

Introduction

Quality Window can be licensed in two ways: Standalone License or Server License

In Standalone License mode, a single workstation is assigned a unique license with unlimited use. In Server License mode, a server with QWLicenseServer installed is assigned a special license with an encoded number of seats, and each workstation configured to communicate with the server is allocated a seat based on the number of concurrent seats already allocated. In other words, a 10 seat license means that at most, 10 workstations can communicate to the server at any one time. *It is highly recommended that mission critical workstations be allocated standalone licenses or take advantage of License Reservation to be guaranteed usage of the software when they need it.*

Requirements

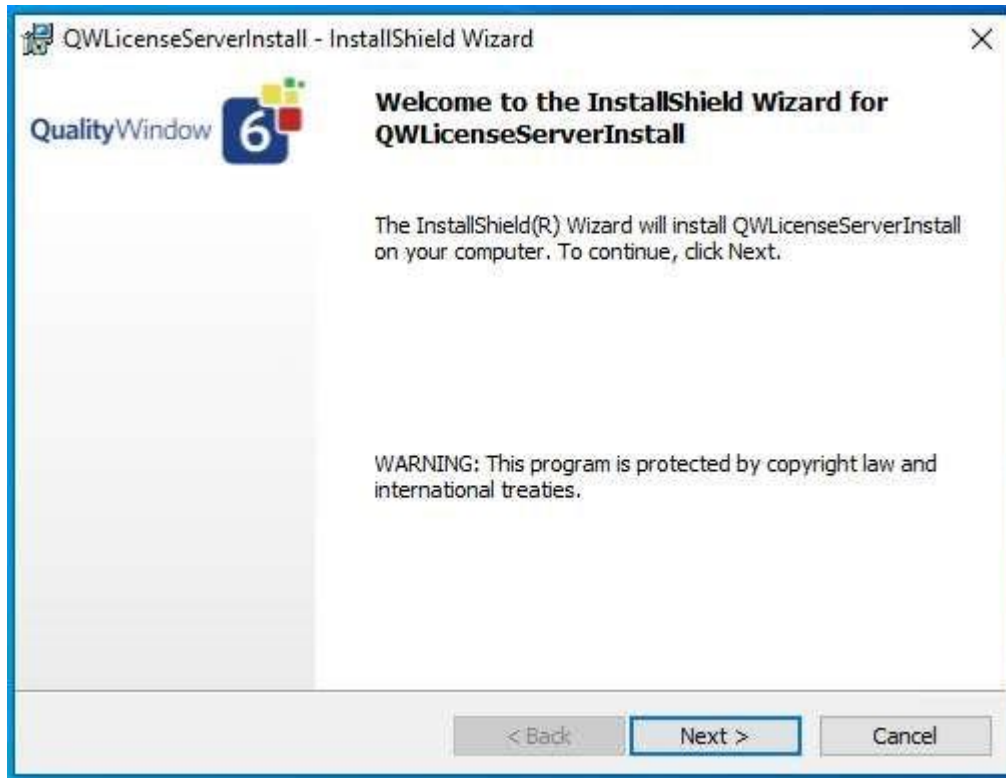
Quality Window License Server must be installed on a workstation or server with a Static IP address with at least 1 unused TCP port. The software will run on all Microsoft operating systems from Windows 7 onward including 32bit and 64bit architectures. There is very little demand on memory, CPU and disk space when QW License Server is running, however network TCP traffic can be demanding with a high number of concurrent users checking-in (larger than 100 users). The software is usually installed on an existing server that may be providing other services such as a file server or web server.

Installation

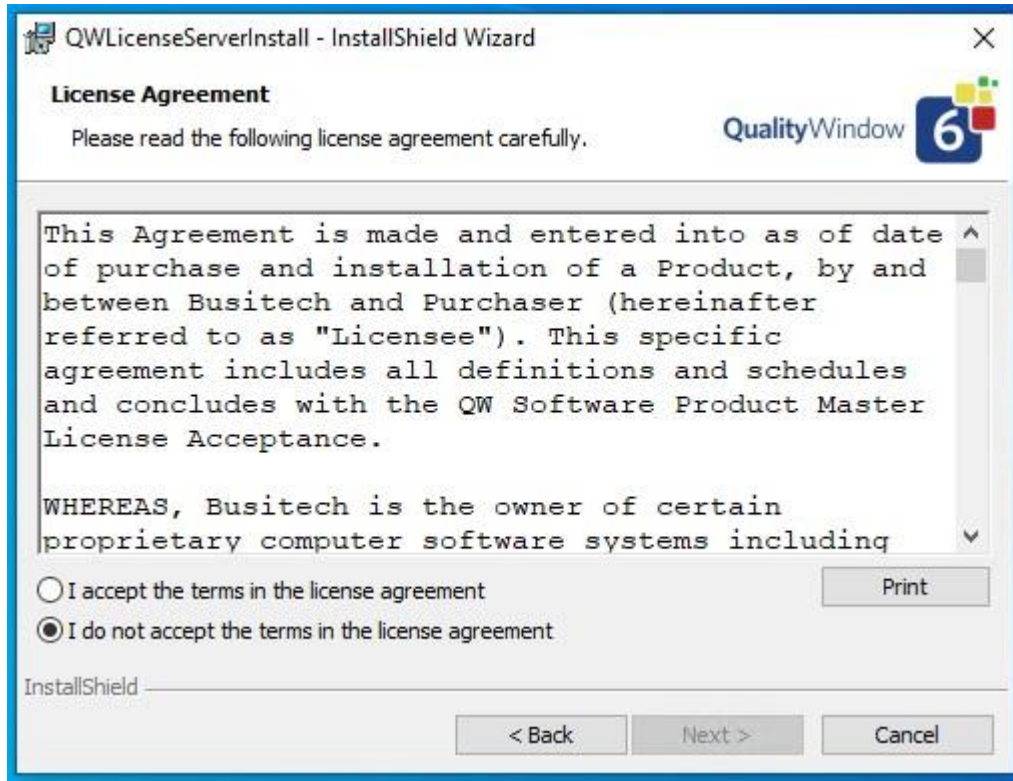
Download and run the following installation package:

