



QW License Server

Install and Administration Guide

April 25, 2024

QW License Server Install and Administration Guide

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Introduction

Quality Window offers two distinct licensing models: the Standalone License and the Concurrent License. The Standalone License is designed for individual workstations, providing each with a unique, unrestricted license.

On the other hand, the Concurrent License operates through QW License Server. This setup involves a server with a specific number of licensed 'seats'. Workstations connect to the server and occupy a seat, but only up to the maximum number allowed by the license. For instance, a 10-seat license permits up to 10 workstations to simultaneously connect to the server.

For workstations critical to operations, it is advisable to either use Standalone Licenses or leverage License Reservation, ensuring uninterrupted access to the software whenever necessary.

System Requirements

QW License Server is remarkably flexible and efficient, designed to operate seamlessly across a range of Windows environments, including various desktop and server editions. Its design focuses on minimalistic resource utilization, ensuring compatibility with diverse hardware setups.

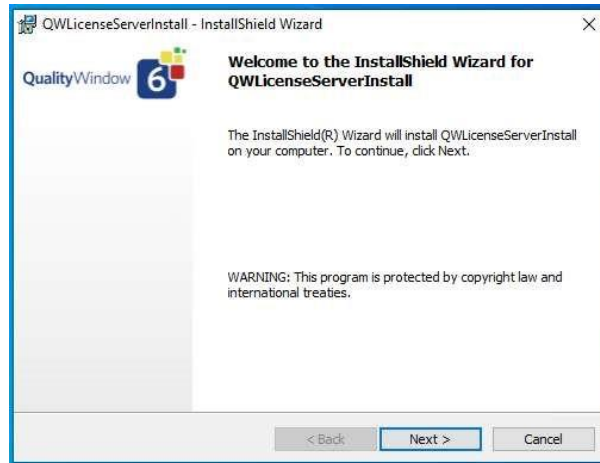
Supported Operating System	<ul style="list-style-type: none"> Windows 10, 11, Windows Server 2019, 2022.
Processor	<ul style="list-style-type: none"> 1 GHz or faster processor
Memory (RAM)	<ul style="list-style-type: none"> 4GB
Storage	<ul style="list-style-type: none"> 1GB of free space
Network Requirement	<ul style="list-style-type: none"> Static IP Address 1 TCP un-used port <ul style="list-style-type: none"> Open to private network (not to public internet)

*****QW License Server is not designed to be installed the same device as Quality Window. If installed on the same machine, issue can arise where QW License Server or Quality Window would stop operating properly.**

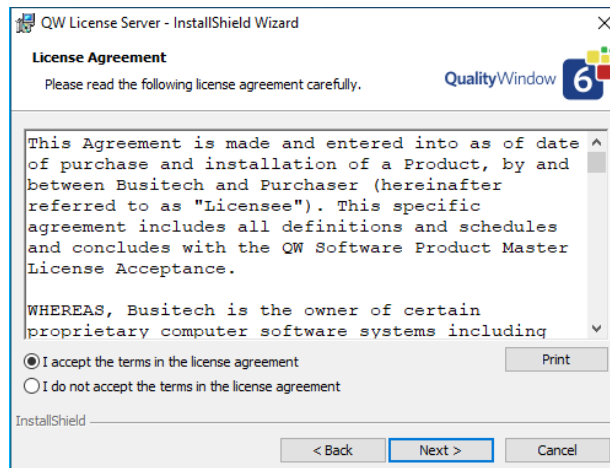
Installation

NOTE: If upgrading from QW License Server 5.X version please see [Appendix A – Upgrading from QW License Server 5](#)

Download and run the following installation package: [QW License Server MSI](#)

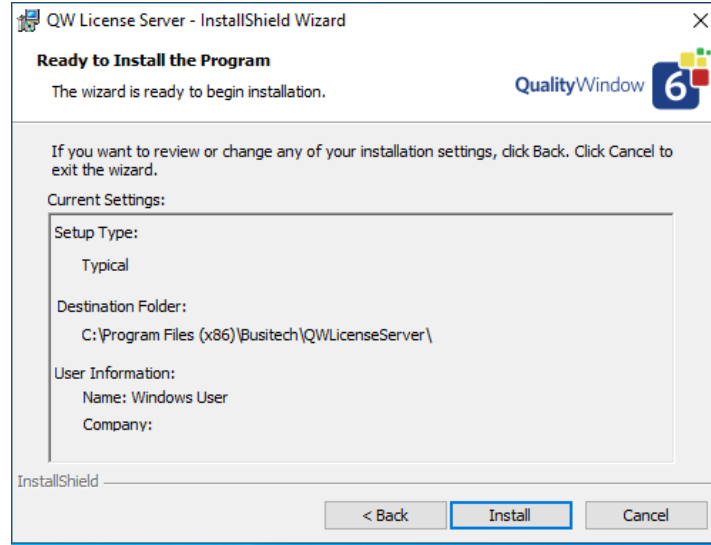


Click **Next**.

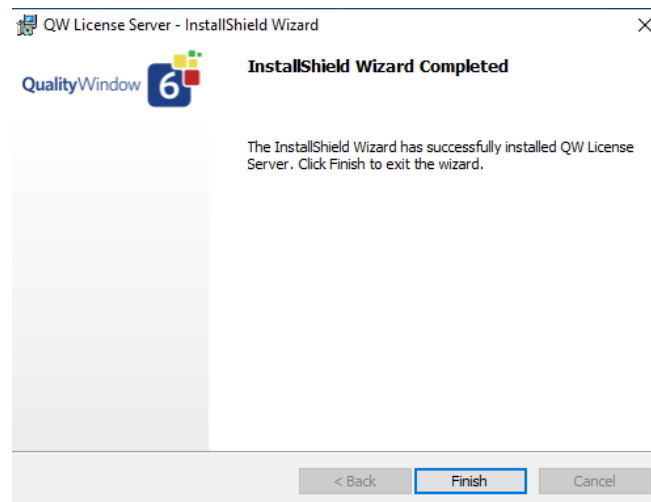


Review the license agreement and choose whether to accept the terms. Click **Next**.

