

# Wavenology

# License Configuration Manual

Wave Computation Technologies, Inc.

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- Installation
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# License Type

- Fixed Node License
  - The license server is bound locally to a computer and it only accepts the licensing request from this computer.
- Network Floating License
  - The license server is bound to a server on the network and it accepts the licensing request from any computers within the network.

**NOTE:**

1. A WCT license is bound to the machine with MAC address.
2. The license includes number of solvers that can be run simultaneously.

# Licensing Procedure

- User need to run the installation package first, the license server will be automatically installed.
- User need to get a valid license file from WCT sales.
- After the license server has been successfully installed, user need to load the obtained license through Wavenology's license server manager.
  - *Run WCT license server manager*
  - *Stop the License server*
  - *Load the new license file*
  - *Start the License server*

*NOTE: license renewal follows the same procedure.*

# Installation

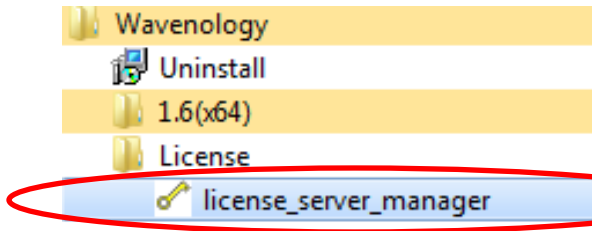
- The regular WCT installation package includes the license server. The installation of license server in the package is automatic.
- WCT's license server works as a Windows service.
- WCT's license server will start automatically after the installation.
- WCT's license server can be configured by the program "license server manager".

*NOTE: On Windows Vista/7, do NOT install the software with "setup.msi", use "setup.exe" with administrator privilege.*

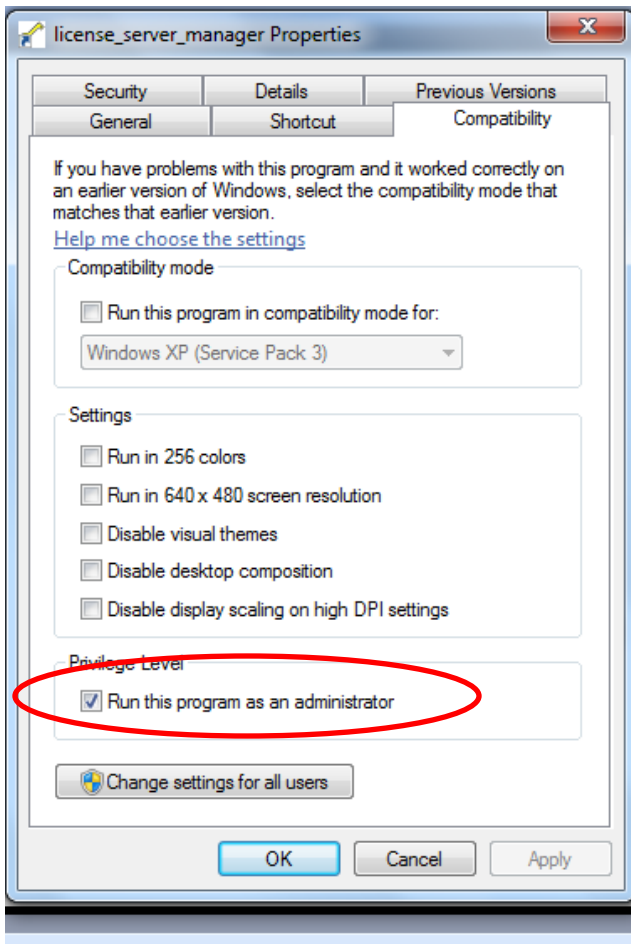
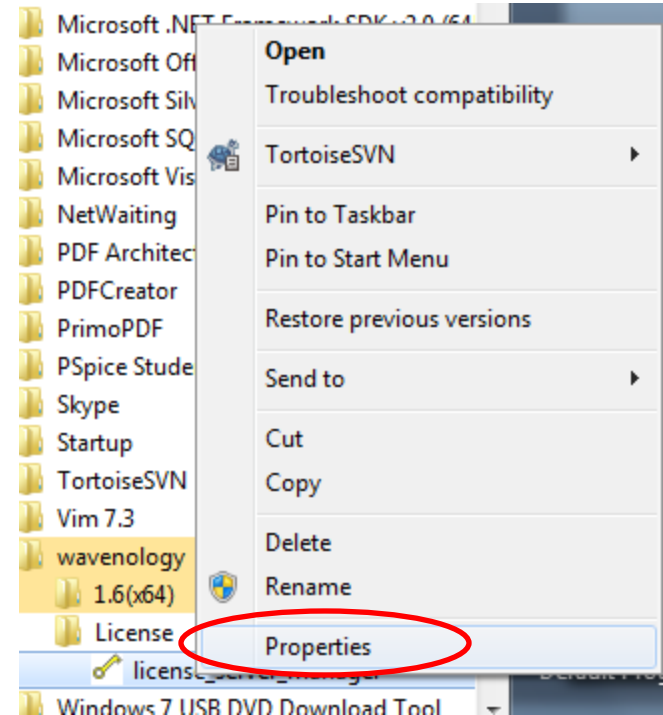
# License Server Manager

- Run as administrator
- Loading a new license
- Floating License Server Configuration
  - Windows XP
  - Windows Vista/7
  - IP Range Restriction
  - MAC Address Restriction

# Run as Administrator



Right click mouse button



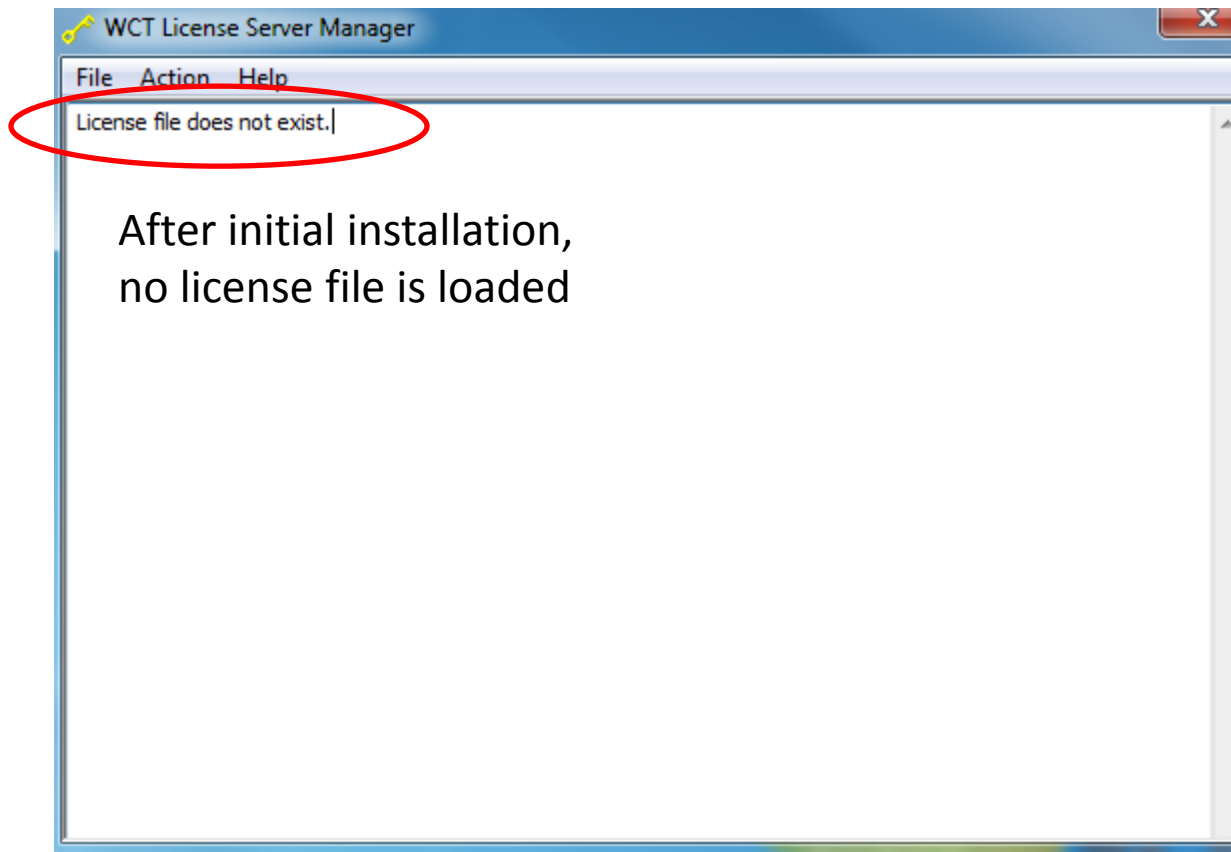
Windows Vista and Windows 7 use enhanced “User Account Control” (UAC) system. In order to enable the license server manager to control the service “WCT\_LIC\_SERVER”, user need to run the license server manager in the “Administrator” mode.

