



MetaTrader 4 Administrator — User

Translate: EN ▾

Guide

The remote administration program is intended for server operation control, managing settings of users groups, administrator's rights, financial instruments, and data feeds, Data Centers setting.

Also MetaTrader 4 Administrator is intended for quotes base managing, server operation logs treatment, charts historical data synchronization, data feeds and server restart, automatic program updating, working hours and days regulation and data bases backup functions control.

The screenshot shows the MetaTrader 4 Administrator application window. The menu bar includes File, Edit, View, Services, and Help. The toolbar contains icons for Disconnect, Refresh, Restart, Apply, and various file operations. The left sidebar is titled 'Administrator' and lists categories: MetaTrader server (selected), Common, Gateway, IP Access List, Data Centers, Time, Holidays, Symbols, Securities, Groups, Managers, Data Feeds, Backup, LiveUpdate, and Synchronization. The main area has two tables. The top table, 'Configuration', lists 15 items with descriptions: Common (Common server settings management), Gateway (Gateway configuration), IP Access List (IP access list settings configuration), Data Centers (Data center parameters setup), Time (Common server operating time determination), Holidays (Holidays setting for security groups and symbols), Symbols (Symbol list setting), Securities (Grouping of securities), Groups (User group settings), Managers (Configuration of permissions and settings for a man...), Data Feeds (External data feeds settings), Backup (Configuration of databases backup settings), LiveUpdate (Configuration of LiveUpdate settings for terminals), Synchronization (Database synchronization settings), and Plugins (Configuration of server plugins). The bottom table, 'Articles', lists news items with columns for Name, Category, and Date:

| Name | Category | Date |
|---|----------|------------|
| MetaQuotes Software Corp. Will Take Part in iFXEXPO and Hold a Conference | News | 2013.03.08 |
| Meet MetaTrader 4 STP Gateway in New Build 480! | News | 2013.03.01 |
| Signals and Market Sections on Your Website | News | 2013.02.28 |
| New version of MetaTrader 4 Report Server build 478 | News | 2013.02.28 |
| MQL5.community Restyled | News | 2013.02.26 |

At the bottom, there are tabs for Monitor, Mailbox, Support, Articles (selected), Journal, and a Toolbox icon.

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[MetaTrader 4](#)

[Getting Started](#)

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Getting Started

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This section contains basic information you need to know when starting to work with the administrator terminal:

[Introduction](#)

[Overview](#)

[Main Menu](#)

Administrator

[Introduction](#)

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Introduction

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The remote administration program is a part of the online trading platform MetaTrader 4. It is intended for:

- server operation control;
- managing settings of users groups, administrator's rights, financial instruments, and data feeds;
- Data Centers setting;
- quotes base managing;
- server operation logs treatment;
- charts historical data synchronization;
- data feeds and server restart;
- automatic update of all components of the platform;
- working hours and days regulation;
- data bases backup control.

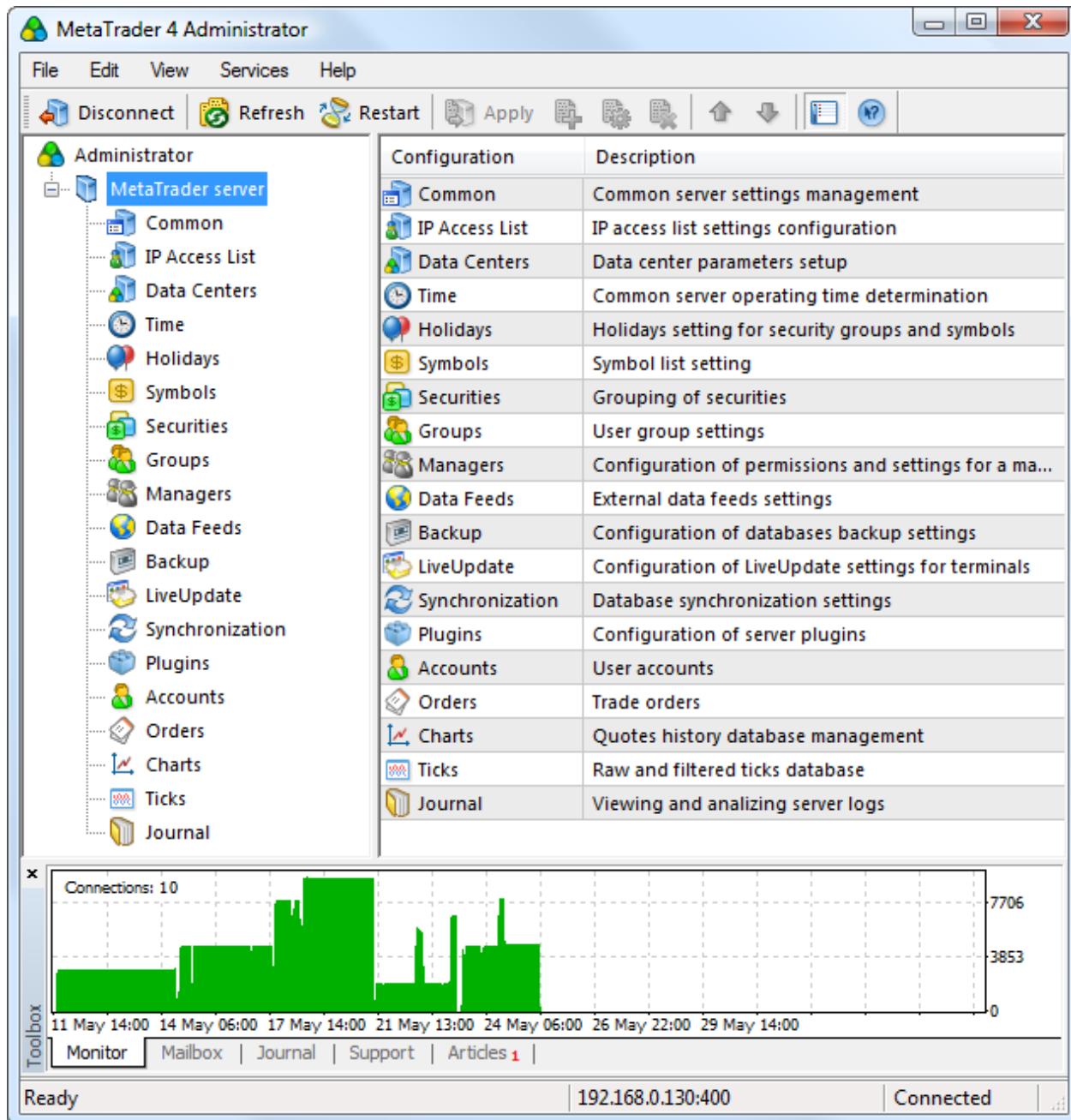
MetaTrader 4 Administrator can operate under Microsoft Windows XP SP3/Vista/7/8/10 or Windows Server 2008R2/2012/2012R2. A processor with SSE2 support (Pentium 4/Athlon 64 or higher) is required for operating as well. Other hardware requirements are limited with software ones.

[Getting Started](#)[Overview](#)

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Overview

The program appears as follows:



The program window is divided into several parts:

Menu and Toolbar

All commands for server administration and Administrator settings are located in the menu and toolbar.

The List of Servers and Server Settings

There is a list of servers and their settings performed as "a tree" in the left part of the program window. Such a grouping allows to avoid errors when administering several servers.

Comprehensive Settings

The right part of the program window is intended for configuration.

Monitoring

The "Monitor" inlay of the floating "Toolbox" window shows (through a context menu): the CPU load, use of RAM, network load, the amount of active connections.

Messages about successfully executed commands and errors in the operation of Administrator are published in "Journal". In logs, error messages are marked with a red icon (No Entry sign) and the routine ones are marked with a gray point. The local time of message appearance, "Server" (the address of the server to be administered), "Message" (the message body) are shown in the "Time" column.

The "Mailbox" tab is intended for working with the [internal mailing system](#).

The "Support" tab allows contacting the developer company if you have any troubles or questions regarding the trading platform.

Status Line

The program command prompts, address and port of the server to be administered, the connection status, and the amount of information sent and received are placed in the status line.

[Introduction](#)

[Main Menu](#)

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Main Menu

The Main Menu includes all program commands. The most frequently used ones are also shown on the toolbar.

File Menu

| | Menu Command | Description |
|---|----------------------------|---|
| ↻ | Connect | Authorization. After clicking this command, an attempt to login to the selected server will be made. If there is no account indicated on this server, the login will fail |
| ✖ | Disconnect | Disconnecting from the server. Before finishing work with Administrator, it is strongly recommended to disconnect from the server |
| | Export All Settings | Export all server settings to HTML file |
| ✚ | Add Server | Adding an administration server. After clicking a command, a window will appear requesting information on the server to be added. After the information has been filled the new server will appear in the list on the left part of the window. This server is now ready for connection. |
| ✖ | Remove Server | Removing a server. After clicking a command, the selected server will be removed from the list in the left part of the window. To start administration of this server repeatedly, it is necessary to add it each time. |
| | Change Password | This command allows to change the password of the account selected on a specific server. To do so, you will need to know the current password |
| 🗁 | Open Data Folder | Open the data directory of the administrator terminal. This is a convenient command for operation under MS Windows Vista and above, where programs by default store data in the Windows user directory, and not in the installation directory. The data storage directory has the following path: C:\Users\[username]\AppData\Roaming\MetaQuotes\MetaTrader 4 Administrator\[terminal instance id]\. |
| | Exit | The command will close the program |

Edit Menu

| | Menu Command | Description |
|---|---------------------|--|
| ✚ | Add | Adding an instruction. Depending on the section selected in the servers tree (in the left part of the window), different commands will be executed. For example, when the "Holidays" section is selected, the command will allow to add a new instruction for a holiday. If the "Symbols" section was selected, the command will add a new financial instrument. Applicable for all sections, except for "Server", "Backup", "Ticks" and "Journal" |

| | Menu Command | Description |
|---|----------------------|---|
|  | Edit | Editing an instruction. The command allows to modify the instruction (setting) already existing. To do so, it is necessary to select the desired element in the data adjusting window (the right part of the window). As in the case of adding a new instruction, the result of this command will differ depending on the section. Applicable for all sections, except for "Server", "Backup", "Ticks" and "Journal" |
|  | Delete | Deleting an instruction. Before deleting an instruction, it is necessary to select it (in the right part of the window). Applicable for all sections, except for "Server", "Backup", "Ticks" and "Journal" |
|  | Apply Changes | Applying new settings. The command is only activated when changes were made in the "Server" or "Backup" sections, and when it is necessary for them to come into force |
|  | Move Up | Moving up priorities. This command allows to manage the priority in the lists of "IP Access List" and "Data Feeds" sections. For example, if a feeder like "Quotes" is located above other feeders of the same type, it is the feeder that will give full information to the server. Only if this feeder fails will the server switch to the next feeder of this type. The priority is set top-to-bottom. For the "Symbols" inlay, this command allows to change the on-default position of symbols in the "Market Watch" window in the client terminals. Besides, you can move added servers relative to each other in the tree-structured list using this button |
|  | Move Down | Moving down priorities. This command allows to manage priority in "IP Access List" and "Data Feeds" sections. For example, if the feeder like "Quotes" is located above other feeders of the same type, it is the feeder that will give the full information to the server. And only if this feeder fails will the server switch to the next feeder of this type. The priority is set top-to-bottom. For the "Symbols" inlay, this command allows to change the on-default position of symbols in the "Market Watch" window in the client terminals. Besides, you can move added servers relative to each other in the tree-structured list using this button |
|  | Find | Find an element on the currently open tab. |
| | Find Next | Find the next element according to the current search request. |

View Menu

| | Menu Command | Description |
|--|---------------------|--|
| | Languages | Activating languages. This menu contains the list of languages available. To activate the language settings, it is necessary to reload the program |
| | Toolbar | Toolbar Enabling/Disabling |
| | Status Bar | Status Bar Enabling/Disabling |

| | Menu Command | Description |
|---|---------------------|--|
|  | Toolbox | The "Toolbox" window enabling/disabling. This floating window is intended for monitoring the server status (CPU load, use of memory, number of users connected to the server, network load), for using the internal mailing system and for session logging |

Services Menu

| | Menu Command | Description |
|---|--------------------------------------|---|
|  | Restart Server | Restarting server |
|  | Reload Configuration | Reloading server configuration. If any changes in the server configuration have been made by another administrator during your session, the administration mismatch may occur. To avoid such problems, it is recommended to perform this command periodically. The command will automatically be executed after authorization |
|  | Restart Datafeeds | Restarting Datafeeds |
|  | Synchronize Historical Charts | History data synchronization |
|  | Start LiveUpdate | Starting LiveUpdate process |
|  | Activate | Activating the trade platform. Without activation the trade platform has functional limitations. |
|  | Switch to Backup | Switch to backups using backup server instead of the main trade server. A more detailed description of this process is given in the appropriate section . |
|  | Options | Open the window of options of the administrator terminal. |

Help Menu

| | Menu Command | Description |
|---|---------------------------------------|---|
| | Contents | MetaTrader Administrator information |
| | MetaQuotes Ltd. | Homesite of the MetaQuotes Software Corp. in Internet |
| | MetaQuotes Support Center | Support site of the trading complex of MetaTrader 4 in Internet |
|  | About MetaTrader Administrator | About program |

[Overview](#)

[Terminal Settings](#)

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Terminal Settings

The window of the administrator terminal settings can be opened by pressing the "🛠️ Options" button in the "[Services](#)" menu or using the "Ctrl+O" key combination. All the settings are grouped in three tabs:

[Common](#)

General settings of the administrator terminal.

[Support](#)

The authorization details for contacting the technical support team.

[Main Menu](#)[Common](#)

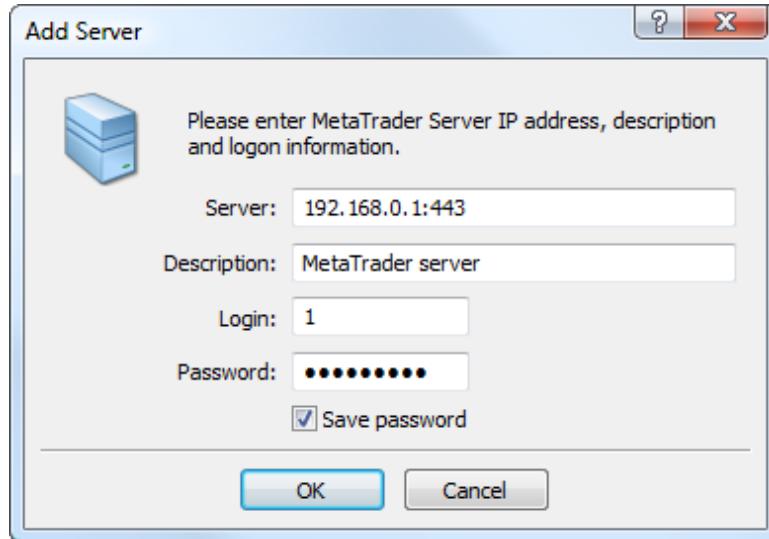
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Add or Remove Server

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The program allows to administer several servers simultaneously. The tree of available servers is located in the left part of the program window. To start administering a server, it is necessary to add a new server to the tree by performing the "File – Add server" menu command or a corresponding context menu command.



Server is the IP address or domain name of the desired server and the port number. If the port number has not been indicated, the value of 443 will be input on default;

Description is the server description or name (no longer than 128 characters). This information will be shown in the list of servers in the left part of the program window;

Login is the administrator's account (login) through which the server is connected. The connection is impossible if such an account is not opened on the server;

Password is the administrator's password;

Save password helps to save a password.

At this stage, it is not necessary to indicate the login and the password. These data will be requested when administrator's [authorization](#) is performed.

If there are several servers added, you can move them relative to each other in the tree-structured list. and buttons of the "Edit" menu and of the toolbar are used for this purpose.

Remove Server

Any server can be removed from Administrator. The "Server – Remove Server" command or a corresponding context menu command will remove the server. The server can be added to the program again and its administration can be started later.