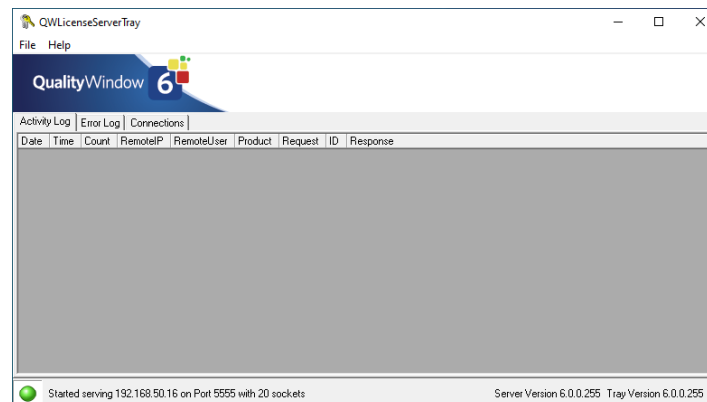
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Click **Install** to start copying files. After copy is complete, you will be presented with completion dialog.



QW License Server has now been installed. Click on **Finish** to start QW License Server. You should be displayed the QW Server License Tray Application



If you encounter any issues during the installation please contact [Busitech Support](mailto:support@busitech.com) at support@busitech.com

Validating Firewall Configuration

QW License Server requires bidirectional network access to listen to License requests and issuing license sessions to Quality Window clients.

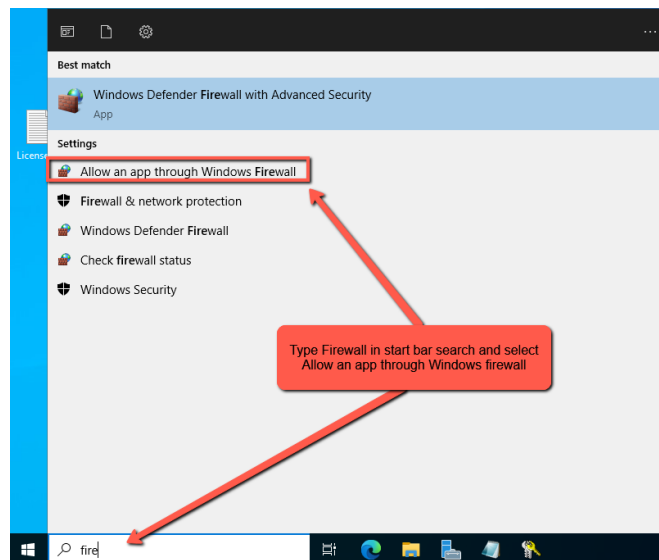
The QW License server installation will attempt to add a firewall rule but given the many different network and security configurations our customers can have it is recommended that a firewall rule is verified.

Busitech cannot provide instructions for all various firewall that can be employed in a customer environment, so we will provide basic instructions for the built-in basic Windows Firewall feature.

If your organization is not using Windows firewall, the QW License Server requires traffic from your internal network (private) on a specified port in the QW License Server configuration which can be modified. We recommend moving onto the configuration section of this document before enacting your firewall exception.

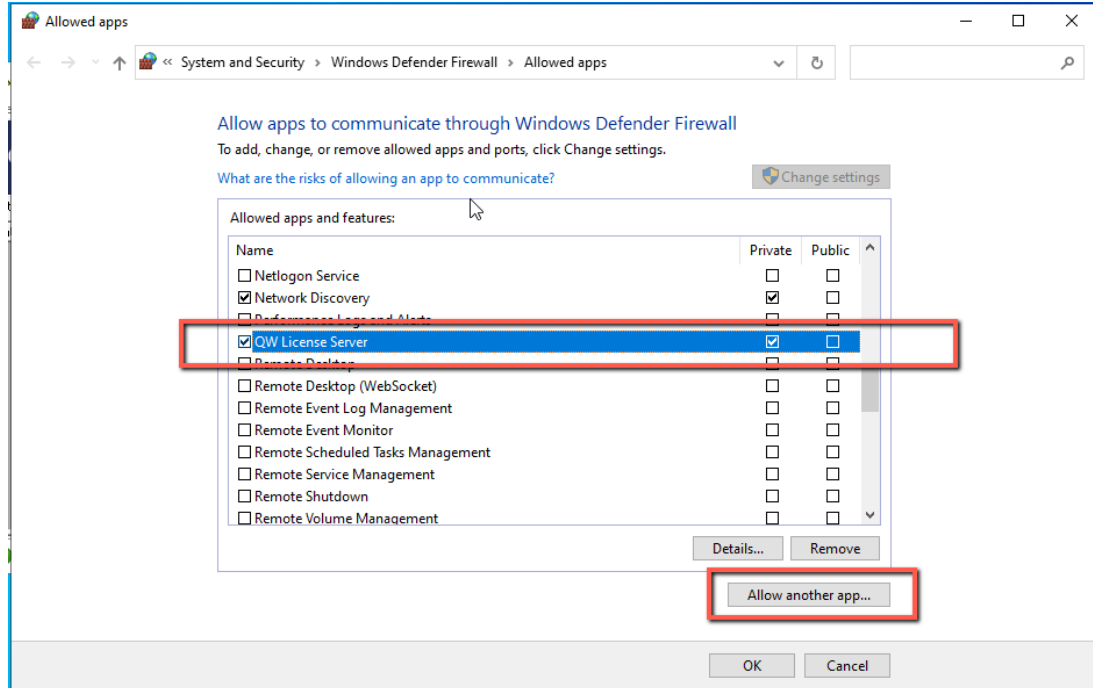
Verify existing Firewall Exception in Windows Firewall.