**NOTE:**

1. This is a one time configuration
2. Windows XP does not require this.

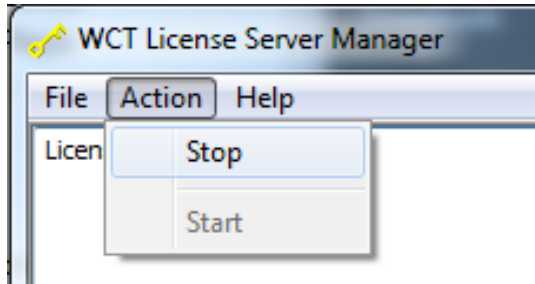
# Loading a New License

- The working license is the “License.lic” in folder of license server.
- After user get the license, user need to load this new License into WCT’s license server.

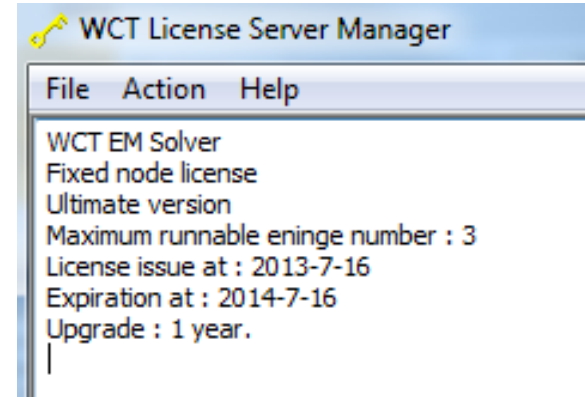




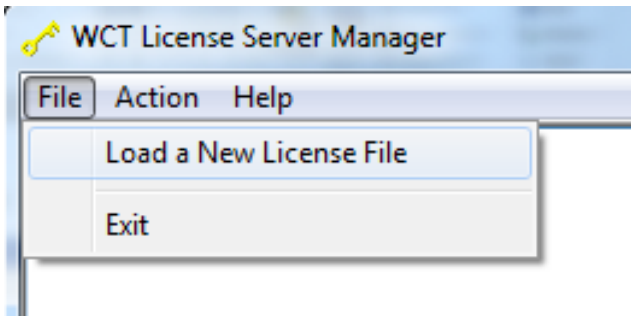
# 1. Stop the server



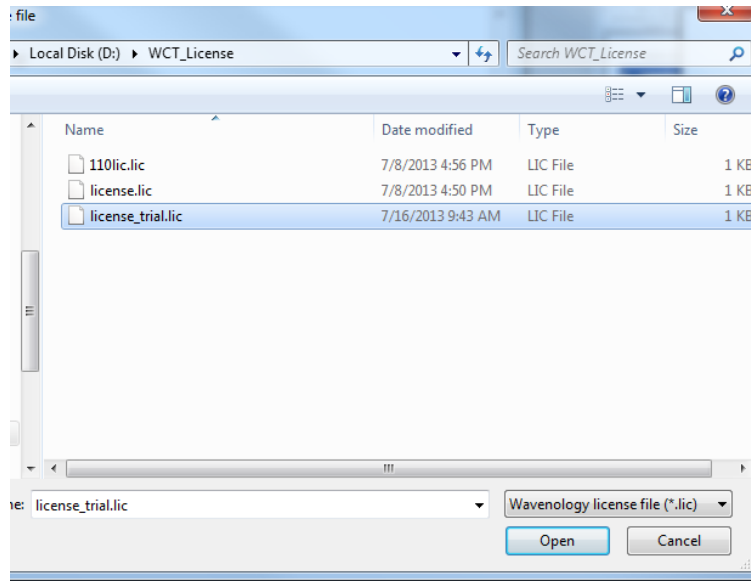
# 4. Successfully loaded license



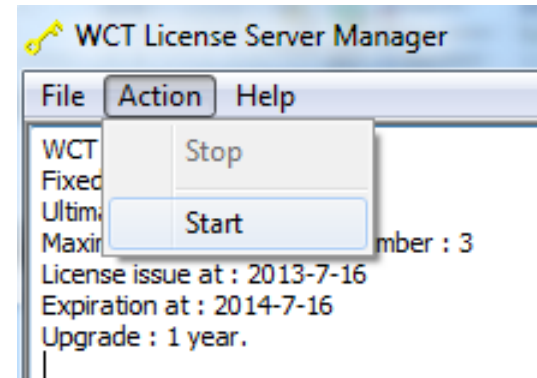
# 2. Load the new license file from WCT



# 3. Choose the correct license file

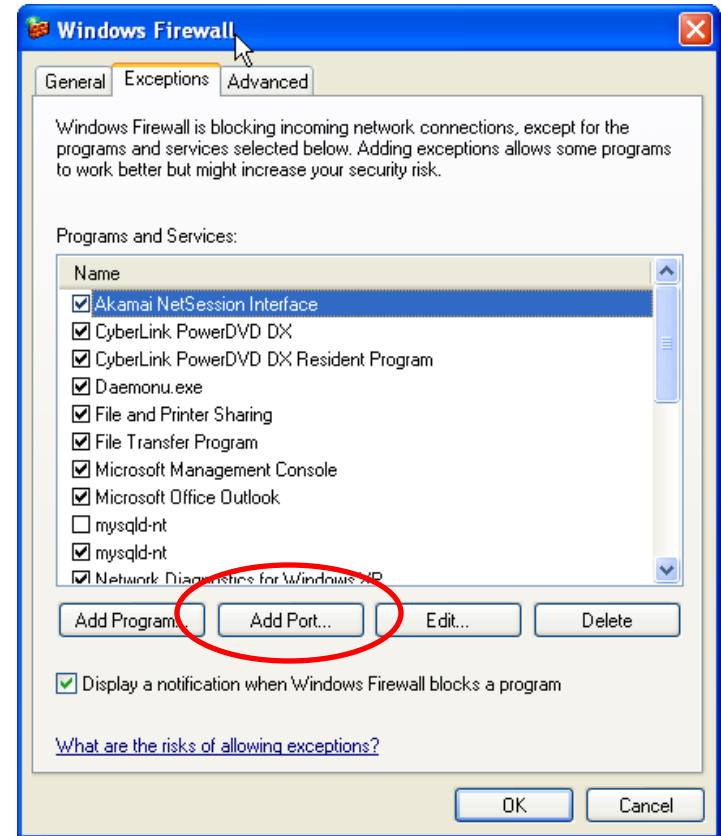
