How (and Why) To Configure SHOWCASE[®] Workstation As A Stand-Alone SCP

Your ShowCase Workstation can be configured to function as a simple stand-alone SCP. This is a not a common use of ShowCase Workstation. It might make sense to run a Stand-Alone SCP if:

- You have a very small practice, less than 1000 studies a year, you do not need to view studies on anything but the Workstation you're sending to, and you plan to do your own manual long term archival.
- Your studies are non-permanent in nature, i.e. they contain 'working' experimental images or other nondiagnostic study images that you plan to delete in the near future.
- You use ShowCase Workstation to test other DICOM software.

Note: If you are setting up your workstation to forward studies to a PACS or Image Center, you **do not** need to set it up as a Stand-Alone SCP. In fact, we strongly recommend that you do not do this.

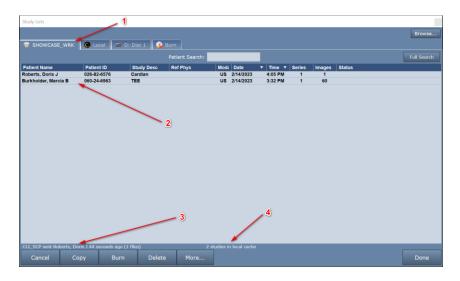
Setting Up Workstation As A Stand-Alone SCP

- 1. Click the Edit menu and select ShowCase Settings...
- 2. Select the **Dicom SCP** tab

E ShowCase Settings	- 🗆 X
Viewer Dicom SCP	Image Centers Remote PACS
f SCP Settings	
AE Title	SHOWCASE_WRK
Listening Port	11112
CCP Timeout Set	tings
Send	5000 milliseconds
Receive	5000 milliseconds
Stand Alone SCP	Server*
Status	On v
Storage Folder	D:\Workstation Cache
	*A Stand Alone SCP Server is a very specialized feature and should only be activated if necessary. Click the 'Help?' button on this page for details before you decide to activate this feature. Help?
= required field	Apply Cancel

- 3. Set the **AE Title** and **Listening Port** to whatever AE Title and network port you intend to use.
- 4. In the **Standalone SCP Server** section:
 - a. Set the Status: to On
 - b. Click the ... button to the right of the **Storage Folder** option and choose or create a folder on your hard drive with sufficient space (300GB) to store your studies. This folder must be empty.
- 5. Click the Apply button.

Bring up the study list in ShowCase. Try sending a study to the Workstation from your imaging device. It should look like this:



A few things to note:

- 1. The tab for your stand-alone SCP will be the tab with the AE Title of the Workstation
- 2. Your studies will appear here.
- 3. Incoming DICOM study activity will appear here
- 4. This tells you the status of the local cache where your study is stored.

What To Do If No Studies Are Showing Up

So, you sent a study to your stand-alone workstation but nothing showed up in the study list. Here's how to troubleshoot that.

1. Is there a red bar at the top of the study list with an error message?

If there is, it will look like this:

SHOWCASE_WRK	🔺 🔞 Local 🛛	D: Disc 1	🍃 Burn					
			Patient Search:					
The ShowCase Study	List Service is not run	ning. Please resta	rt the service using '	Windov	vs Services or	reboot the	computer	
Patient Name	Patient ID	Study Desc	Ref Phys	Moda	Date	Time	Series	Image

To resolve this, read the error message and follow the instructions there. There might be a *[click here for help]* option, which you can click to read more about resolving the error shown.

- 2. Is there are green bar at the top of the study list indicating Search is on?
 - If there is, it will look like this:

Patient Name	Patient ID	Study Desc	Ref Phys	Moda	Date	•	Time 🔻	Series	Images	Status
Displaying 0 of 0 Studies: 1/5/2023 to 1/30/2023										
			Patient Search:							Full Search
SHOWCASE_WRK	🔘 Local 🛛 🔚 D:	: Disc 1 🧳 Bi	urn							

To resolve this, click the red 'X' on the right side of the bar. It will clear the search and list studies. If you still don't see the study you just sent, click on the Date header to change the sort order so that the latest study should appear at the top of the list.