[Managed Servers](#)
[Login to Server](#)

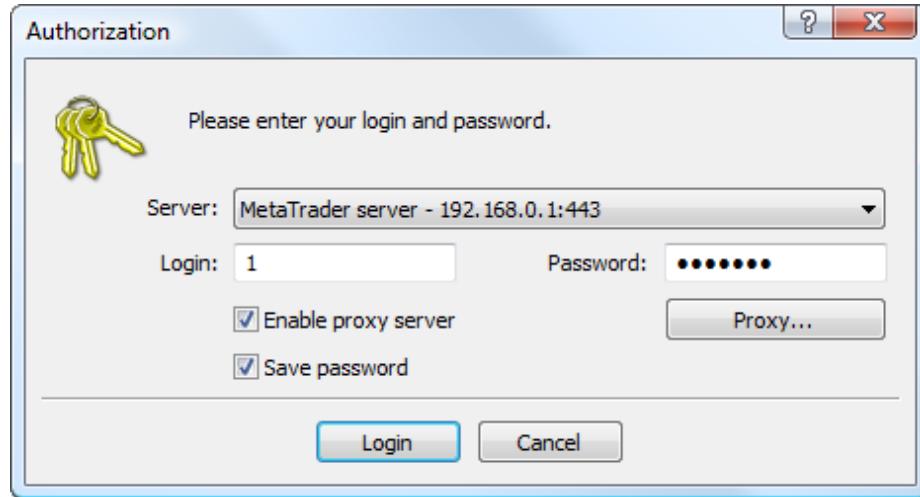
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Login to Server

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Before starting server administration it is necessary to login to it. The "File – Login to Server" command, the corresponding context menu command, or button of the toolbar will open the "Authorization" window:



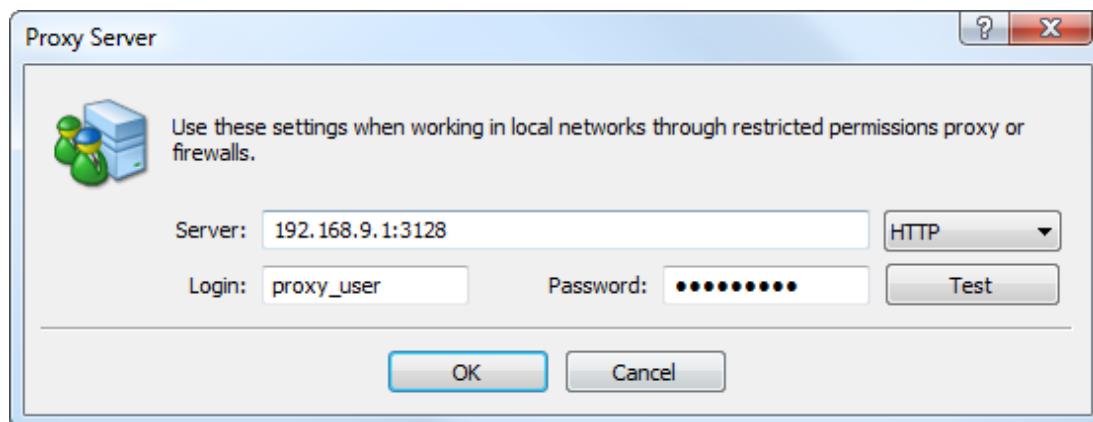
Server is the server address and port;

Description is the server description;

Login is the administrator's account (login). The connection to server is impossible if such account has not been opened on this server;

Password is the administrator's password;

Enable proxy server — enable support of connection via proxy server. Pressing of the "Proxy..." button will open the window where proxy server parameters should be specified (these data can be given by the systems administrator or by internet provider):



Server — proxy server address and port and type (HTTP, SOCKS5, or SOCKS4);

Login — a user login for access to the proxy server. If login is not needed, this field must remain empty;

Password — a password for access to the proxy server. If password is not needed, this field must remain empty.

After the parameters have been specified, it is recommended to press the "Test" button to check how the settings work. If they have been tested successfully, the "OK" button must be pressed in order the settings to be effective. Error message means that the proxy server was set up incorrectly. To find out about the reasons, the system administrator or internet provider must be contacted again.

Save Password helps to permit/prohibit saving the password.

Note: Before connecting to the server, it is necessary to [add](#) it to the tree of servers available for administering.

After successful authorization, the indicator of connection in the status line will be replaced with "Connected", and three messages will appear in "Journal":

1. **connected** means that connection has been successfully established;
2. **login (x.xx, #yyyyyyyy)** means that you have been logged in server of x.xx version with #yyyyyyyy session number;
3. **all configurations have been refreshed** means that all configurations have been received from the server.

After successful completion of the authorization process, you can start working. If any problems occur during authorization and you do not receive at least one of three messages in Journal, the administration program will disconnect you forcibly from the server.

Note: On server installing, an account of administrator will be created automatically (Login: 1; Password: manager). After the first authorization it is necessary to change the password or to create a new administrator's account and delete the above-mentioned one.

[Add or Remove Server](#)

[Change Password](#)

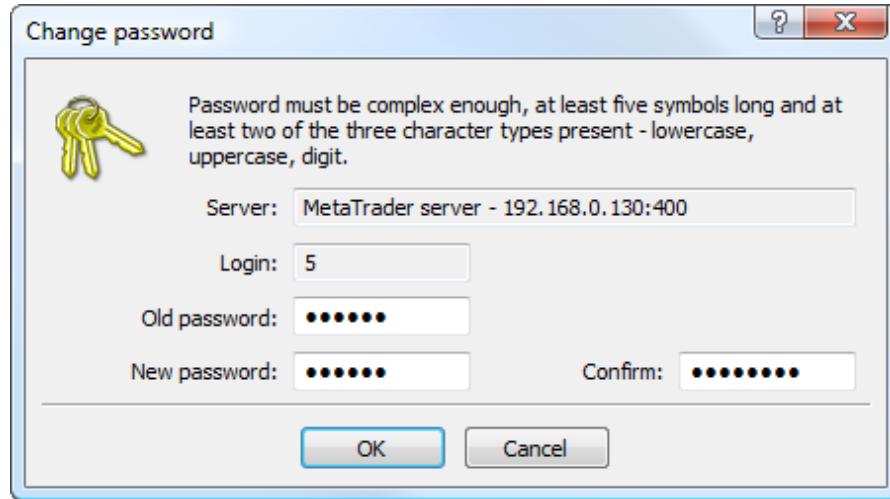
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Change Password

Administrator which is connected to the server can change own password. The "File – Change Password" command or the corresponding context menu command will open the "Change Password" window:



Server is the server description, address and port;

Login is the account (login) of the administrator, which is connected to the server;

Old password is the administrator's old password;

New password is the administrator's new password;

Confirm is the confirmation of administrator's new password.

Note: On server installing, an account of administrator will be created automatically (Login: 1; Password: manager). After the first authorization it is necessary to change the password or to create a new administrator's account and delete the above-mentioned one.

[Login to Server](#)[System Requirements](#)

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System Requirements

We recommend installing the MetaTrader 4 platform components on dedicated servers rented from hosting companies.

Hardware

| | Minimum requirements | Recommended requirements |
|------------------|--|---|
| CPU | Intel i7 4xxx quad-core or more | Intel Xeon E3, E5 no less than quad-core |
| RAM | No less than 8GB | No less than 16GB |
| HDD | RAID-1 array with 2 x SATA 1TB | RAID-1 array with two 480GB SSDs for the trade server and the history server, RAID-1 array with 2 x SATA 1TB for backup servers |
| Network | No less than 20 Mbps Internet connection for both incoming and outgoing channels | No less than 100 Mbps Internet connection for both incoming and outgoing channels |
| Operating system | Windows Server 2016 Standard x64 | Windows Server 2019 Standard x64 |

The processor must support [AVX](#) instructions to enable platform installation.

Choose a server configuration depending on the number of clients, financial instruments and the density of quotes stream. When databases grow, causing an increased load on the trading platform, even the initially recommended configuration may fail to cope with such load.

Due to the fact that the backup server is basically a duplicate of the main trading server, it is desirable that the configuration of the backup server is similar or even identical to the configuration of the main server. It is not recommended to place the backup server at the same hosting company as the main server, as it may happen that the entire network of the provider will be unavailable. Locating the servers in different hosting companies increases data security and the resiliency of the system.

Additional Requirements

No third-party software for system time synchronization is allowed.

Use virtualization if you have control over the hypervisor and can ensure enough resources for the virtual machine running MetaTrader 4. At least 8 logical cores must be available to the virtual machine (virtual processors are specified here, unlike physical ones used for dedicated servers). The machine should support the Over-Provisioning technology and have the disk speed of no less than 30 MB/s.

Configure BIOS on the server to run low-latency applications: turn all the energy saving features off (including CPU C-state), set memory usage parameters to the High Performance state.

Recommended basic cluster configuration

We recommend renting at least two servers. It is advisable to have servers that are physically located in different data centers. One server is to be used as the main one. The second server is used as the backup one. The main server data is to be replicated to it in real time. Thus, even if one of the hosting providers has troubles, you will be

able to restore the platform on the backup server. This will allow you to minimize risks, while the probability of failure in both data centers is very small.

[Change Password](#)[System Preparation](#)

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System Preparation

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.

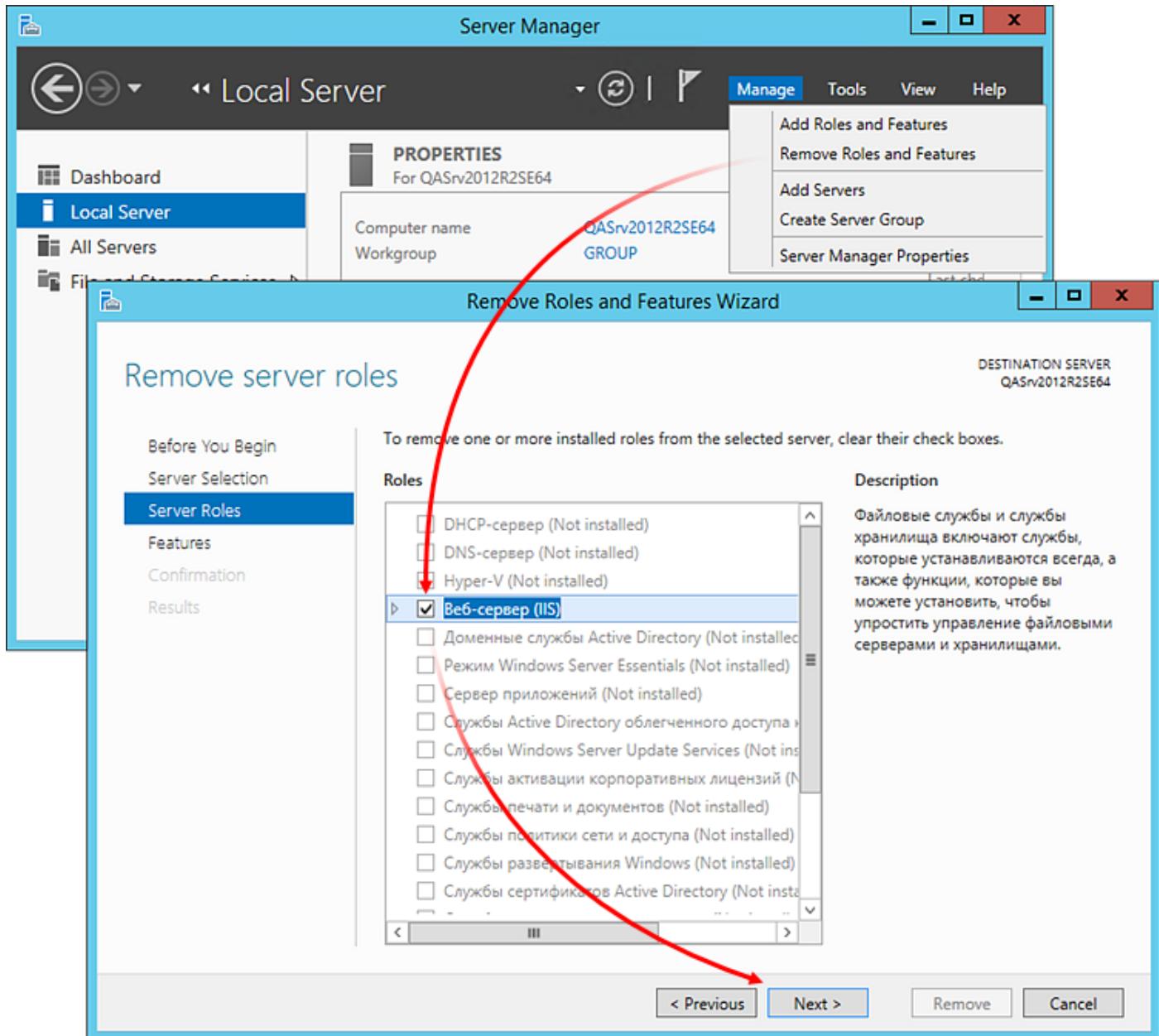
Graphical interface

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.

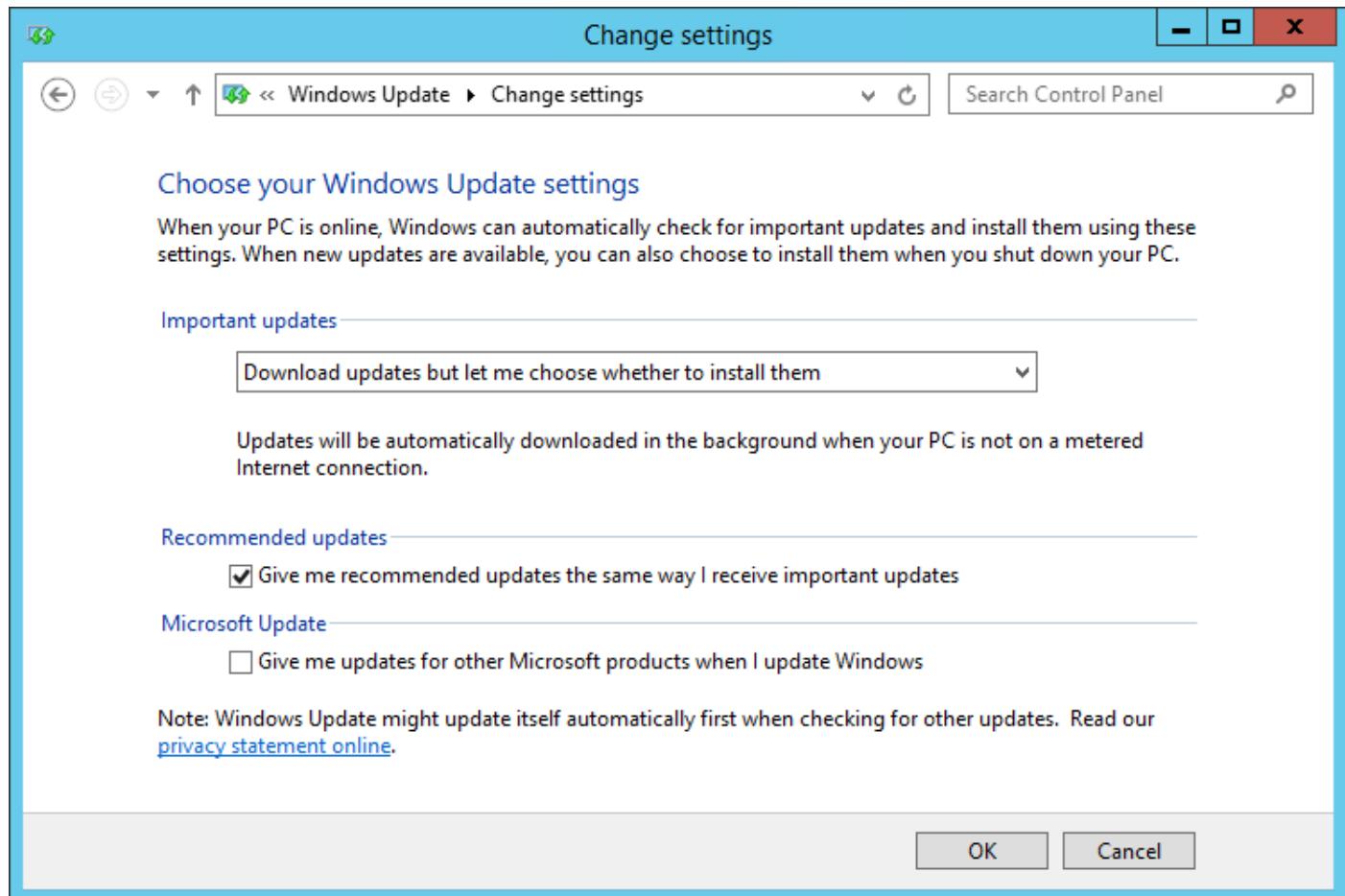
Environments .NET and Java

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.