The first step is to verify if the installer successfully added a firewall rule/exception.

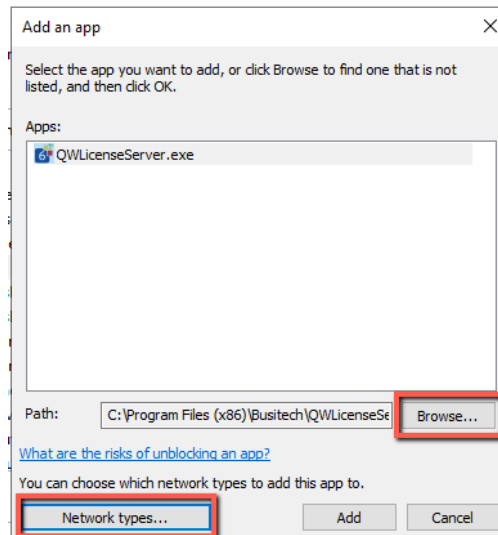


1. In the windows search bar, type: **“Firewall”**
2. Select **“Allow and app through Windows Firewall”** to open the Allowed Apps window.

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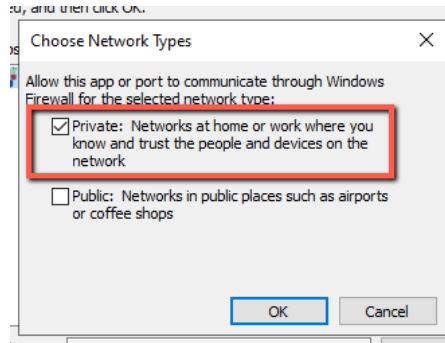


3. In the allowed apps window scroll through the list to see if there is an existing rule for QW License Server. If there is, the rule should only be applied to the **'Private'** section of your network and not have **'Public'** checked as you see in the above screenshot. If this is the case you can skip further steps and continue with the [configuration of the QW License Server](#).
4. If QW License Server does not appear in your Allow apps list, click the **'Allow another app...'** button to add a new exception.



5. Click **"Browse..."** button and navigate to the QW License Server install director and select the *"C:\Program Files (x86)\Busitech\QWLicenseServer\QWLicenseServer.exe"* file.

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6. Once selected, click the **“Network Types..”** button and ensure only Private is checked.
7. Click **‘OK’** on the Choose Network Types dialog, then Add on the Add an app dialog to complete the addition of a new firewall exception for QW License Server.

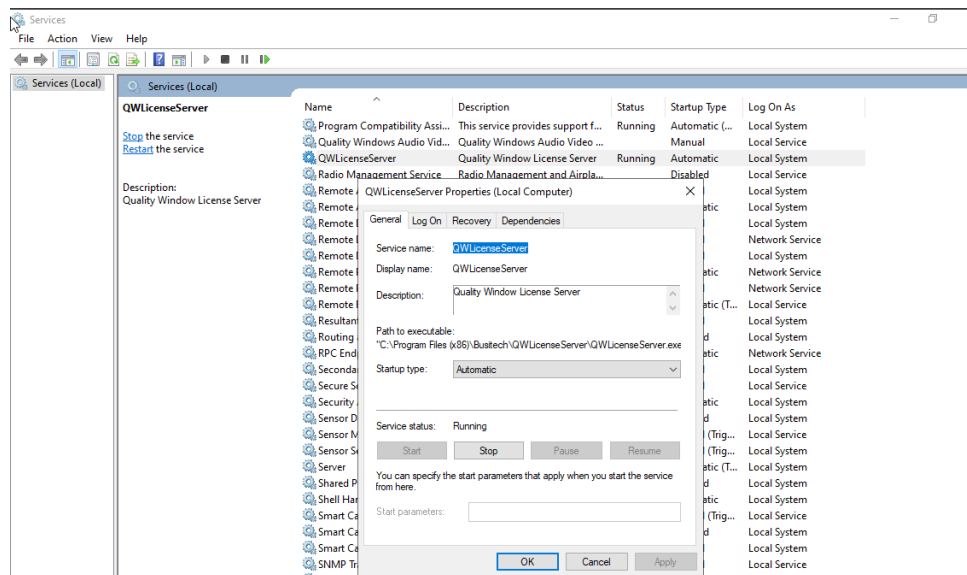
QW License Server Components

QW License Server has three main components:

1. **QW License Service** – Background Windows Service
2. **QW License Tray** – Current Status of QW License Server
3. **QW License Admin** – Administration of QW License Server