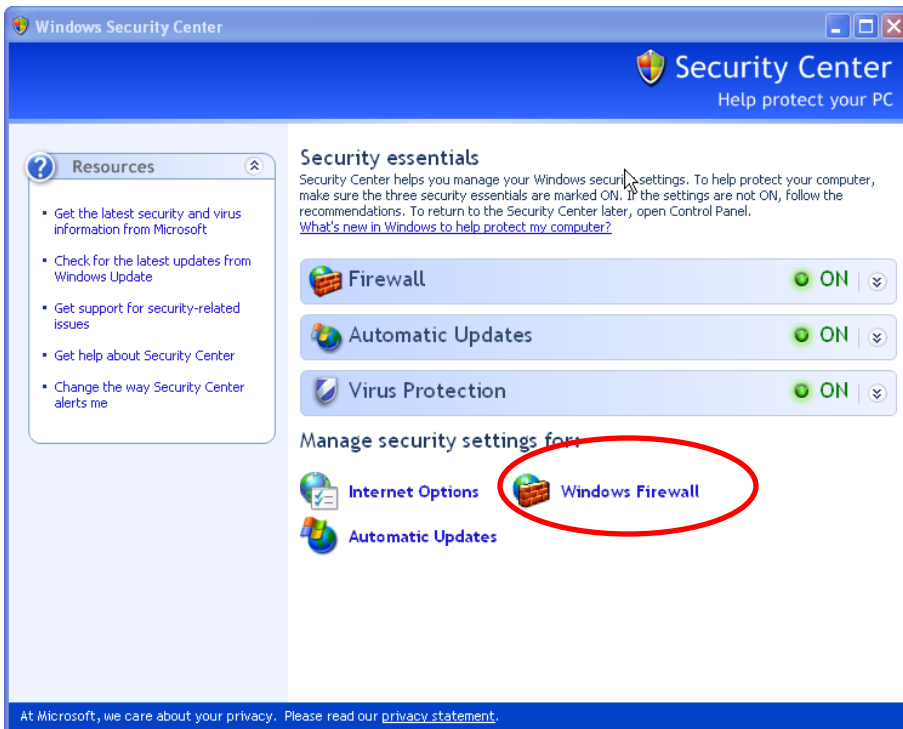


# 5. Start the server

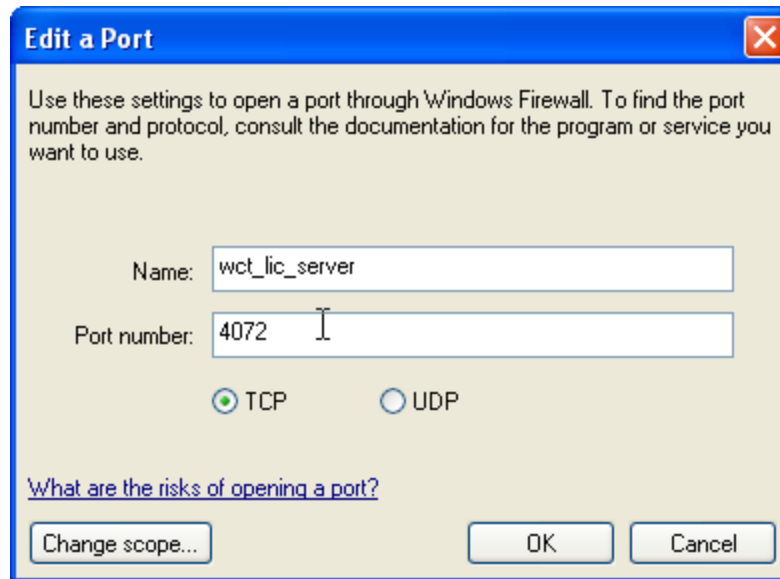


# Floating License Server Configuration

## Windows XP



Add rule to make sure that TCP port 4072 will not be blocked by firewall

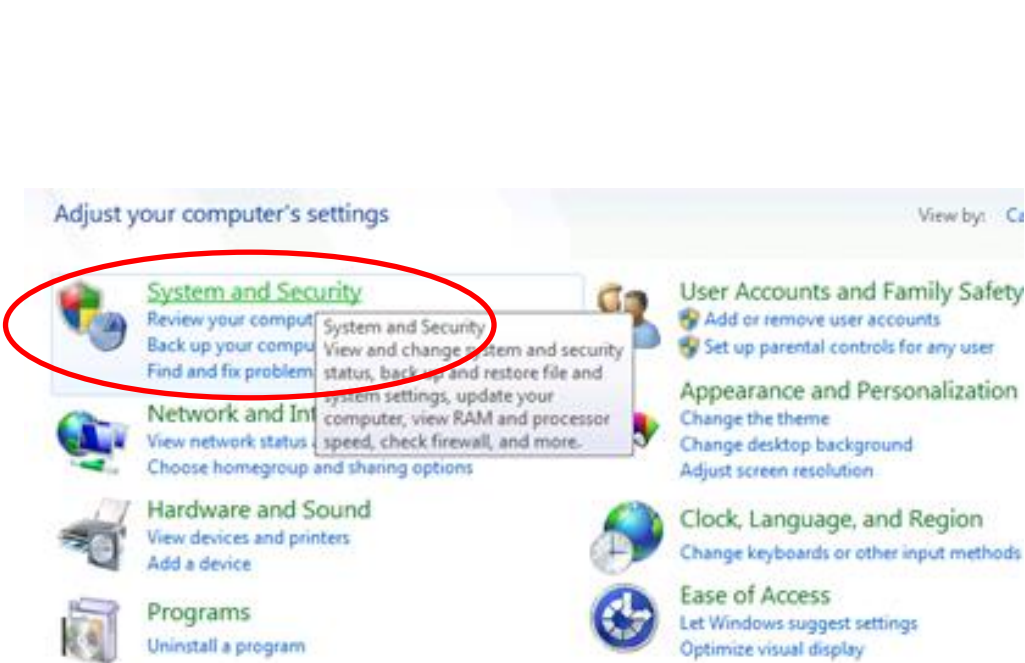


**NOTE:**

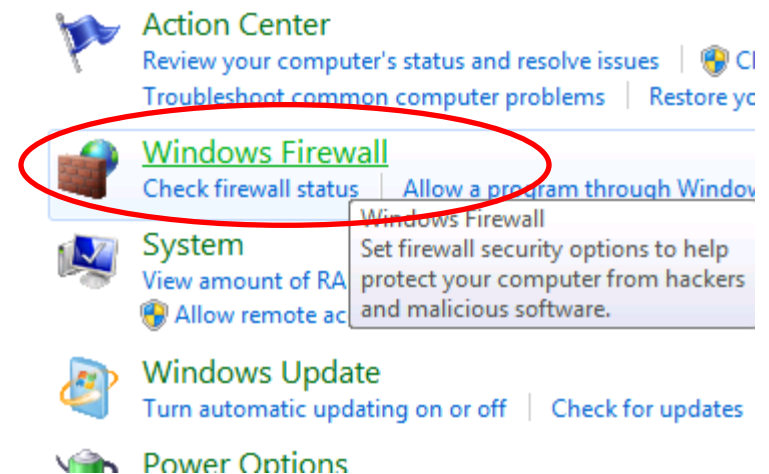
1. *More actions might be required if there is anti-virus software installed on the server.*
2. *For example, modify the network setting in the anti-virus software to let the communication can go through the port 4072.*