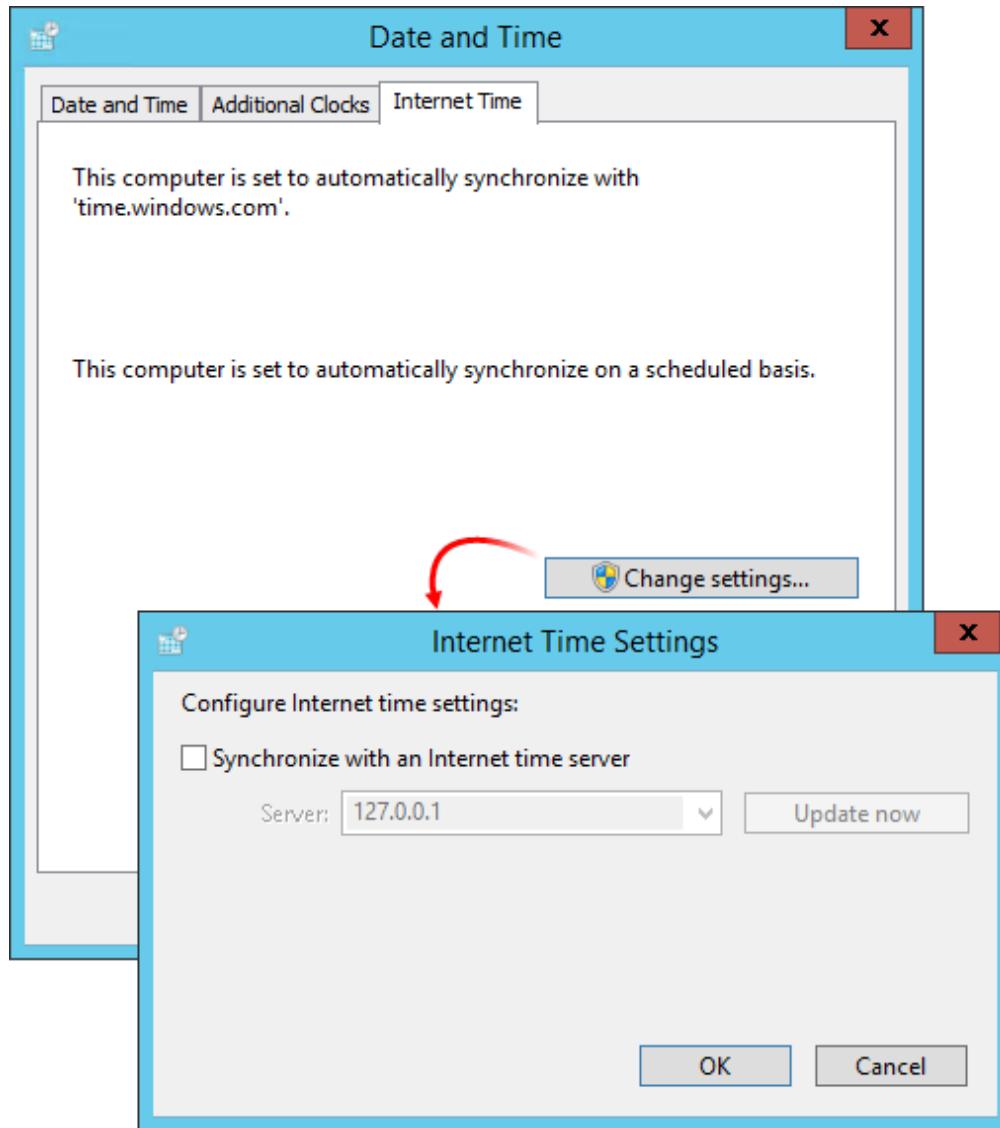
Make sure to install all operating system updates, before installing the platform.

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.

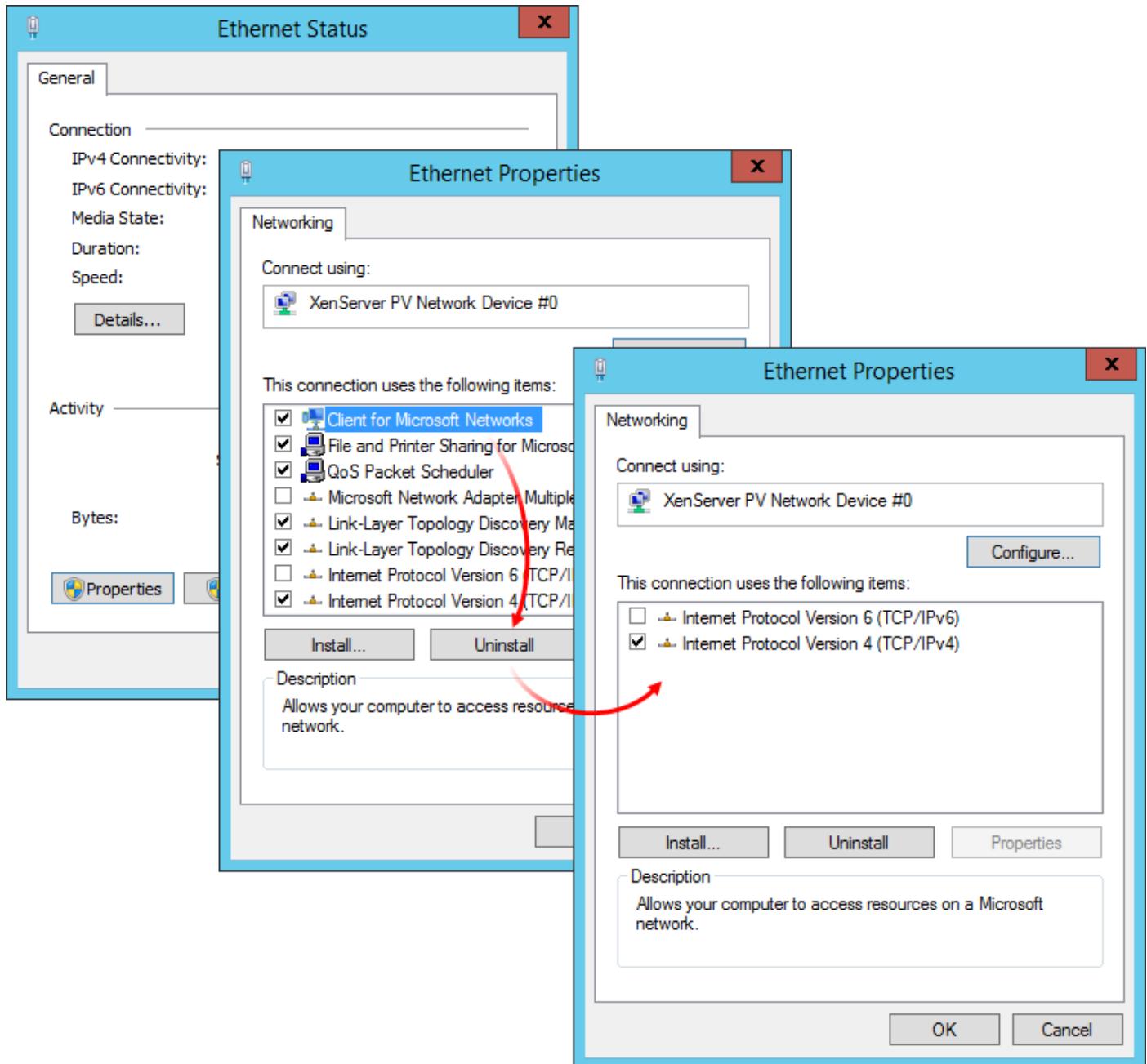
MetaTrader 4 time synchronization service verifies and corrects time (if necessary) once an hour.

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:

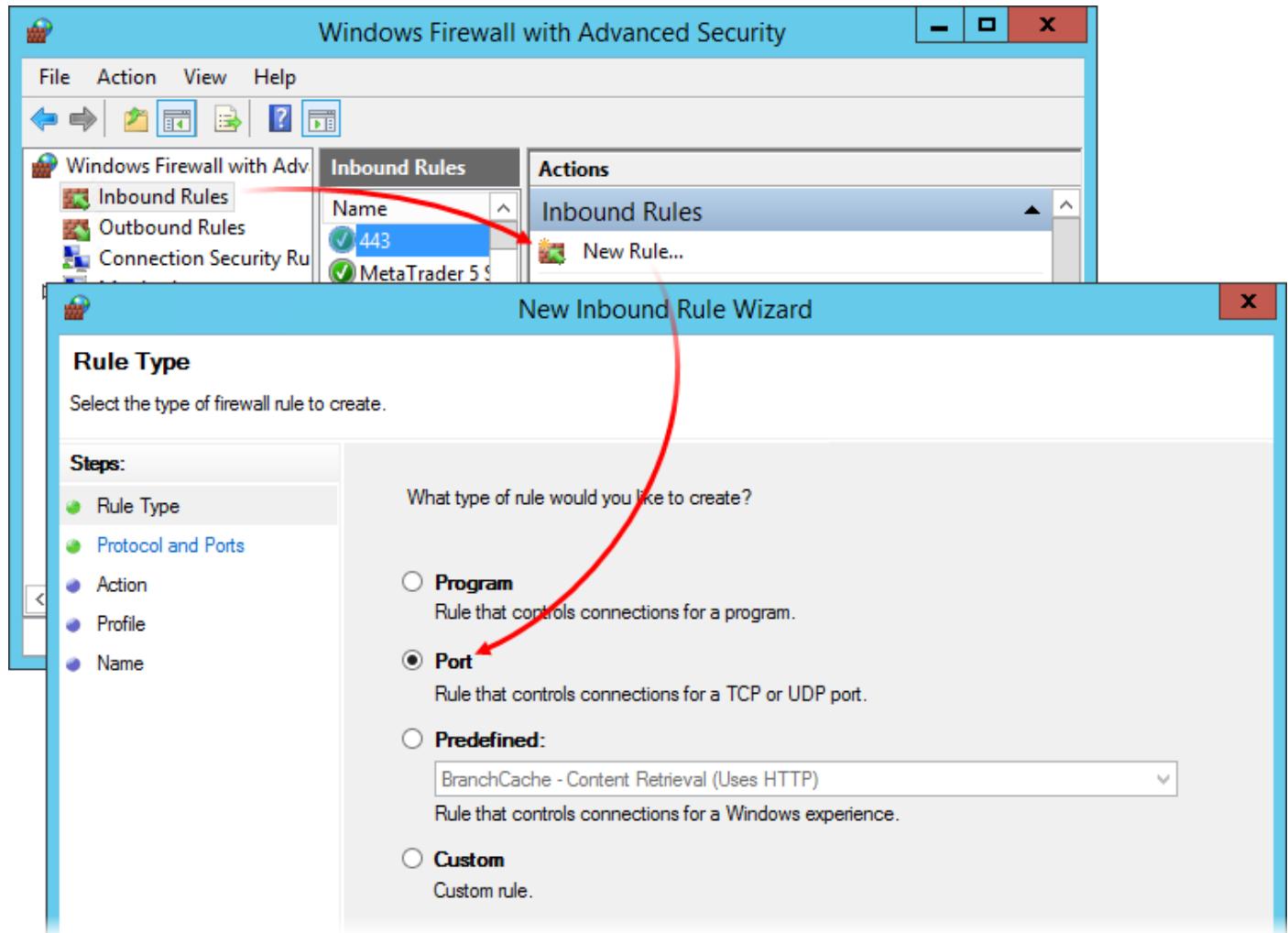


In the Network tab, remove all components except TCP/IP v4 and TCP/IP v6. The list one can be unchecked, while it is not used by the platform.

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":

New Inbound Rule Wizard

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

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

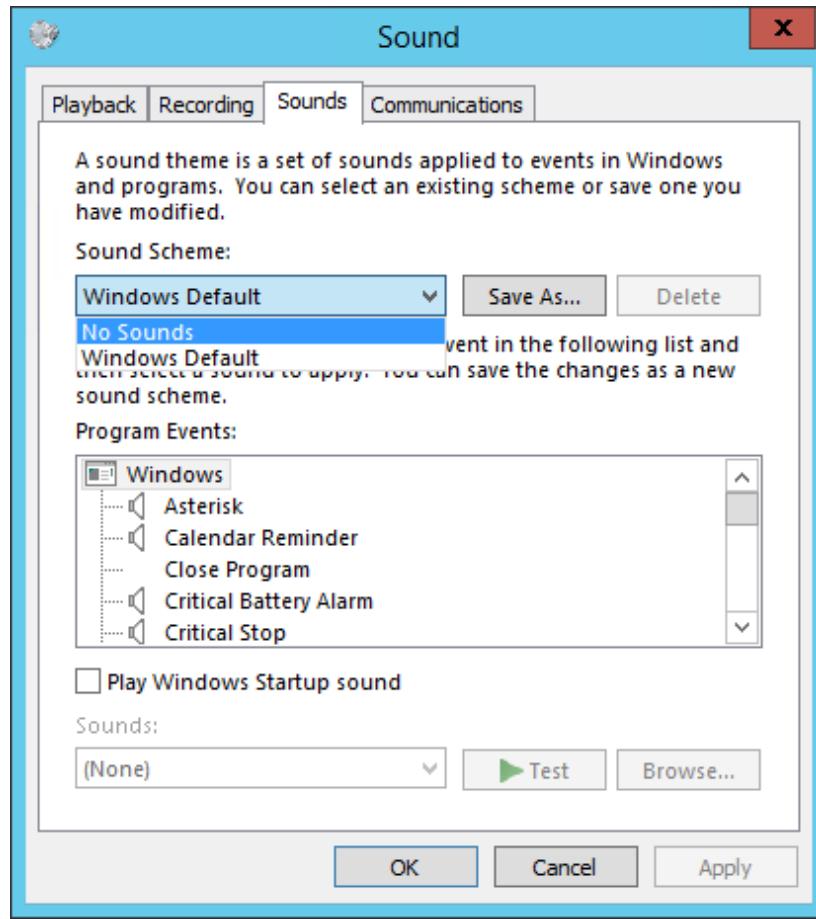
This includes only connections that have been authenticated by using IPsec. Connections will be secured using the settings in IPsec properties and rules in the Connection Security Rule node.

[Customize...](#)

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

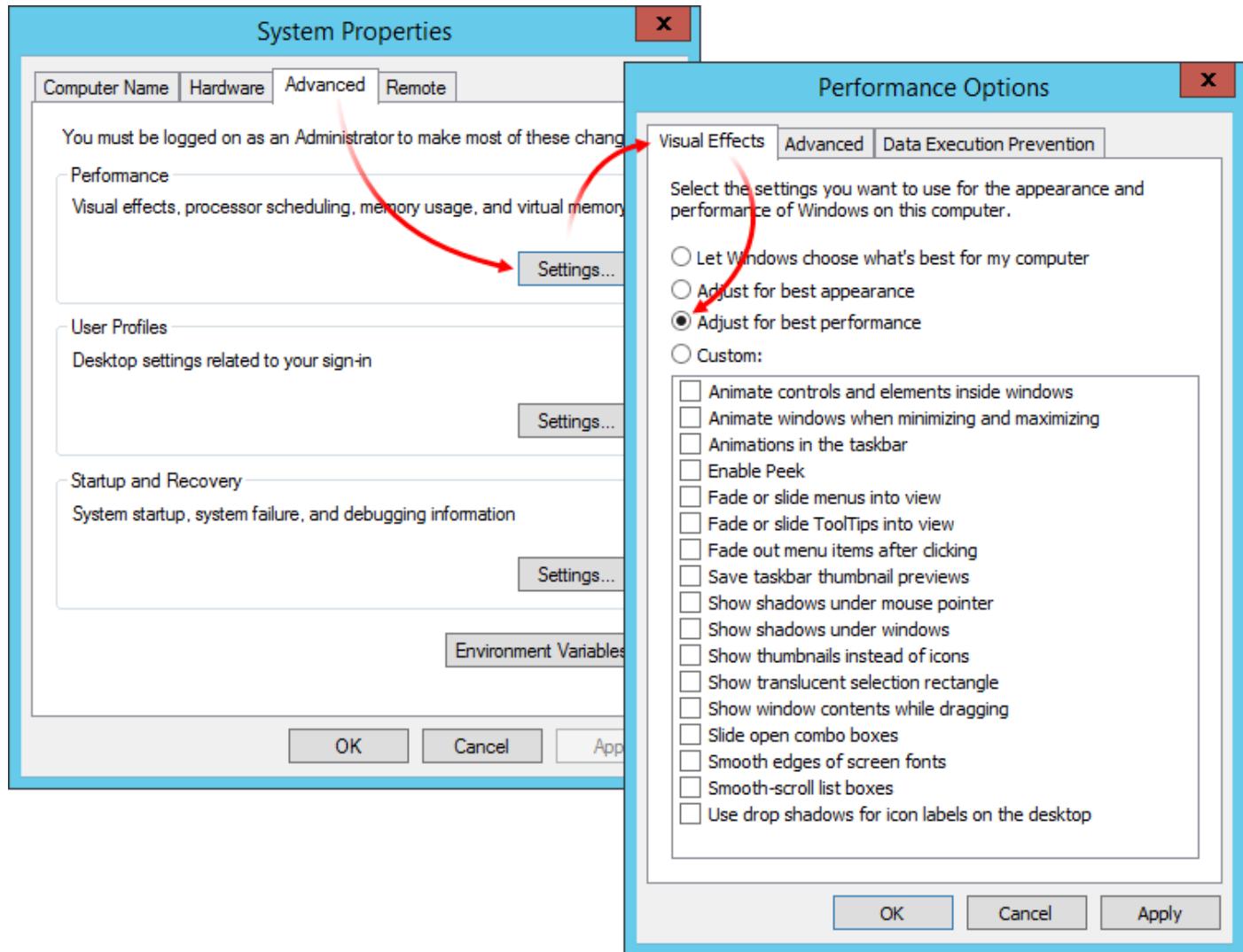
Sound notifications will not be used on the server where the trading server is installed, and thus they should be disabled. Open Sounds in Control Panel:



