System Preparation

Translate: **EN** ⌄

An important step which directly affects the security and stability of the trading platform, is the configuration and optimization of your computer with the operating system. This section covers the main features of this process:

[GUI customization](#)

[Disabling server roles](#)

[Removing unnecessary programs](#)

[Configuring system updates](#)

[Disabling time synchronization](#)

[Configuring network connections](#)

[Configuring Windows Firewall](#)

[Disabling sounds](#)

[Configuring general performance parameters](#)

[Configuring file deletion without moving them to the recycle bin](#)

[Server Configurator](#)

[Configuring remote access](#)

[Configuring antivirus software](#)

> To complete the setup,you should restart the server.
>
> These instructions are recommendations, so you should use them at your own discretion and depending on your specific conditions and requirements.

Graphical interface

First, it is recommended to configure a graphical user interface of the operating system. Disable anti-aliasing, shadows, menus, transition effects, etc. These settings enable faster operations with the server in remote access mode.

> Additionally, it is recommended to set a blank page as the home page in the Internet browser properties.

Disabling server roles

Disable all server roles using the "Server Manager". Launch the Server Manager from the Administration section and complete all steps by clicking Next, until you see the list of server roles. If any of the roles are active, select these roles and click Next. Skip the next step, where system components are configured, by clicking Next. At the confirmation step, check the list of roles to be removed and click Remove.
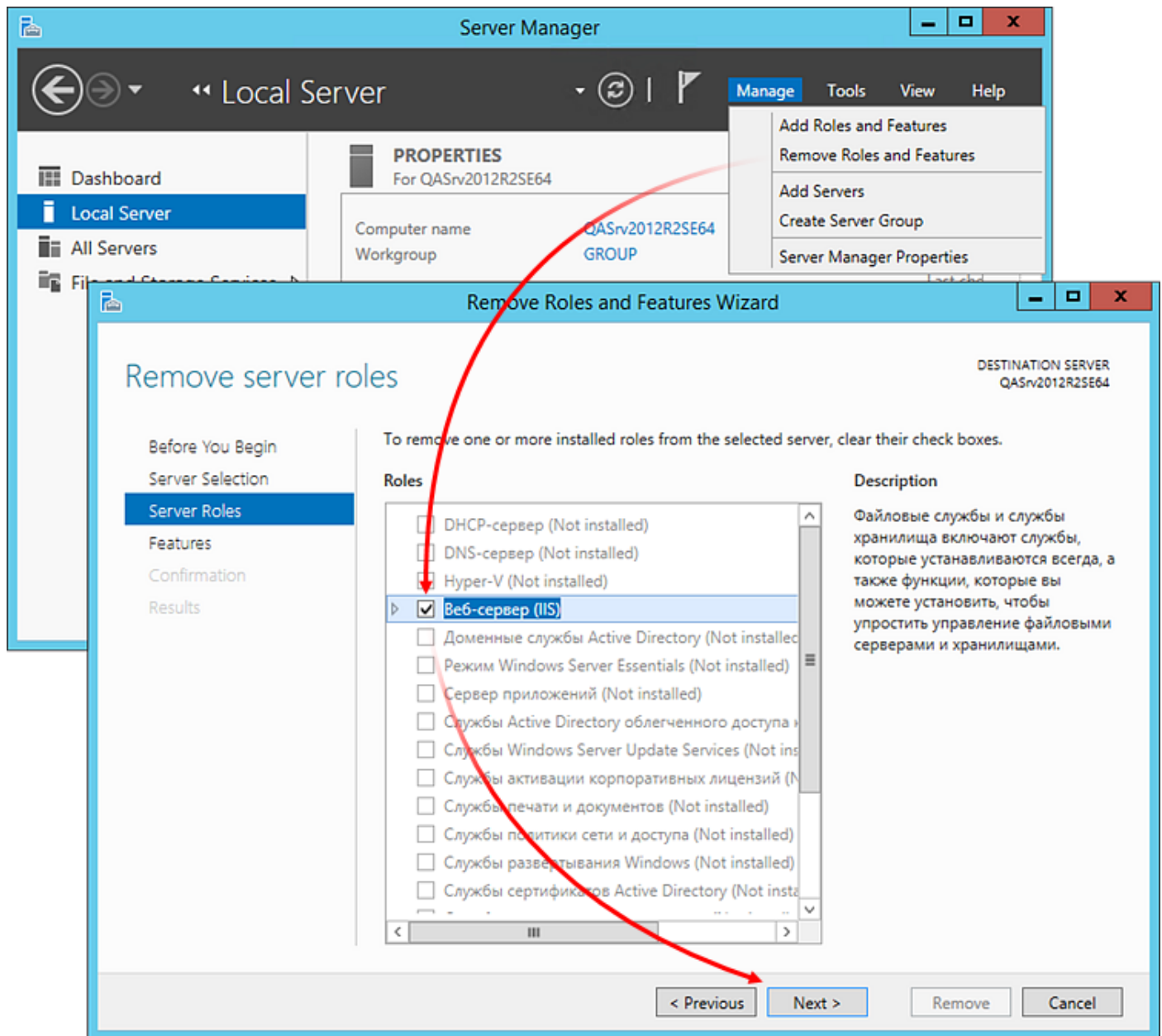
Removing unnecessary programs

Uninstall all programs which may slow down the trading platform or may negatively affect its security:

Web server (Internet Information Server, Apache, etc.)

Mail server, DNS server, SNMP, etc.

Databases (Oracle, MSSQL, etc.)

Various development environment (IDE), compiler, etc.

Environments .NET and Java

Various control agents from the server manufacturer, usually this is a whole set of default programs, intended to remotely monitor the server.

Run the Add/Remove Programs wizard to remove programs. Go to Programs and Features and uninstall all the specified programs.

Configuring system updates

In the control panel, enable automatic downloading of updates with manual confirmation of installation. The fully automated mode is not recommended as Windows server does not allow the selection of the day on which updates should be installed. We recommend installing the updates on weekends, when the server load is minimal.
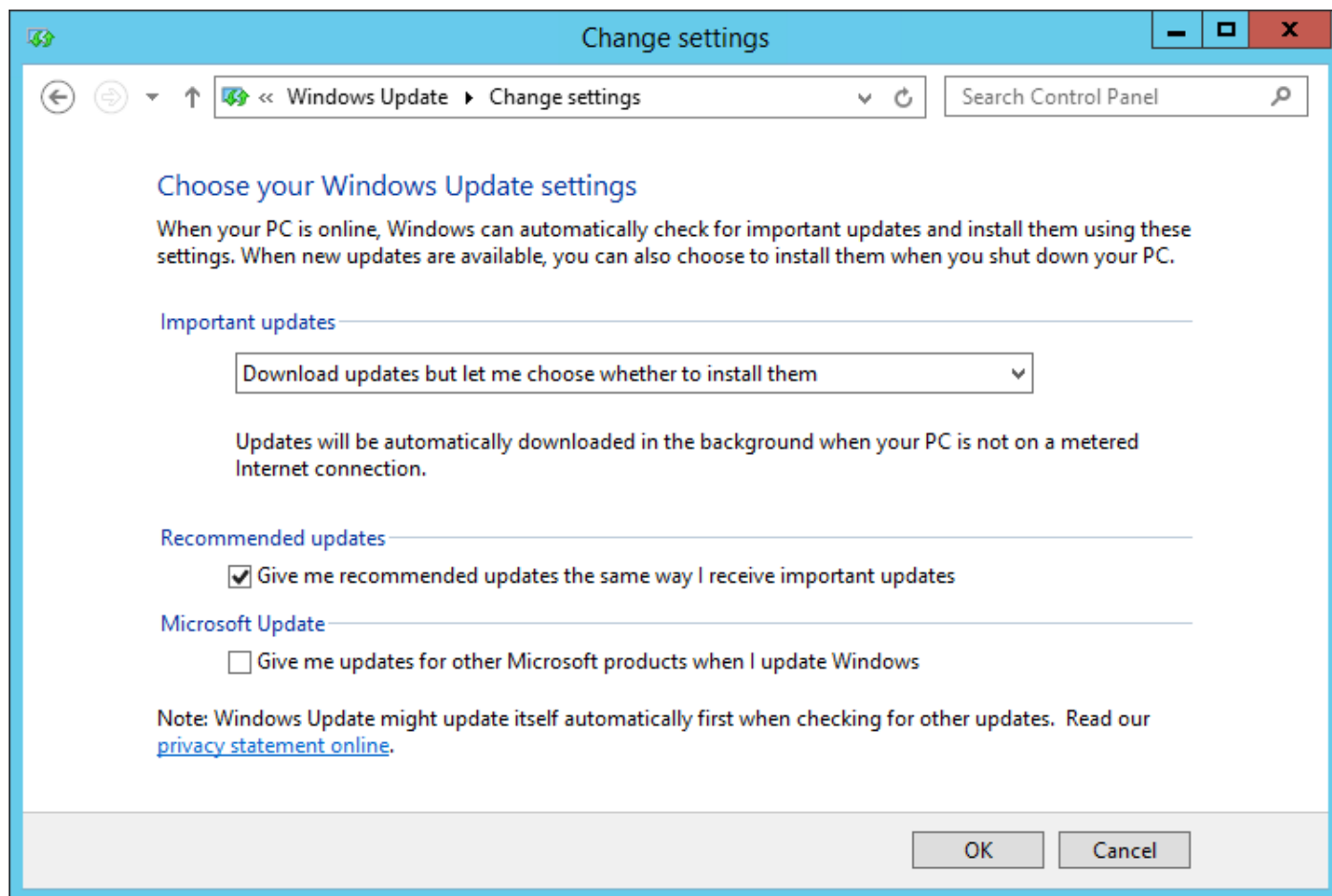

Make sure to install all operating system updates, before installing the platform.

