

QW5 - Remote Access Data Server



Note: Requires a current build of the QW 5 product to be installed on server.

QWDataServer is a Windows Service application that runs on a server with a static IP address. Once configured, remote users running QWDataClient can connect to the server and make requests to query Quality Window applications located on the server. QWDataServer uses WinSock for communication and a valid free TCP Port (unblocked) must be allocated to it.

QWDataServer is managed and configured by a separate program called QWDataServerAdmin, which creates a list of Quality Window applications that will be exposed to the server, a list of valid remote users, and the relationships between applications and users. Application and User settings are stored in a MS Access database called QWDataServer.mdb.

Another program called QWDataServerTray is used to display server activity as well as being able to control the QWDataServer service. After installation, QWDataServerTray will be launched every time a user logs onto the server. All TCP traffic is logged to a file called QWDataServer.log located in the installation folder. The log file can be cleared by right-clicking on the QWDataServer tray icon and selecting 'Clear Log File'.

The MS Access database contains 3 Tables:

Users:

- usrID: Internal record ID for a user
- UserName: Descriptive name of the user
- UserID: Unique User ID for the user
- Password: Encrypted password for the user

Applications:

- appID: Internal record ID for an application
- Filename: Full path of a shared QW application

Relationships:

- usrID, appID: A single User to Application relationship

Note that special care must be taken when selecting Quality Window applications in terms of internal path names with the QW application and its scripts. If the application is referencing specific paths such as L:\ then that shared drive must also be defined and accessible to this server for proper operation (more on this later)

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QWDataServer also uses a QWDataServer.IQW file which contains various program settings, as follows:

```
[QWDATASERVER]
LocalIP    = 123.456.789.012
Port       = 5000
MaxSockets= 20
LicenseNo  = 107-XXXXXXXX-264
```

- LocalIP** The server's IP address to listen on
If left blank, QWDataServer will use the IP address of the first adapter it finds. If you have multiple adapters/interfaces, enter an IP address here to make sure it binds to the proper one.
- Port** TCP Port to listen on
- MaxSockets** The maximum number of TCP sockets to create during the session.
- LicenseNo** License Registration Number

How does QWDataServer work:

QWDataServer runs as a Windows Service that sits on a server waiting for TCP requests to come in on a specified port. It works in conjunction with a client program called QWDataClient.

The Server IP Address can be left blank and it will default to the first adapter found on the server. If specified, then only that address will respond to requests.

Once an administrator configures the TCP port to listen on (default 5000) and defines the Quality Window applications on the server that should be shared, as well as Users that can access them, clients on other computers running the QWDataClient program can remotely access those shared applications.



MaxSockets = 20 means that the system will allocate a maximum of 20 TCP sockets (supporting 20 concurrent users).

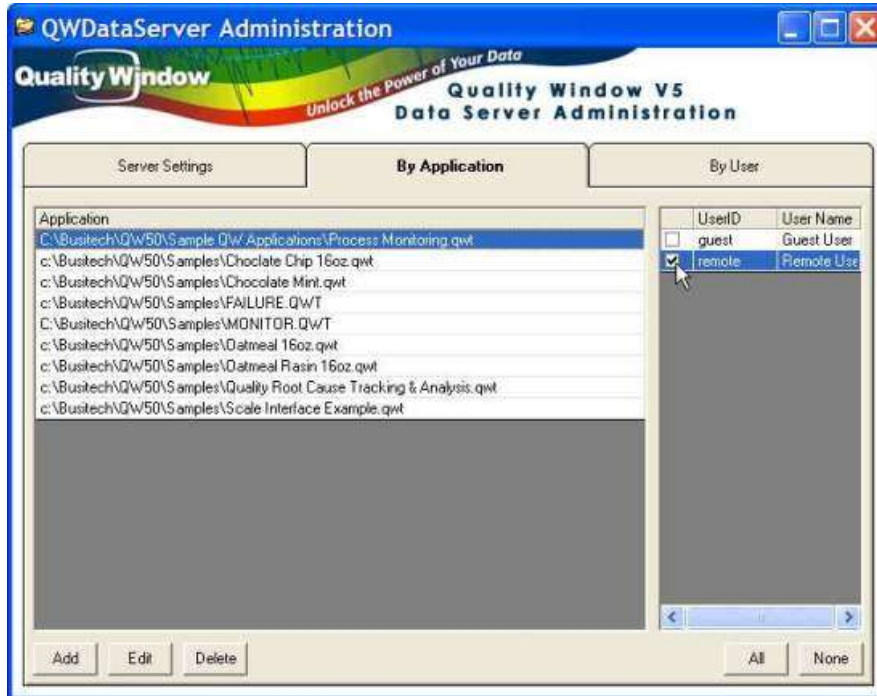
Contact Busitech for your Quality Window Data Server license number.