<http://assets.busitech.com/software/QWLicenseServer/QWLicenseServer6.0.0.237Install.msi> The

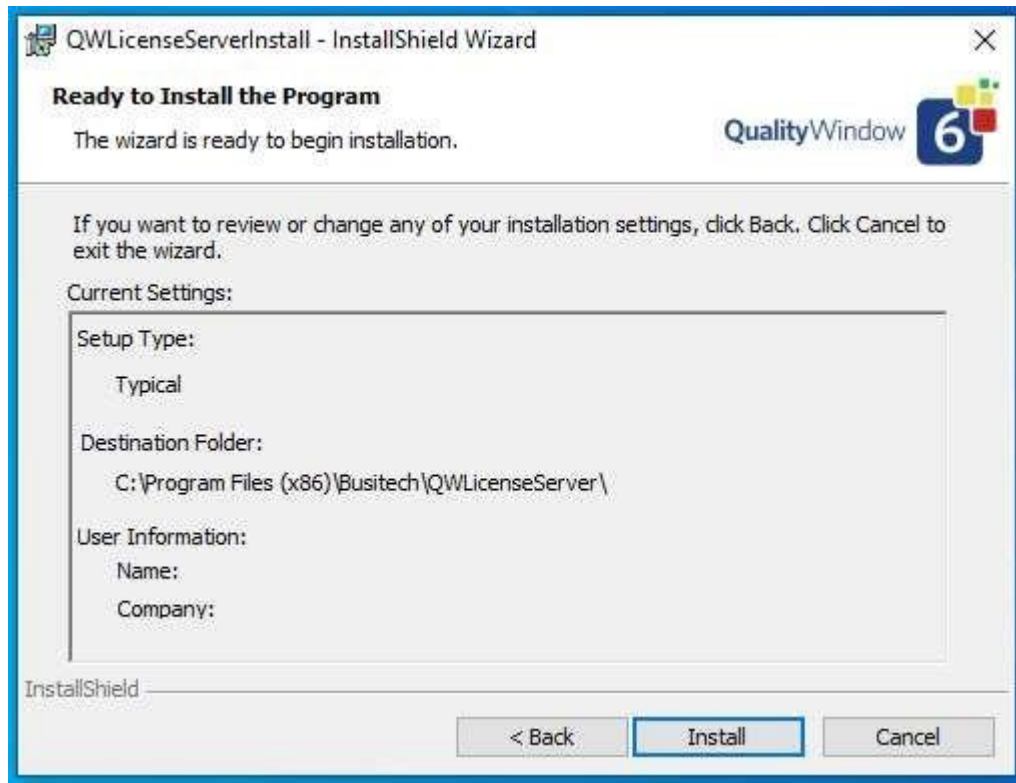
following screen should appear:



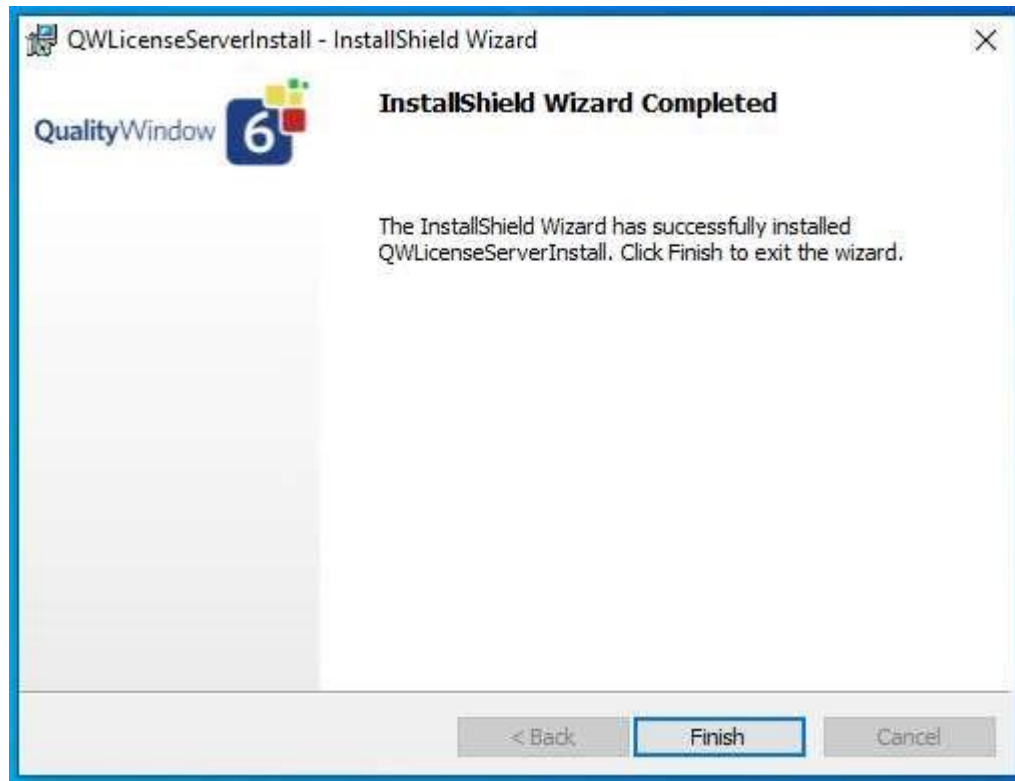
Now click **Next**.



Review the license agreement and choose whether to accept the terms. Click "Next".



Click **Next** to start copying files. After copy is complete, you will be presented with completion dialog.



QWLicenseServer has now been installed. Click on **Finish** to start QWLicenseServer.



Right Click on the Keys icon in the System Tray to Start/Stop the Windows service, or to enter the Administration module for QWLicenseServer.