Disabling time synchronization

Time synchronization on the server where the platform is installed, must only be performed by the MetaTrader 4 trading server. Windows Time sync service must be disabled.

MetaTrader 4 time synchronization service verifies and corrects time (if necessary) once an hour.

To disable time synchronization in the operating system, open the "Date and Time" section in Control Panel. Navigate to the Internet Time tab, enter 127.0.0.1 in the "Server" field and uncheck the box next to automatic synchronization:
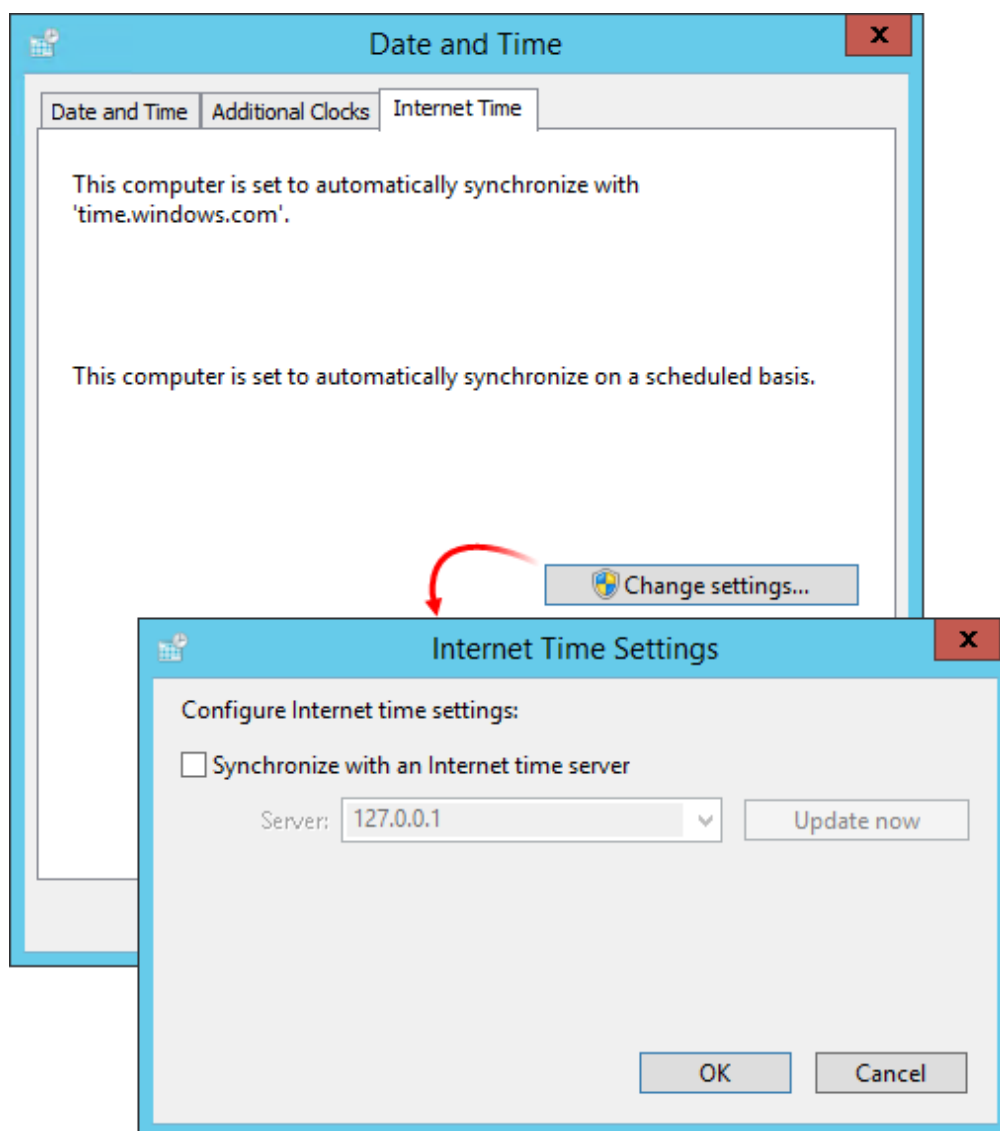
Configuring network connections

