



# My clients cannot connect to the Exaquantum server.

The following is a list of things to check when a client cannot connect to the Exaquantum server.

## Users and User groups

For a valid connection to an Exaquantum server the 'client account', used on the client computer, must be available on both the client computer and the server computer. Additionally, the 'main Exaquantum user account', normally quantumuser, must be available on both computers. In the case of a domain installation, this is covered by both computers having access to the domain controller. In the case of a workgroup installation, these accounts must exist on both computers and must have matching passwords. Additionally, the accounts must not have expired. Lastly, the client account must be a member of the QUserGroup to permit connection.

### To check user accounts

Establish whether you are using global accounts or local accounts.

On the Exaquantum server, validate the main quantumuser account by either logging on as that account or running a program such as Notepad as the quantumuser account. Note: Run as is only available in Windows 2000 onwards.

Still on the Exaquantum server, validate the client user account in the same way as above.

On the client computer, validate the two accounts as described in 2 and 3.

On the Domain Controller (global groups) or the Exaquantum server (local groups), check that the client account is a member of the QUserGroup.

It is advisable to log off and on with the client account to ensure that membership is confirmed since changes to user accounts group memberships are not reflected until the next time the account logs on.

This procedure will check that the required accounts are available and have not expired. It will also check that the client account is part of the QUserGroup.



## DCOM Settings

During installation DCOM settings are made to the computer. These may be different to the current settings of the PC. Since some DCOM setting changes do not take effect until the computer is rebooted, it may be necessary to restart your computer in order for the settings to take effect and the connection work. Additionally, it is possible that the DCOM settings are incorrectly set during installation.

To check the DCOM settings

Start QDCOMCnfg.exe, found in the system folder of your Exaquantum installation.

Ensure that the Configure for Client checkbox is checked.

The Exaquantum Users field at the top should refer to either the domain group (normally domainname\qusergroup) or the local quantumuser account (normally machinename\quantumuser). Once this is entered, press OK to store the information. Reboot the client computer to ensure that the information is being used.

This procedure ensures that DCOM information is stored and active.

## Server Settings

The Exaquantum client needs to know the location of the Exaquantum server in order for a connection to be made. The server must be available to the client over a network link. Lastly the server must be running to allow a successful connection.

To check the server settings

Verify the name of the Exaquantum server.

Ensure that the server is reachable via the network. Test this by use of the ping utility or by using network neighbourhood.

If the server computer cannot be reached, contact the network administrator.



If the server can be reached, check that the client is pointing to the server by using the Exaquantum Server Manager. Start the manager and verify that the Exaquantum server is listed in the primary server field.

Click on the test button and verify the status shown beneath the server name. Status should be 'Running'>

If the status is 'Stopped or unavailable', go to the Exaquantum server and check that the server name is correct and that the server is running.

This procedure ensures that the Exaquantum server is available and running and that the client is correctly configured to point at it.

### **SQL Server Logins**

Occasionally, it is possible for SQL server logins to become invalid. This can happen if the Exaquantum server is renamed or moved from a workgroup to a domain or from one domain to another, etc. The check involves using the main Exaquantum user account to log onto the client computer. This may work because the main Exaquantum user account is a local administrator on the Exaquantum server and by default, all local administrators are give access to all databases.

To check if a failed client connection is caused by invalid SQL server logins

On the client PC, log in as the main Exaquantum user account, normally quantumuser, and see if this provides access to the databases. If this works and the client account fails, and the user accounts are known to be correct, then it could be a result of invalid SQL logins.

If the above is true, resolve the issue by removing all logins relating to QUserGroup on the Exaquantum server and rerun QDCOMCnfg on the server computer.

### **Hardware Firewalls**

Firewalls are designed to prevent unauthorized access and therefore incorrect configuration will cause client connection issues.

Hardware Firewalls are supplied by a number of manufactures and Yokogawa cannot test with every available firewall.



Guidelines are provided in Exaquantum Engineering Guide Volume 2 but extra settings may be required in order to allow Exaquantum Client/Server communication to occur.

If a firewall problem is suspected and it is possible to change the configuration then it is recommended that the firewall be temporarily opened to allow all access or a client installed inside the firewall should be tested in order to ascertain whether it is the firewall that is causing the problem.

One case that we do know about on Cisco ASA firewalls is, that a global policy in the policy map called inspect dcerpc can cause a client connection failure if not correctly configured (see [http://www.cisco.com/c/en/us/td/docs/security/asa/asa82/configuration/guide/config\\_inspect\\_mgmt.html#wp1478733](http://www.cisco.com/c/en/us/td/docs/security/asa/asa82/configuration/guide/config_inspect_mgmt.html#wp1478733) for details). It is recommended that this policy is disabled and the guidelines defined in the Exaquantum Engineering Guide Volume 2 are followed.