If you Left-click on the icon, a log window such as this will be displayed:

The Activity Log tab displays the protocol request and response messages between the client and the server. This tab is the primary interface for testing and confirming activity

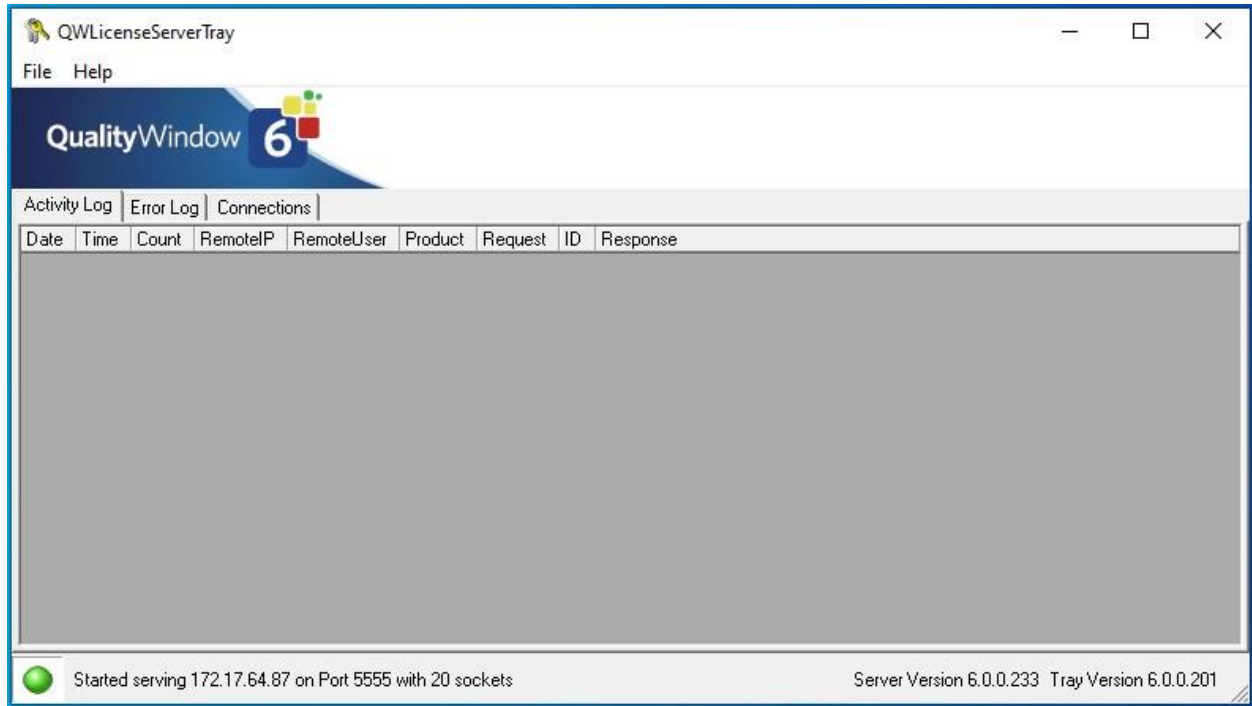


Figure 1 License Server Activity Log

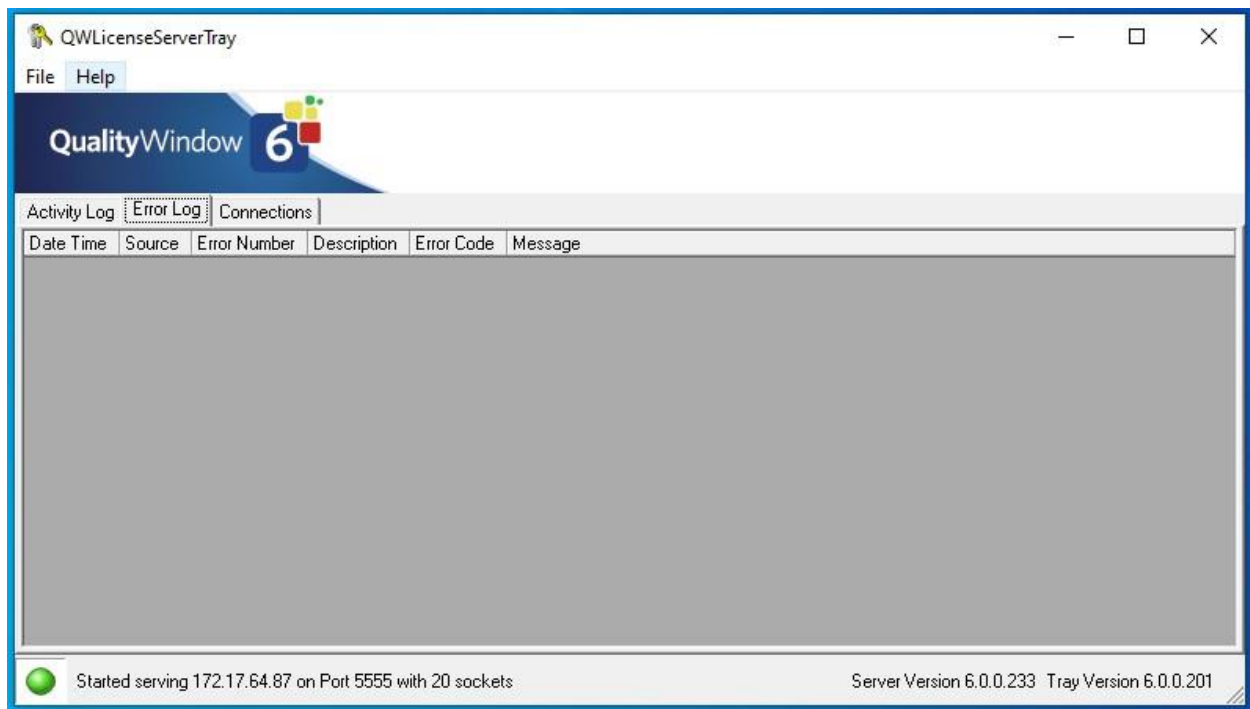
Activity Log grid displays the following information:

Date	This is the date stamp for the activity message.
Time	This is the time stamp for the activity message.
Count	The current license usage for the product associated with the record. This count is for concurrent licenses and does not include any reserved licenses from the pool.
Remote IP	This is the remote IP address from where the message originated.
Remote User	This is the remote user from the workstation where the message originated.
Product	The friendly name of the product associated with this activity record.