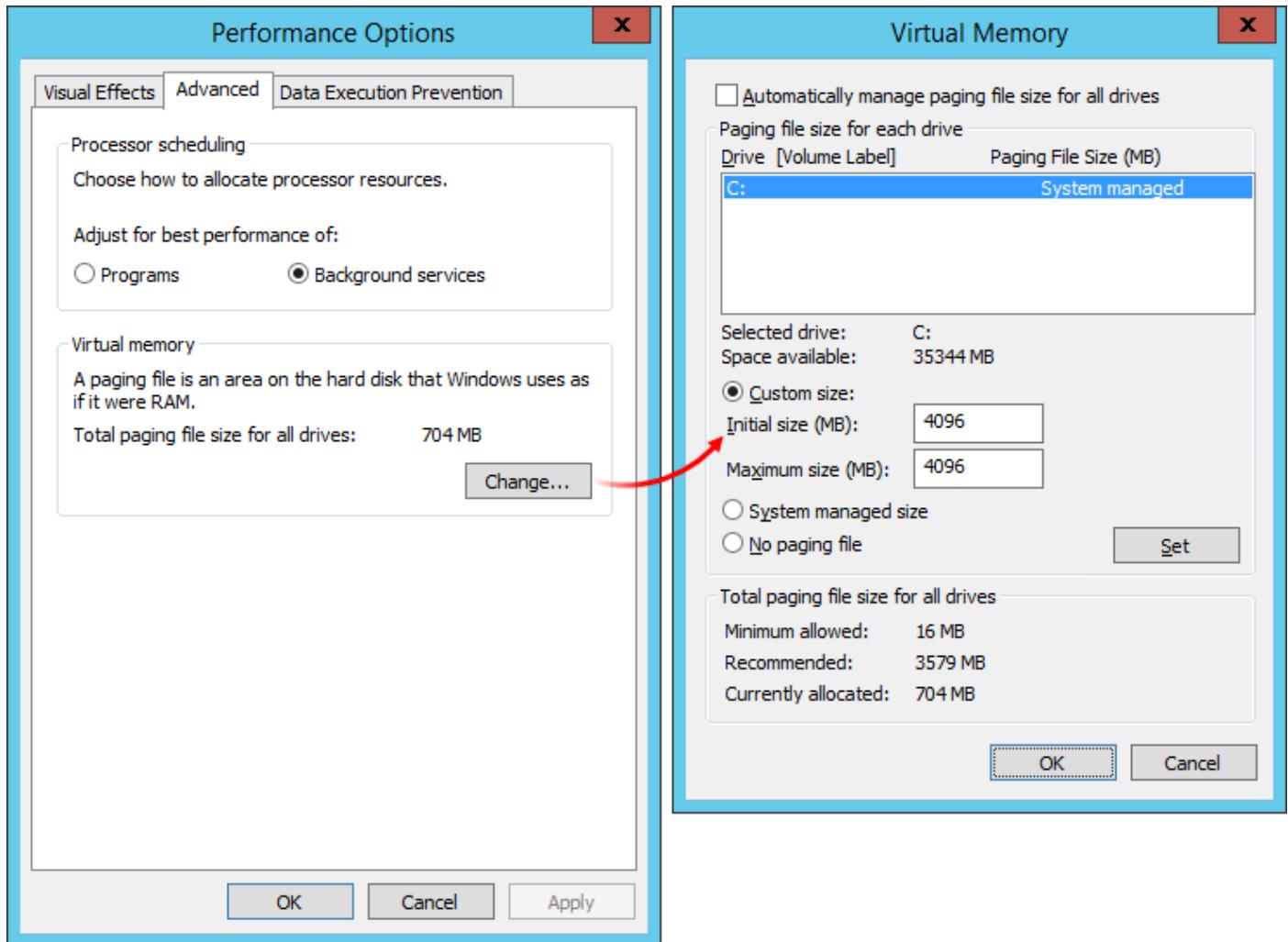
In the list of sound schemes, select No Sound and click OK.

Configuring general performance parameters

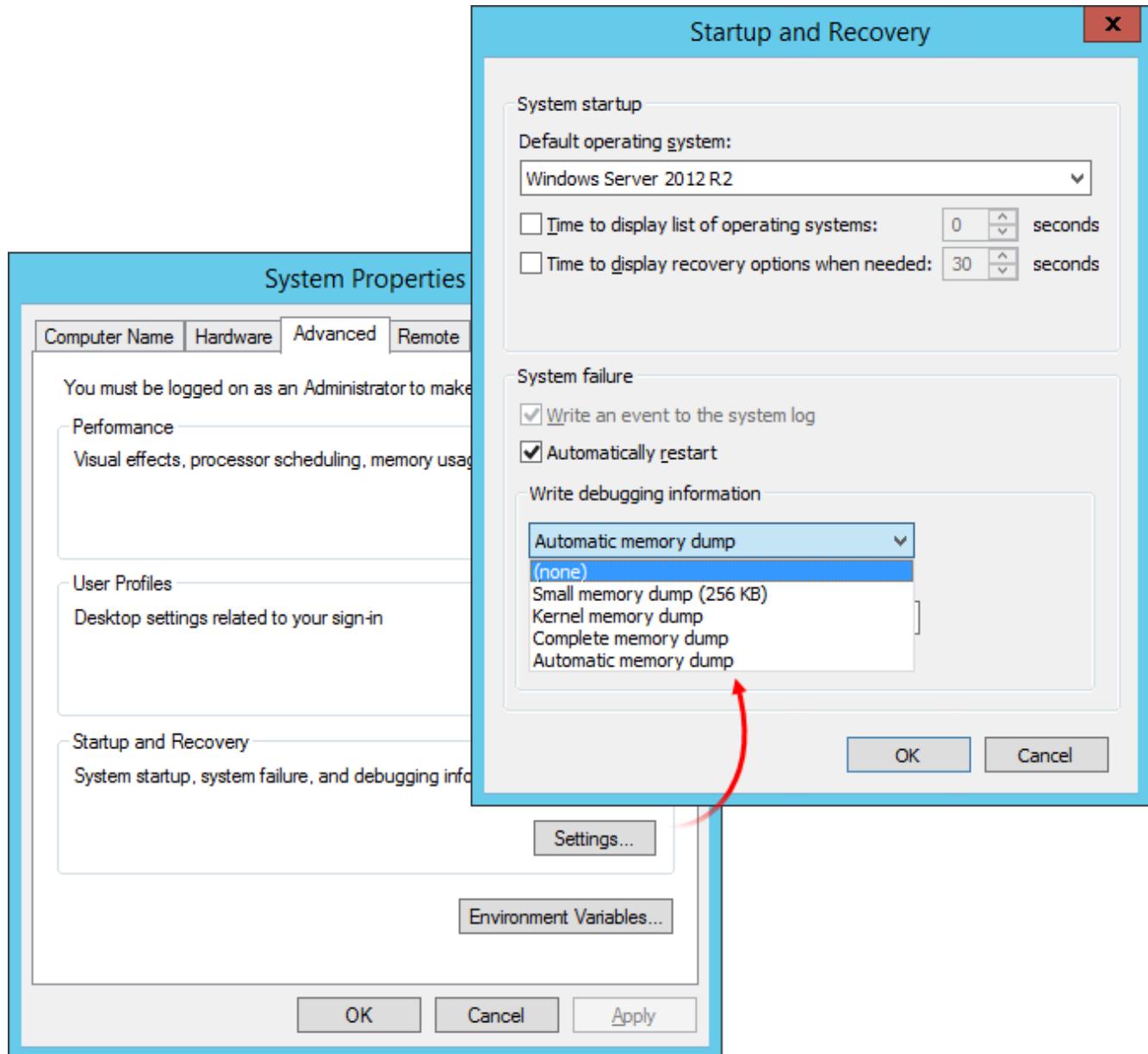
Open the control panel, then System – System Properties – Advanced – Performance Options. On the Visual Effects tab, select "Adjust for best performance".



Navigate to the Advanced tab, click Change..., and set the initial paging file size to the maximum value.

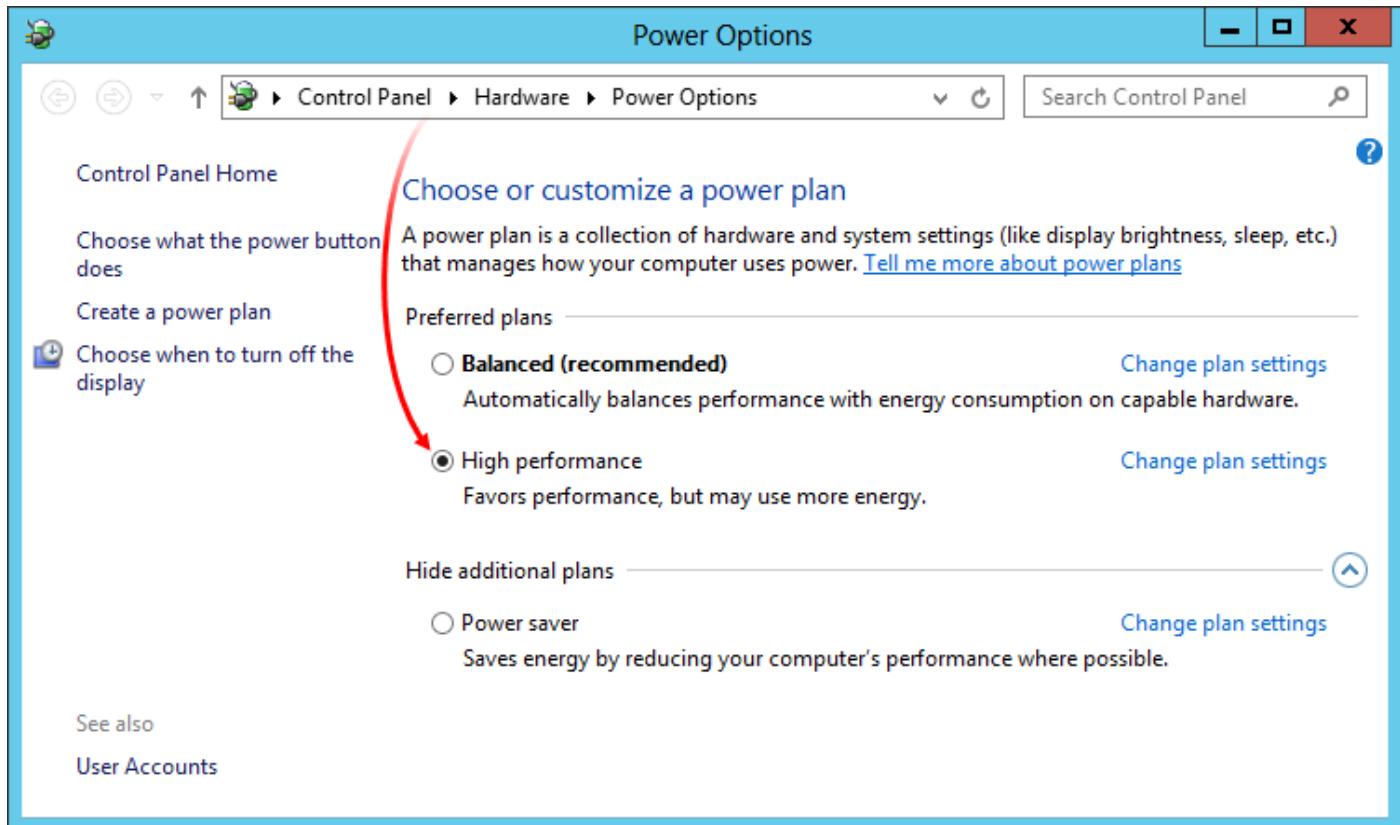


Return to the System Properties – Advanced dialog and go to the Startup and Recovery settings:



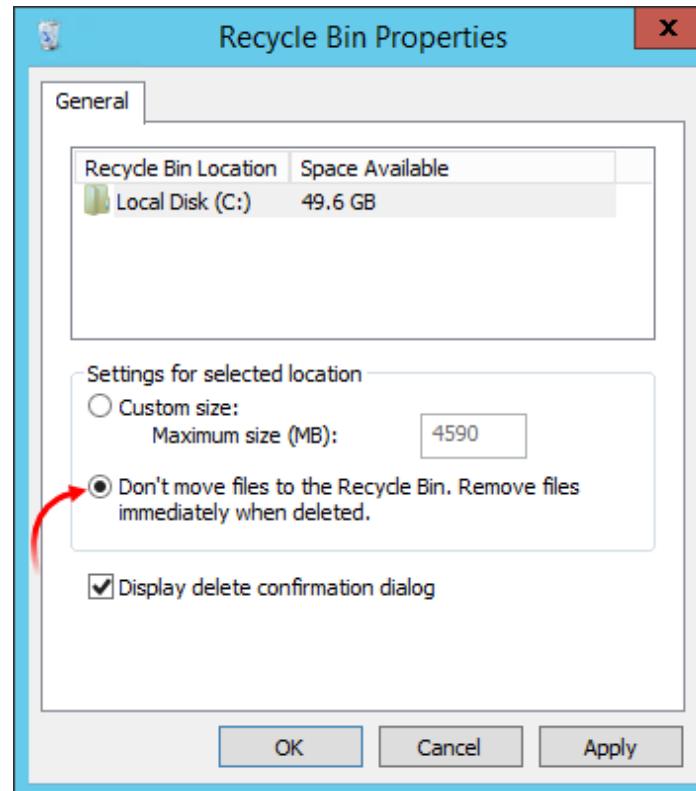
Disable the "Display List of Operating Systems" option. In the Write Debugging Information item, select "None".