Right-click on an active network connection and choose Properties:
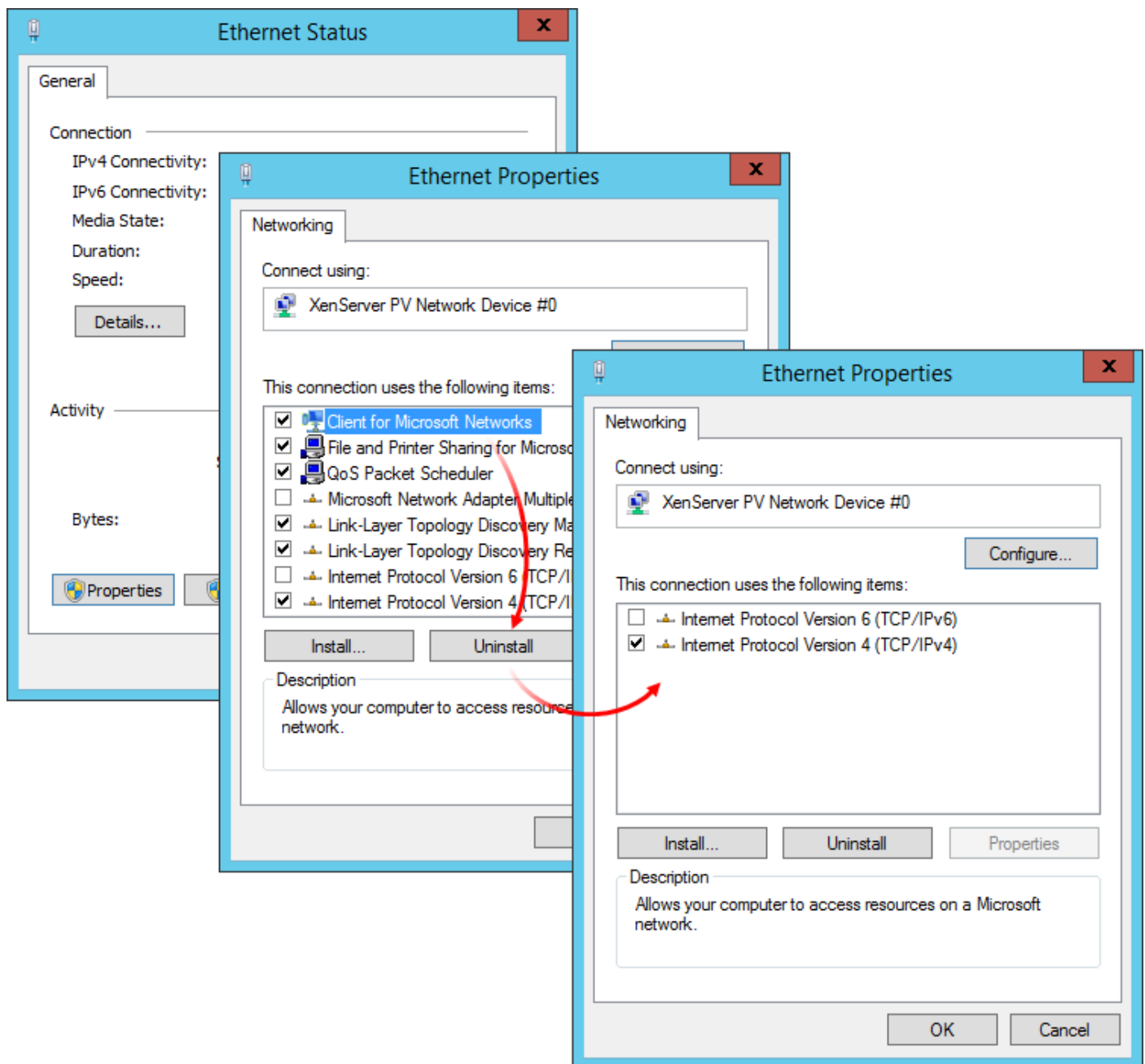
In the Network tab, remove all components except TCP/IP v4 and TCP/IP v6. The list one can be unchecked, while it is not used by the platform.
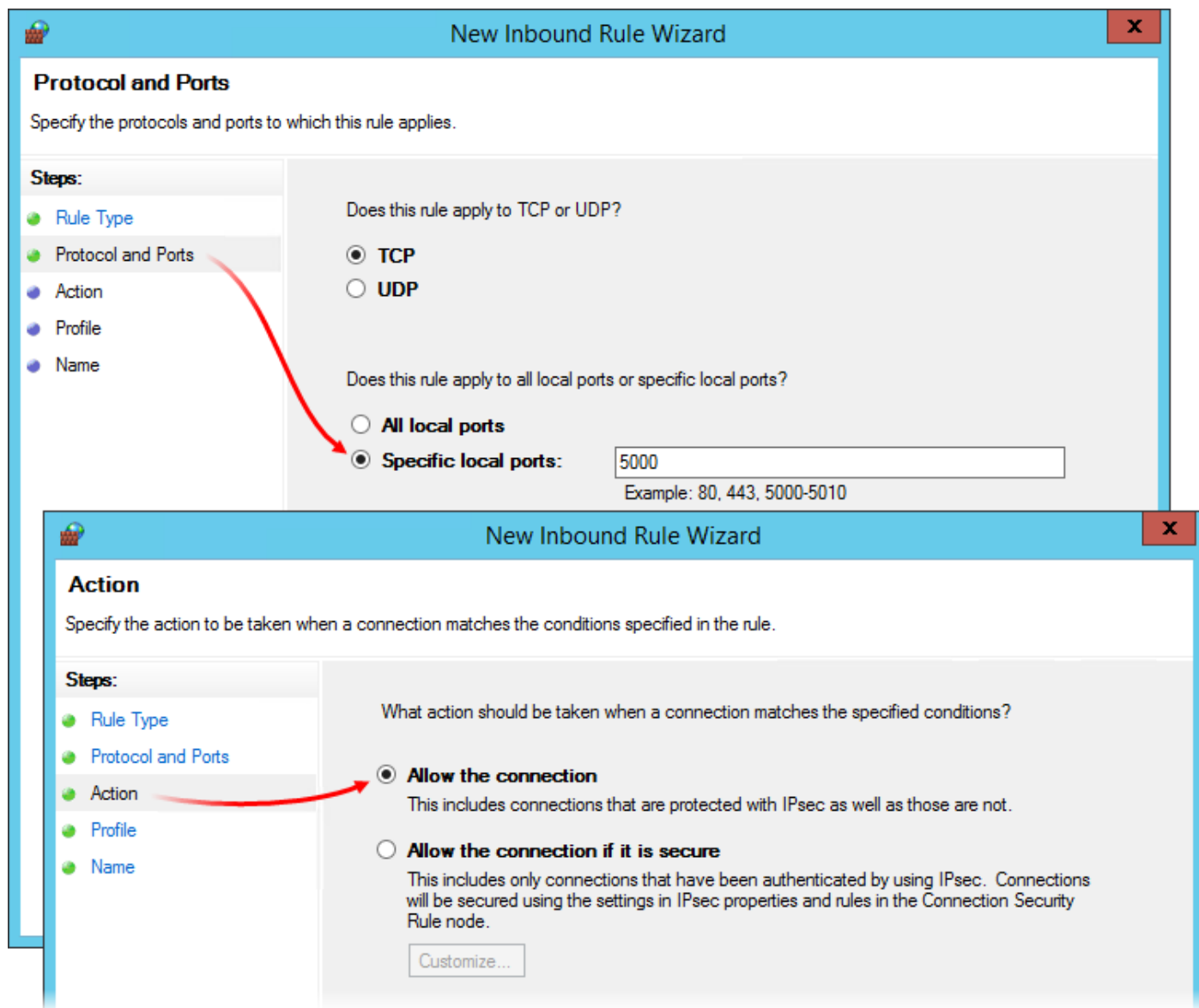
Configuring Windows Firewall

The Platform Installer automatically adds permissions for the required ports in Windows Firewall.

If your platform configuration needs an additional port, navigate to Control Panel — Windows Firewall — Advanced settings. Create a new inbound rule and select "Port":
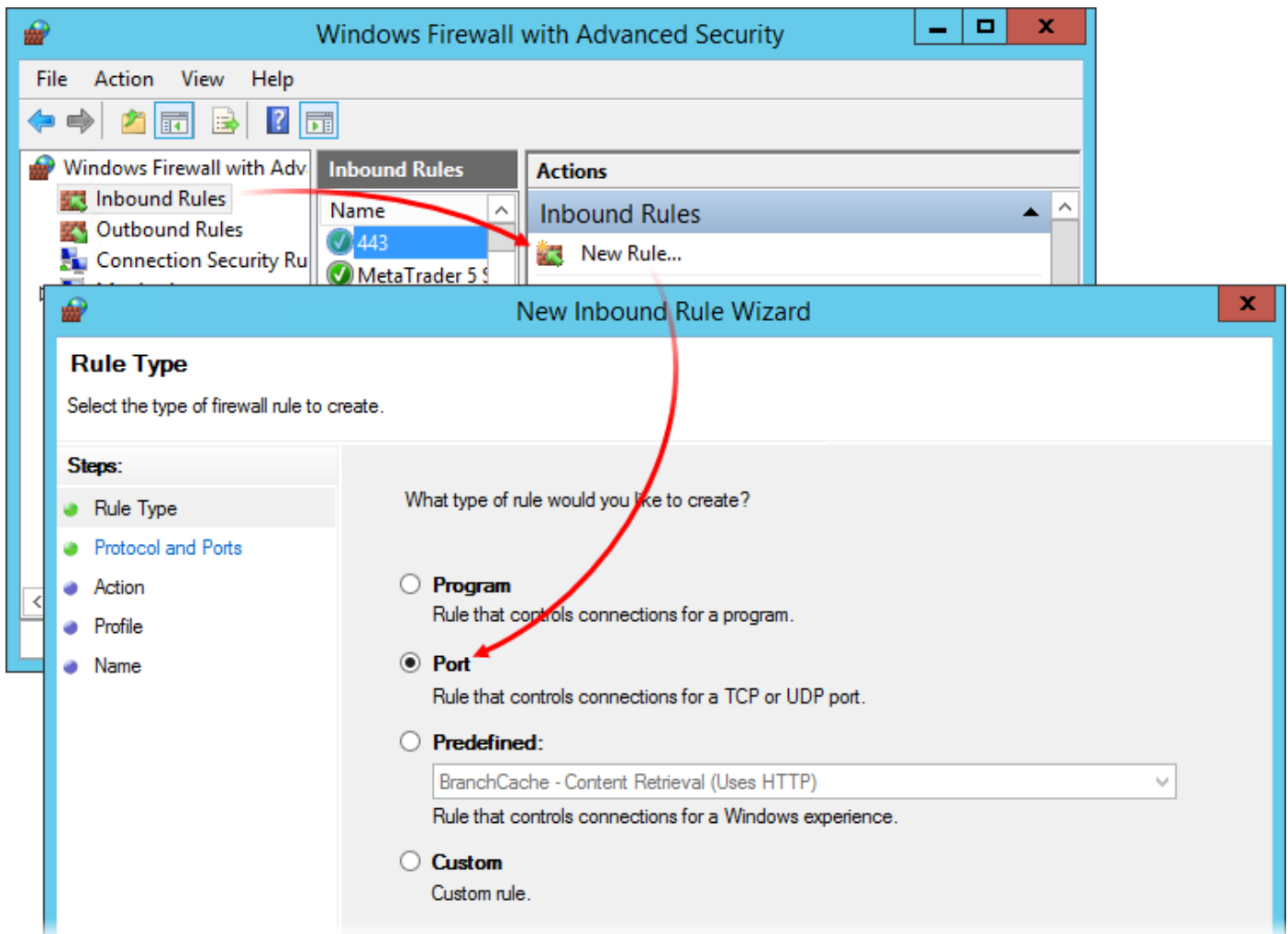
Next, specify the port number and select "Allow the connection":

Next, depending on your computer location, specify the profile for which the rule shall apply: domain, private network or public network. In the last step, give the rule a name.