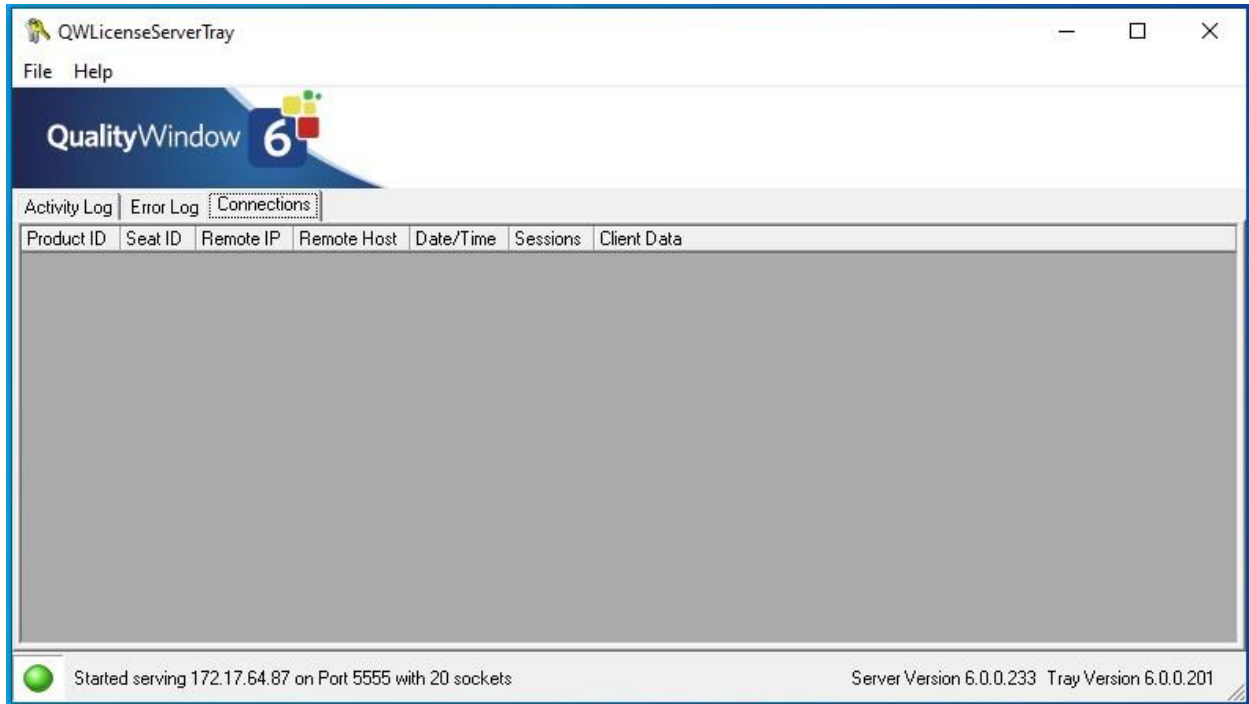
Request	The protocol command issued by the client.
ID	The identifier number given to the client from the CONNECT request.
Response	The protocol response from the server for the given client request command.

The bottom status bar displays the status of the license server service by way of colored icons. A green icon indicates the service is running. A yellow icon is displayed when the service is either stopping or starting. A red icon indicates the service is stopped. The status bar also shows the server IP Address and Port that is being used to send and receive protocol data.

The Error Log tab displays any protocol or networking errors that might occur. This data is useful when the license server is not working correctly. Runtime errors that might cause the license server service to stop running will be logged here because it is not possible to display runtime errors on the screen in Windows Services.



The Connections tab displays all the current protocol connections for every product registered with the license server.



License Server Configuration

The license server administration tool is used to configure communication, logging, security, and products.

