



## Configuring ShowCase Connect for Query/Retrieve from PACS

This guide shows you how to configure your ShowCase Connect module to communicate over a DICOM network with a PACS or other DICOM device that supports Query/Retrieve. Once you complete this configuration you are unlikely to need to go to the Connect **Settings** screen again.

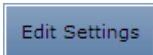
1. **If you have not done so, install and license your ShowCase Premier/ Connect software**

See the Installation and Licensing Quick Guide for instructions. Installing and licensing ShowCase also installs and activates the Connect (DICOM messaging) module.

2. **Go to the Windows Start menu and call up the ShowCase Connect application.**

Connect 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.

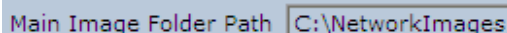
3. **In the ShowCase Connect main screen click Edit Settings.**



4. **In the Settings Dialog, select a folder on your disk that you want to use as an image repository.**

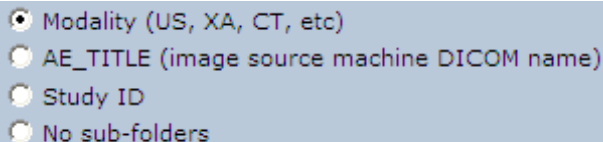
The default location for storing images is in a folder called “NetworkImages” that is automatically created for you in your “Documents” folder that is shared by all users. You may want to select a folder you have created in a different disk location.

Click on the browse button to select a different image repository folder. Make sure that the permissions on the selected folder allow ShowCase to write files there.



5. **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 4. They can 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.

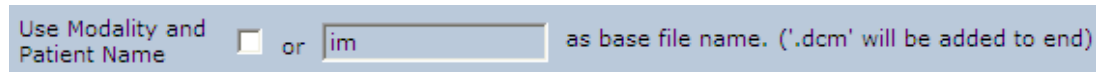
- 
- Modality (US, XA, CT, etc)
  - AE\_TITLE (image source machine DICOM name)
  - Study ID
  - No sub-folders

Selecting “AE\_TITLE” allows you to sort images by their source. For example, if two ultrasound machines “ECHO1” and “ECHO2” are connected to your network, you would automatically sort all imported images into folders – “NetworkImages/ECHO1” and “NetworkImages/ECHO2”.

**Note** that storing by Study ID is not recommended because some ultrasound machines do not assign unique Study IDs. You will need to check this with your equipment manufacturer.

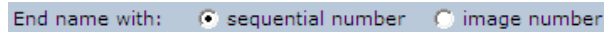
## 6. Select a method for naming your imported images.

There are 2 methods of naming images:



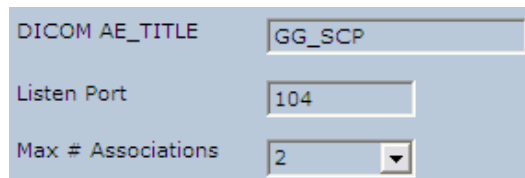
You can put the patient name and modality at the beginning of the image name, or you can use the letters “im” to start the name. The “im” method is the default and recommended way to name images. This method is simpler and avoids possible patient privacy problems.

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. Sequential is recommended.



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

## 7. 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: “CLINICB”, “LAB1\_PC”)

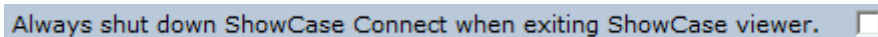
Port 104 is a typical port to use to receive images from a DICOM Store operation. You should not need to change this unless you have other DICOM software running on your computer that is already using port 104.

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 11.

## 8. Select the shutdown behavior for the Connect module.

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



You will want to make sure that all images have finished transferring before you exit ShowCase.

## 9. Click on Save Settings. Then exit.

Save your settings and Exit ShowCase Connect. **Note:** It is always best to exit Connect and restart after changing any settings. This makes sure all new settings take effect.

## 10. Launch the ShowCase application.

Launch the ShowCase application. Go to the File menu and select the ShowCase Connect option. This will establish a link between ShowCase and the Connect applications. This is also a good opportunity to check that the Connect configuration settings were saved correctly.