# Floating License Server Configuration

## Windows Vista/7

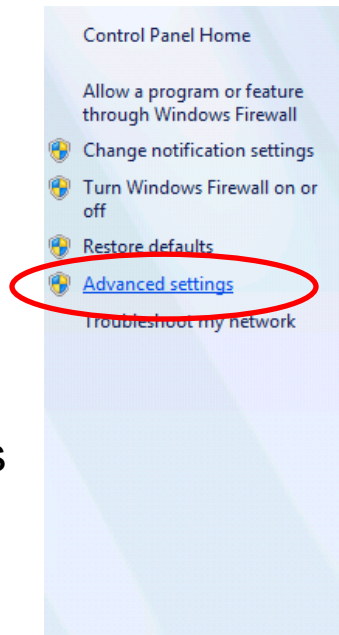


1. System and Security



2. Windows Firewall

### 3. Advanced Settings

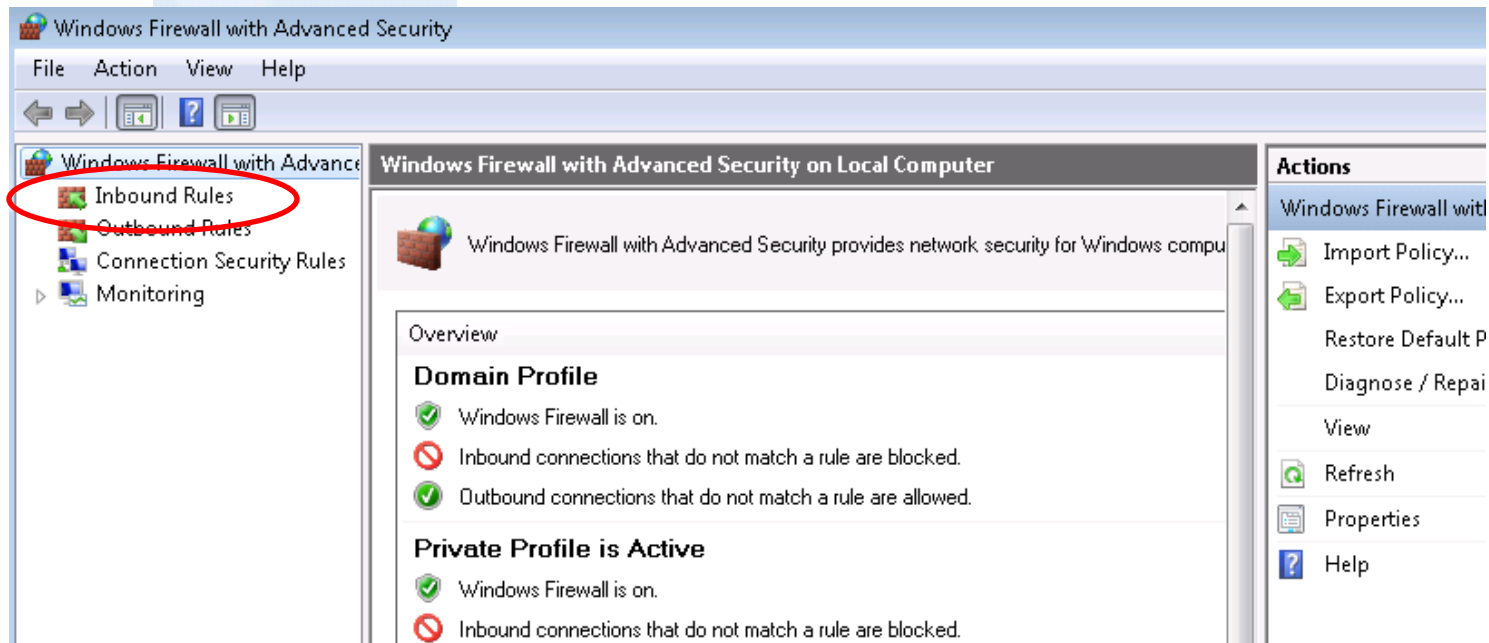
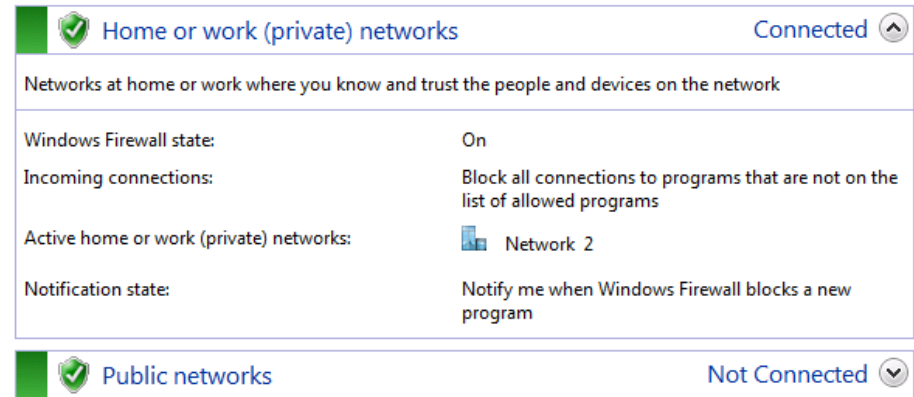


#### Help protect your computer with Windows Firewall

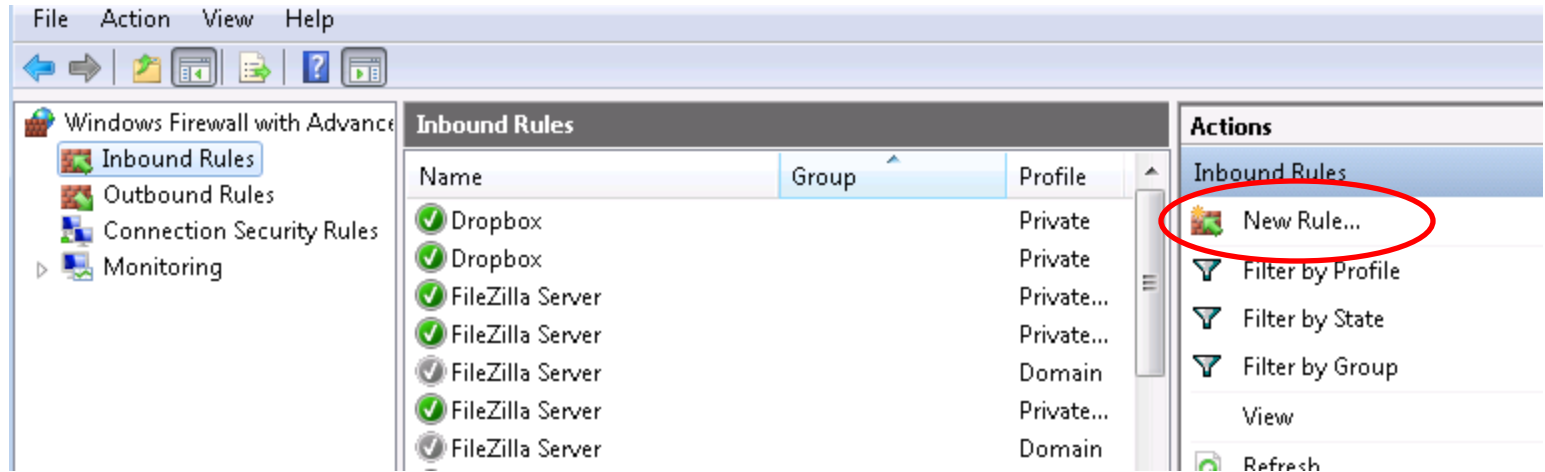
Windows Firewall can help prevent hackers or malicious software from gaining access to your computer through the Internet or a network.