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

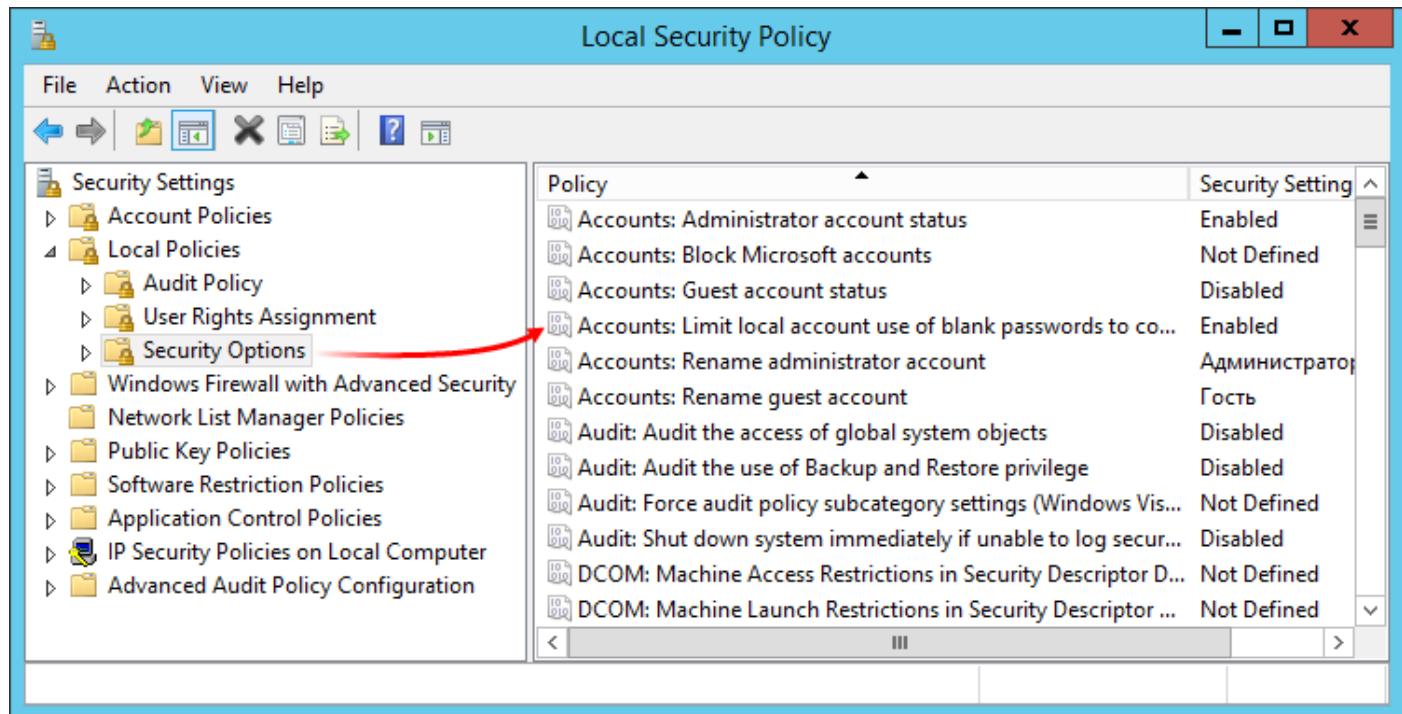
The "Server Configurator" program is specially designed to facilitate the preliminary server configuration process, by automating manual operations concerning the termination of various services, system configuration via the registry, and deletion of temporary and unnecessary information from the disks.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

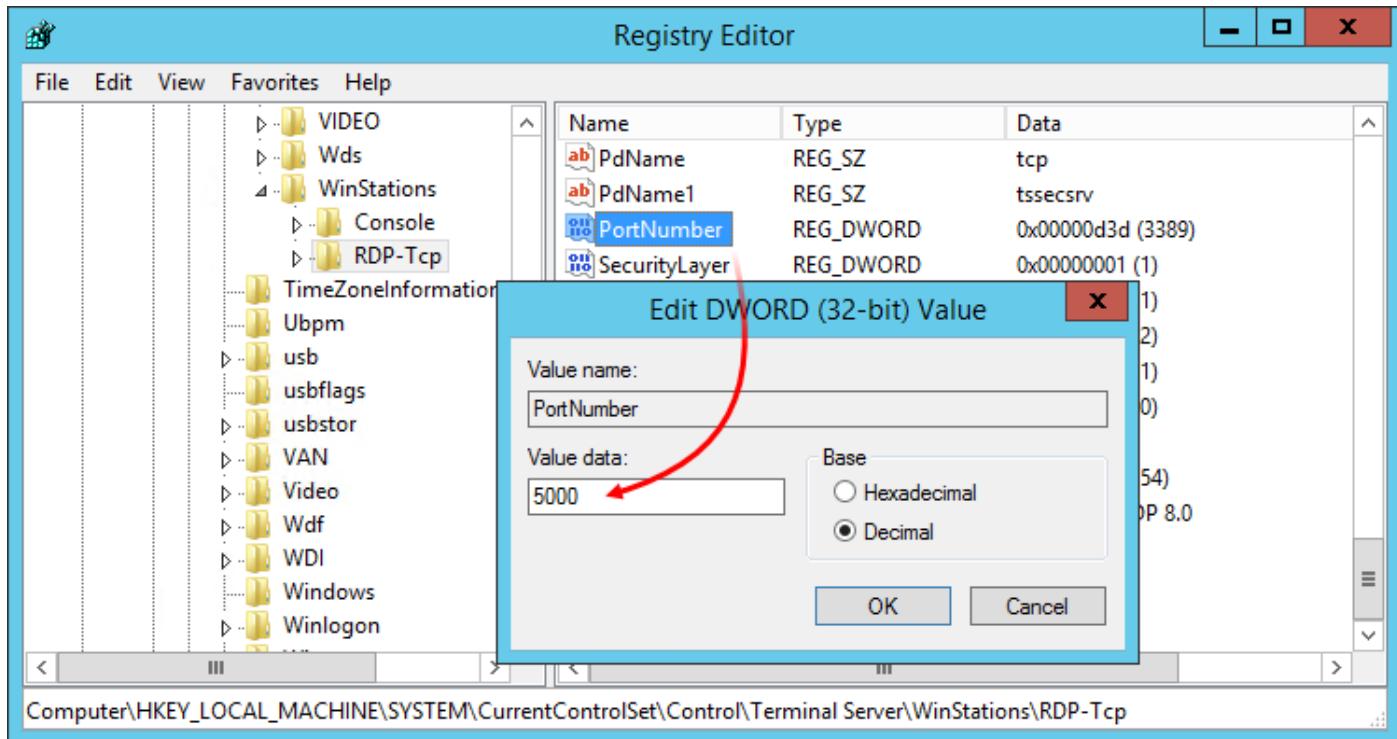
Configuring remote access

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-known" 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.

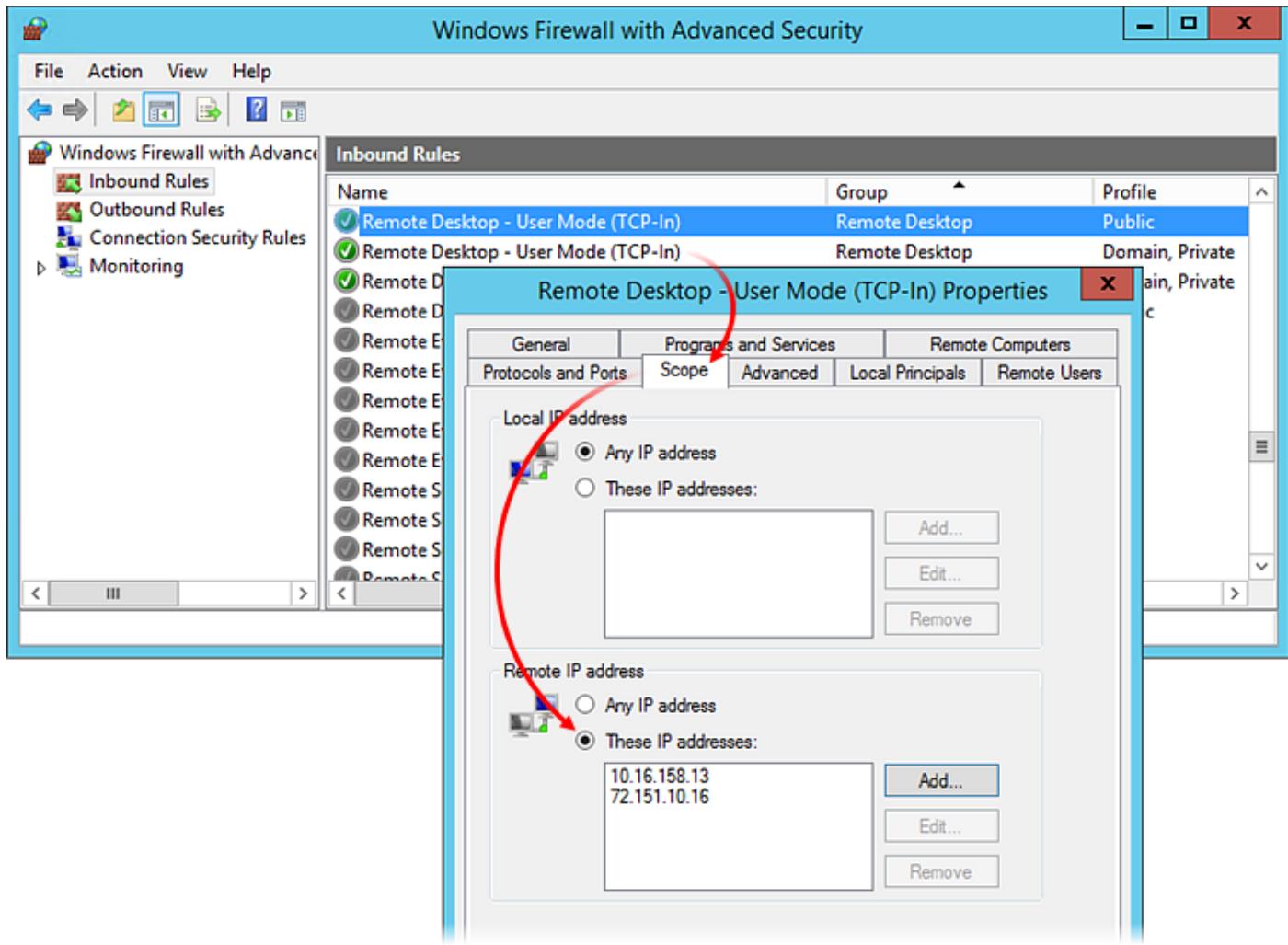


The specified port must be allowed in [Windows Firewall](#).

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".

Settings

with Automatic sample submission enabled.

Home Off

Find a setting

Privacy Statement

Update & security

Windows Update

Windows Defender Off

Recovery

Activation

For developers

Automatic sample submission

Allow Windows Defender to send samples of suspicious files to Microsoft, to help improve malware detection. Turn this off to be prompted before sending samples to Microsoft.

Privacy Statement

Exclusions

Windows Defender won't scan excluded files, making your PC more vulnerable to malware.

Add an exclusion



Select "Exclude folder" and choose the platform installation directory

← Settings

Add an exclusion

Files and folders

+ Exclude a file

+ Exclude a folder

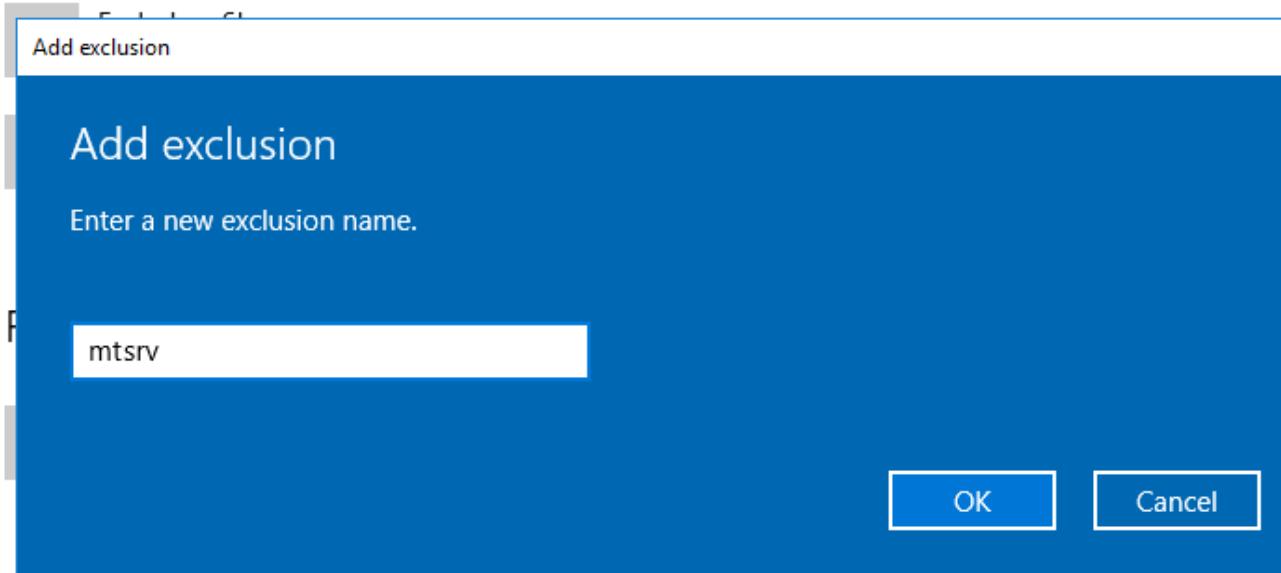
The screenshot shows a Windows File Explorer window with a blue title bar and a white background. The title bar says 'File Explorer' and 'MetaTrader4Server'. The window shows a list of folders in the 'Name' column, including 'api', 'bases', 'config', 'confirms', 'datafeed', 'history', 'links', 'liveupdate', and 'logs'. The 'Date modified' and 'Type' columns are also visible. On the left, there's a sidebar with 'Quick access' and links to 'Desktop', 'Downloads', 'Documents', 'Pictures', and 'logs'. At the bottom, it says '27 items'.

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).

← Settings

Add an exclusion

Files and folders



Add exclusion

Add exclusion

Enter a new exclusion name.

mtsrv

OK Cancel

Processes

When you exclude a process, any file associated with it will also be excluded.

+ Exclude a .exe, .com or .scr process

[System Requirements](#)[Server Administration Commands](#)

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Server Administration Commands

Translate: EN 

In this section you can find the description of service commands used when working with servers:

[Server and Data Feeds Restart](#)

[Synchronization of Charts](#)

[Starting LiveUpdate](#)

[Activation](#)

[System Preparation](#)

[Server and Data Feeds Restart](#)

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Translate: EN 

Server and Data Feeds Restart

Server should be restarted after:

- a new [Data Center \(access point\)](#) has been added;
- a new [Users Group](#) has been added;
- new [financial instruments](#) have been added;
- changing the [margin settings](#) of a financial instrument;
- technical failures occur.

The server restart is performed in two steps: shutdown and repeated start. At the shutdown, all connections are broken, all feeders and requests to dealers are terminated. The restart initiates feeders, client bases, orders, and historical data.

You can restart server via "Services – Restart Server" menu command or  button of the toolbar.

Note: It is necessary to reconnect to the server after restarting. Since the server restart can take from several seconds to one minute, it is impossible to login to the server within this period of time.

Data Feeds Restart

The data feeds restart is applied when technical problems occur regarding quotes and news receiving. The server will stop operation of all data feeds and restart them should this occur.

You can reset them via the "Services – Reset Datafeeds" menu command or  button of the toolbar.

Note: When [adding a new feeder or changing the priority \(position in the list\)](#) of any data feed, the automatic resetting will start. It is not recommended to change the priorities of feeders unless absolutely necessary!

[Server Administration Commands](#)

[Synchronization of Charts](#)

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Synchronization of Charts

Translate: EN 

No matter how ideal the quotes providing system may be breaks can cause gaps in the charts at times. To fill up these gaps quickly and smoothly, the charts synchronization via other MetaTrader servers can be used.

To synchronize the charts, it is necessary to execute the "Services – Synchronize Historical Charts" menu command, or to push the  button of the toolbar, having performed the [parameters setting](#) in advance.

[Server and Data Feeds Restart](#)[Starting LiveUpdate](#)

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Translate: EN 

Starting LiveUpdate

MetaTrader LiveUpdate is a computer-based system providing secure and effective distribution of program updates of the whole information trading complex MetaTrader. The important features are: full automation of updating processes and minimum attention from trading server administrators. Security is provided with secure data transfer through shrinking algorithms, coding, and obligatory digital signature for each file.

To start LiveUpdate process on the server manually, it is necessary to execute the "Services – Start LiveUpdate" menu command, having performed the [parameters setting](#) in advance.

[Synchronization of Charts](#)[Activation](#)

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Translate: EN ▾



Activation

A license provided for installation of the platform is non-activated and has a limitation: no more than 100 users can be created. If the current number of users exceeds this amount, new accounts cannot be created.

If the server license is not activated, the "Server" field on the "Common" displays "not activated":

| Property | Value |
|-------------------------------|---|
| Server | MetaQuotes Trial Servers (4.00 build 491, 26 Apr 2013), not activated |
| Name | Demo |
| IP Address | any address |
| Communication port | 444 |
| Demo accounts | Prolong from the last login |
| Time of demo | 14 days |
| Time zone | GMT+02:00 |
| Daylight Saving Time corre... | No |

To activate the license, execute the "Activate" command in the "Services" menu. After typing a confirmation code the activation process starts. The following actions are performed during activation:

A request is sent to the update server of the developer company;

In case of successful license checking, a new activated license is generated; it is bound to the configuration of server where the platform is installed;

Activated license is sent back to the trade server;

The server is restarted.

If the license is activated, the "Server" field on the "Common" displays its expiration date - "expires at ...":

| Property | Value |
|-------------------------------|---|
| Server | MetaQuotes Trial Servers (4.00 build 491, 26 Apr 2013), expires at 2013.06.27 |
| Name | Demo |
| IP Address | any address |
| Communication port | 444 |
| Demo accounts | Prolong from the last login |
| Time of demo | 14 days |
| Time zone | GMT+02:00 |
| Daylight Saving Time corre... | No |

Reactivation

A reactivation of the license is required in the following situations:

hardware changes on the server where the platform is installed;

re-installation of the operating system;

switching to a reserve server.