## 11. Configure your Query/Retrieve server.

Now you will need to configure the DICOM devices that ShowCase Connect needs to talk to.

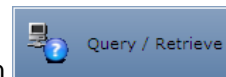
Each machine has its own method of configuration, so you may need to ask your IT department or the machine's manufacturer for advice.

- The machines must be able to see each other on the network.
- Set the ShowCase AE\_TITLE in the other device. You may need to add other configuration information (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, usually port104.

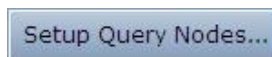
**Note:** Do NOT configure the Query/Retrieve Server to include "Storage Commit".

## 12. Set up the Connect Query/Retrieve Node.

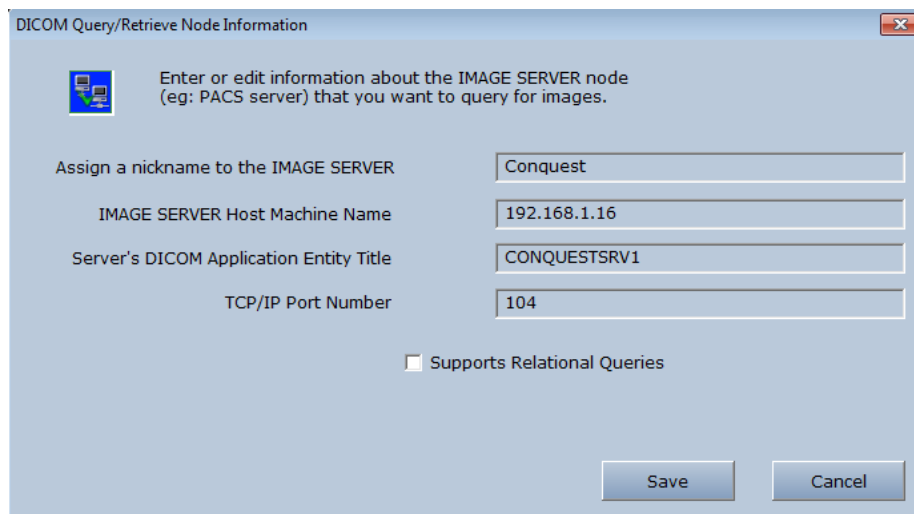
- Call up ShowCase Connect and click on the **Query/Retrieve** button



- In the Query/Retrieve dialog, click on **Set up Query Nodes**  
Click on Add New Node



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

A screenshot of a dialog box titled "DICOM Query/Retrieve Node Information". The dialog contains the following fields and options:

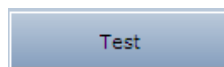
- Assign a nickname to the IMAGE SERVER: Conquest
- IMAGE SERVER Host Machine Name: 192.168.1.16
- Server's DICOM Application Entity Title: CONQUESTSRV1
- TCP/IP Port Number: 104
- Supports Relational Queries
- Buttons: Save, Cancel

- 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: Hospital PACS, 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 **Supports Relational Queries** box.
- Click on **Save** to save your settings for this Query/Retrieve server.

### 13. Test your Query/ Retrieve configuration.

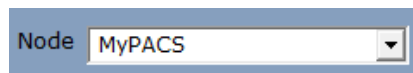
After saving your settings, select the Query/Retrieve node you configured and click on **Test** to see if ShowCase Connect and the image server node you have configured are talking to each other correctly.



If all of the configuration at both ends is correct and the PACS is connected to the network, a confirmation dialog tells you that the node is responding and set up for Query/Retrieve.

- If the test does not pass, make sure the sending and receiving computers can see each other on the network and review your settings to make sure the communication port is the same on each end. Check the Support section of [www.triltech.com](http://www.triltech.com) for other troubleshooting tips.

In most situations there is only one Query/Retrieve node to set up, a PACS with your studies. If you have multiple servers to query (eg: an ultrasound image server and a cath image server) you can set up multiple nodes. With multiple nodes, 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. The drop down box lists all configured Query/Retrieve nodes.



You should now be configured and ready to go.