[How does a firewall help protect my computer?](#)

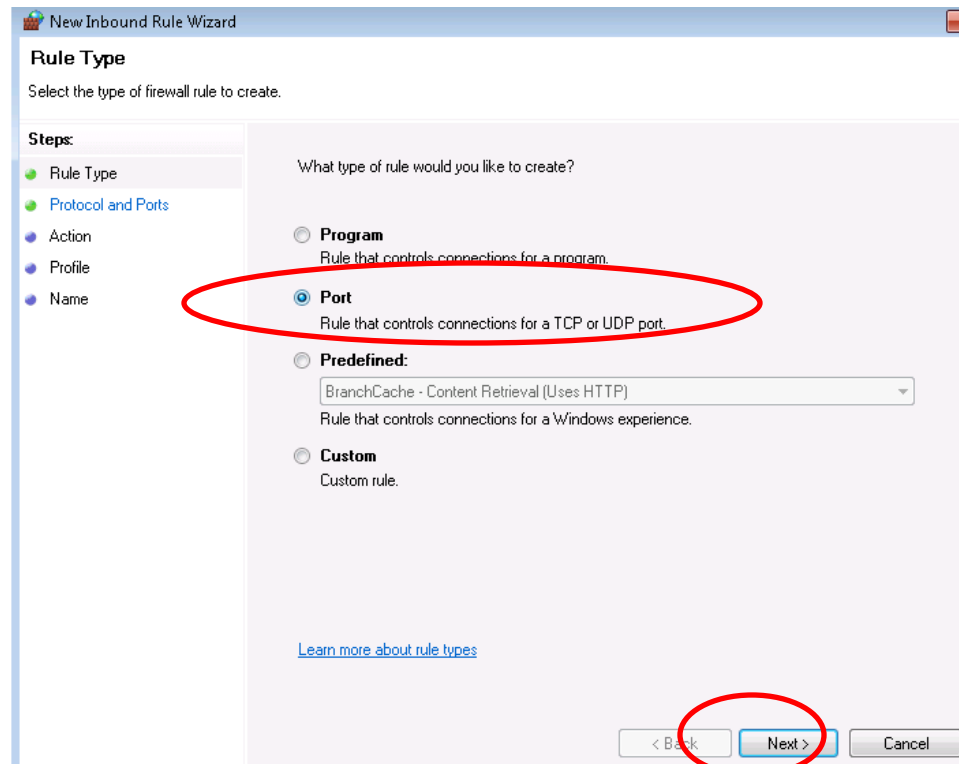
[What are network locations?](#)



### 4. Inbound Rules



## 5. New Rule



## 6. Open a port

**Protocol and Ports**  
Specify the protocols and ports to which this rule applies.

**Steps:**

- Rule Type
- Protocol and Ports
- Action
- Profile
- Name

Does this rule apply to TCP or UDP?

TCP  
 UDP

Does this rule apply to all local ports or specific local ports?

All local ports  
 Specific local ports:   
Example: 80, 443, 5000-5010

[Learn more about protocol and ports](#)

< Back   **Next >**   Cancel

7. Port number 4072

**New Inbound Rule Wizard**

**Action**  
Specify the action to be taken when a connection matches the conditions specified in the rule.

**Steps:**

- Rule Type
- Protocol and Ports
- Action
- Profile
- Name

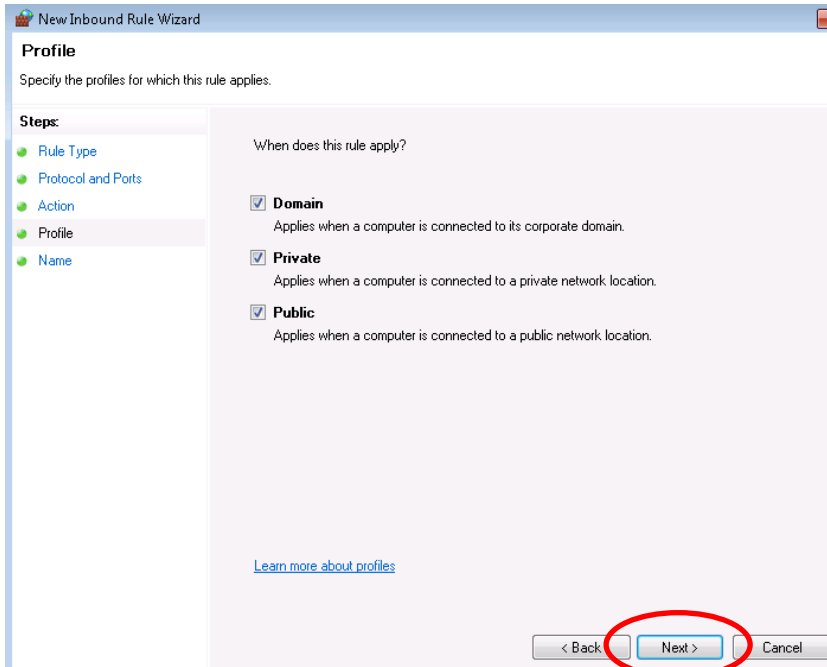
What action should be taken when a connection matches the specified conditions?

**Allow the connection**  
This includes connections that are protected with IPsec as well as those are not.

**Allow the connection if it is secure**  
This includes only connections that have been authenticated by using IPsec. Connections will be secured using the settings in IPsec properties and rules in the Connection Security Rule node.