If any changes are made on this screen click on the 'Apply Server Settings Now' button.

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To **Add an Application** to the server:

Click on the **By Application** tab



Click **Add**

Navigate to and select the application

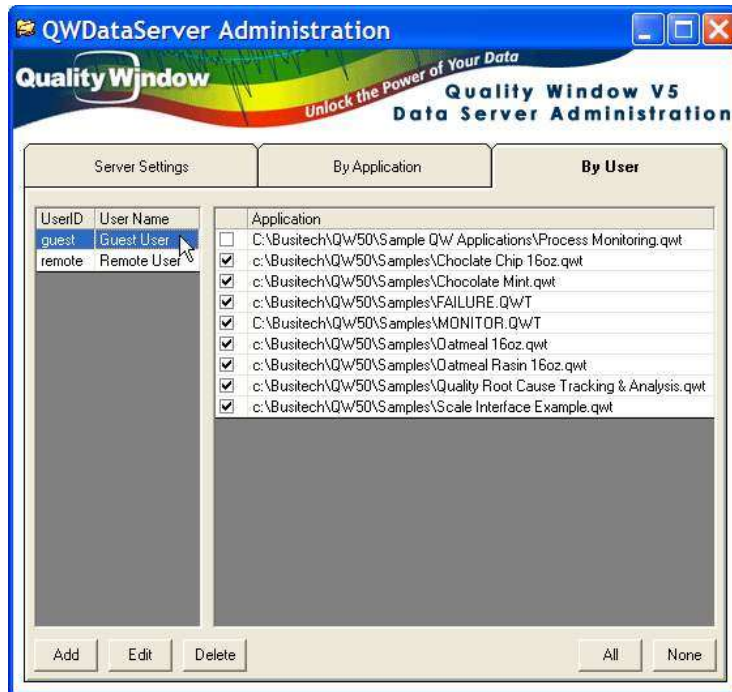


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Click **Open**

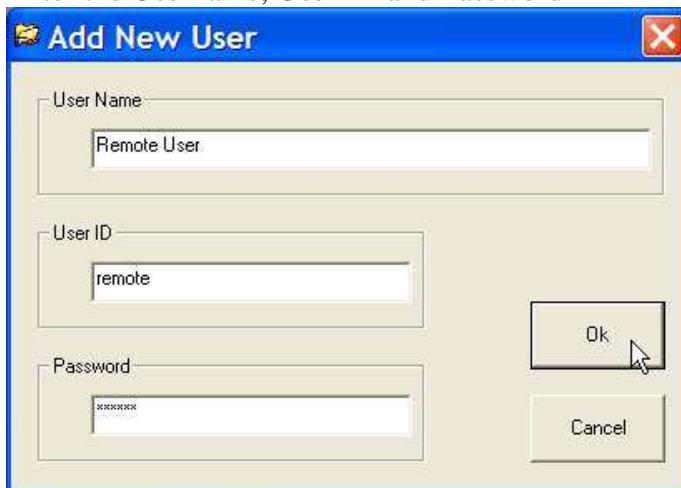
To **Add a User**

Click on the **By User** tab



Click **Add**

Enter the Username, User ID and Password



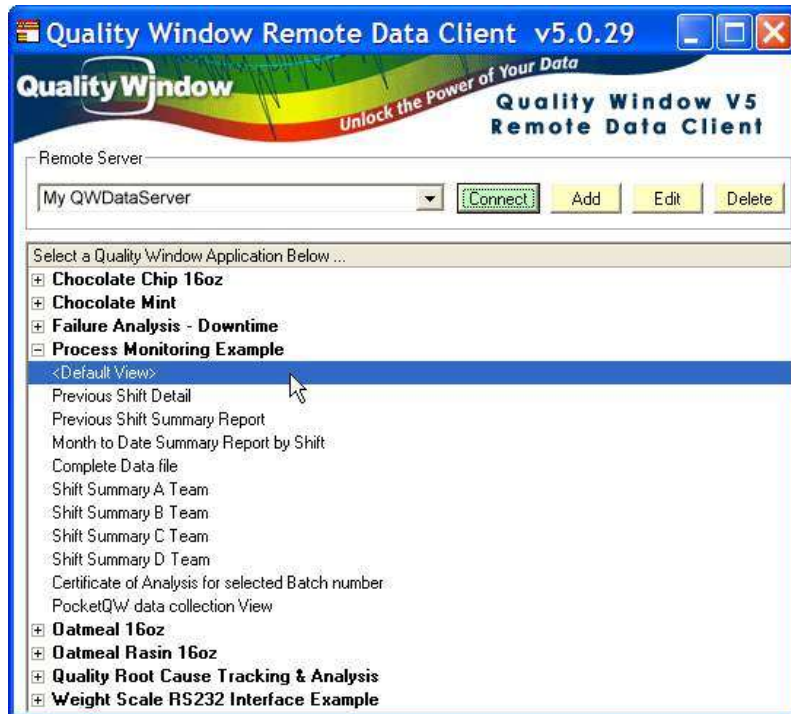
Click **OK**

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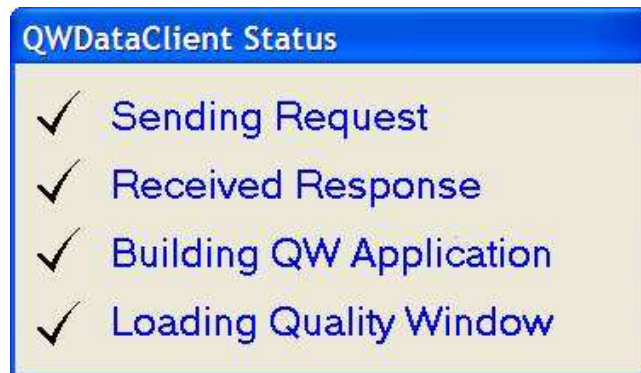
Which Application can be opened by which User is set either on the By Application tab or the By User tab. Just place a checkmark beside the Application or User.

When a user first runs QWDataClient, they must click on the Add button in order to add one or more Server Locations to their list. This involves specifying an IP address or Domain Name of the Server they wish to connect to, giving it a meaningful name, specifying the TCP port at which this server will be listening on, and specifying a UserID and Password for this server. Multiple servers can be listening on different ports, but only one Service can be installed on a server. There is also an option to force the user to enter a UserID and Password when they initially access a server.

When a QWDataClient program connects to a QWDataServer, the server returns a list of all Quality Window applications (and their Views) available based on the UserID. When the client selects one of the Views, a request goes out to the server, the data is extracted and returned to the client, and a temporary Quality Window application is created and displayed in QW50. When the client closes QW50, the temporary data is then deleted, and the QWDataClient screen is then returned, ready to select a different view.



If a View is selected that has prompts '?' in its Filtering, then an intermediate screen is displayed prompting the user to fill in the prompts and re-submit the request for processing.