Disabling sounds

Sound notifications will not be used om the server where the trading server is installed, and thus they should be disabled. Open Sounds in Control Panel:
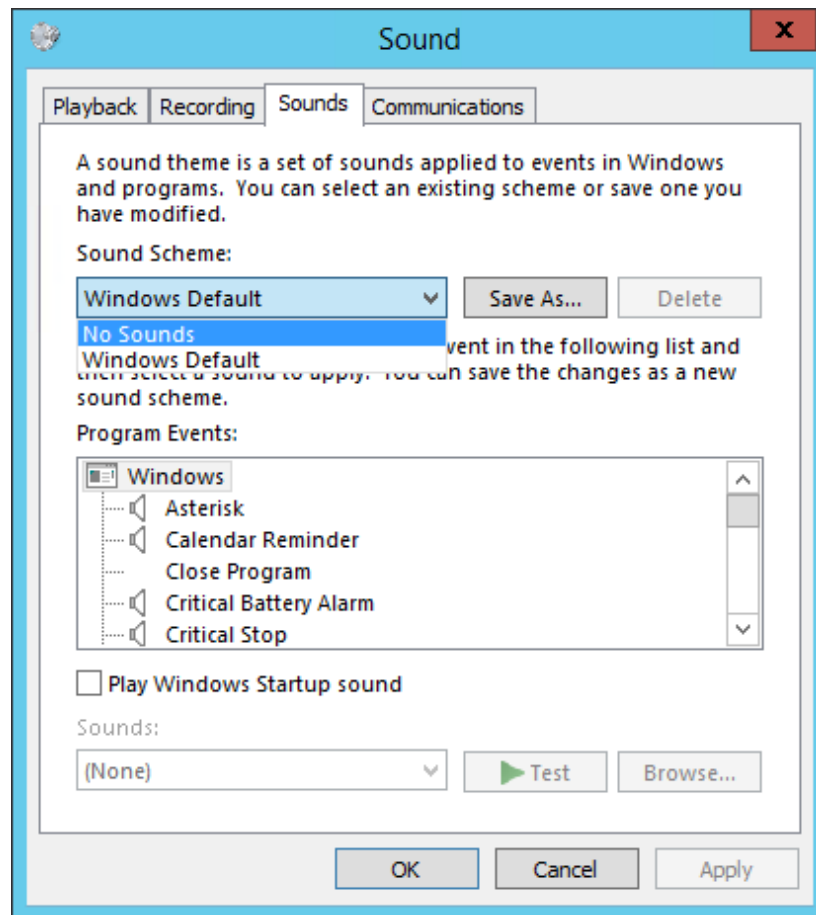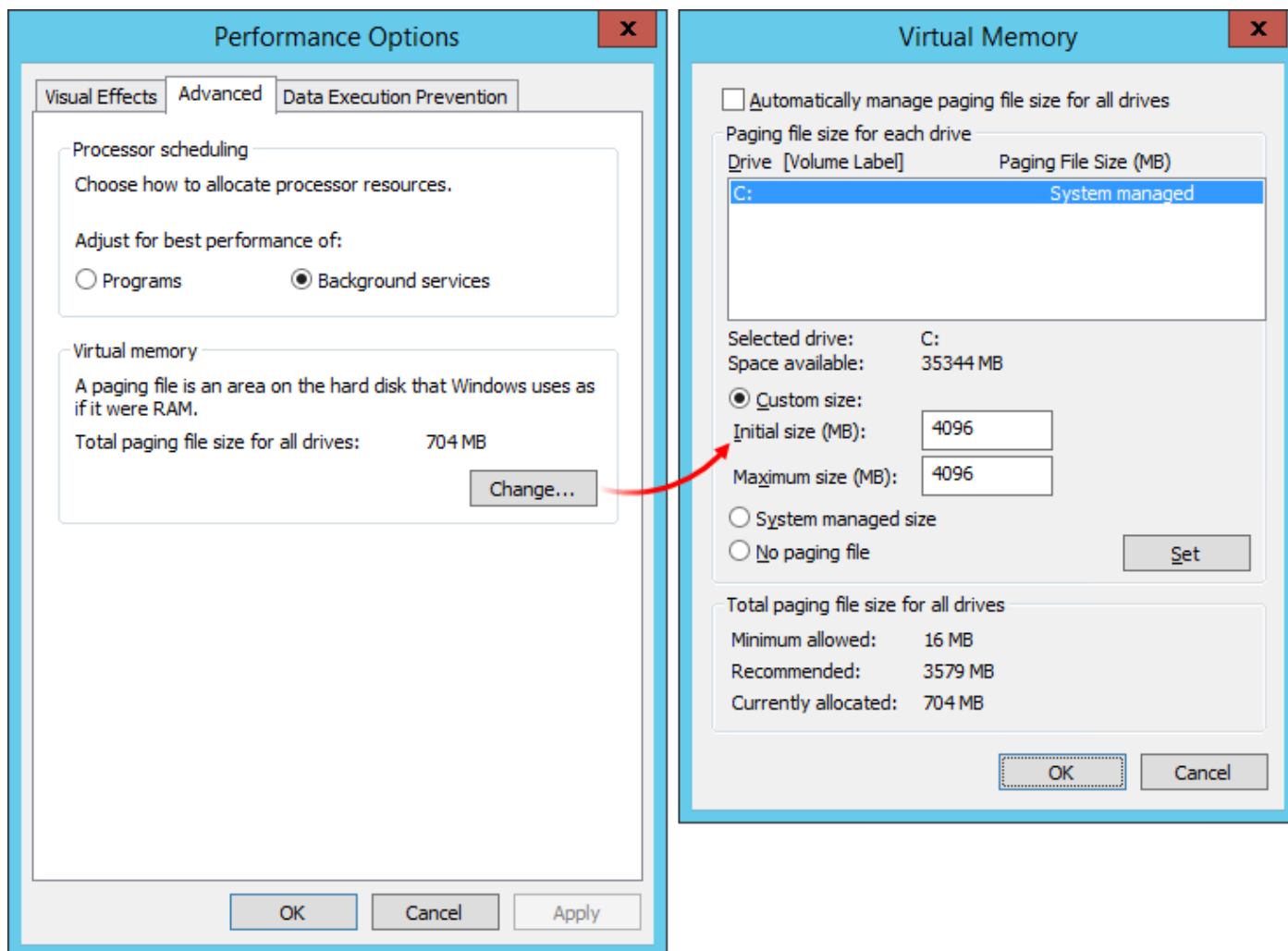
In the list of sound schemes, select No Sound and click OK.