Administration

Translate: EN 

This section provides the full description of the process of administration of a trade server:

[Common](#)[Gateway](#)[IP Access List](#)[Data Centers](#)[Time](#)[Holidays](#)[Symbols](#)[Securities](#)[Groups](#)[Managers](#)[Data Feeds](#)[Backup](#)[Live Update](#)[Synchronization](#)[Plugins](#)[Accounts](#)[Orders](#)[Charts](#)[Ticks](#)[Server Journal](#)[Activation](#)[Common](#)

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Common

Translate: EN ▾



The "Common" section is intended for the administration of common settings:

| Property | Value |
|---------------------------------|---|
| Server | MetaQuotes Servers (4.00 build 705, 25 Sep 2014), expired at 2014.12.26 |
| Name | Name |
| IP Address | any address |
| Communication port | 400 |
| Demo accounts | Prolong from the last login |
| Account allocation URL | |
| Time of demo | 90 days |
| Time zone | GMT+02:00 |
| Daylight Saving Time correction | Yes |
| End of day time | 10:40 |
| Rollover mode | Normal |
| Statements mode | End of day |
| Monthly statements mode | Last day of month |
| Generate statements at weeke... | No |
| Keep internal emails | 30 days |
| Keep ticks | 60 days |
| Optimization time | 10:40 |
| Antiflood control | No |
| Antiflood max. connections | n/a |
| Feeder switch timeout | 30 seconds |
| LiveUpdate mode | Enabled with beta versions |
| Time synchronization with | clock.psu.edu |
| IP access list of web services | |
| Path to accounts/orders bases | D:\MetaTrader4\bases |
| Path to history bases | D:\MetaTrader4\history |
| Path to log files | D:\MetaTrader4\logs |
| Network adapter for monitoring | Адаптер рабочего стола Intel[R] PRO_1000 GT |

Server is the read-only information field that contains the full name of a company that owns the server, its version, build and the release date of the server. It is recommended to specify the value of this field when applying to the support service in order to get a quicker answers to questions regarding the server operation. The license expiration date is also indicated here;

If "not activated" is displayed in this field, it means that the license of the trade platform is not activated. You should [activate](#) it.

Name is the visual name of the server to be seen by clients. The name of the server consists of two parts: the company name and the specific server name, the latter one given in this field. For example, the full name of the server of MetaQuotes Software named Demo Server will appear as MetaQuotes Software: Demo Server;

Attention! It is strongly recommended to give a unique name no more than 12 characters long to each server (the limitation in length is caused by usability of the server name displaying in the client terminal).

IP Address is the IP address from which the server will operate. When several IP addresses are available on the server, one can indicate a specific address or allow to use any address available;

Communication port is a server port for communication. This port must be indicated when logging in to the server. Any port may be indicated. Port 443 is used by it is (HTTPS port) usually permitted for use with a proxy server in local, corporate networks;

Time of demo is the timeout for deleting demo accounts. The accounts which have never been used for logging in to the server within the time period indicated will be deleted automatically (this applies to the accounts from *demo* groups);

Demo accounts is the type of demo accounts usage: demo accounts prohibited, prolong demo accounts from the last login, demo accounts with fixed period;

Account Allocation URL is the address a client is [redirected](#) to when opening an account from the client terminal. The link address must start with "https://" or "http://".

Time zone is the trade server time zone (for example, GMT+2);

Daylight Saving Time correction helps to permit/prohibit summer time correction;

End of day time means the time when the trading day ends. This is the time point when reports are generated and rollovers are added on. During end of day operations all trade operations (including balance operations and operations performed by manager accounts) on the server are disabled; an attempt to perform a trade operation will result in "Market is closed" error in the journal;

Rollover mode helps to close position at the end of the working day and to open a new one. "Normal" means that rollovers are added on, and all open positions remain open. "Reopen by close price" means that opened position will be forcibly closed at rollover by close price, and another one will be opened instead of it next trade day with swaps being added on the close price. "Reopen by bid" means that opened position will be forcibly closed at rollover by bid price, and another one will be opened instead of it next trade day with swaps being added on the bid price;

When swaps are charged by reopening, positions are closed at a time set in the "End of day" parameter. After closing, the positions are opened again. The open time of new (reopened) positions depends on the "Statements mode" setting of the trade server. If "End of day" option is selected, the open time of the reopened positions is as the end of day time of current trade day ("End of day"). If "Start of day" option is selected, the open time of the reopened positions is set as the start of the next trade day. At that, if the open time of a position does not match a [trading session](#) of the symbol, then the open time is set to the start of a closest trading session. At that, if positions are reopened by current Bid price, the Bid price at the actual time of opening is used, not the price at the start of the trading session.

Statements mode means the time of statements generation: end of trading day (before rollovers) or start of trading day (after rollovers);

Monthly statements mode means the day of monthly statements generation: the last day of the current month or the first day of the next month;

Generate statements at weekends enables/disables generation of statements on Sundays (this option doesn't affect generation of reports on Saturdays);

Before generating daily reports, the server checks whether there has been at least 1 trade hour for the last 24 hours (work hours are determined in the ["Time"](#) section). If there were no trade hours, the daily reports are not generated. This rule is not applied to monthly reports.

Keep internal emails indicates the time period in days within which the emails being not received by the users will be kept. After the expiry of the time period indicated, all emails not received by the user will be deleted;

Keep ticks is the time period in days, during which tick data for securities will be stored;

Optimization time is the time period within which the server optimization is performed. The HDDs defragmentation, as well as other useful operations aimed at increasing the speed of server response and its reliability are performed during this period of time. It is necessary to choose the time of the lowest server load. For example, 3:39 a.m. GMT;

Antiflood control is used for enabling the protection against DoS attacks. The server analyzes the network activity of all clients, then chooses logins with the most frequent operations, coming from the same IP address or CID (computer identifier). When the attack is located, the IP address/CID of the attacker is included into the temporary list of disabled addresses/CIDs for the 5-minutes period, and a "xxx.xxx.xxx.xxx Flooder blocked" message is written in the log-file on the server. When a repeated attack is detected, the period of the address/CID disabling will be increased. This response mechanism allows to easily block attack attempts. The control must be enabled;

Antiflood max. connections is the number of connections the exceeding of which results in blocking the attacker's IP address/CID. For example, if the parameter is indicated as 150, as soon as the amount of connections from the same IP address/CID exceeds 150, it will be blocked. But it is important to note that a situation is possible when a group of users (e.g., dealing) operates through one proxy server (WinGate, WinRoute, etc.). In this case, all connections to the server come from the same IP address. If there are too many clients and they generate very many network queries from the same IP, the server may mistake it for DoS attack and block the address. In this case, the amount indicated in Antiflood max. connections; should be increased

Feeder switch timeout is the time after expiry of which the server will switch to the next feeder of the same type in the list, if there are no quotes. To increase the reliability of data providing, it is recommended to have at least two feeders of the same type connected to different providers;

LiveUpdate mode allows to enable or disable live update:

Disabled – automatic updates are disabled. When automatic updates are disabled there's still a possibility to [manually update](#) the platform components.

Enabled – in this mode the platform components will be updated automatically when the final versions of updates are released. If this mode is enabled, the check of the current program versions will be performed on Sundays after the optimization (Client Terminal, Manager's Terminal, Administrator, Data Center, Server). Should new versions be detected, automatic download and installation of programs will be performed. Live Update is usually run within 5 minutes after the optimization time is over. This check allows to update all the system components without participation of technicians.

Enabled with beta versions – besides the release versions, there are beta versions that are released more often. If this option is enabled, all types of updates will be installed. However, it should be noted that intermediate versions can be unstable, so they should be installed only in extreme cases.

It is strongly recommended to use beta updates only in extreme cases and only on demo servers.

Time synchronization with indicates the server address used for time synchronization through TIME protocol. This server will provide the system with the precise time indications. After having checked the time zone, they will be used in the system;

IP access list of web services is a comma-separated list of IP addresses from which Web-services commands are permitted. This list may contain no more than 8 IP-addresses. Empty list means that all IP-addresses are permitted;

Path to accounts/orders bases is the place on HDD where accounts and orders bases are stored. As soon as the path is changed, the existing bases will automatically be sent to a new directory. It is necessary to check if you have enough space on your HDD!

Path to history bases is the place on HDD where history bases are stored. As soon as the path is changed, the existing bases will automatically be sent to a new directory. It is necessary to check if you have enough space on your HDD!

Path to log files is the place on HDD where the server logs are stored. As soon as the path is changed, the existing logs will automatically be sent to a new directory. It is necessary to check if you have enough space on your HDD!

Network adapter for monitoring helps to choose an adapter for monitoring network activity of the server. It is necessary to choose a network adapter through which the server will be connected to Internet.

Note: To change a parameter, it is necessary to select it and push the Enter button or double-click on it with the left mouse button. After having changed it, it is also necessary to push the Enter button. It is also necessary to execute the "Edit – Apply changes" menu command in the "Common" section, push the  button of the toolbar or shortcut keys Ctrl+S. The changed parameters are now sent to the server and stored at it. Any changes in IP Address, Communication port, Time zone, Summer time correction, Accounts and order bases path, History bases path and Log files path come into effect only after the server is restarted.

It is strongly not recommended:

- to change the time zone settings on the server operating for the traders' enquiries, and
- to disable Antiflood control.

Recommended Settings

Communication port: 443

Daylight saving time correction: Yes

End of day time: 23:59

Antiflood control: Yes

Antiflood max. connections: 150

Gateway

Translate: EN ▾



MetaTrader 4 platform features the built-in gateway allowing users to arrange Straight Through Processing (STP) of trade operations on any external MetaTrader 4 trading server. The gateway is easily configured providing maximum security and performance.

How the Gateway Works

MetaTrader 4 Gateway has two main tasks: passing the quotes and moving trade operations to MetaTrader 4 external server. This is performed via a special account opened on MetaTrader 4 external server.

The gateway can simultaneously work with several MetaTrader 4 external servers.

Passing Quotes from MetaTrader 4 External System

The quotes received from the gateway:

Are not subject to the filtration rules configured for the appropriate symbols. The quotes received from an external server are supposed to be filtered already;

Passed "as is" considering spread settings on a quote account;

Have the highest priority over any data sources working in your trading platform. [Priority of quotes](#) received via different account gateways is defined by the account's position in the list;

Can be transformed (expanded) when being submitted to your trading platform.

Transferring Trade Operations to MetaTrader 4 External System

MetaTrader 4 gateway transfers trade operations to an external server, as well as receives and displays their handling results. Operations are transferred via one or several trade accounts opened at MetaTrader 4 external server.

Operations containing only market orders are transferred to an external server by the gateway:

opening a position;

complete or partial closing of a position;

complete or partial closing of a position by an opposite one.

Placed pending orders, as well as Stop Loss, Take Profit and Stop Out ones are processed on MetaTrader 4 platform side. During their activation, the appropriate market order is transferred to an external system.

The gateway does not support closing multiple positions using opposite ones (Multiple Close By). Such requests are rejected automatically.

Both local and external MetaTrader 4 servers should have build 480 or higher to use the gateway.

Purchasing the Gateway

The gateway works in demo mode handling the first 100 trade requests after launching the server in case the license is absent (the server service should be re-launched manually in order to reset). The appropriate license should be purchased to experience a full-scale functionality of MetaTrader 4 gateway. You can place your order in [Buy section of the technical support website](#) or send a request via [Service Desk](#).

After purchasing the gateway, your MetaTrader 4 platform license will be updated via [LiveUpdate](#) system. No additional actions are required after that, you will be able to start working immediately.

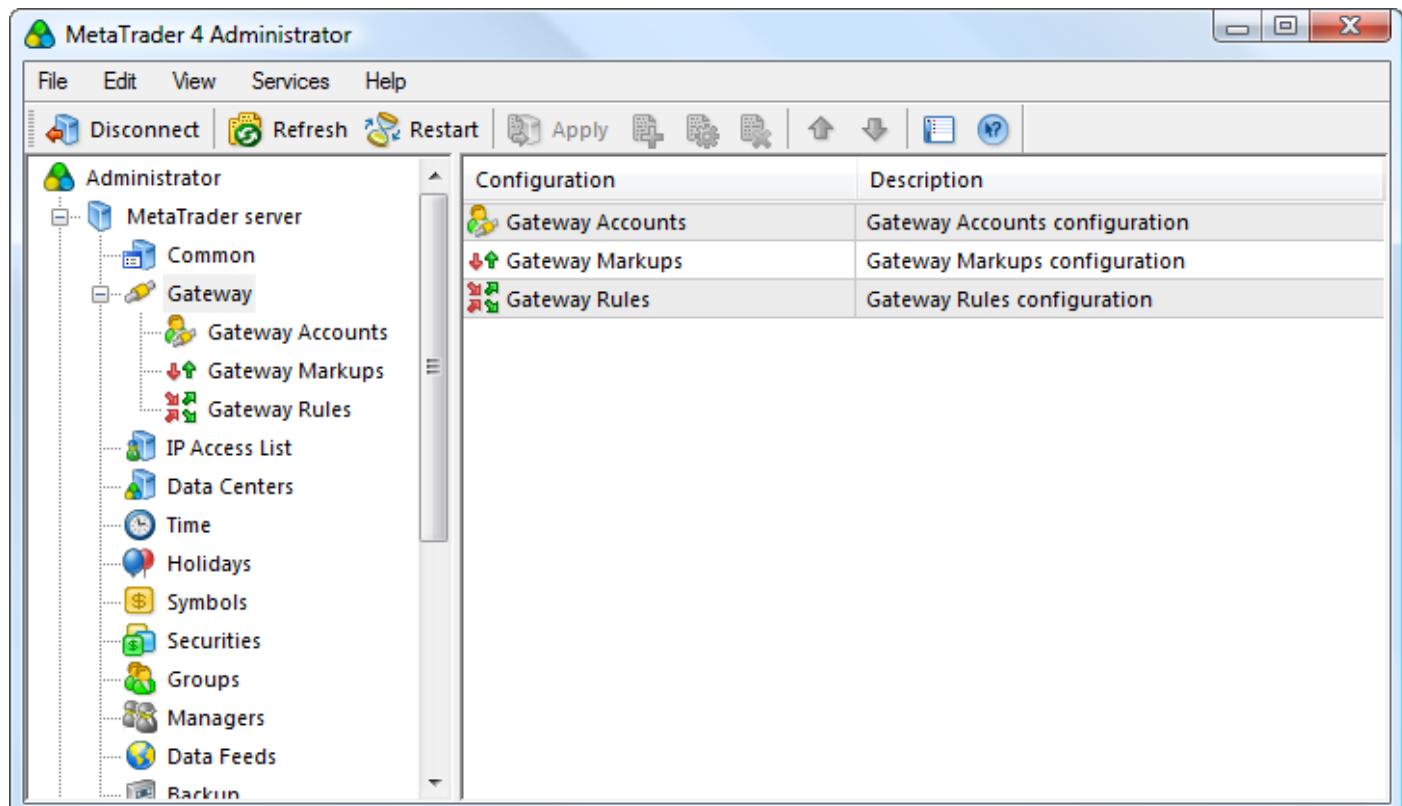
Gateway Setup

Gateway settings are divided in three groups:

Gateway Account – configuring connection to transfer the quotes and display trade operations;

Gateway Markups – configuring the symbols, for which the gateway will transfer the quotes, as well as configuring conversion of the quotes transferred via the gateway and used for performing trade operations;

Gateway Rules – configuring trade requests routing to the gateway.



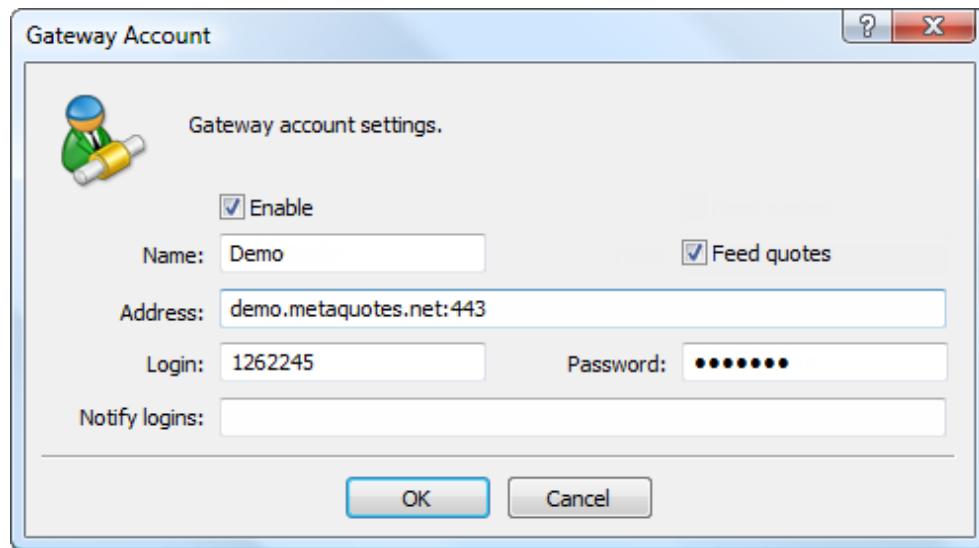
Gateway Accounts

One or several accounts should be configured for the gateway operation.

Any change in configuration of accounts (adding, changing or deleting) leads to entire reconnection of all accounts. At the same time, all currently handled requests will be rejected. Therefore, we do not recommend you to change account parameters during active trading.