3. No Red or Green Bars?

Click the **More...** button at the bottom of the study list and select **Status.**



An Operating Details screen will appear:

Operating Details for SHOWCASE_WRK	-	
Local SCP Activity and Cache Status for SHOWCASE_WRK		
Recent Study Activity		
Time Patient Study Study Date Images Status		
2/14/2023 4:49:11 PM Ketchum, Crystal D 2/14/2023 4:36:48 PM 14 sent from 1	CLI_SCP	
2/14/2023 4:34:43 PM Roberts, Doris J 1000183 2/14/2023 4:05:20 PM 51 sent from	-	
2/14/2023 4:04:09 PM Burkholder, Marcia B 2/14/2023 3:32:21 PM 60 sent from	CLI_SCP	
Incoming DICOM Network Activity Local Cache Folder Status		
AETitle Activity		
CLI_SCP Sent 'Ketchum, Crystal D' 10 seconds ago (14 file Location: D:\Workstation Cache		
Status: OK # Studies: 3	B	
Disk Userset 112.9 MP		
A more Free Disk: 2.3 TB		
Study Retrieval Outbound Studies		
Study Status Study Status		
		Close

- A. The first thing to check is the **Incoming DICOM Network Activity** window. It lists incoming DICOM activity from imaging machines sending studies to the Workstation.
 - a. Try sending a study to the Workstation
 - b. If you don't see any activity for AE Title of the machine that sent the study, then no DICOM network messages are making it to the Workstation. Try the following:
 - i. Turn off the firewall on the Workstation computer. Try sending a study. If that doesn't fix the problem, leave the firewall off and continue.
 - ii. Check that the ultrasound machine is configured with the correct IP address for the Workstation computer. In ShowCase, go to the Edit menu, select ShowCase Settings and click on the Dicom SCP tab. Do the settings in there match the AE title and port configured at the ultrasound machine?
 - iii. Check the imaging machine's DICOM logs for errors.
 - iv. Clear the DICOM queues on the imaging machine.
 - v. Reboot the imaging machine.
 - vi. Reboot the Workstation computer.
 - vii. Do a DICOM CECHO on the imaging machine and see what it tells you.
 - viii. Turn the firewall back on if it was turned off earlier.
 - c. If you do see activity from the imaging machine, but some studies are not coming across, click *more...* and the DICOM messaging log will appear. Look for errors in this log (highlighted in red). If you need help interpreting the errors, go to the Help menu in ShowCase, select Submit A Support Request... and fill out the form so our support engineers can help you diagnose the problem.
- B. The second thing to check is the Local Cache Folder Status.
 - Does the Status: field say anything but OK? If it does, you have problems with your local cache and the Workstation will be unable to receive studies until the problem is resolved. Here are some possible local cache problems:

- i. **Cache full, limit is 1000 studies** When this happens you will need to clean up studies in your cache. If these are real patient studies, see the section on "Freeing Up Cache Space"
- ii. **Out of Disk Space** This happens when your disk is full. Free up space on your disk or migrate your cache to a new location.
- iii. **Cache almost full, limit is 1000 studies** This will not prevent studies from transferring but is alerting you to the fact that you're about to hit the 1000 study limit of your cache.
- iv. Low Disk Space This will not prevent studies from transferring but it is alerting you to the fact that pretty soon you won't have enough disk space available to receive studies.
- v. **Cache Folder Missing** Your cache folder was removed and you will need to set up a new folder in the settings screen. Or, if you can, restore the original cache folder.

Other Things to Check

- If Storage Commitment and/or MPPS are being proposed by the imaging machine, turn it off.
- Check for conflicts on the IP Address and/or Workstation listening port (default 11112), change the port number to a number above 1000; the port number must be changed in both Workstation and imaging machines.
- Check for hardware problems by replacing network cables, using different ports on the network switch and replacing network cards
- Check to make sure multi-frame images (clips) are being compressed. Transferring huge uncompressed clips can aggravate network problems.

Stand-Alone SCP Limitations

- The Stand-Alone SCP cache can store a maximum of 1,000 studies.
- If the Stand-Alone SCP cache becomes full, it will reject all DICOM requests for CSTORE.
- The Stand-Alone SCP cannot be configured to automatically clean up studies.
- Studies in the Stand-Alone SCP cache should only be deleted using the Delete button from the study list. Using external software or manually removing studies will corrupt the cache and require a new cache folder be created.

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