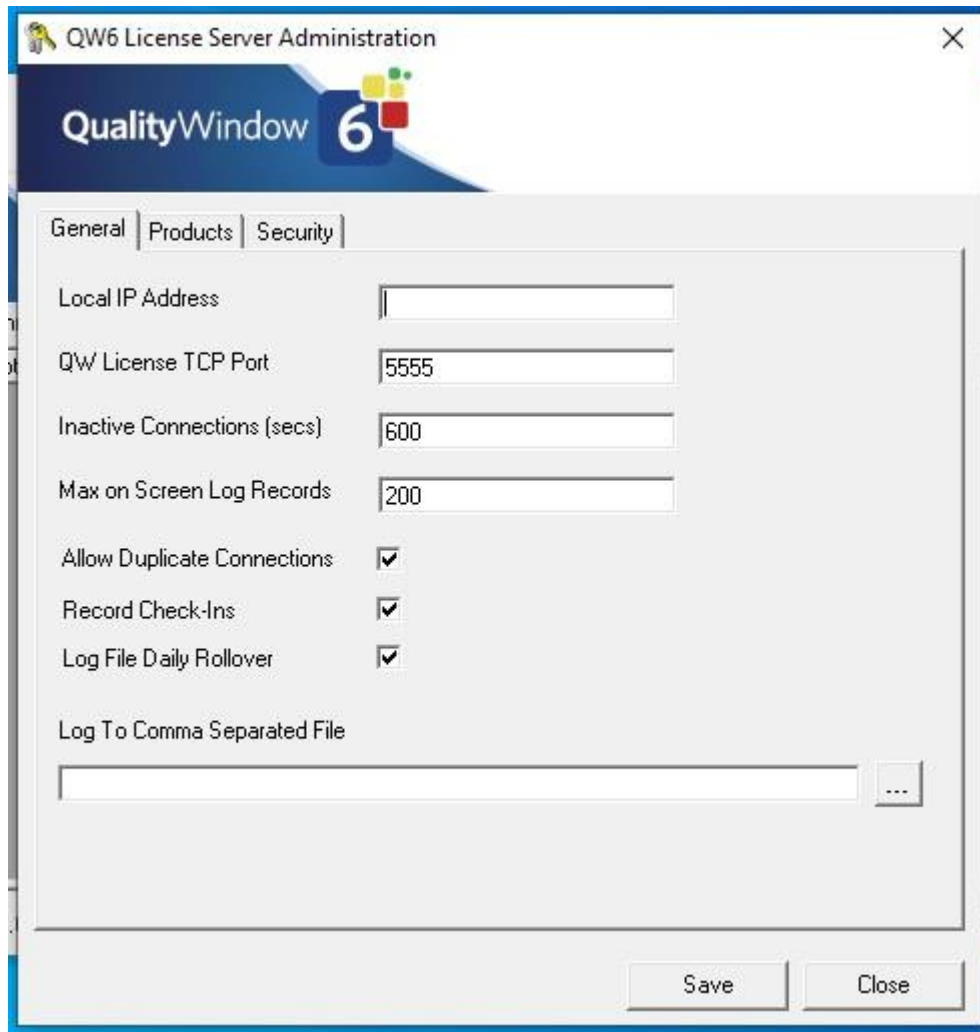


Figure 2 General settings for License Server Administration

Local IP Address	
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For the **Local IP Address**, you can leave this blank and QWLicenseServer will use the IP address associated with the first interface card it finds. If you have multiple interface cards and you want to have QWLicenseServer listen on a specific IP address, then enter the IP address here.

Choose a **TCP Port** that you know is not currently being used on this server (Default 5555)

Allow Duplicates if selected, means that if a workstation runs multiple instances of a program, that only 1 seat should be allocated for all instances. If not selected, then each instance will consume a seat.

Inactive Connections is the number of seconds that an ID has not checked in, to release the seat. The default of 600 seconds (10 minutes) is usually fine.

Max on Screen Log is the maximum number of log records to display in the Log Window. Note that ALL log records are written to the log files if a log file was specified.

Log to Quality Window (if specified) allows you to output log entries to a Quality Window application. Please note that Quality Window 5 must be installed on the same computer as the license server to use this feature.

Log to Comma Separated File (if specified) allows you to output log entries to a CSV file which can later be imported into Excel.

Log to Quality Window (if specified) supports output to the specified Quality Window filename. This option requires a licensed copy of Quality Window 5 installed on the same PC as the License Server instance.

Now click on the **Products** tab to create a new product.

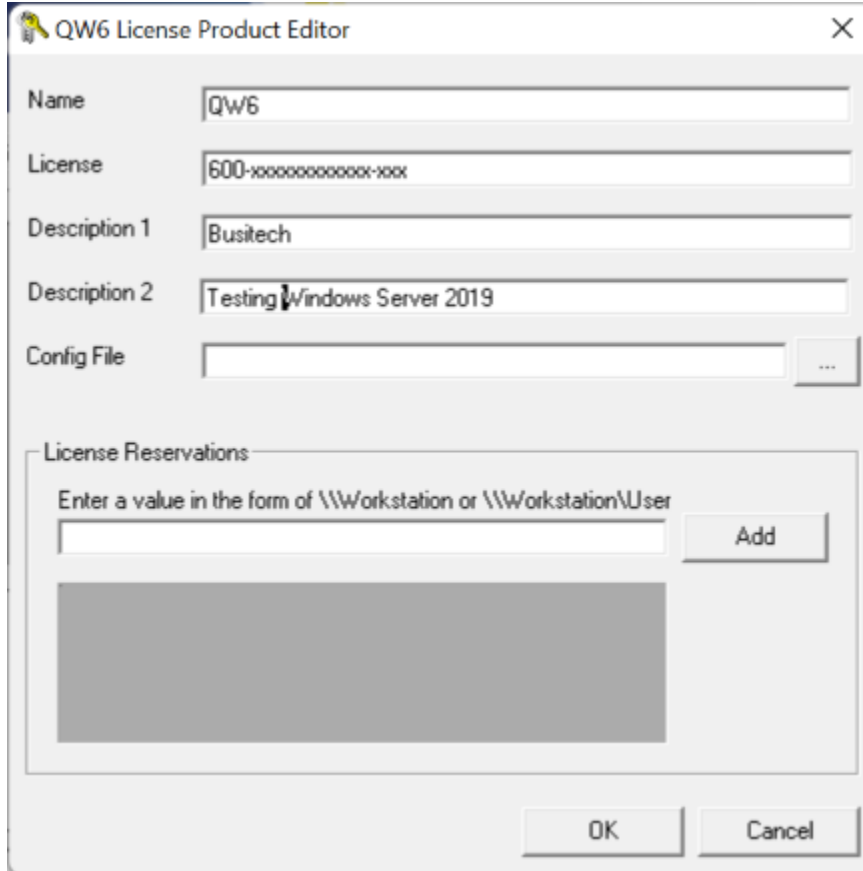


The screenshot shows the 'QW6 License Server Administration' window with the 'Products' tab selected. The window has a title bar with the QualityWindow 6 logo and a close button. Below the title bar are three tabs: 'General', 'Products', and 'Security'. The 'Products' tab is active, showing a list of configuration options:

- Local IP Address: [Empty text box]
- QW License TCP Port: [5555]
- Inactive Connections (secs): [600]
- Max on Screen Log Records: [200]
- Allow Duplicate Connections:
- Record Check-Ins:
- Log File Daily Rollover:
- Log to Comma Separated File: [Empty text box] ...
- Log to Quality Window: [Empty text box] ...

At the bottom of the window are two buttons: 'Save' and 'Close'.

Now click **Add** to add a new product.