The account is used both for passing trade operations to an external server and for passing the quotes (if Feed quotes option is enabled in the settings).

Create a new configuration in Gateway Account section:



Specify the following parameters for an account:

Enable — enable an account. When disabling a trade account, trade requests transferred to an external server via the trade account according to the [routing rules](#) are not handled. They are rejected instead.

Feed quotes — if enabled, the quotes from an external trade server are passed via this account. The list of symbols the quotes are passed for is configured in [Markups](#) section.

Name — name for configuring an account.

Address — MetaTrader 4 external server address for connection. The address is specified as an IP address or a domain name and a port.

Login — number of an account on the external server, using which connection is performed. All trading symbols, for which you are going to transfer the quotes and perform trade operations, should be available for the account.

Password — password for connecting to the specified account. The account's Master password should be specified, since that account is used for trading.

Notify logins — this field allows specifying up to 8 comma-separated account logins, to which gateway operation error reports will be sent via the internal email system. Accounts having administrator or manager rights, as well as ordinary trade accounts can be specified here.

Quotes transfer features:

The quotes passed by the gateway have the highest priority over any [data feeds](#) used on the trade server. Several accounts can be used simultaneously for passing the quotes via the gateway. Priority of the quotes is defined by the account's position in the list. Quotes from the first account in the list have the highest priority.

This does not mean that the quotes arrive only from a single account. The server always receives the quotes from all accounts with "Feed quotes" option enabled. This solution allows to instantly switch to other accounts in case of malfunctions.

For example, several accounts provide quotes for one symbol from different servers — priority defines what account should be used. If the required information is not received from the current account within a certain time interval (specified in Common section — [Feeder Switch Timeout](#) field), the server will automatically switch to the next account that supplies data on the same symbol. However, once data are received from an account with a higher priority, the server switches to the use of its data.

After account priority (position in the list) is changed, quote flow is automatically switched according to the

new priorities.

When a quote flow is switched from one account to another, the following entry is displayed in the server journal:

Gateway 0: G01D activation

The digit indicates the number of the account that is now used for passing the quotes for the specified symbol (0 stands for the first account in the list, 1 – for the second one, etc.). In order to find out what account occupied the specified position in the list, examine the previous gateway initialization entry:

Gateway 0: account 'Demo' uses '123456' at demo.metaquotes.net:443 initialized

The entry contains the account configuration name, account name, as well as the address of the external server connection is performed to.

Other features:

If a price spreading is configured at an external server for an account, extended prices will be transferred via the gateway.

Quotes transferred by the gateway are not subject to the filtration rules configured for the appropriate symbols. The quotes received from an external server are supposed to be filtered already.

Quotes transferred by the gateway are not affected by the spread settings of the symbol ([Spread by default](#) and [Spread balance](#)).

Gateway Markups

The section is used for:

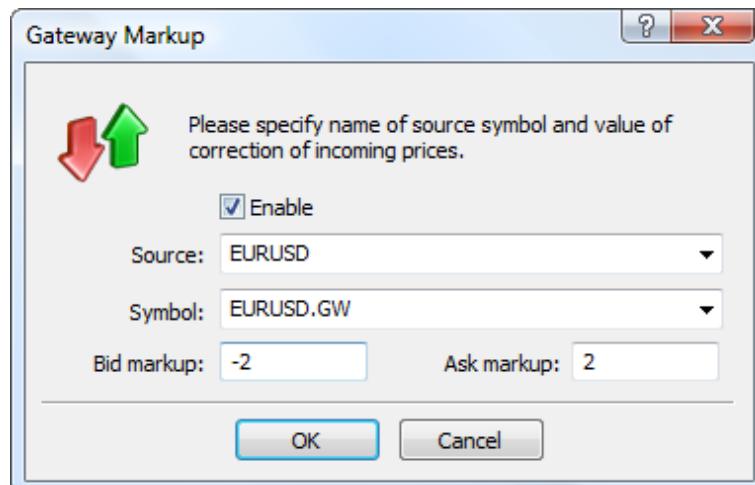
setting the list of symbols the gateway passes the quotes for;

setting the rules of changing symbol names;

setting the rules of correcting the prices passed by the gateway.

Any changes in price correction settings (adding, changing, deleting) are applied immediately and do not require additional server restart.

Create a new configuration:



Specify the following parameters:

Enable – enable symbol configuration. If the setting is disabled, the gateway will not accept quotes for the specified symbols.

Source – symbols on MetaTrader 4 external server. Symbols can be specified the following way:

as a symbols group name (Securities), for example, Forex;

as a comma-separated list of symbol names, for example EURUSD, USDJPY, GBPJPY;

as symbol masks, for example EUR*, USD*, *JPY (all symbols starting from EUR and USD, as well as symbols ending in JPY).

Symbol – this setting allows changing symbol names in case they differ at the external server. Suppose that the symbol is called EURUSD on MetaTrader 4 external server, while it should correspond with EURUSD.gw symbol in your platform. In this case, EURUSD should be specified in Source field, while EURUSD.gw should be entered in Symbol field given that the symbol exists in your platform. If names should be changed, setup is performed symbol-by-symbol. Otherwise, leave the field empty.

Bid markup – bid markup on the local server relative to the external one should be specified in points. For example, if -2 is set, 1.3320 quote will be transferred to your platform if 1.3322 is received from the gateway. Markup can be either positive or negative.

Ask markup – as in the case with Bid markup, Ask price markup can be specified here.

Correction settings features:

If names should be changed, setup is performed symbol-by-symbol.

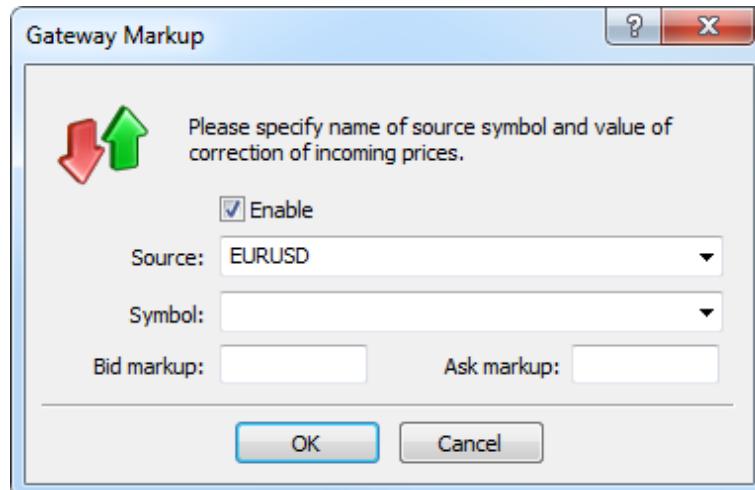
Symbols should not cross in the settings. This should be especially considered when using '*' mask.

If price correction is not configured, clients will work using external server's prices.

Example of [price correction](#) is shown below.

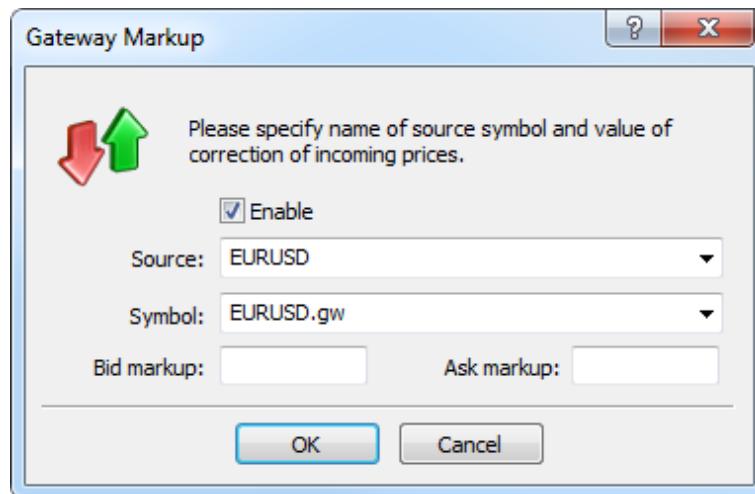
Let's consider some configuration examples.

Setting the list of symbols the quotes from the gateway are passed for:



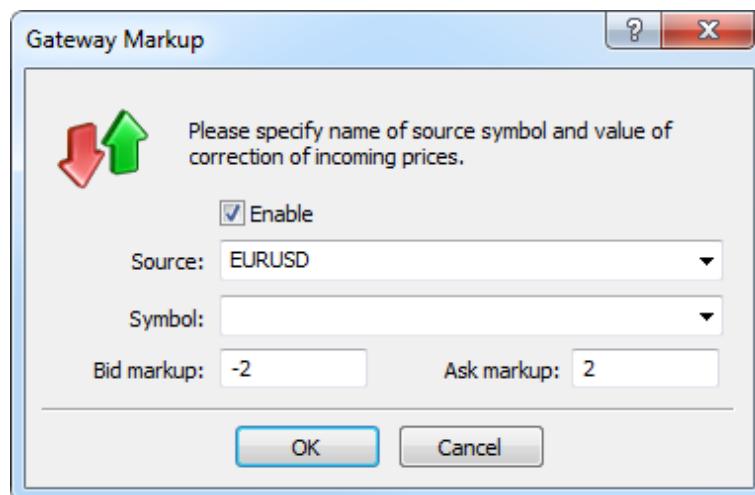
All fields except Source remain empty.

Changing the symbol name:



Only Source (initial name on the external server) and Symbol (final name on the local server) fields are filled.

Correcting the prices passed from the external server:

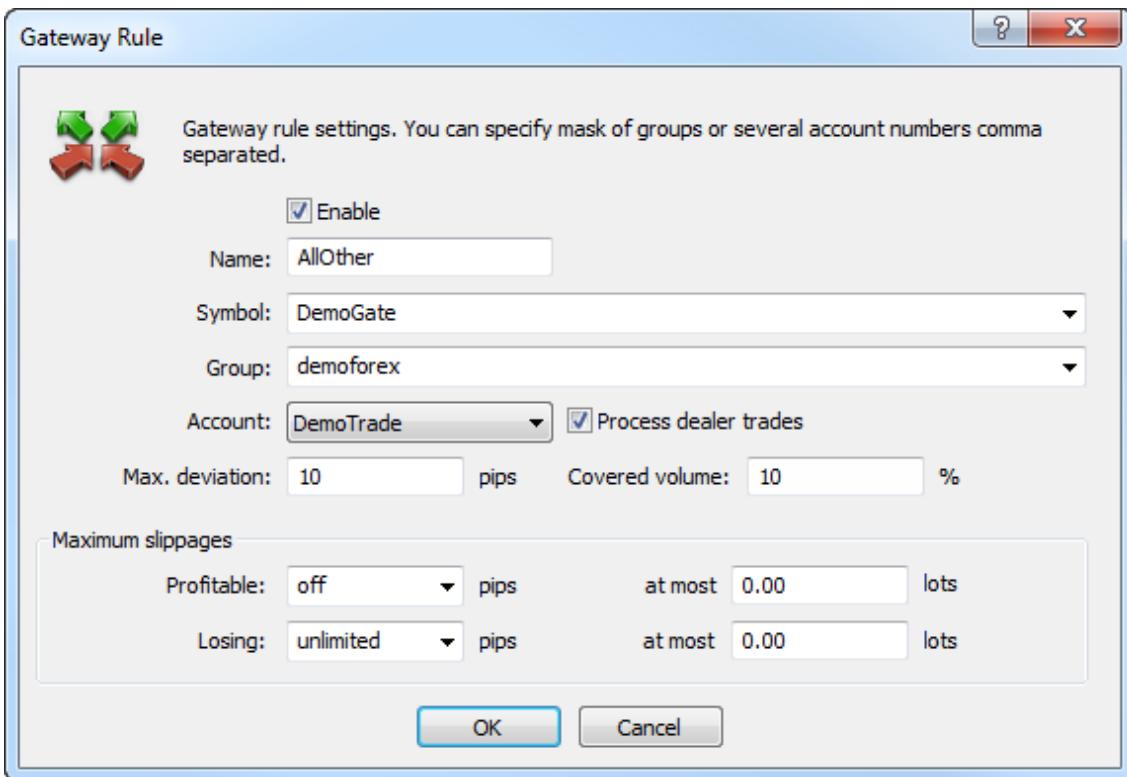


Source symbol, as well as Bid and Ask price correction value are set.

Gateway Rules

The section is implemented for configuring the rules of handling trade requests by MetaTrader 4 gateway.

Any changes in configuring the gateway rules (adding, changing, deleting) are applied immediately and do not require additional server restart.



The following parameters are set up for each rule:

Enable – enable the rule.

Symbol – trade symbols, for which trade requests should be transferred to the gateway according to the rule. Symbols can be specified the following way:

as a symbols group name (Securities), for example, Forex;

as a comma-separated list of symbol names, for example EURUSD, USDJPY, GBPJPY;

using the "*" mask and the negation sign "!". For example EUR*, USD*, *JPY (all symbols starting with EUR and USD, as well as symbols ending in JPY) or EUR*;!EURUSD (all symbols starting with EUR, except for EURUSD).

The "*" mask and the negation sign "!" can only be used in symbol names. Using "*" and "!" in symbol groups (Securities) is not allowed.

Group – group of clients whose trade requests should be transferred to the gateway. Similar to the symbols, the groups can be specified in a comma-separated way using "*" mask and "!" negation symbol. You can also specify here certain logins separated by comma.

Account – [gateway trade account](#), through which trade operations are transferred to the external system. When changing trade account configuration name, the gateway routing rules should also be changed properly. The number of the account (in the gateway account list) used for passing a certain trade operation is specified in the server journal. In the example below, number 2 is specified meaning the third account in the list.

```
Gateway 2: stp on '2698810' for '200' - order was opened : #29045766 buy 1.00 GBP
```

Max. deviation – maximum permissible deviation of prices. It is used in the following cases:

If Market Execution mode is used at a local server, while Instant Execution one - at an external server, trade requests are shown in Instant Execution mode with allowable deviation specified in this parameter;

If Instant Execution mode is used at an external server, while Stop Loss, Take Profit or Stop Out are activated on a local server, appropriate market orders are transferred to the external server in Instant Execution mode with allowable deviation specified in this parameter. The larger the parameter value, the higher the probability that the order will be executed after the first activation without a requote from the external server's side. On the other hand, increasing this parameter may cause too large deviation of the order execution price from its activation price.

Following the Rules:

The rules of processing gateway requests are of higher priority in comparison with automation settings in the client group parameters. It means that even if "automatic only" is set in the client group settings for this group of trading symbols but a trade request corresponds with one of the gateway rules, it will be processed by the gateway.

Rules are executed from top downwards according to their sequence in "Gateway Rules" section. If a received request corresponds to the conditions of the top rule, it is handled under this rule, otherwise conditions of the second rule are checked, and so on.

When checking and processing requests, the gateway receives control before plugin hooks shown below. The following hooks are not called for trade requests corresponding to the gateway rules:

- MtSrvTradeRequestApply
- MtSrvTradeRequestRestore
- MtSrvTradeStopsFilter
- MtSrvTradeStopsApply
- MtSrvTradePendingsFilter
- MtSrvTradePendingsApply
- MtSrvTradeStopoutsFilter
- MtSrvTradeStopoutsApply

Processing Dealer's Trades

Dealers can trade on behalf of traders using the MetaTrader 4 Manager terminal. Of all the trading operations available to the dealer, only four operations can be sent to an external server through a gateway:

- Opening an Order
- Closing an Order
- Closing an Order by an Opposite One
- Pending Order Activation

It is specified in the gateway rules, whether such operations should be sent to an external server or they should be processed locally. Gateway rules contain a selectable option "Process dealer's trades".

It should be noted that dealer's operation do not have execution type: Instant, Request or Market. The dealer always sends trading orders with a specified price. Respectively, [slippage](#) is checked the same way as it is done when pending orders and stop orders (Stop Loss, Take Profit and Stop Out) trigger.

Dealer's trade operations sent through the gateway appear in the server log as follows:

```
2014.11.26 13:07:14.724      192.168.0.1      '1': open order for '759535' buy
2014.11.26 13:07:14.755      Gateway 6: stp on '254' for '759535' - request price
2014.11.26 13:07:14.880      Gateway 6: stp on '254' for '759535' - answer prices
2014.11.26 13:07:14.880      Gateway 6: stp on '254' for '759535' - order by request
2014.11.26 13:07:15.005      Gateway 6: stp on '254' for '759535' - order was opened
```

Explanation:

The dealer with login "1" opened an order for user '759535' at a price of 1.57241.

Since the symbol goes with the Request execution type, the gateway has requested prices from the external server.

The external server has returned prices 1.57223 / 1.57241.

The order has been executed at the price of 1.57241.