Note that QWDataClient is installed as part of the Quality Window 5.0 installer. QWDataServer is installed by downloading and executing QWDataServerInstall.exe.

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Using Mapped Drives in QWDataServer:

Since QWDataServer runs as a Windows Service and typically under the System account, it will not have access to any shared drives that may be created by the current interactive user. If you wish to serve Quality Window data that is located on a shared drive, you need to first define the shared drive in the interactive user account so that QWDataServerAdmin can see the drive(s) in order to define the applications. You must also define the same mapped drives in QWDataServer to allow it to see the drives when the interactive user is not logged on. You can do this as follows:

In the same folder that QWDataServer was installed, create a new file using Notepad and name it QWDataServer.map

Use one line for each mapped drive you need to define, in the following format:

Drive: \\ServerName\ShareName@UserName:Password

Examples:

L: \\MyServer\QWData@Ray:secret

M: \\MyOtherServer\QWFiles

Note the single space after the drive, and that UserName and Password are optional.

Once this file is created, the next time you startup QWDataServer, it will internally attempt to create these mapped drives (any errors will be written to the log file). The interactive user may see icons in explorer showing Disconnected Drive – this is normal Windows behavior since the mapped drives were created outside of the user account.

System Requirements for QWDataServer:

- Runs under Windows Windows 7,8,10, Server 2003, Server 2008. Server 2012
- Minimum of 1GB RAM
(2GB or more recommended, depending on number of concurrent users)
- Unlimited QW Application/User definitions
- Static IP address accessible to all QWDataClients both local and remote
- Requires 1 TCP Port (default port set to 5000 on install)
Can be changed as required
Selected port must be allowed in Firewall settings
- Default of 20 concurrent users (sockets)
Number of sockets can be increased/decreased as required
- Less than 100MB of disk space required by server for operation
(assuming QW data files are already installed)

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