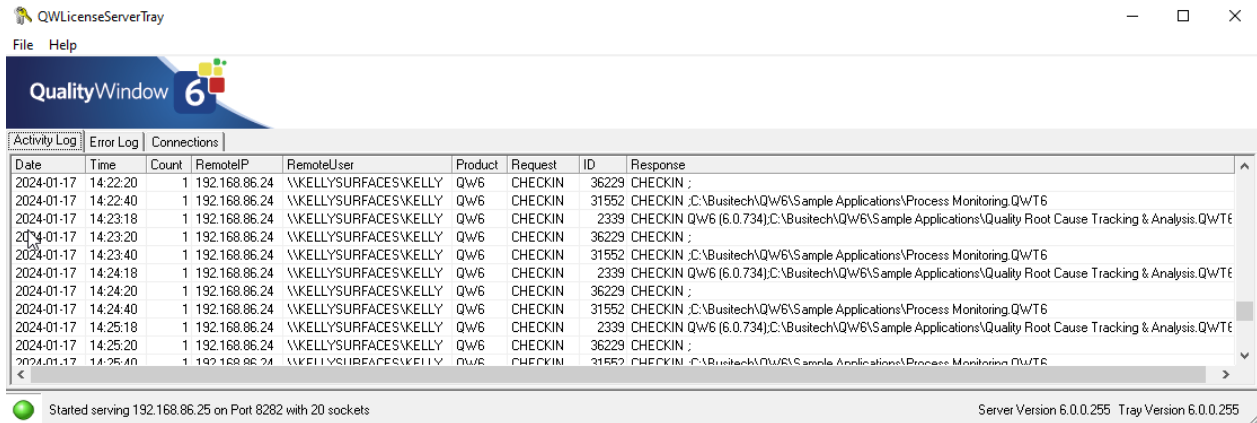
QW License Server Service

This component is installed as a windows service. The service can be managed both in the QW License Tray application or through the Microsoft Windows Services console. If required the Identity the service runs as can be modified or you can start, stop and restart the service if needed in the Windows Services Management Console.

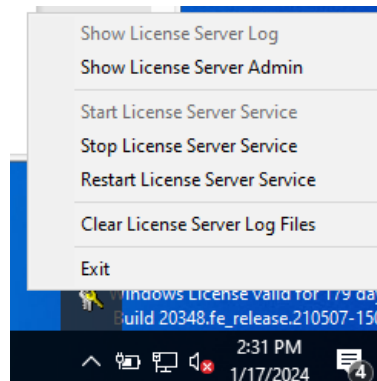


QW License Server Tray Application

The QW License Server tray application allows users to monitor the status of the server, Activity logs, Error Logs and Quality Window Client connections.



You can access the tray application through the windows system tray and right clicking the QW license server icon.



If the tray app is not showing, you can access the tray application through the start menu under the 'QW License Server' program folder.

QW License Server Admin Application

The QW License Server Admin application allows administrators to configure the QW License Server such as product licenses, security settings and connections configuration.

License Server Configuration

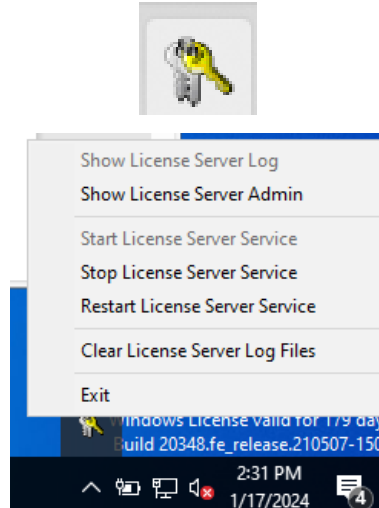
To configure the License server Configuration, open the QW License Server Administration application.

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There are several methods to access the QW License Server Admin application.

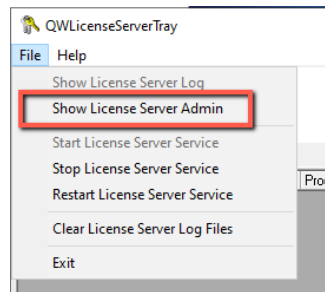
Right click the Windows tray Icon

Right Click on the Keys icon in the System Tray to Start/Stop the Windows service, or to access the QW License Server Admin Application for QW License Server.



QW License Server Tray File Menu

Another way to access the QW License Server Admin Application is to access it via the file menu of the tray application.



Windows Start Menu Application Folder

The last method is to open the QW License Server Admin Application is to navigate to the Start Menu QW License Server folder and access the app shortcut.

The license server administration tool is used to configure general network and logging configurations, product license details and security settings.

General Tab

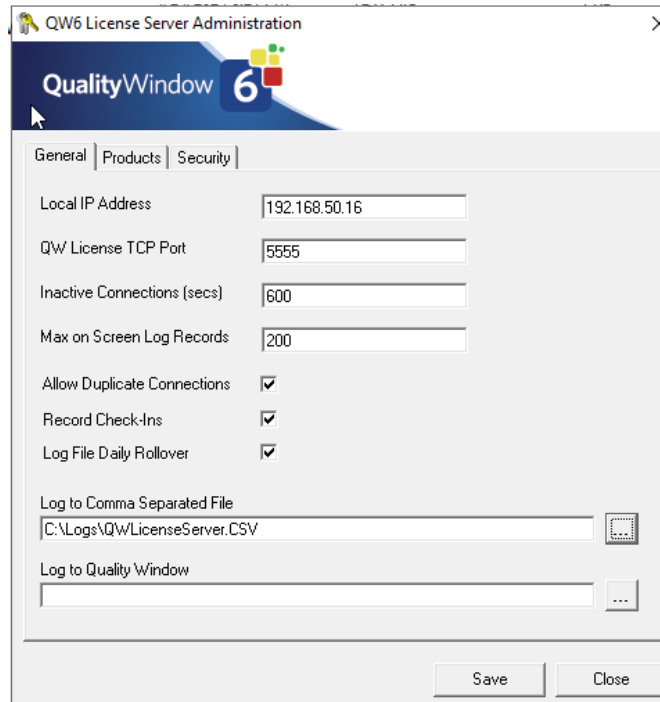


Figure 2 General settings for License Server Administration

The General tab allows administrators to configure the network communication settings and logging configurations. See below for details on each property's purpose.

