

Installing & Configuring ShowCase Connect

Installing ShowCase Connect and configuring your DICOM nodes on a DICOM network is a one time operation. Once you have finished the configuration you might never have to visit the Settings screens again.

1. **MAKE SURE THAT YOU ARE LOGGED IN WITH ADMINISTRATOR PRIVILEGES FOR THE ENTIRE INSTALL/LICENSING/CONFIGURATION PROCESS. This is especially important if you have the Windows Vista operating system.**

2. **If you have not done so, install and license ShowCase Basic or ShowCase Premier.**

This will install the Connect software and activate your Connect option.

3. **Go to the Start Menu and call up the application “ShowCase Connect”. (If it is not in your start menu go to the Program Files / ShowCase folder, and double-click on the ShowCase Connect application (it has a Network icon).**

This is the independent network “listener” component of ShowCase. It can run independently, storing images to your disk even if the image display part of ShowCase is not running. Once the software is running, you will want to configure network access.

4. **From the “ShowCase Connect” main screen click Edit Settings**  You should see then see the Settings window.

5. **Change your settings to fit your site’s needs.**

The Settings screen allows you to decide where to store your network transferred images and how to name the image files as they are saved to disk. ShowCase provides default values for you so that you do not need to change the settings if you don’t want to.

6. **Select a folder on your disk that you want to use as an image repository.**

The default location for storing images is in a folder called “NetworkImages” that is automatically created for you in your “Documents” folder that is shared by all users. You can select another location, frequently this might be on an external added disk drive.

Main Image Folder Path

Click on the browse button  to select a folder to use as the image repository.

7. **Choose the way you want to organize the images that you transfer over the network.**

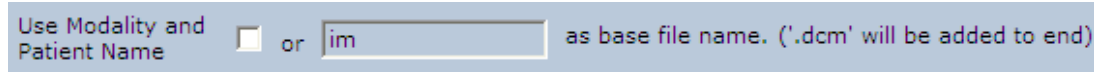
Images are stored in the folder you selected in step 6. They can also be organized into sub-folders based on modality, image source or Study ID. The default setting is to store by modality (sub-folders will be created as needed and named “US”, “CT”, “NM”, etc). If you select “none”, no sub-folders will be created and all images will import into the main image folder.

- Modality (US, XA, CT, etc)
- AE_TITLE (image source machine DICOM name)
- Study ID
- No sub-folders

Selecting “AE_TITLE” allows you to sort images by their source. For example if two ultrasound machines “SEQUOIA1” and “PHILIPS1” are connected to your network, you would automatically sort all imported images into folders – “NetworkImages/SEQUOIA1” and “NetworkImages/PHILIPS1”.

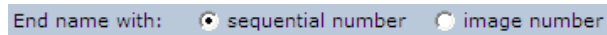
8. Select a method for naming your imported images.

There are 2 methods of naming images:



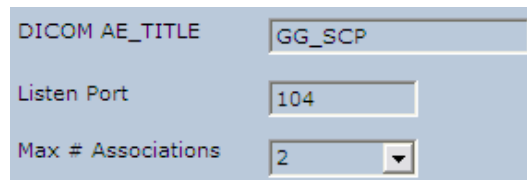
You can put the patient name and modality at the beginning of the image name, or you can use the letters “im” to start the name. The “im” method is the default and recommended way to name images. This method is simpler and avoids possible patient privacy problems.

A number will be added to the end of the name. You can decide whether the number should be a sequential number or the image number found in the image file.



Your image file names might look like this: im000001.dcm, im000002.dcm, etc.

9. Configure your DICOM network settings.



You must have a unique Application Entity Title for every DICOM node on your network. The default value will be “SHOWCASE_SCP”. If you have more than one copy of ShowCase Connect running at the same time, each must have a different title (eg: “SHOWCASE”, “LAB1_PC”)

Port 104 is a typical port to use to receive images from a DICOM Store operation. You should not need to change this unless you have other DICOM software running on your machine that is already using port 104.