Enter the Product Name (ie if using Quality Window 5.0, then enter **QW6**)

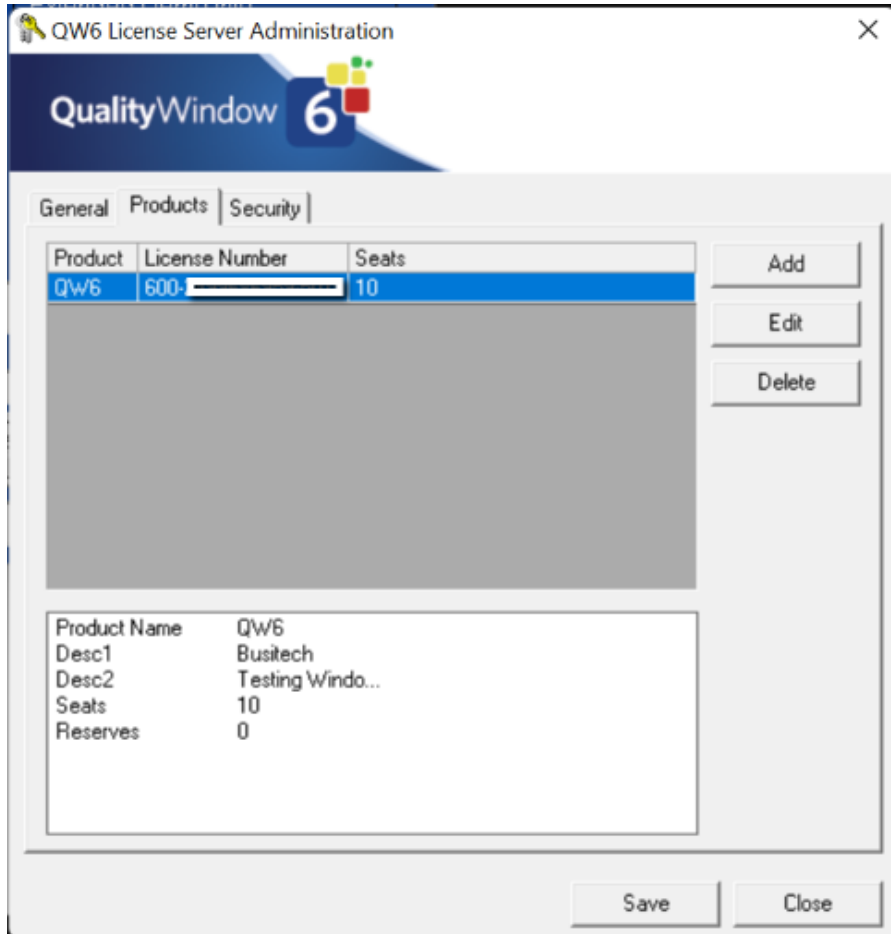
Enter the License number that was given to you in the exact format including hyphens.

Enter both Descriptions to document the product or company name.

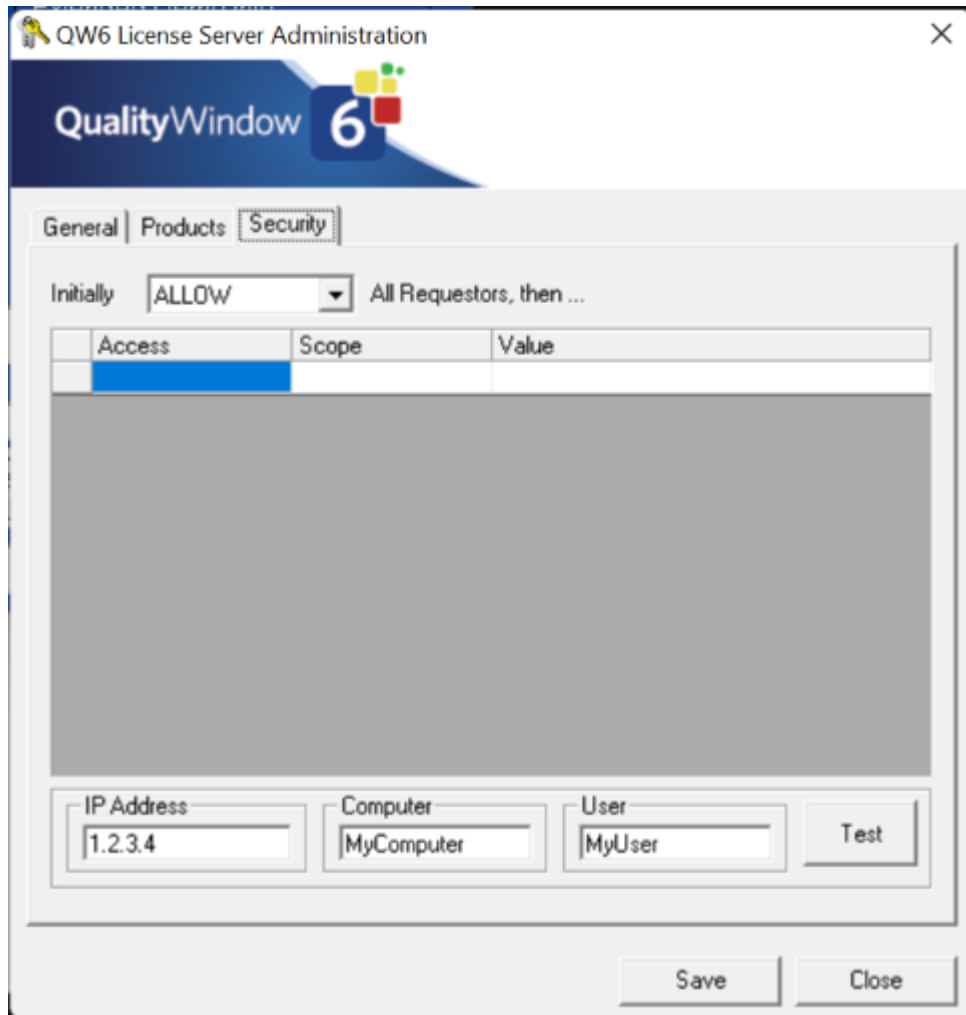
License Reservations is a feature that will guarantee seats to the listed workstations or workstation users. Use this feature to ensure mission critical workstations and workstation users will always obtain a seat when Quality Window is started. Please note that using the feature will reduce the total number of concurrent seats by the total number of reservations. Alternatively, mission critical workstations can be assigned a stand-alone license separate from the license server. This would require a separate license number purchased from Busitech and the workstations would no longer participate with the license server.