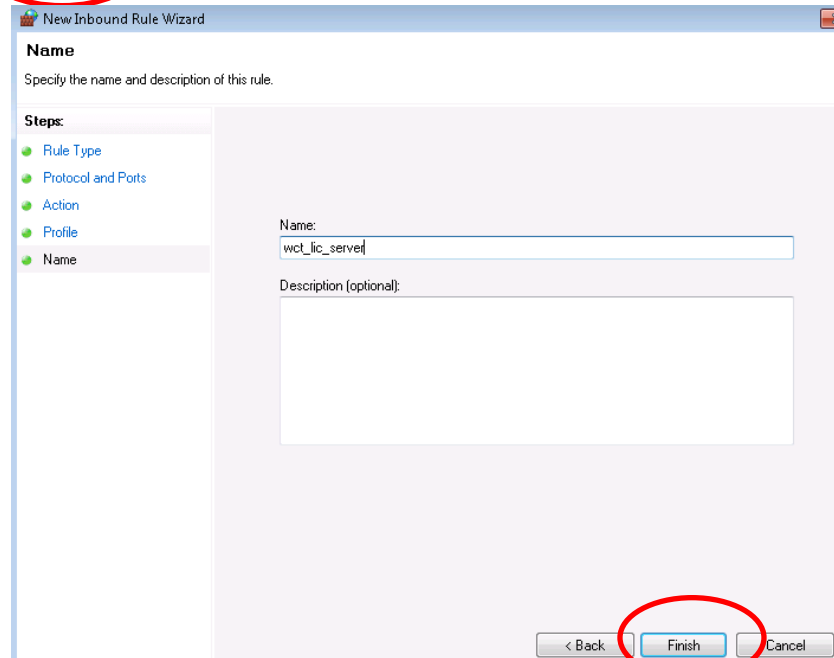
**Block the connection**

8. Allow the connection

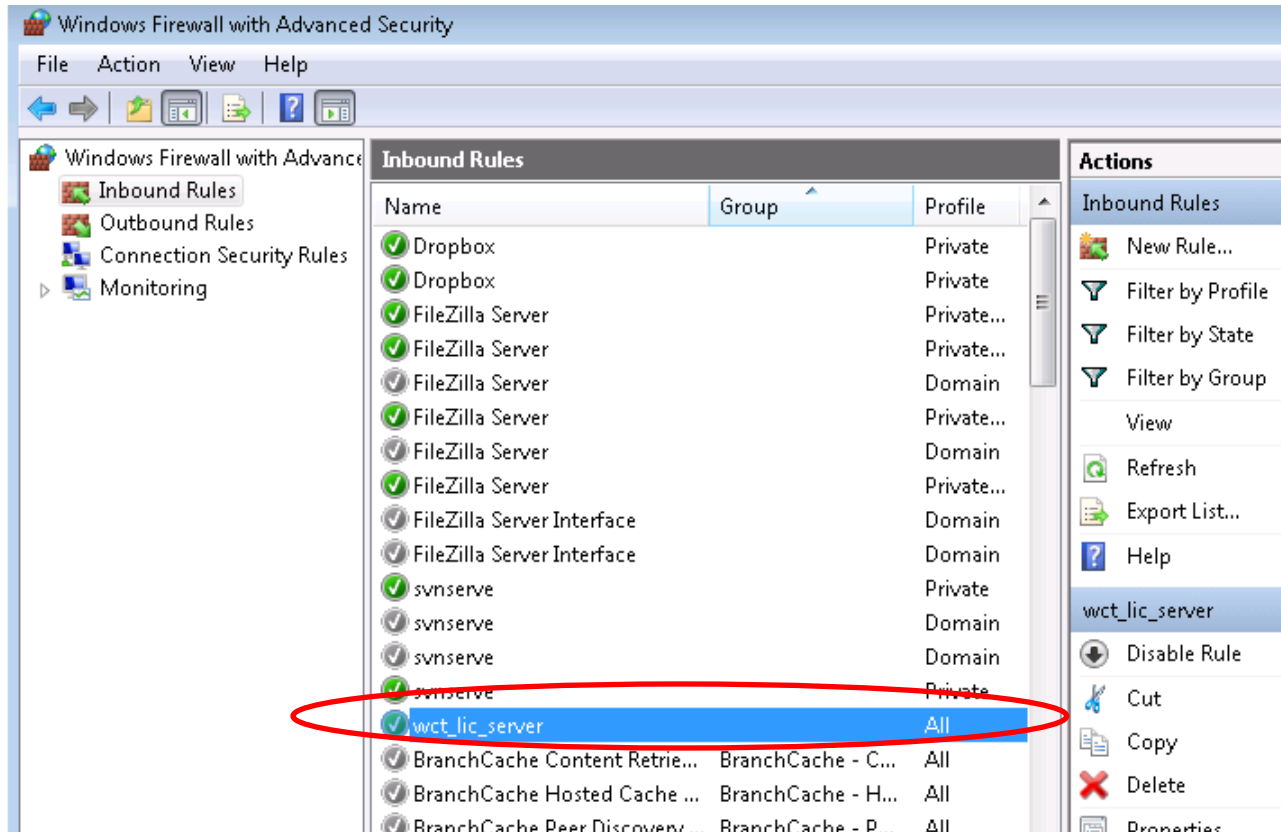


9. Choose type of networks that the server can be connected

10. Give a name to this rule, e.g. "wct\_lic\_server"







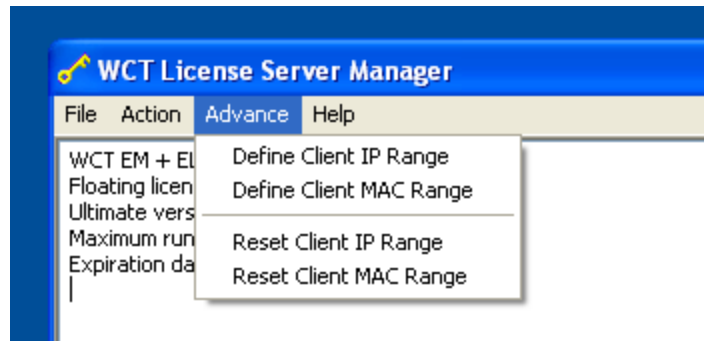
TCP port 4072 is enabled.

**NOTE:**

1. More actions might be required if there is anti-virus software installed on the server.
2. For example, modify the network setting in the anti-virus software to let the communication can go through the port 4072.

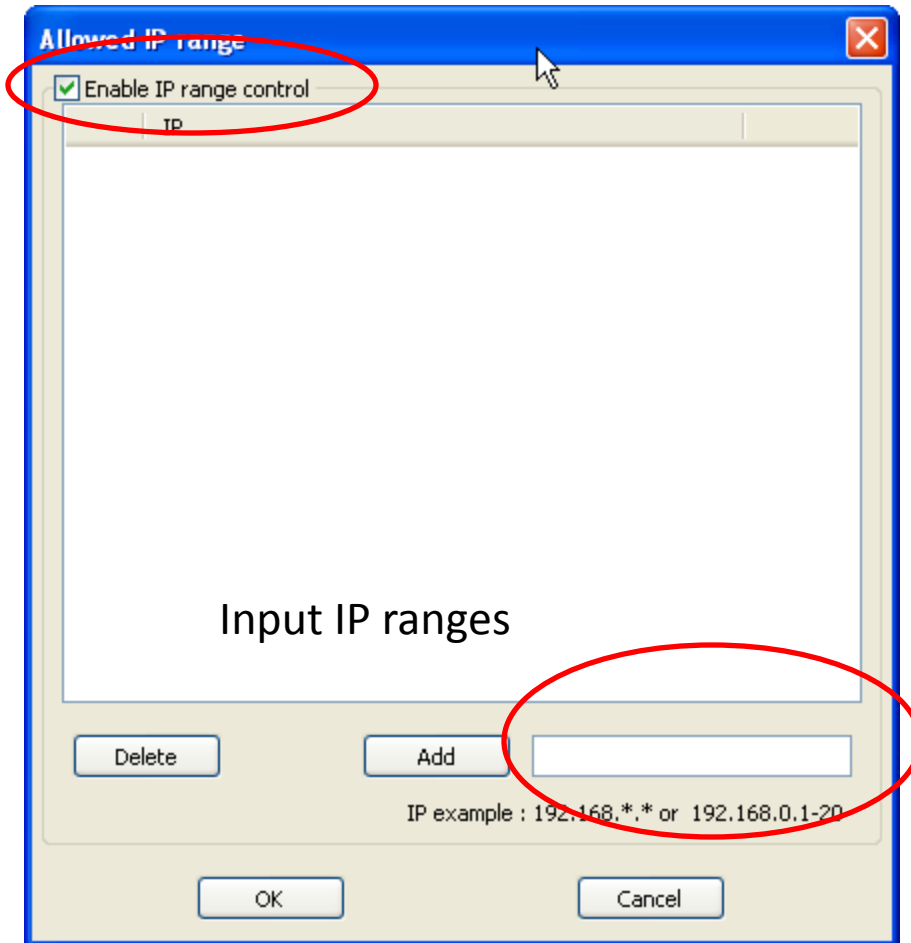
# IP Range Restriction (Floating License Only)