Local IP Address	Current IP for Network Interface Card (NIC) that is listening for License Server Requests. Defaults to first NIC that is detected by the application. This should be the value that clients use to request a license session.
QW License TCP Port	The port that QW License Server is listening on for License Session requests. Should be a un-used port. Can be any available port. Default port is '5555'. Value is used for clients requesting a license seat.
Inactive Connection Reset	Time in seconds where inactive connections will be reset and licenses seat released.
Max on Screen Log Records	Maximum log entries that are displayed in the QW License Server Tray application.
Allow Duplicate Connections	Allows administrator to limit how many concurrent instances a single workstation can initiate. Default is enabled and it is recommended to leave this enabled. If disabled, workstations will only be allowed to open a single instance of Quality Window. <i>*This feature is deprecated and should not be used as it will be removed in a future release.</i>

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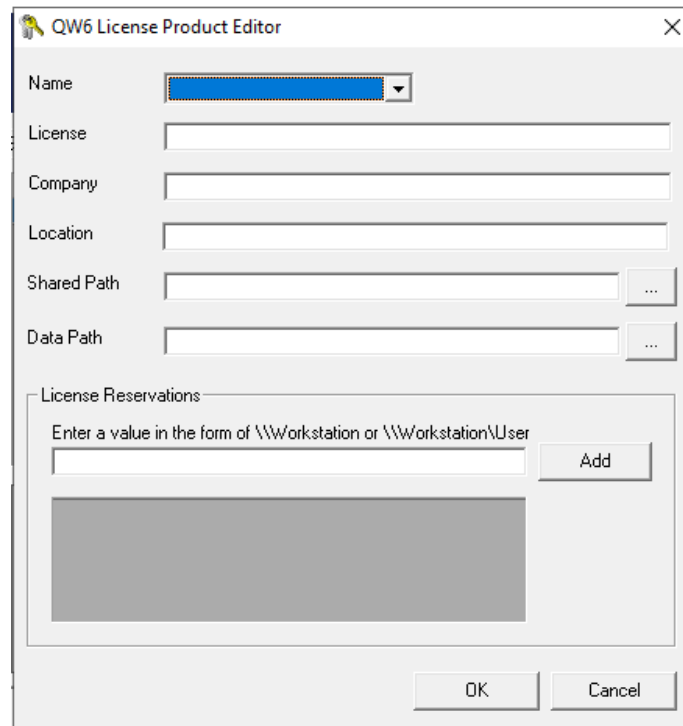
Record Check-ins	When enabled, QW License server will log all client check-ins in the activity log and log files.
Log File Daily Rollover	When enabled, QW License server will delete all logs from previous day.
Log to Comma Separated File	Set this value to log to CSV file specified.
Log To Quality Window	Set this value to log to a quality window application. <i>*This feature is deprecated and should not be used as it will be removed in a future release.</i>

Products tab

The Products Tab allows users to configure purchased Quality Window product licenses. QW License Server supports both Quality Window 5 and Quality Window 6 keys types. QW License Server can only host 1 key per type (QW5 or QW6). If you have multiple keys for either QW5 or QW6, please contact sales@busitech.com or support@busitech.com to merge your keys into a single key.

Add a Product

To Add a product, click the add button and provide the license key details.



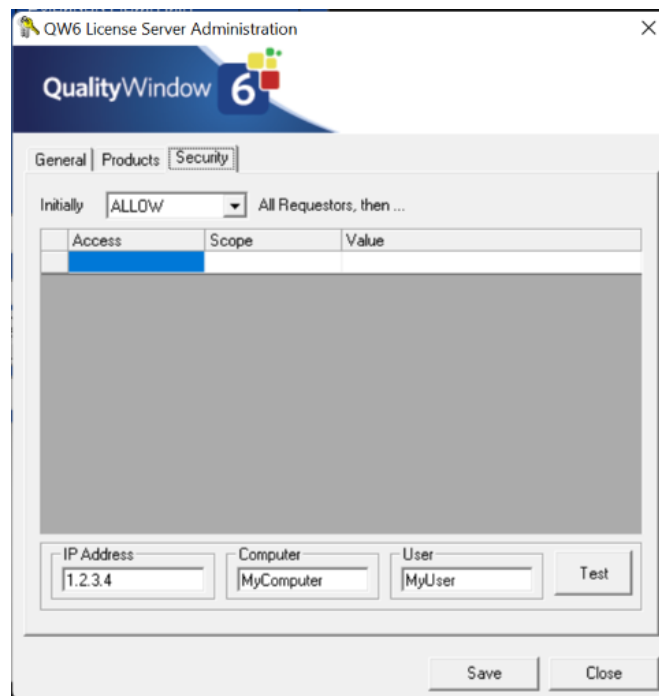
Name	Required	Product Version name
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		QW5 – License Key starting with 104 QW6 – License Key starting with 600 Required
License	<i>Required</i>	18-character License Key. Include hyphens
Company	<i>Optional</i>	Provide you company name, appears in QW Workstation license view
Location	<i>Optional</i>	Provide your site/location name, appears in QW Workstation license view
Shared Path	<i>Optional</i>	Sets Shared Configuration Path for QW clients
Data Path	<i>Optional</i>	Sets default data directory for QW clients
License Reservation List	<i>Optional</i>	Enabled Seat reservation for specific named computers or users. Syntax: \\MyComputerName \\MyComputerName\User

Security tab

The Security Tab allows administrators to configure the how QW License Server to restrict which devices or users can request license seats.



Choosing you Default (Initially)

QW License Server Security has two security stances or modes. Allow or Disallow.

