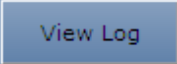

Getting that first image to transfer is always the hardest part of network setup. Once images have transferred successfully, you may never need to visit the ShowCase Connect settings screens again. This guide gives some tips for handling problems that could come up while setting up the network connectivity.

Install as Administrator

Make sure that all of your installation and configuration is done with an administrator log in. If you think you installed, licensed or configured without administrator privileges, it is best to uninstall the ShowCase software and re-install it.

Error Logs

If you are having trouble getting communication going between ShowCase Connect and other DICOM devices, you might be able to get information about the problem by looking in error logs.

A rectangular button with a light blue background and a dark blue border, containing the text "View Log" in a dark blue font.

ShowCase Connect has a **View Log** button on the bottom of the main screen. While sometimes difficult to interpret, the entries in the log might help diagnose the problem. Most DICOM devices (image servers, ultrasound machines, etc) also have error logs to help with diagnosing communications problems. Consult the manual for your DICOM device.

General Network Connectivity

The machines (ShowCase Connect computer and ultrasound machine or image server or other DICOM device) must be able to see each other on the network, so make sure that "ping" works in both directions. Your IT expert may need to help make sure your network is set up correctly and advise you about each machine's network IP address.

For most network configurations the ShowCase Connect computer must have a fixed IP address because ultrasound machines and image servers cannot send DICOM messages using a dynamic IP address.

Some sites might need to use the 'LMHOSTS' FILE on the computers to map IP addresses. If you enter a host machine name instead of an IP address and you are not using a DNS (Domain Name Server) this could be necessary. **Check with your IT expert.**

DICOM Network Connectivity

The DICOM AE_TITLE is essential for accurate communication. Make sure that if you have assigned the name "SHOWCASE_SCP" in the ShowCase Connect Settings, that the same exact name (including capitalization) is configured in the DICOM server, ultrasound machine or other DICOM device you want to communicate with.

The ports that send/receive images must match. The "Listen Port" in ShowCase Connect is usually port 104. The Send port on the connected machine must be port 104 also.

Do not set up your imaging machine to require "Storage Commit" when sending images to ShowCase. ShowCase does not support Storage Commit.

Firewalls

If your DICOM messaging says that an association was refused and you have checked all of the network connectivity settings above, you might have a firewall preventing communication.

If your machine is protected by the standard Windows Firewall, see the instructions below. For other firewall vendors, consult the documentation on how to permit a specific program to get access through the firewall.

For Windows XP Firewall, select Control Panel > Windows Firewall and select the Exceptions tab.

For Windows Vista select Control Panel ->Allow a program through Windows Firewall

For Windows 7 select Control Panel -> System and then Security->Windows Firewall->Allow a program through Windows Firewall "

Using Query/Retrieve with Remote Connections

Since the ShowCase machine needs a fixed IP address, remote machines such as home computers must have a fixed IP address as well. Most sites use a VPN for remote connection. The VPN must map the remote computer to a consistent IP address. If you are not using a VPN, the cable company or DSL provider should be able to assign you a fixed IP address.

What if Query/Retrieve Doesn't Work?

You may be trying to query a DICOM system that does not support Query/Retrieve. For example, very few ultrasound machines support Query/Retrieve. You must "send" the images from the ultrasound machine to ShowCase Connect. You do not need to configure a query/retrieve node if you are just sending images from an ultrasound machine to ShowCase Connect. The Settings page information is sufficient. From the ultrasound machine you will use an option to "send study".

Note that ShowCase itself is currently **not** a Query/Retrieve SCP, which means you cannot set up to query another ShowCase machine for studies.

What if Query Works, Retrieve Doesn't?

If you have followed all of the installation/configuration instructions but you are still having trouble, check the following tips.

1. **IP Address:** The most common problem is that the image server is not configured with the correct IP address for the ShowCase Connect computer. Be sure to verify the IP address. This is the key information the server uses to transfer images.
2. **Error Logs:** Check the logs on both machines. The log on the image server system is more likely to report the problem if ShowCase Connect can query, but not retrieve studies. If error messages are appearing on either the image server or ShowCase Connect, read them carefully.
3. **Image Server Configuration:** Double-check your image server configuration with the manufacturer's instructions. Some image servers require you to enter a specific configuration for the ShowCase machine to Query/Retrieve the image server. Some require separate configuration for multi-frame images.
4. **"Stuck" Studies:** Check to see if the transfer queue on the image server has a study "stuck" in it. There should be a way to clear the transfer queue.
5. **Firewalls:** Verify that the firewall is configured to allow ShowCase Connect to communicate inbound and outbound on any port.
6. **Port Conflicts:** Try using a different port than 104 if the logs indicate a problem with the port (make sure to change it on both ShowCase connect and the image server)
7. **"Relational Queries":** If the Query Node in ShowCase Connect has the "Supports Relational Queries" box checked, try unchecking it.
8. **Permissions:** The "Main Image Folder" (configured in ShowCase Connect) must allow ShowCase Connect users write access to the folder.