Configuring general performance parameters

Open the control panel, then System — System Properties — Advanced — Performance Options. On the Visual Effects tab, select "Adjust for best performance":
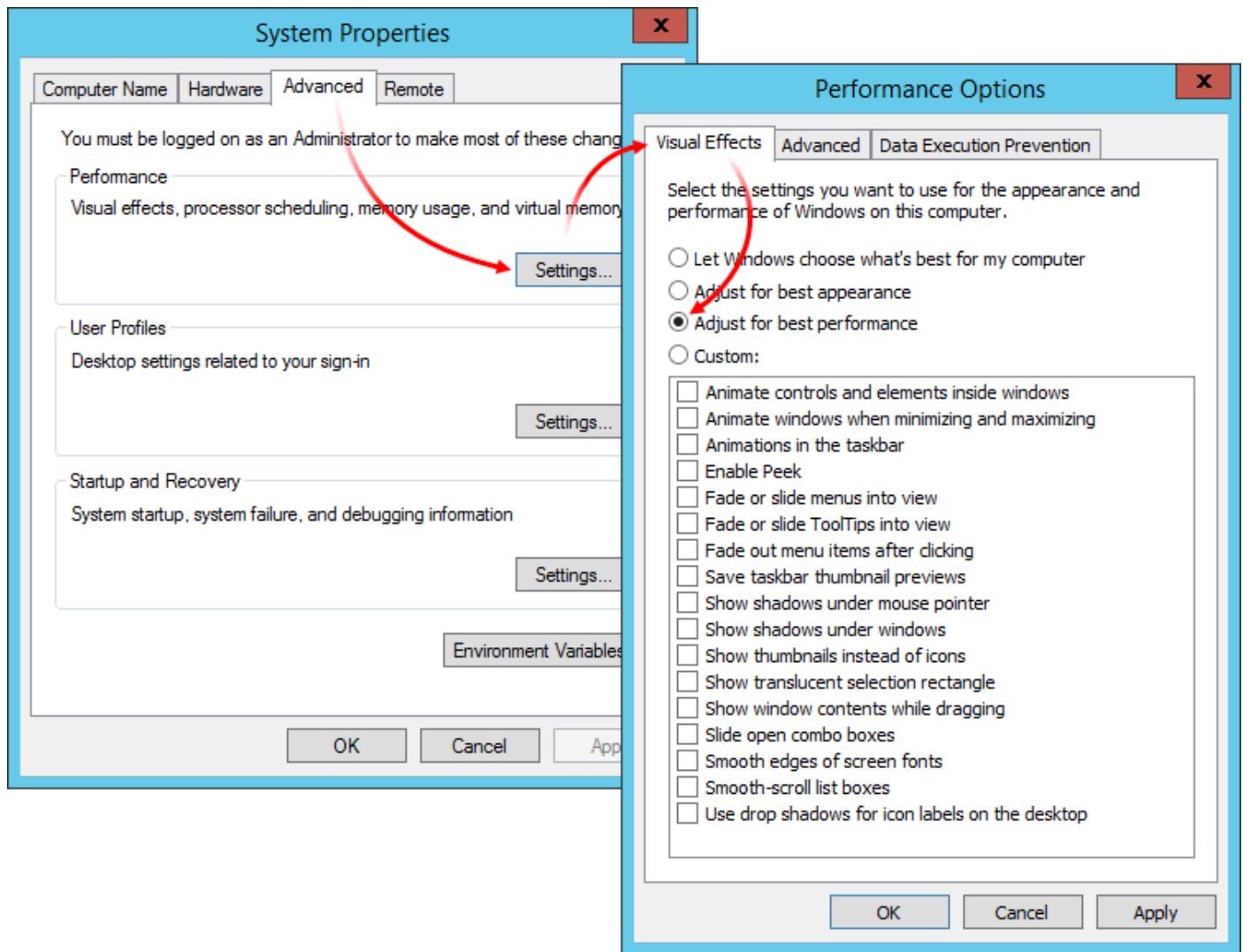
Navigate to the Advanced tab, click Change..., and set the initial paging file size to the maximum value.
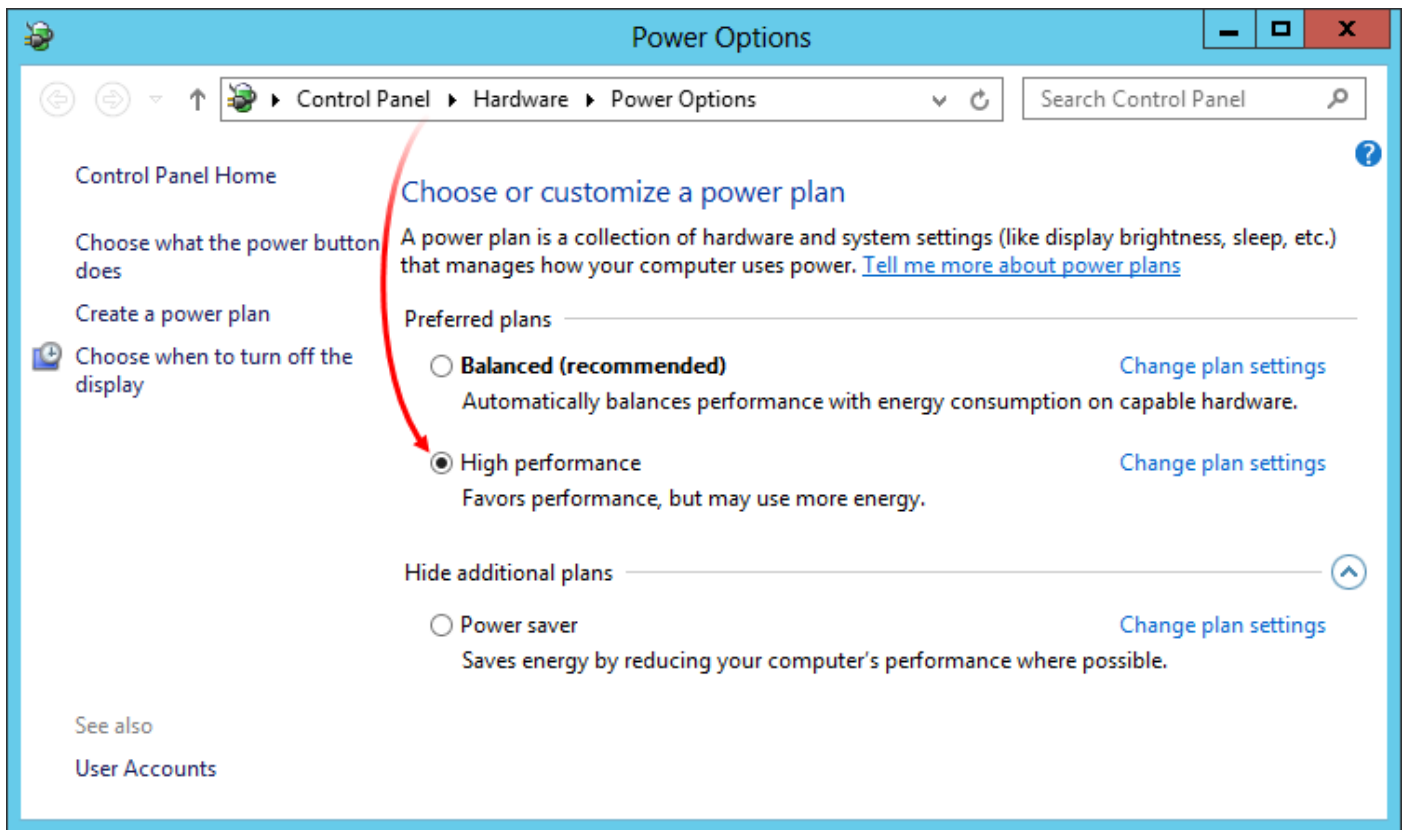
Return to the System Properties — Advanced dialog and go to the Startup and Recovery settings:
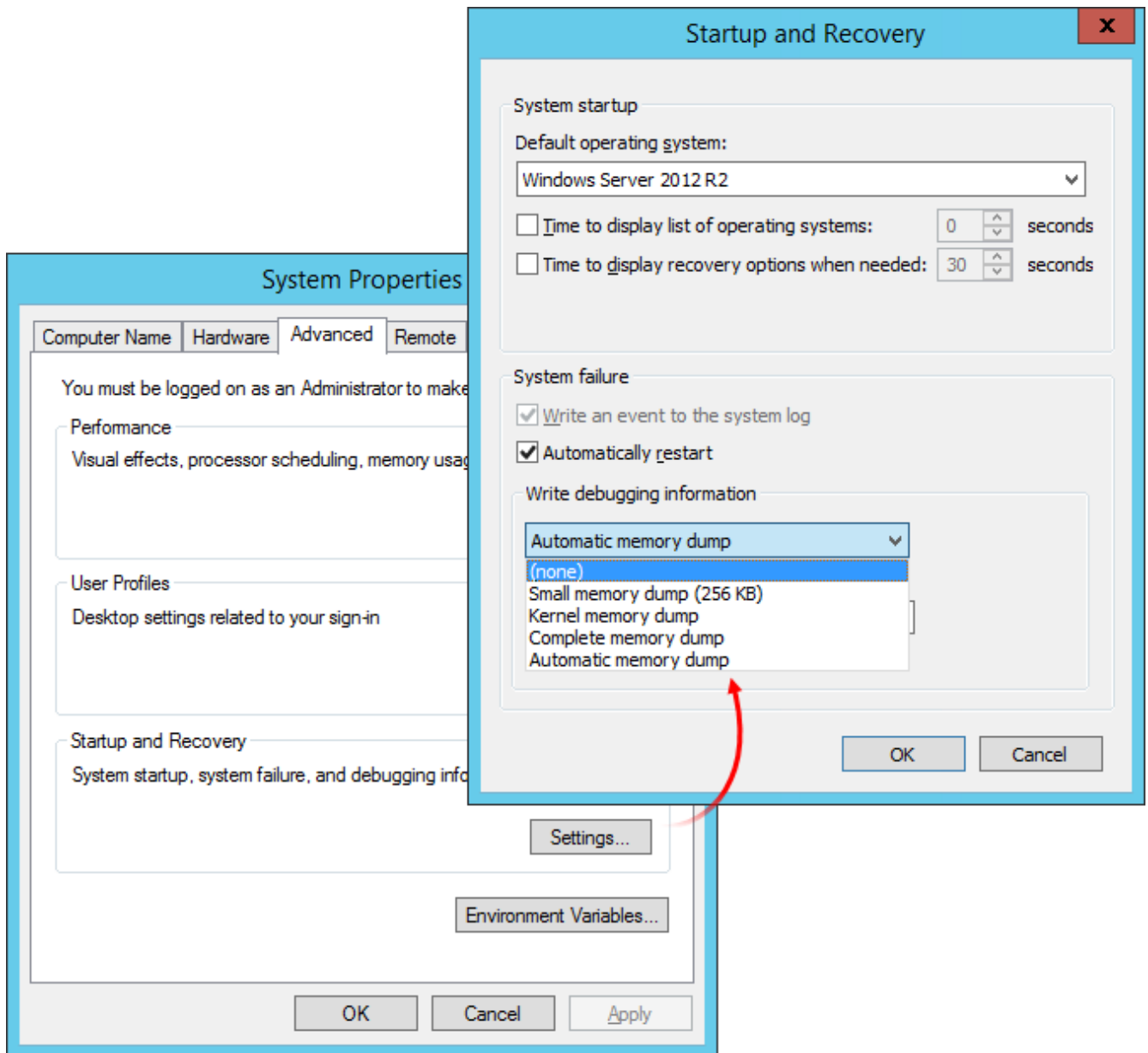
Disable the "Display List of Operating Systems" option. In the Write Debugging Information item, select "None".