Now press **Ok**.

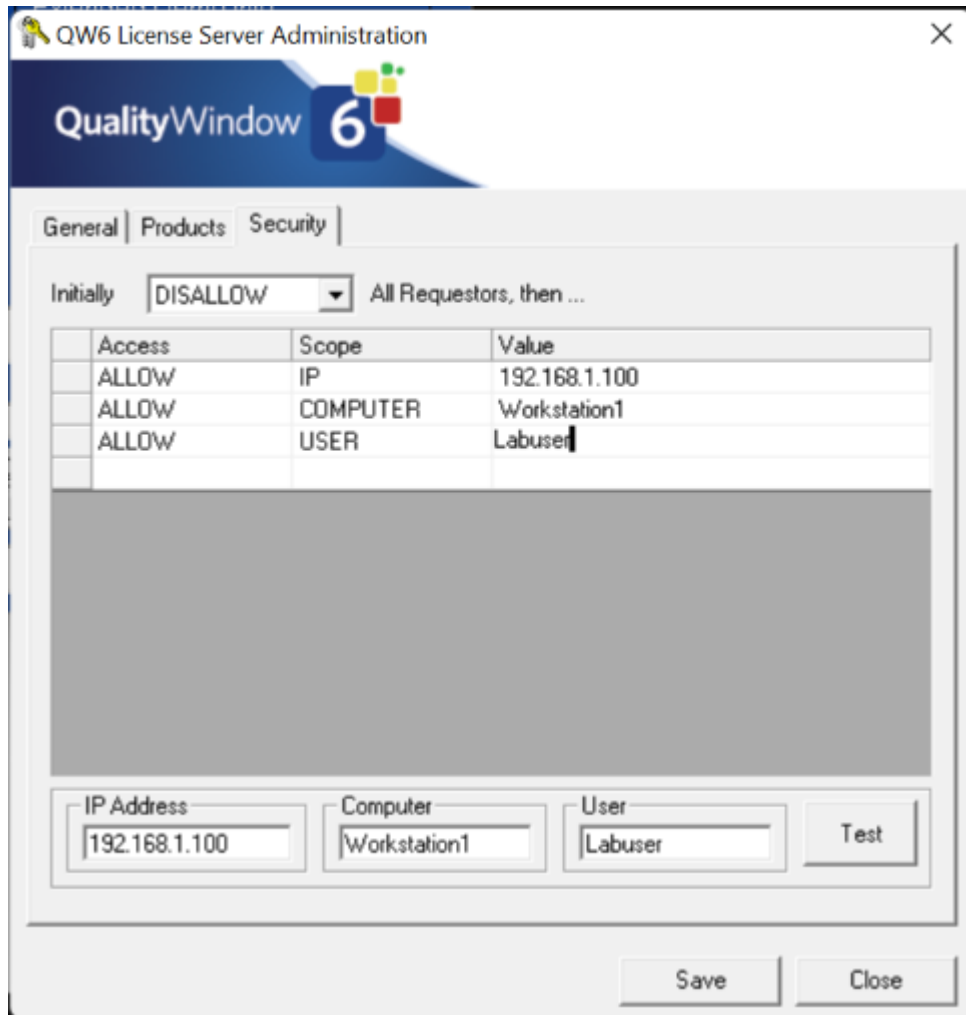
You have just registered your first concurrent server licensee number.



Now that you have your product set up, you can define some Security rules. Click on the **Security** tab on the left.



QWLicenseServer can be configured to allow or refuse external requests based on the user's IP address, Computer name, or logon Username. The first drop-down box defines whether you want to initially ALLOW all requestors, or initially DISALLOW all requestors. Set the appropriate value and continue to the grid below.