Due to the floating license can accept the licensing request from any network location by default. WCT's license server provides a tool to limit the IP range of licensing request.

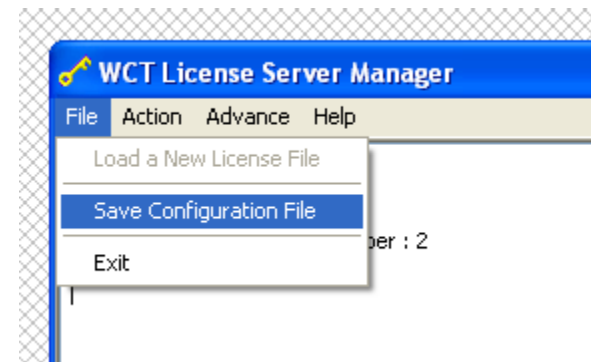


If user cannot see menu "Advance" and the license is floating, please close the License manager and re-run it.

Check here to enable IP range control

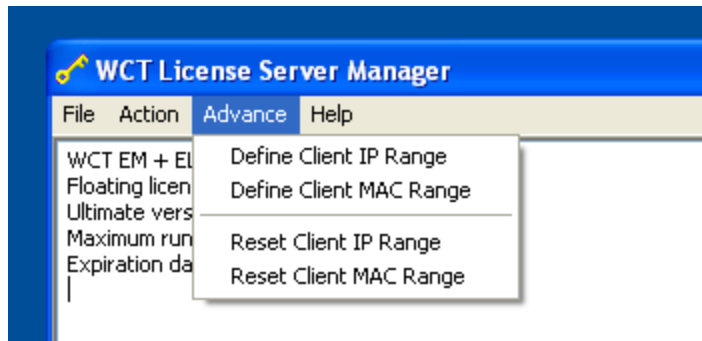


After defining the IP range, use “Save Configuration File” to save user input.



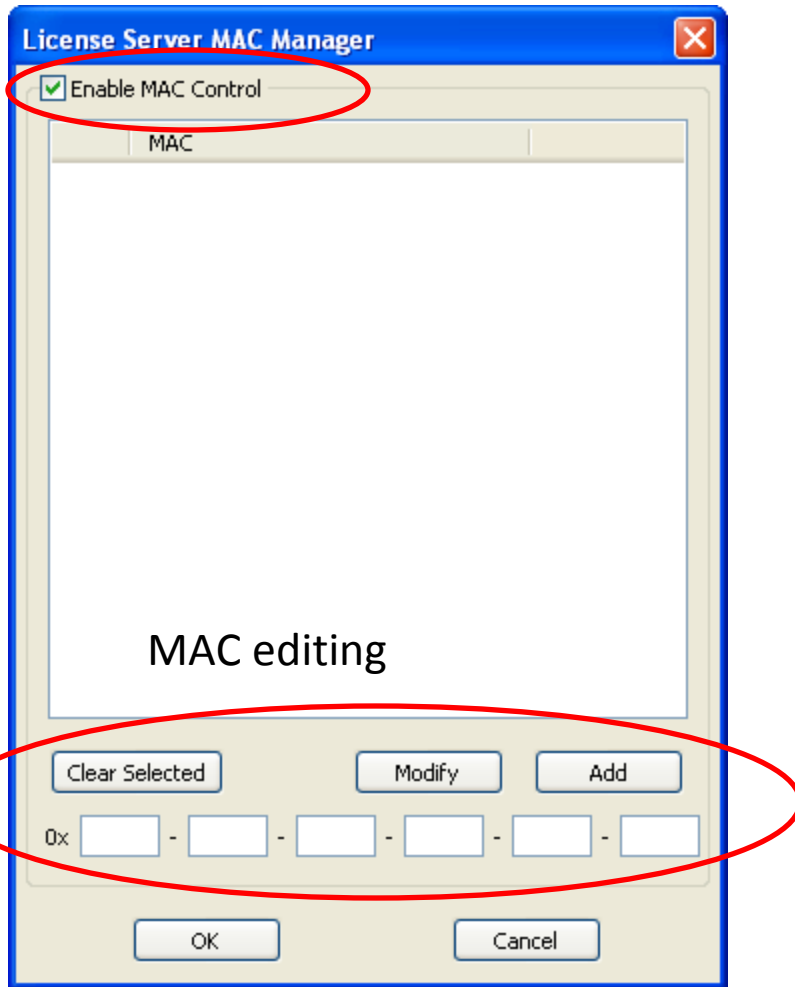
# MAC Address Restriction (Floating License Only)

Due to the floating license can accept the licensing request from any computer by default. WCT's license server provides a tool to define the allowed computer to request licensing.

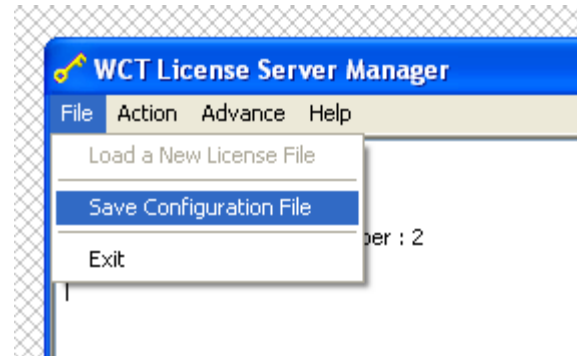


If user cannot see menu "Advance" and the license is floating, please close the License manager and re-run it.

Check here to enable MAC control

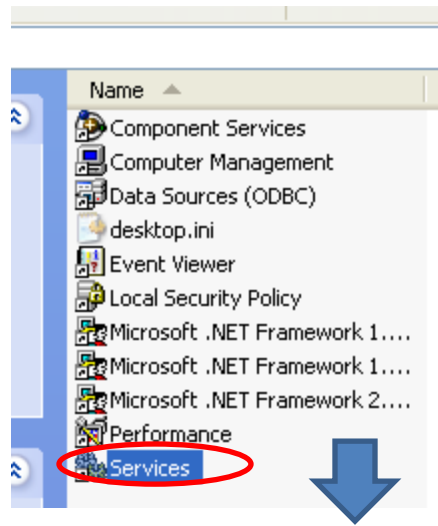
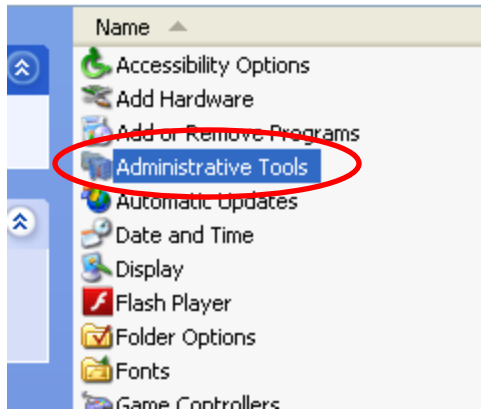


After defining the allowed MAC addresses, use  
“Save Configuration File” to save user input.



