two services must have read/write/create permission for the network share. One way to accomplish this is to configure the services to use login credentials that have access to those shares.

1. Open the Windows Services dialog
2. Right click on the **ShowCase Image Center Service** and select Properties
3. Click on the Log On tab
4. Select the "This account:" option and enter an account name and password. You may need to Browse to get the exact name for the account you want to use. Make sure this account has full access to the folder share.
5. Stop and Start the **ShowCase Image Center Service**
6. Repeat this procedure for the **ShowCase Image Center Web Service**.

These steps may vary, depending on the Windows operating system you are using. This is only one way to approach providing proper access to the network shares for your services. Your IT policies may dictate another.

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