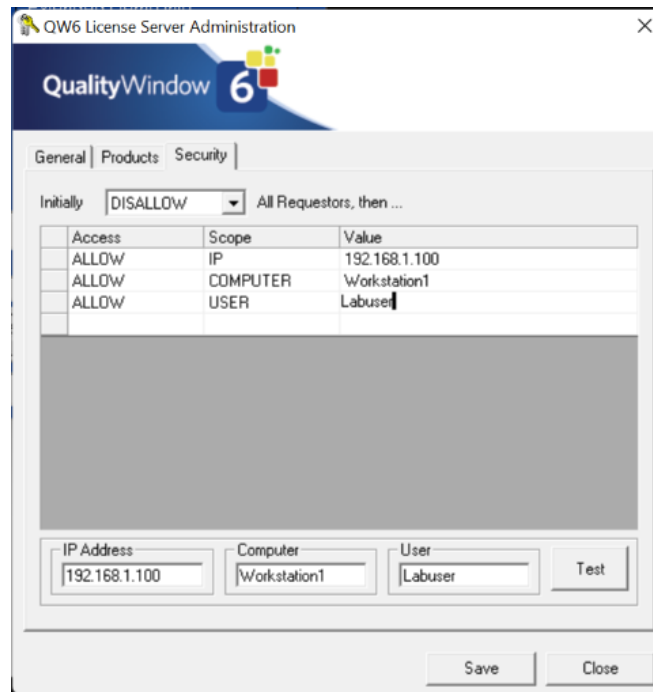
ALLOW Security mode – Set the “Initially” dropdown to **ALLOW** if you want to allow most request to get a seat and only restrict specific users, named machines or IP addresses.

DISALLOW Security mode – Set the “Initially” dropdown to **DISALLOW** if you want to reject all seat requests and only permit defined user, named machines or IP addresses.

Defining Exceptions

The Exception list below the Initially dropdown allows administrators to configure exceptions for the default mode. If the default mode is ALLOW you will likely want to set DISALLOW rule exceptions and the opposite for DISALLOW mode defining ALLOW rule exceptions.

Exceptions can have one of 3 different scopes: IP Address, Named Computer, Username.



IP Address Scoped Exceptions

IP Address exceptions allows the administrator to ALLOW or DISALLOW a specific IP or IP address range. Ranges are defined with 0 on a subnet, meaning if I want all users of a specific Class C subnet you can define the exception as 192.168.1.0 whereas a Class B would be 192.168.0.0.

Named Computer Scoped Exception

Administrators can also scope an exception to a specific computer name. This would be the Windows computer name also named “device name” and can be found in “System -> About” on Windows based computers.

Username Scoped Exception

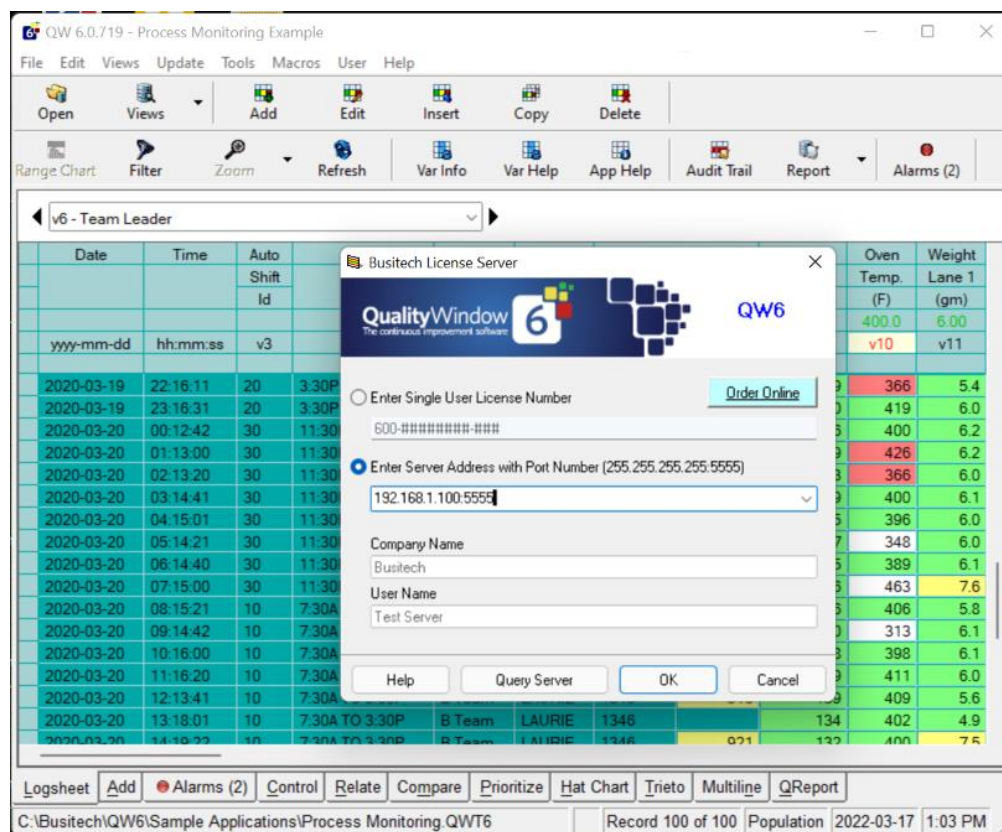
The last type of scope for exceptions is the username scope which is your windows username. Domain is not required.

Testing Exceptions

At the bottom of the security tab there is a test panel that allows you to test different values against your defined mode and exceptions. Fill in one or all values and click test. This will allow you to determine if your configuration is working properly. If a user is struggling to connect to the license server testing their unique values (IP, computer name, username) will allow you to quickly determine if the security configuration is the cause.

Configuring Quality Window Clients

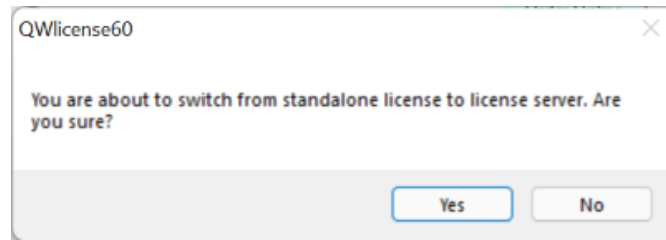
With QW License Server both configured and running, run Quality Window on device. Then click on menu **Help → Enter Review QW6 License Information**.