From the control panel, navigate to Hardware — Power Options. Select the high performance mode:

Configuring file deletion without moving them to the recycle bin

To delete files immediately, without moving to the recycle bin, click "Properties" in its context menu. Select "Don't move files to the Recycle Bin. Remove files immediately when deleted":
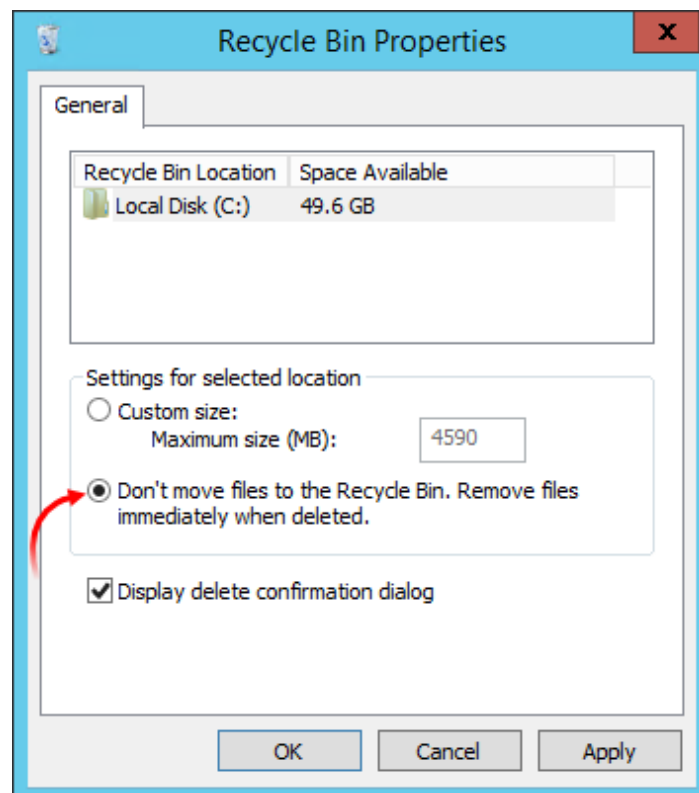

Server Configurator

The "Server Configurator" program is specially designed to facilitate the preliminary server configuration process, by automating manual operations concerning the termination of various services, system configuration via the registry, and deletion of temporary and unnecessary information from the disks. This program can be downloaded at

https://support.metaquotes.net/spfiles/srvcfg.exe. The program does not require installation, you just need to run the EXE file. Go through all the steps, setting all flags to on. For more details about Server Configurator please read the article "How to use the Server Configurator".

Configuring remote access

Please keep the server remote access details in a safe place and do not share it with anyone without special need.

Disabling RDP access with blank password. Accounts for which blank password should not be able to remotely connect to the server. Open Control Panel— Administration — Local Policies — Security Options. Enable the option "Accounts: Limit local account use of blank passwords to console logon only".
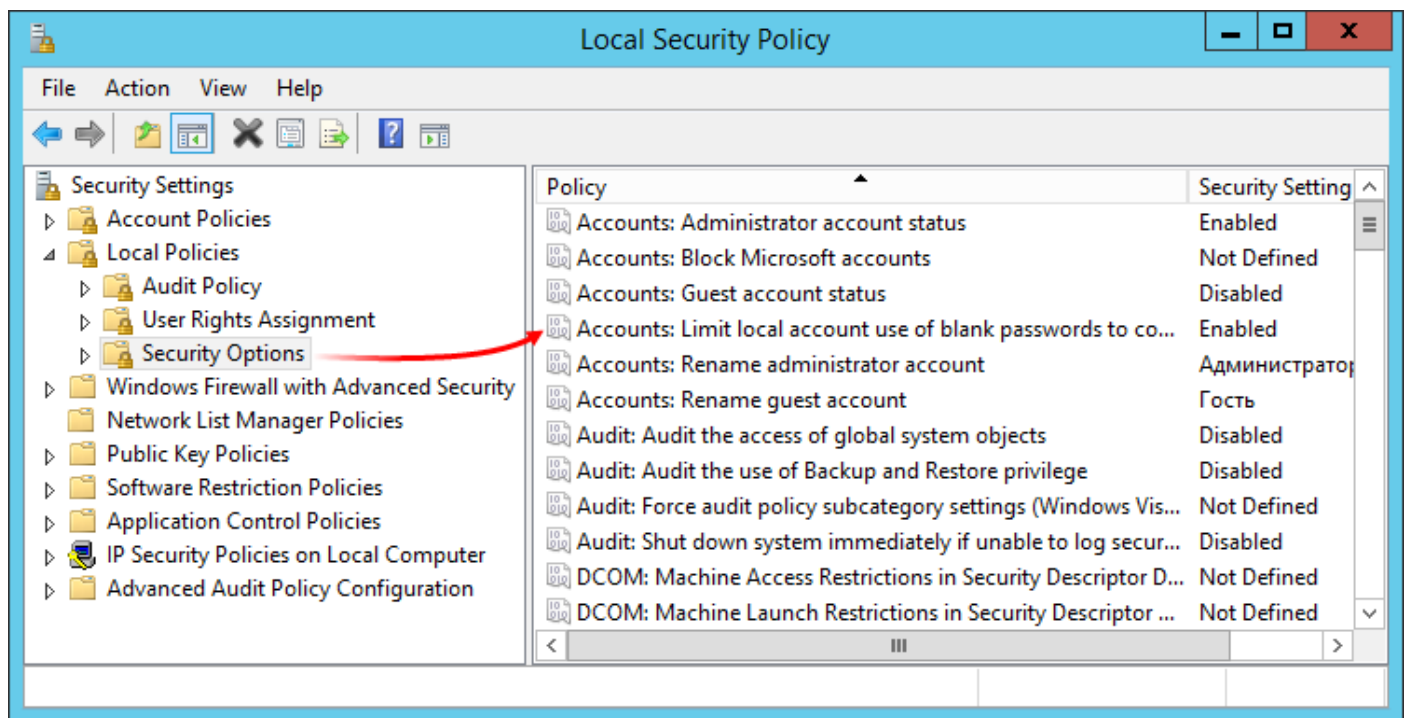
Changing standard port for remote connections. To protect the server from attacks targeting "well-know" port, we recommend changing the port for Desktop Protocol. Open regedit, go to HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Terminal Server\WinStations\RDP-Tcp and find the Port Number parameter. Double click on it, select Decimal base and specify the desired port.
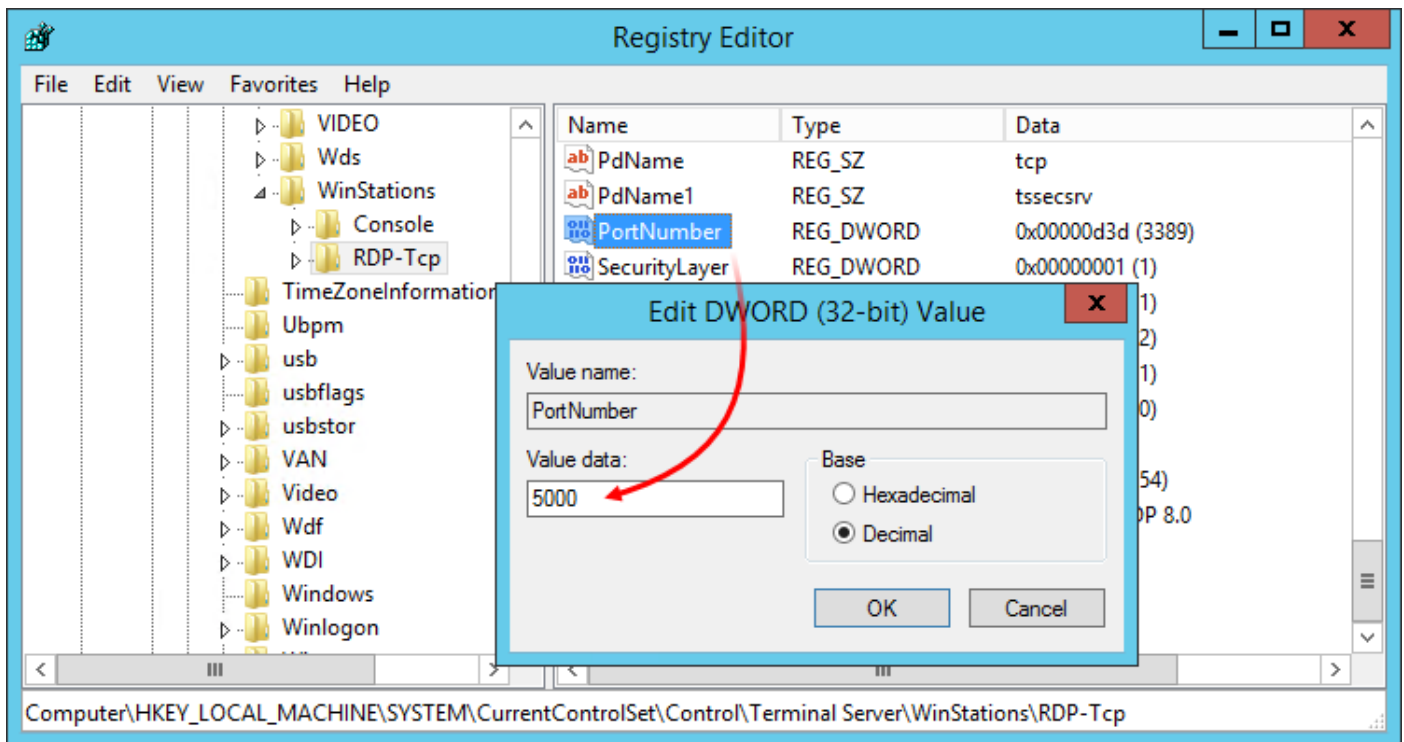
The specified port must be allowed in Windows Firewall.