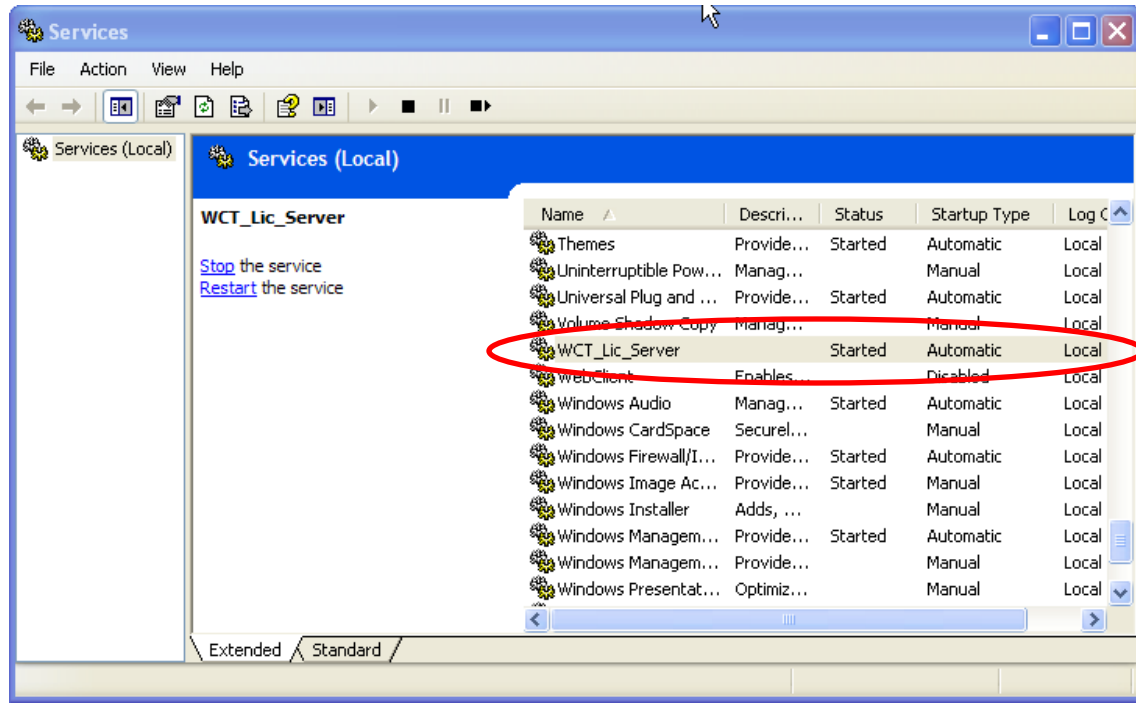
# Miscellaneous: Check the Server Status

Control Panel



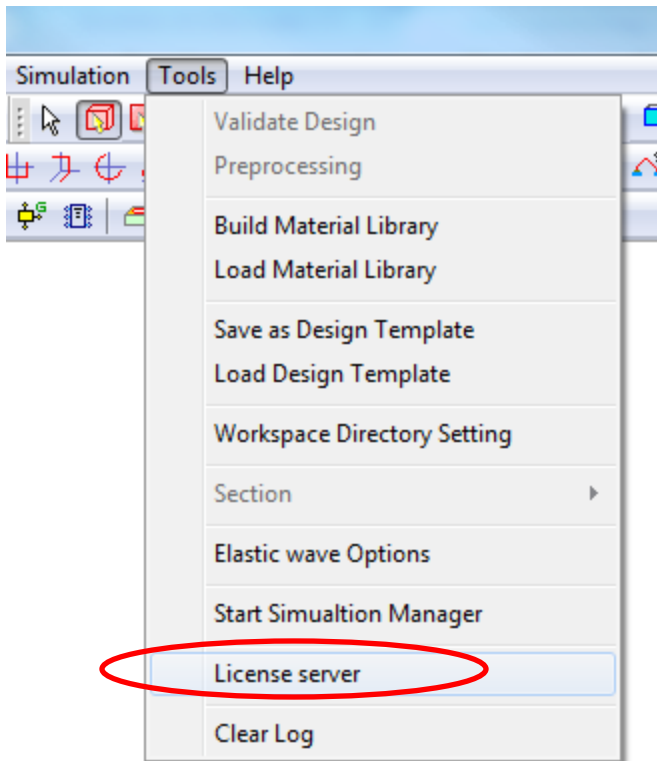
WCT license server runs as Windows service in the system. User can use system tools to monitor the status of this service.

If the WCT license server has been installed correctly, user can see it in the system service list.

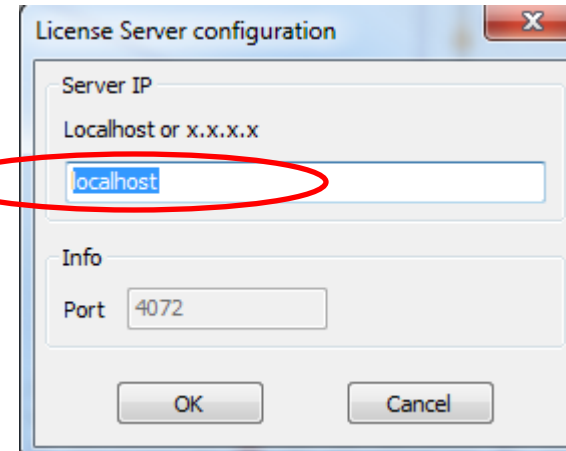


# Miscellaneous: Specifying the License Server

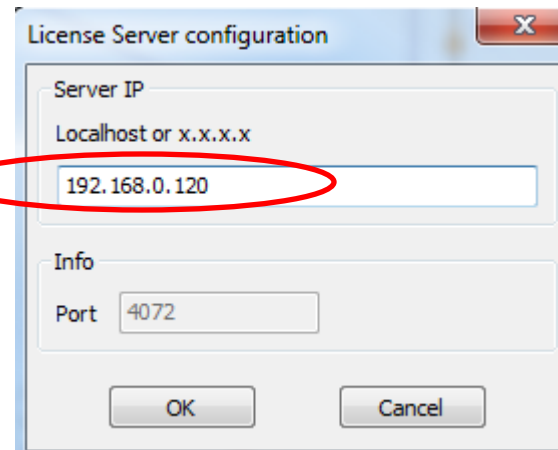
When Wavenology is launched, the IP address of the license server can be specified from the tool menu



For single node license, specify the server as “localhost”, this is the default setting



For floating license, specify the server's IP address within the network



# Support Contact

[support@wavenology.com](mailto:support@wavenology.com)