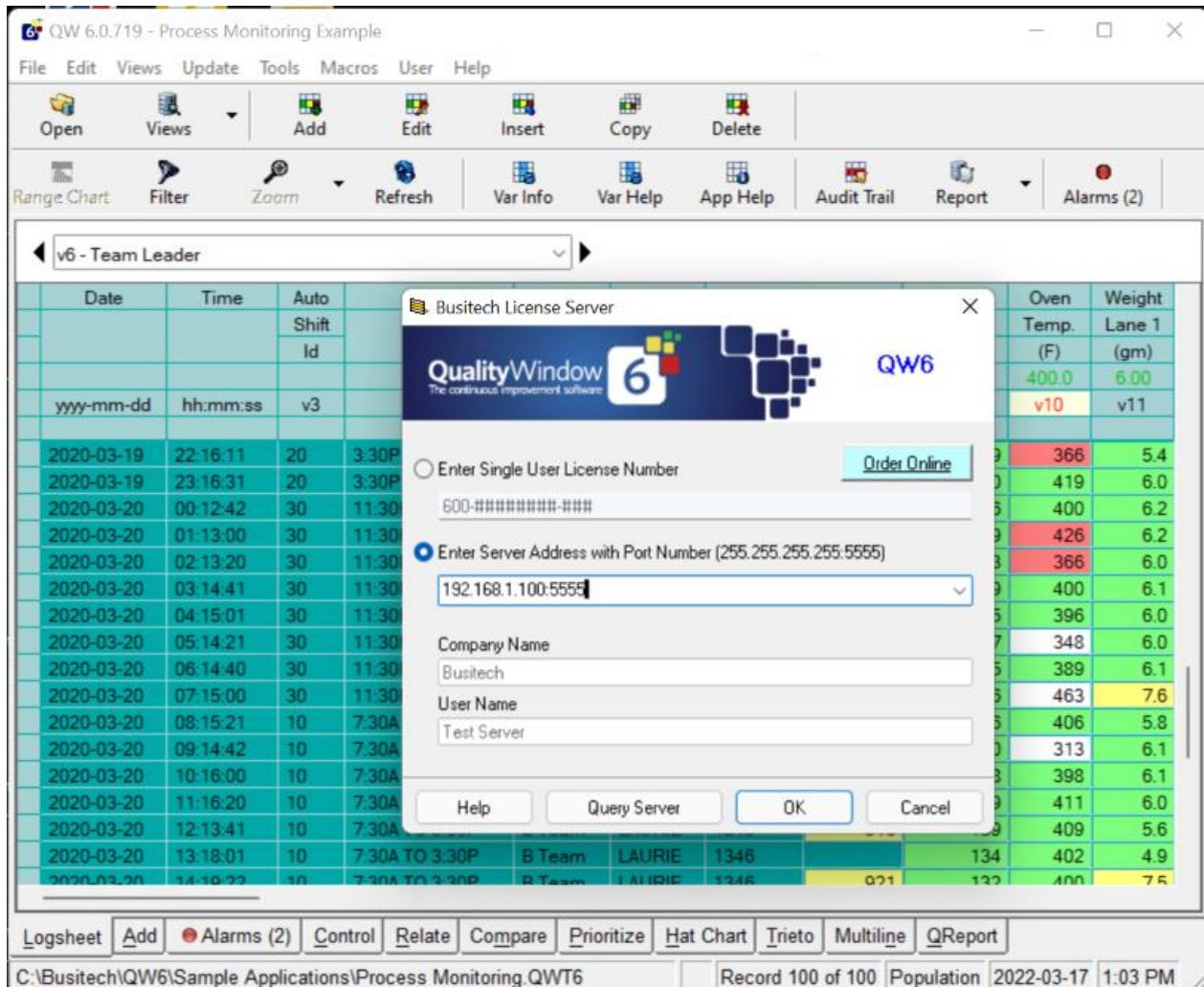


The security grid is broken into 3 parameters, where the first column defines the access rule of Allow or Disallow, then second column defines the scope which could be by IP address, Computer name, or by Username. The third column defines that actual value to test against.

In the example above, all requestors are initially disallowed, but if request came from IP address 192.168.1.100 then allow it. Then it would check if the Computer name was "Workstation" and if so Allow it. Then it would check if the username was "Labuser", and if so Allow it. Note that you can use the testing area below the grid to enter example requests and click on the Test button to determine if that scenario would be allowed or not. The system basically validates the request top-down in the list to determine if the request should be allowed or not. Note that a '0' specified as one of the IP sub addresses means to use it as a wildcard (eg 192.168.1.0 would correspond to all addresses from 192.168.1.0 through 192.168.1.255).

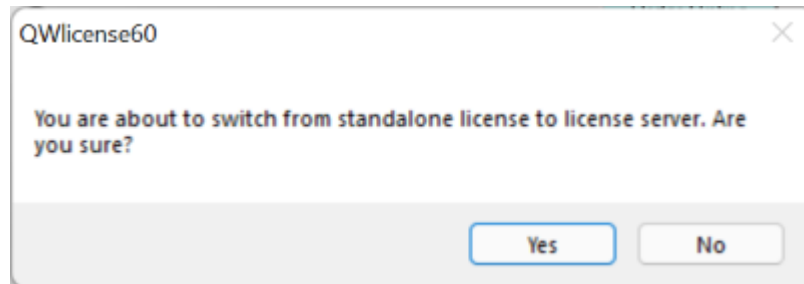
Now click on **Save** and then **Close**. You will get a message stating that changes will not take effect until you restart the License Server program. Using the Tray icon, Stop QWLicenseServer and then restart it.

With QWLicenseServer both configured and running, run Quality Window on one of the workstations. Then click on menu **Help** and choose **Enter Review QW6 License Information**.



Date	Time	Auto Shift Id	Oven Temp (F)	Weight Lane 1 (gm)	
2020-03-19	22:16:11	20	400.0	6.00	
2020-03-19	23:16:31	20	v10	v11	
2020-03-20	00:12:42	30	366	5.4	
2020-03-20	01:13:00	30	419	6.0	
2020-03-20	02:13:20	30	400	6.2	
2020-03-20	03:14:41	30	426	6.2	
2020-03-20	04:15:01	30	366	6.0	
2020-03-20	05:14:21	30	400	6.1	
2020-03-20	06:14:40	30	396	6.0	
2020-03-20	07:15:00	30	348	6.0	
2020-03-20	08:15:21	10	389	6.1	
2020-03-20	09:14:42	10	463	7.6	
2020-03-20	10:16:00	10	406	5.8	
2020-03-20	11:16:20	10	313	6.1	
2020-03-20	12:13:41	10	398	6.1	
2020-03-20	13:18:01	10	411	6.0	
2020-03-20	14:18:22	10	409	5.6	
			134	402	4.9
			132	400	7.5

Click on the Server Address radio button and enter the IP address of the server, a colon, followed by the TCP Port configured on the server. Now click on the **Ok** button. A warning message appears to remind you that you will be switching to Server Licensing – click **Yes** to confirm.



Note that if you have a DNS name defined for the Server's IP address, you can enter the DNS name instead of the IP address in Quality Window. For example, if you have MyLicenseServer.Domain.com in DNS associated with the address 192.168.1.55, then in Quality Window you could enter:

MyLicenseServer.Domain.com:5555

This way, if you choose to change the IP address of the server, your administrator only needs to change the DNS entry and all Quality Window users will automatically point to the new IP address.

Repeat the above steps for each workstation that you want to connect to QW License Server.

Now that you have QWLicenseServer running as a Windows Service, you can further configure the service by going into Control Panel and clicking on the Services icon. You can then ensure that the service is set to Automatic mode and that the proper security settings have been specified if needed. Since it runs as a Windows Service, QWLicenseServer will be available to process requests even if a user is not logged into the server.

Automating Licensing

On the client side, if a file with the same name as the client application, with an extension of '.LIC' exists in the same folder as the client application, it will be loaded the first time the client application is executed and the contents of the file applied to the product registration. The file will be automatically deleted after registration has applied.

The LIC file should be in the following format and saved as an ASCII text file.

[QWLICENSE]

LicenseNo = 192.168.1.55:5555

RegName1 = Company

RegName2 = User

Support

Any questions concerning Quality Window License Server may be directed to **Busitech** at (613) 938-0900 or via email: support@busitech.com