To connect to the server remotely, specify the new port after the IP address separated by a colon. For example, 10.59.162.3:5000.

Limitation of IP address list for remote connection. As an additional security measure, you can restrict the list of IP addresses that can be used to remotely connect to the server. For example, you can allow connection only from your office's IP addresses.

Open Windows Firewall and find "Remote Desktop - User Mode (TCP-In)" in the list of inbound rules. There can be several such rules depending on the number of network profiles. Open the one you need and go to Scope tab. In the "Remote IP address" section, select "These IP addresses" and add the necessary ones to the list:
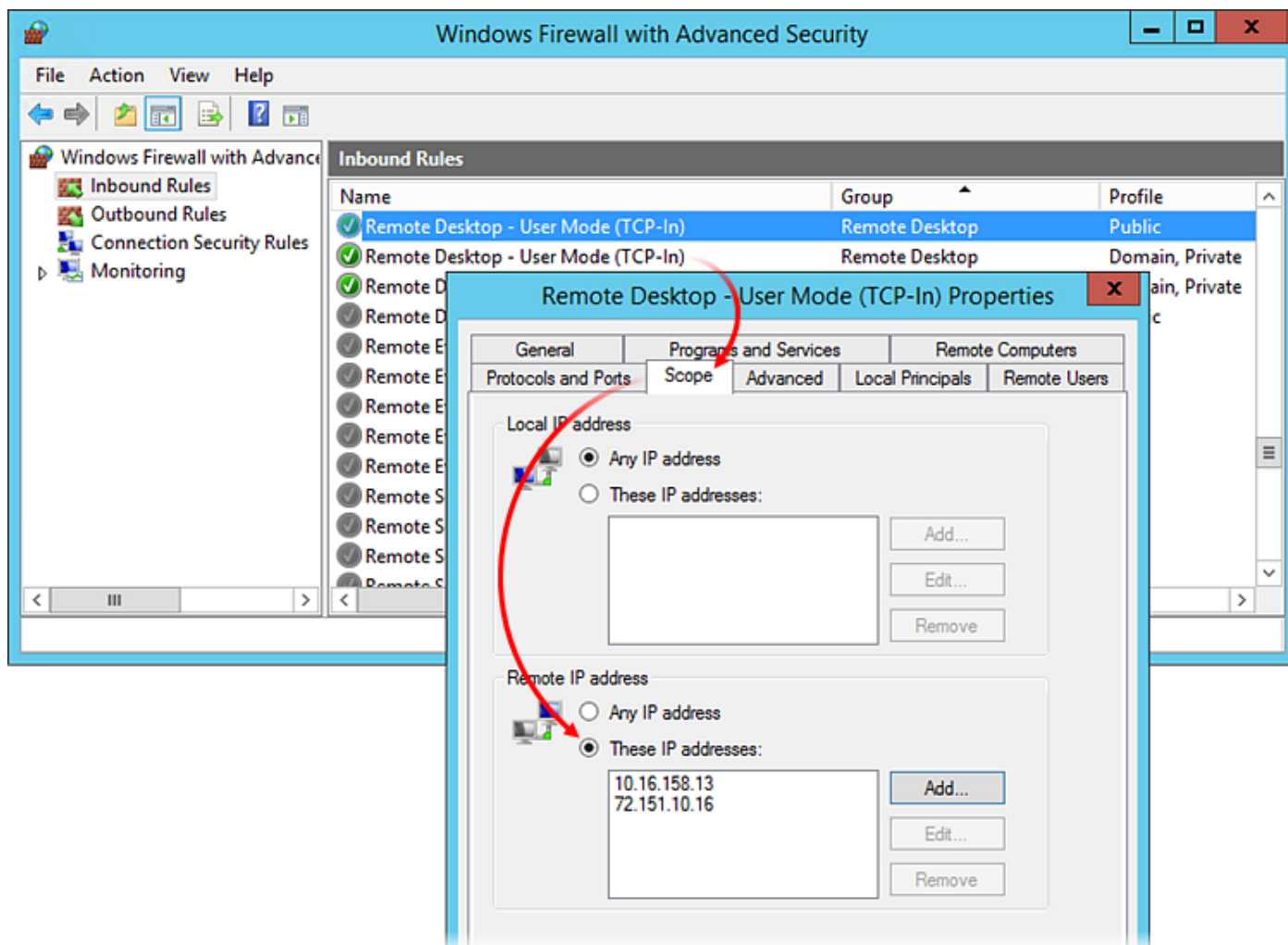
Configuring antivirus software

If antivirus software is used on your server, add to its exclusions the MetaTrader 4 platform system process and its installation directory. Constant monitoring by antivirus software reduces platform performance.