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.

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Repeat these steps as needed to connect all Quality Window clients.

Troubleshooting

If you are unable to get this working as expected, [See Appendix B – Troubleshooting](#) for troubleshooting steps before contacting support.

Support

If you have questions or require support, please contact the Busitech support team by visiting our Support Page or contact us directly at: support@busitech.com

Appendix A – Upgrading from QW License Server 5

For customers upgrading from the Quality Window 5 family of products to Quality Window 6 Family of products, unfortunately due to an issue in the QW License Server 5 versions, it is not possible to upgrade using the MSI to the latest version. Instead follow the below instructions to properly upgrade without losing your current configuration.

Assumptions

The below instructions assume you are installing QW License Server 6 over top an existing QW License Server 5 instance and on the same physical device or virtual machine. If you are installing on a new device, please follow the [normal installation procedure](#).

Before Upgrading

It is recommended that this upgrade be completed during a low usage time for Quality Window in your location. During the upgrade Quality Window Clients will not be able to receive new license assignments. Existing license assignments will continue to work for a short period of time, allowing existing sessions to continue.

QW License Server 6.X Support for Quality Window 5.X Clients

It should be noted that QW License Server does support Quality Window 5 keys and applications, allowing organizations to run both quality window 5 and 6 with the same license server. It is highly recommended to upgrade QW License Server to version 6 before upgrading any client machines (QW Workstation 6 or QW Admin 6).

Upgrade Instructions

Since the QW License Server 6 will not properly upgrade a QW License Server 5.X the core steps that need to be completed are the following:

1. Copy INI file to a safe location.
2. Un-install QW License Server 5.X
3. Follow QW License Server 6 Install instructions in this document.
4. Add QW License Server 5 configurations to QW License Server 6 configuration
5. Validate installation against Quality Window 5 clients.

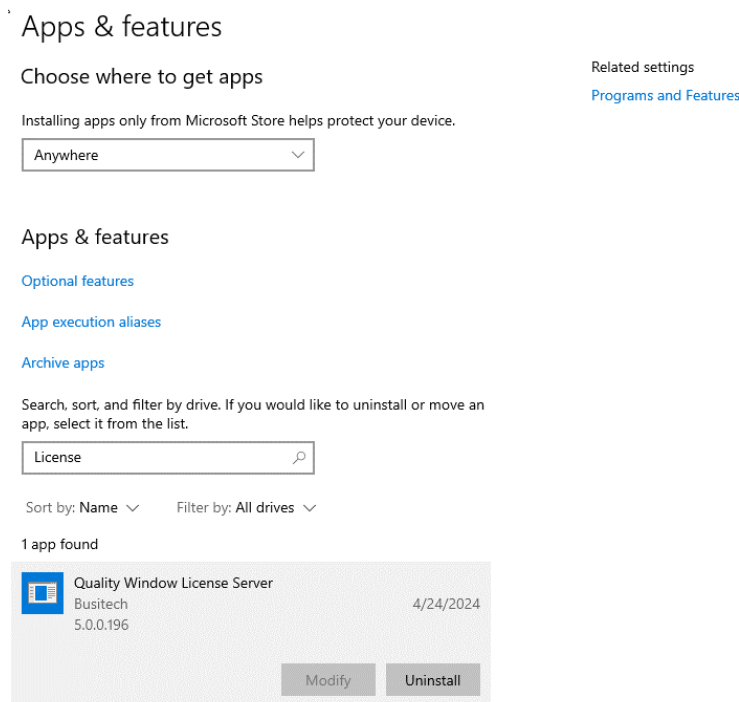
Copy INI file to a Safe Location

1. Navigate to the QW License Server install folder which is typically “*C:\Program Files (x86)\Busitech\QWLicenseServer*” with windows file explorer
2. Copy the “*QWLicenseServer.ini*” file to a safe location other than the install folder such as the devices desktop.

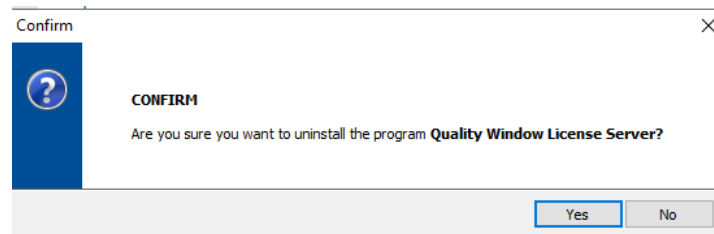
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Un-install QW License Server 5.X

In windows, navigate to the System Settings → Add Remove Programs console and click **Uninstall** to uninstall the application.

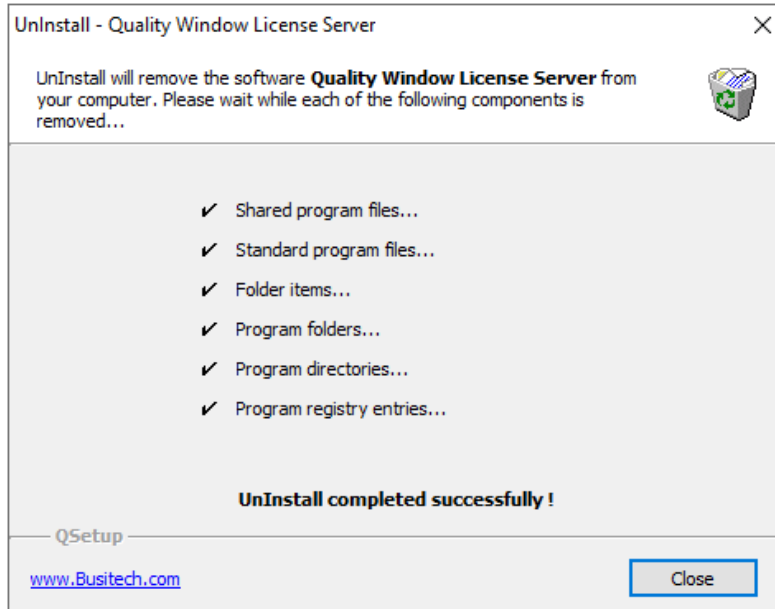


Click **'Yes'** on the confirmation prompt



Wait while the uninstall process completes. When successfully completed the dialog box should look like the following screenshot. Click **'Close'**.