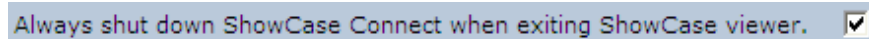
You can also limit the number of simultaneous “associations” – the number of DICOM image sources your computer can listen to at the same time. Your network speed and disk capacity may not handle more than 1 or 2 associations.

Write down your AE_TITLE and listen port – You will need them in step 12 below.

10. Select the shut down behavior for the SCP_ShowCase module.

Most customers use ShowCase Connect in one of two ways, either as a Store node connected to an acquisition device or for Query/Retrieve to a DICOM server.

If you use ShowCase Connect as a storage node, you will probably want to leave the Network importer running, listening for new images most of the time. Don’t check this box:



If you use ShowCase Connect only for Query/Retrieve, you probably want to shut down the network “listener” every time you finish running ShowCase. Check this box:

Always shut down ShowCase Connect when exiting ShowCase viewer.

11. Click on *Save Settings*. Then exit.

Save your settings and **Exit ShowCase Connect**. It is always best to exit and restart after changing settings to make sure all new settings are in effect.

12. Configure your acquisition device or Query/Retrieve server.

Now you must configure the other DICOM devices that ShowCase Connect is going to talk to.

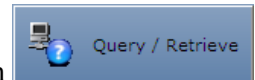
Each machine will have its own method of configuration, so you may need to ask your IT department or the machine’s manufacturer for advice.

- The machines must be able to see each other on the network.
- You will need to set the ShowCase AE_TITLE in the other node and may need to add other configuration information as well (eg: authorize to do a Query/Retrieve and C-STORE operation)
- The port to use for sending images must match the “Listen Port” in ShowCase Connect.
- THE HOSTS FILE ON BOTH THE SHOWCASE AND SERVER MACHINES MAY NEED TO INCLUDE ENTRIES TO ALLOW THEM TO SEE EACH OTHER IF YOU ARE NOT USING IP ADDRESSES or a DNS.
- Do NOT configure the machine to include “Storage Commit”.

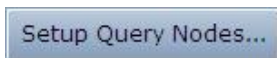
QUERY/RETRIEVE

1. If you are using Query/Retrieve, set up a Query/Retrieve server node in ShowCase Connect. You do NOT need to do this step if you are only sending images from ultrasound machines to ShowCase Connect.

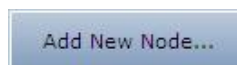
- From the “Network” screen, click on the Query/Retrieve button



- In the Query/Retrieve dialog, click on *Set up Query Nodes*



- Click on *Add New Node*



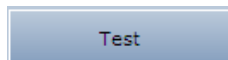
- Fill in the information about the image server – the node you will connect to when you want to retrieve images.

- The *Nickname for the Image Source* can be anything that helps you identify the Q/R node in case you have several to choose from (eg: Lab2 Server, Vascular Server, etc).

The *Host Machine Name* can be the TCP/IP address on your network or the machine name mapped in the “lmhosts” file or a machine name mapped by your DNS. You might want to test to see if you have a network connection to the machine name by bringing up a command window and entering “ping *hostmachinename*”.

“Relational Queries” run faster, so if your server supports relational queries (check with the manufacturer), check the box.

- Click on *Save* to save your settings for this node.
- Select the node and click on *Test* to see if ShowCase Connect and the image server node you have configured are talking to each other correctly.



- If all of the configuration information is correct and the Image Server is running and connected to the network, a confirmation dialog will tell you that the node is responding and set up for Query Retrieve.

In most situations there is only one query/retrieve node to set up, the server of your PACS. If you have multiple servers to query (eg: an ultrasound image server and a cath image server) you can set up multiple nodes. Then, each time you query for images, make sure that in the Query/Retrieve dialog, you have selected the correct image server (node) to talk to.

You should now be configured and ready to go.