

Troubleshooting ShowCase Connect Connectivity Problems

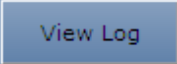
Getting that first image to transfer is always the hardest part of network setup. Once images have transferred successfully, you may never need to visit the ShowCase Connect settings screens again. This guide gives some tips for handling problems that could come up while setting up the network connectivity.

Windows Vista Machines

If you are running under the Windows Vista operating system, 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 start over and re-install.

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 gradient 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 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 addresses.

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 setting 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, or alternatively, see how to open a port (port 104).

For Windows Firewall, call up Control Panel->Windows Firewall and select the **Exceptions** tab. (Windows Vista – from Control Panel >Allow a program through Windows Firewall) (Windows 7 – from Control Panel > System and Security>Windows Firewall>Allow a program through Windows Firewall)



Recommended: Click **Add Program** and allow ShowCaseConnect to get input from any port.



Alternatively, you can click **Add Port** and open port 104 for access by any program. The Add Program option is recommended because it is more specific and allows for port re-configuration later. (Windows 7 you will need to click Allow another program to do this.)

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. 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 can query an image server and get a list back, but then cannot retrieve, you very likely have a problem with the IP address setting on the image server machine. The image server will respond to a Query, but it will not store images unless it has a valid IP address for your ShowCase machine. A problem with the IP address can happen if:

- 1- The IP address isn't set correctly on the image machine – Fix by entering the correct IP address and restarting.
- 2- You are trying to Query/Retrieve from your home or remote site that uses VPN access. The VPN needs to be configured to map your IP address to the same address each time you log in.
- 3- You are trying to Query/Retrieve from your home or remote site without a VPN, over a usual cable or DSL connection and your provider has not assigned you a fixed IP address. Again, you must somehow look like you have a consistent IP address. Your cable or DSL providers may be able to sell you a fixed IP address.

If the IP address is not the problem make sure that the port is correct (send port and listen port are the same) and make sure you do not have a firewall blocking communication (see above).