Here is an example of adding exclusions in Windows Defender, which is a built-in antivirus software used on Windows Server 2016. Open Windows Settings — Updates and Security — Windows Defender. Go to "Exclusions" and click "Add an exclusion".
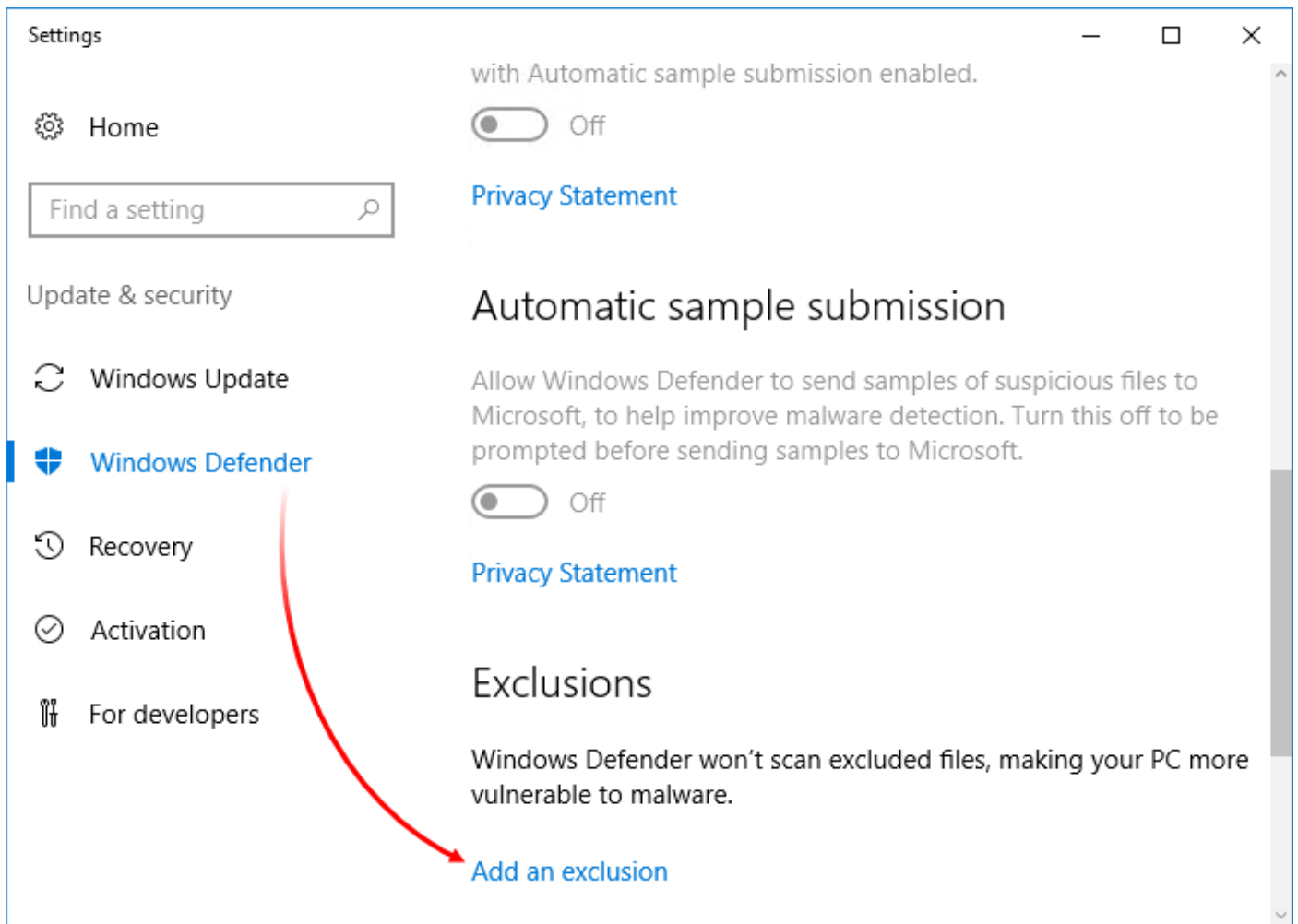
Select "Exclude folder" and choose the platform installation directory
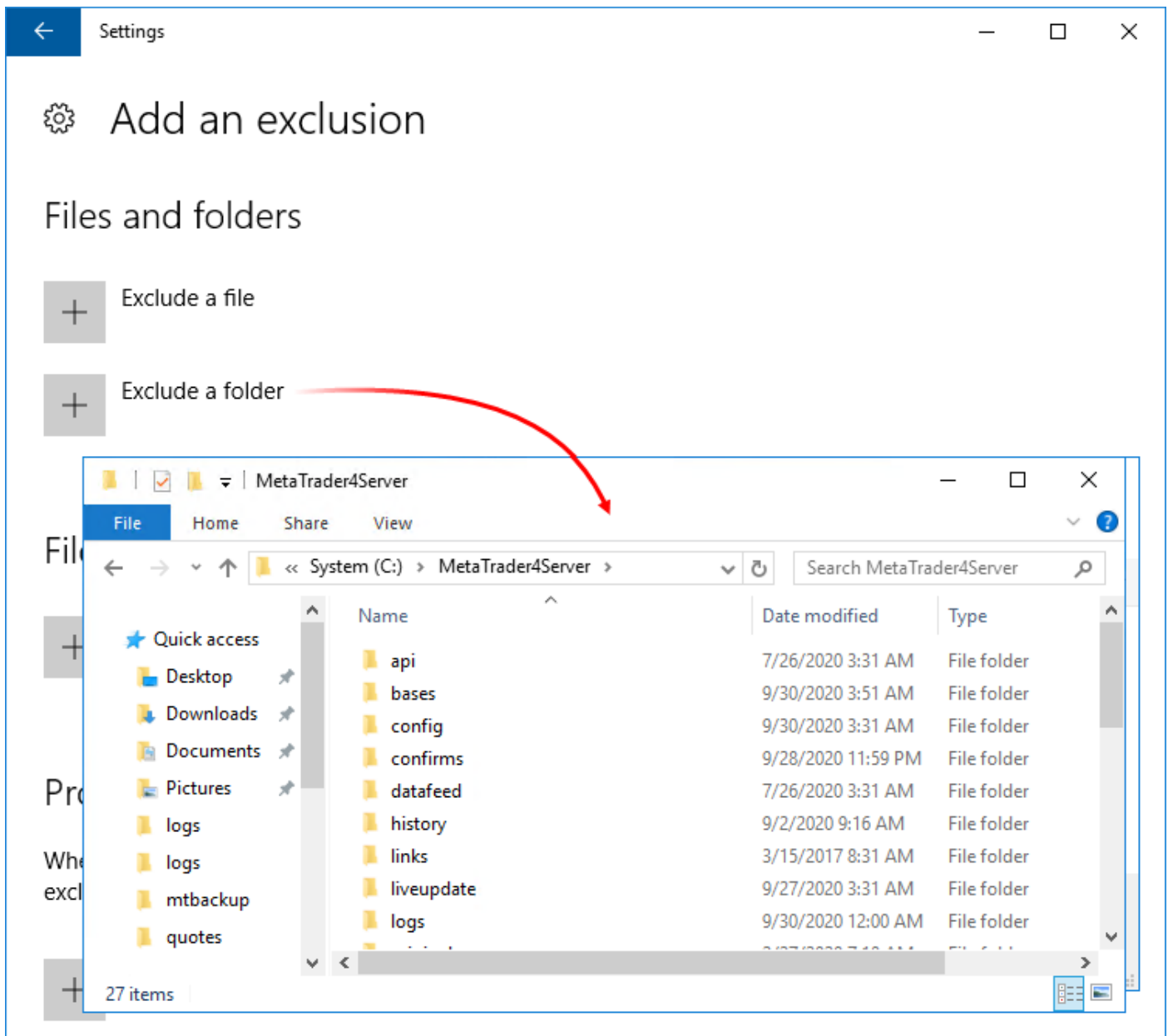
Click "Exclude process .exe, .com or .src". Specify the name of the trading server process in the window that opens. You can specify the name of the server executable (for example, mtsrv.exe) or the process name (for example, mtsrv).
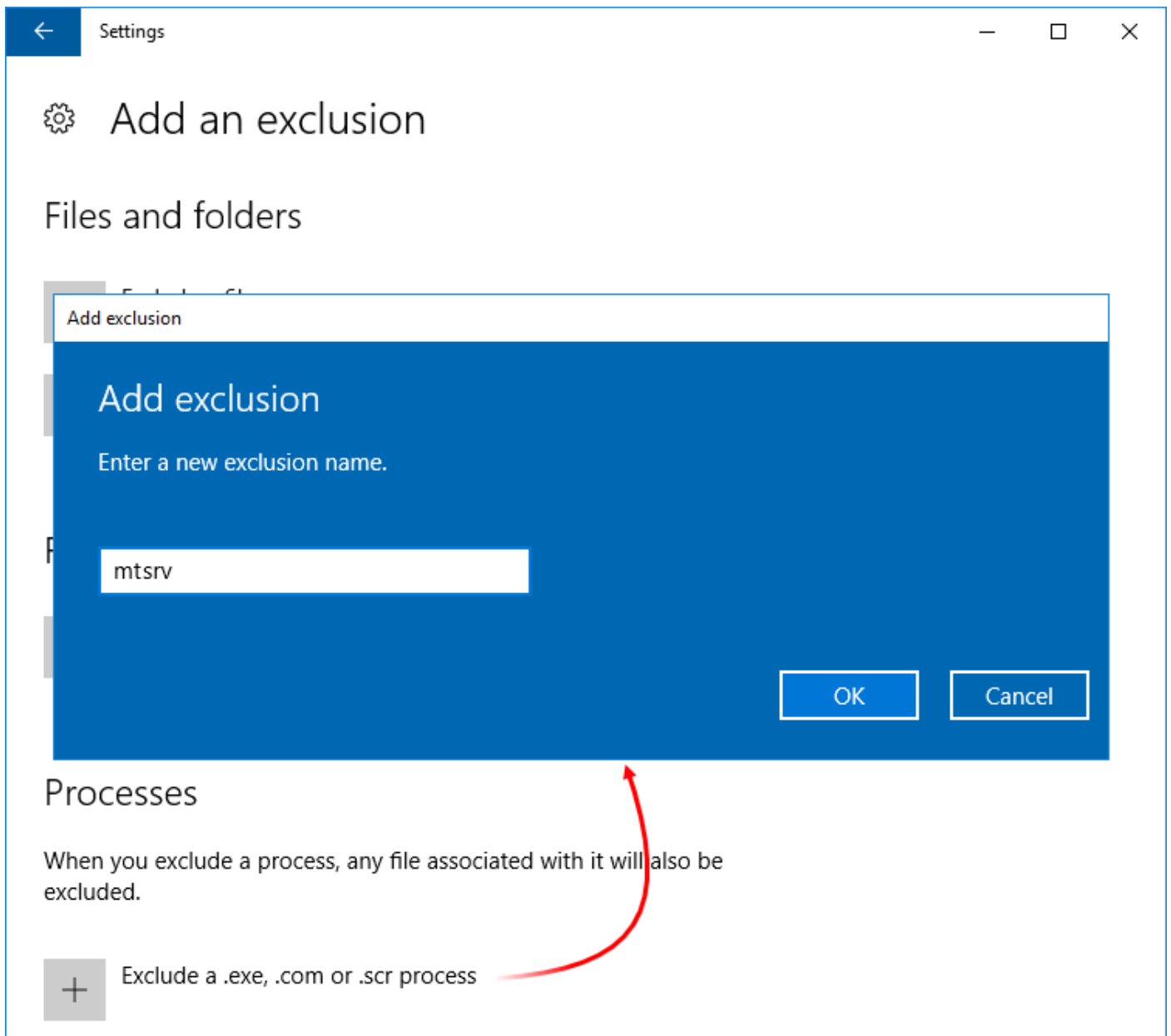
System Requirements   Server Administration Commands

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