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If there was an issue with the un-install, it is recommended to contact [Busitech support](#) or email us at support@busitech.com.

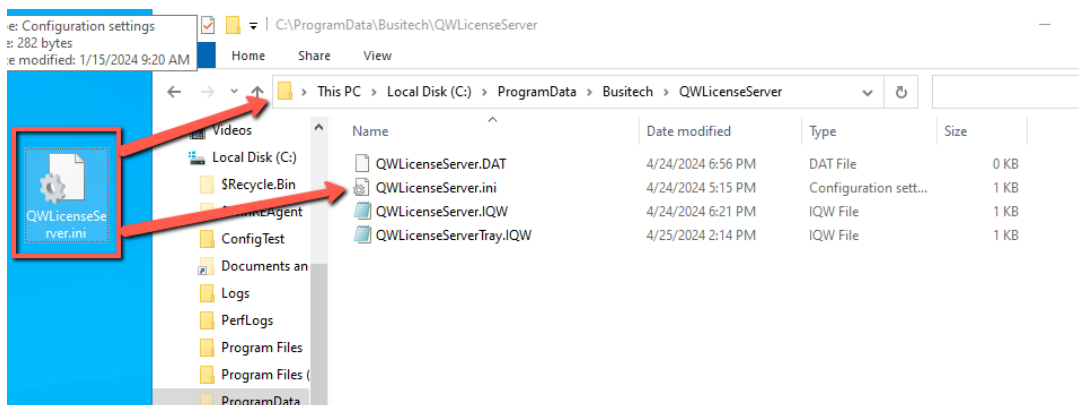
Install QW License Server 6

The next step is to install QW License Server 6. Please refer to the [instructions provided in this document](#) including the [firewall configuration section](#). Once completed, return to this section to continue the upgrade steps.

Importing QW License Server 5 configuration to QW License Server 6

The last step is to import the configuration from QW License Server 5 into QW License Server 6. To do this, you are required to copy the QWLicenseServer.INI file you stored in [step 1 of these upgrade instructions](#) into the following windows system folder:

C:\ProgramData\Busitech\QWLicenseServer\



****The "ProgramData" folder is hidden by default in most windows configurations, if you can't find this folder, just type %ProgramData% in the file explorer address bar to navigate to that folder.**

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The last step is to restart the license server by either of the following methods:

1. Navigate to Windows services console and restart the service.
2. Open QW License Server Tray application and use file menu to restart the service.

That's all, your QW license Server should now be upgraded to the latest version and will have the same settings you had in the previous version. It is best to try all Quality Window 5 clients to ensure they are still operating as expected. If they are not, please contact support at support@busitech.com for assistance.

Next steps

If everything is working as expected, the next step would be to configure your new QW6 product key by following the [QW License Server configuration instructions](#).

Appendix B – Troubleshooting

If clients have issues connecting with the QW License Server, the following areas should be investigated in the order listed below.

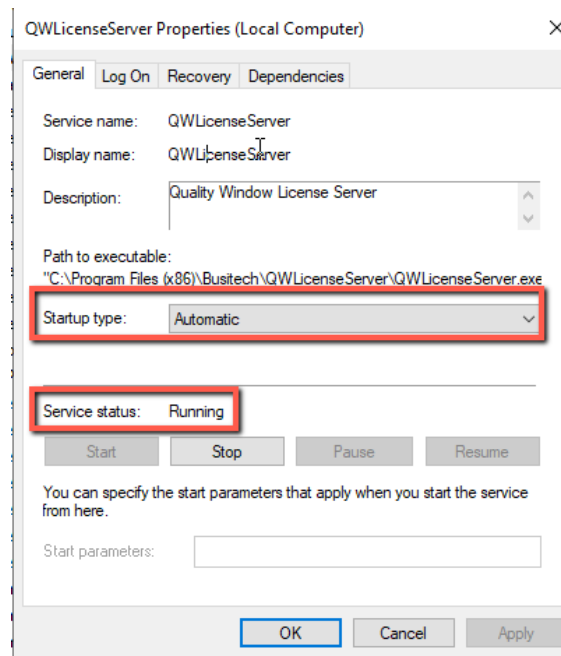
Validate IP Address and TCP Port

If you are having connection issues, validate that the Quality Window Client has the right IP Address and port number specified in the supported format: <ipaddress>:<portNumber>

EG: 123.234.123.12:5555

Confirm Windows Service is running and Automatic

On the host device for the QW License Server open the Windows Services Console and verify that the service is running and that it's startup type is set to “**Automatic**”.



If it was running, try stopping then starting the service or restarting the service to see if that remedies the issue.

Check network Connections

Validate your network connections on both QW License Server host and Quality Window client devices.

Verify Firewall

Most support inquiries related to QW License Server is due to a mis-configured firewall or missing configuration all together. See our [Firewall](#) section for guidance on how to properly configure your infrastructure. You may need to involve you IT network infrastructure team.

Check your Security Settings

If the above still have not helped, it's time to validate your security settings by confirming the settings on the QW client device and testing those in the [Security Tab of the QW License Server Admin application](#).

Appendix C – Internal DNS Support

If your infrastructure has 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 allows a configuration that is resilient to changing IP addresses 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.