Coverage Percentage

The deal volume coverage percentage on an external server is set in Covered volume field. The volume passed to an external server is displayed in the separate order field – [Gateway lots](#).

Volume calculation when opening: the volume is calculated according to the specified percentage. The total value is normalized (rounded mathematically) considering the minimum and maximum volumes, as well as the allowable volume step on an external server.

Volume calculation when closing: the volume is calculated according to the specified percentage. An attempt is made to close the exact same volume on the external server (considering the minimum and maximum volumes, as well as the allowable volume step).

Position on the external server is not closed till the corresponding client's position remains open on the local trade server.

If the appropriate volume part cannot be closed on the external server (for example, the volume is less than the minimum allowable amount), the client's request is confirmed without passing to the external server.

In order to keep the volume proportions when passing the orders to the external system, the following rules should be considered when setting the coverage percentage:

The minimum volume of orders after applying the coverage percentage should be greater than or equal to the minimum allowed volume on the external server.

The maximum volume of orders after applying the coverage percentage should be less than or equal to the maximum allowed volume on the external server.

Volume change step after applying the coverage percentage should be greater than or equal to the volume step on the external server.

Let's consider several examples.

The minimum volume and volume step are equal to 0.1 lots on the local and external servers. Coverage percentage is equal to 50%.

| Client's action | Client's total position | Gateway's action | Total position on the external server |
|------------------------|--------------------------------|---|--|
| Open 1 lot | 1 lot | Open 0.5 lots | 0.5 lots |
| Close 0.5 lots | 0.5 lots | Close 0.2 lots | 0.3 lots |
| Close 0.1 lots | 0.4 lots | Close 0.1 lots (bringing the initial volume of 0.05 to the minimum volume and step) | 0.2 lots |
| Close 0.1 lots | 0.3 lots | Close 0.1 lots (bringing the initial volume of 0.05 to the minimum volume and step) | 0.1 lots |
| Close 0.1 lots | 0.2 lots | Operation is not passed, since the position is not closed yet at the client's side. | 0.1 lots |
| Close 0.1 lots | 0.1 lots | Operation is not passed, since the position is not closed yet at the client's side. | 0.1 lots |
| Close 0.1 lots | None | Close 0.1 lots | None |

The minimum volume and volume step are equal to 0.1 lots on the local and external servers. Coverage percentage is equal to 10%.

| Client's action | Client's total position | Gateway's action | Total position on the external server |
|---|--------------------------------|---|--|
| Open 1 buy lot | 1 buy lot | Open 0.1 buy lots | 0.1 buy lots |
| Open 0.5 sell lot | 0.5 sell lots | Open 0.1 sell lot | 0.1 sell lots |
| Open 0.1 sell lot | 0.1 sell lots | Open 0.1 sell lot | 0.1 sell lots |
| Close 0.5 sell lots by the opposite 1 buy lot | 0.5 buy lots 0.1 sell lots | Close 0.1 sell lots by the opposite 0.1 buy lots | 0.1 sell lots |
| Close 0.1 lots by the opposite 0.5 buy lots | 0.4 buy lots | Close 0.1 sell lots | None |
| Close 0.4 buy lots | None | Operation is not passed, since the position has already been closed on the external server. | None |

The minimum volume and volume step are equal to 0.1 lots on the local and external servers. Coverage percentage is equal to 10%.

| Client's action | Client's total position | Gateway's action | Total position on the external server |
|------------------------|--------------------------------|-------------------------|--|
| Open 0.3 buy lots | 0.3 buy lots | Open 0.1 buy lots | 0.1 buy lots |
| Open 0.1 sell lot | 0.1 sell lots | Open 0.1 sell lot | 0.1 sell lots |

| Client's action | Client's total position | Gateway's action | Total position on the external server |
|--|--------------------------------|---|--|
| Close 0.1 buy lots | 0.2 buy lots 0.1 sell lots | Close 0.1 buy lots | 0.1 buy lots 0.1 sell lots |
| Close 0.2 buy lots by the opposite 0.1 sell lots | 0.1 buy lots | Close 0.1 sell lots | None |
| Close 0.1 buy lots | None | Operation is not passed, since the position has already been closed on the external server. | None |

Maximum slippages

This group of parameters allows setting slippages occurring during the processing of market and pending orders:

Profitable – maximum allowed deviation of a client request price from an external server one towards the client's profit. The maximum allowable request volume (in lots), for which that deviation is acceptable, is specified in "at most" field.

Losing – maximum allowed deviation of a client request price from an external server one towards the client's loss. The maximum allowable request volume (in lots), for which that deviation is acceptable, is specified in "at most" field.

Deviations for market orders:

| Execution type on the local server | Execution type on the external server | Description |
|---|--|---|
| Request Execution | Request Execution | No deviations are used. The price is requested directly from an external server considering necessary changes (Markups). Please note that you can work via STP gateway in Request Execution mode only if it is installed both on external and local servers. |
| Market Execution | Any execution type | No deviations are used. Order execution price is defined by the external server (considering necessary changes specified in "Markups" section). |

| Execution type on the local server | Execution type on the external server | Description |
|---|--|--|
| Instant Execution | Instant Execution | <p>The deviations are managed the following way:</p> <p>Client request price is brought in line with external server's one considering Markups settings.</p> <p>The difference between the received price (transformed client price) and the current market price at an external server is calculated.</p> <p>Direction of the price deviation is checked.</p> <p>If deviation has occurred towards the client's profit, it is compared to Profitable value. Suppose that the client's buy price is 1.0000, while the market one is 1.0005. Thus, the client's buy operation could have been better (cheaper) than the current market one's - deviation towards the client's profit.</p> <p>If deviation has occurred towards the client's loss, it is compared to Losing value. Suppose that the client's buy price is 1.0005, while the market one is 1.0000. Thus, the client's buy operation could have been worse (more expensive) than the current market one's - deviation towards the client's loss.</p> <p>If the deviation is less or equal to the value specified in the settings and the order volume is less or equal to the appropriate "at most" value, the request in Instant Execution mode with the external server's current market price is sent to the external server.</p> <p>Otherwise, the client's request is requoted. External server's current prices brought in line with Markups values are used for requoteing.</p> |
| Instant Execution | Market Execution | <p>Checking a trade request price deviation from the server's current market one is performed just before a trading order is sent to an external server in Market Execution mode.</p> <p>Checking is carried out in the same way as in the previous case (using instant execution on both servers).</p> <p>Please note that the actual execution price on the external server can differ from the price at the moment the check was performed.</p> |

Deviations for pending orders, Stop Loss, Take Profit and Stop Out:

Execution of pending and stop orders (Stop Loss, Take Profit and Stop Out) is checked by the local trade server's prices. An appropriate market request is sent to an external server after an order activation.

In Request Execution and Market Execution modes, sending of a market order to the server is performed in the standard way - with a preliminary request for a price and without specifying a price respectively. In case of Instant

Execution mode, the current market price on an external server is specified in the placed order. Acceptable deviation is additionally set in the order according to Max. deviation field in the gateway settings. The larger the value, the lower the probability of receiving a requote. However, the actual execution price can deviate from the requested one to a greater extent. The value should be selected based on a symbol's volatility.

If the market order is executed successfully, the gateway calculates the difference between the actual order execution price on an external server and the client order one. The obtained value is then compared with the specified allowable deviations:

If deviation has occurred towards the client's profit, it is compared to Profitable value. Suppose that the client buy order's price is 1.0000, while the price of the market order execution on the external server is 1.0005.

Thus, the client's buy operation could have been more expensive at the current market price - deviation towards the client's profit.

If deviation has occurred towards the client's loss, it is compared to Losing value. Suppose that the client buy order's price is 1.0005, while the price of the market order execution on the external server is - 1.0000. Thus, the client's buy operation could have been cheaper at the current market price - deviation towards the client's loss.

If the deviation is less or equal to the value specified in the settings and the order volume is less or equal to the appropriate "at most" value, the client order's price is used as the order execution price at the local server side. Otherwise, the actual execution price of an appropriate market order at an external server is specified as an execution price in the order.

Let's consider the more detailed example of sending an order in Instant Execution mode. Markups are considered to be equal to 0 (not used) for more convenience:

Buy Limit 1.00 EURUSD order at 1.0000 has been activated.

At the moment the market order is sent to an external server, the current market price there is 1.0003. Thus, the gateway sends Buy 1.00 EURUSD 1.0003 market order in Instant Execution mode. The allowable deviation value is additionally added to that order from the gateway settings (suppose that Max. deviation = 10).

The price at the external server is 1.0004 at the moment of execution. It falls into the specified deviation value, and the order is successfully executed.

As the price in the client' order is better than the actual execution one, Profitable deviation value is checked (suppose that Profitable = 5, at most = 5).

The difference between the client's and the actual execution prices falls into the permissible deviation.

The order's initial price (1.0000) is set as an order execution price at the local server's side.

After creating all the rules, the gateway is ready for work. You can check the gateway operation by viewing the server journal. Request journal logs using "Gateway:" keyword in "Journal" section of MetaTrader 4 Administrator.

Correcting Prices in the Gateway

Price correction is set in [Gateway Markup section](#).

Double correction of prices occurs when trade requests are sent from a client to the server and back:

1. Price correction according to the settings in [Gateway Markup section](#).

2. Price correction according to the spreading settings for a client group on your server.

Example:

The following price correction is set for EURUSD symbol in the gateway settings: Bid = -1, Ask = 1. Price spreading of 2 points is set for the same symbol for a client. Thus:

Price received by the gateway from the external server: 1.32272 / 1.32280

Price corrected according to the gateway correction settings: 1.32271 / 1.32281

Price received by the client after spreading: 1.32270 / 1.32282

The client sends the request at the received price in Instant Execution mode: Buy EURUSD 1.00 at 1.32282. When the request is sent to the external server, reverse correction of the price occurs. Therefore, the external server receives the request for executing operation at the price of 1.32280. After opening a position, the price of the coverage position will be better than the client's one by 2 pips.

The difference between the order's open/close price on the local and external servers is displayed in special order fields – [Open price delta](#) and [Close price delta](#).

Managing Compatibility of Trading Symbol Settings

The gateway controls compatibility of symbol settings when transferring trade operations to MetaTrader 4 external server. In case of incompatibility, the trade request is rejected and the appropriate entry appears in the server journal.

The following parameters are controlled:

The gateway requires compliance of **execution types** for similarly-named trading symbols or the symbols compared via Gateway Markup. The following cases are regarded as exceptions:

| Execution type on the local server | Execution type on the external server | Description |
|---|--|---|
| Market Execution | Any | The gateway automatically uses the symbol's execution type specified for a symbol on MetaTrader 4 external server. |
| Instant Execution | Market Execution | <p>The gateway automatically uses the symbol's execution type specified for a symbol on external server.</p> <p>Before sending a request, the check is performed to ensure that deviation of the request price from the current market prices corresponds to the highest value specified in the gateway rule, as well as to the maximum deviation value specified by the client in the request.</p> <p>If deviation has occurred towards the client's profit, the deviation specified in the gateway settings is checked. If deviation has occurred towards the client's loss, the deviation specified by the client when sending the order is checked.</p> |

| Execution type on the local server | Execution type on the external server | Description |
|---|--|---|
| Instant Execution | Instant Execution | <p>Request volume threshold value for moving from Instant Execution to Request Execution is additionally checked. If a request has a volume that is enough for switching to Request Execution mode on only one of the servers (local or external one), this request is rejected.</p> <p>If Instant or Request execution modes coincide on both servers at the specified volume, the request will be executed.</p> |

Trading **should be enabled** for the symbol on the external server.

Number of digits in symbol's price should be the same on both servers.

Tick size should be the same on both servers.

Tick price should be the same on both servers.

Contract size should be the same on both servers.

Initial margin on the external server should not exceed the one on the local server.

Maintenance margin on the external server should not exceed the one on the local server.

Hedged margin on the external server should not exceed the one on the local server.

Margin multipliers should be the same on both servers.

Margin calculation mode should be the same on both servers.

Margin calculation currency should be the same on both servers.

Profit calculation mode should be the same on both servers.

In order to **close the opposite orders** (Close by) on the external server, the appropriate option in the group symbol settings should be enabled.

Handling Market Requests

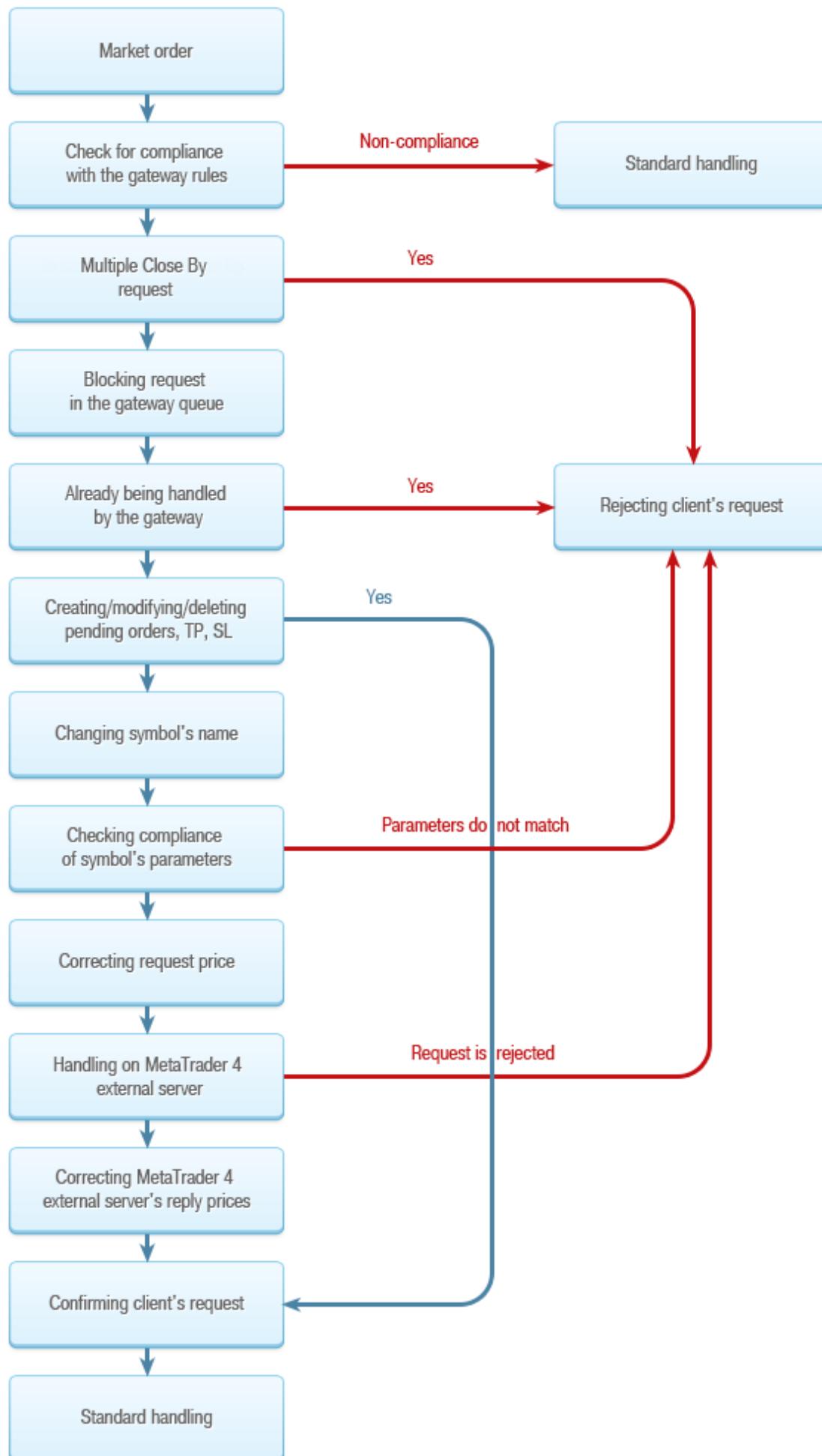
Market requests handling passes the following stages:

1. Request is checked for compliance with [the gateway rules](#). If all the requirements are met, it is blocked in the requests' queue.
2. Multiple Close By requests are immediately rejected.
3. Requests related to pending orders, as well as Stop Loss and Take Profit orders (creation, modification and deletion) are automatically confirmed (not transferred to the external system).
4. Changing a symbol name according to the settings in [Gateway Markup section](#).
5. Checking [trade symbol parameters on](#) your own and on an external MetaTrader 4 server.
6. Price correction according to the settings in [Gateway Markup section](#).
7. If local symbol's execution mode is Market Execution, it is changed according to the external server's execution mode.
8. The request is handled on the external server and is accompanied by logging.

9. Prices are corrected for the obtained result according to the gateway settings and spreading at client's side.

10. Client's request is confirmed or rejected depending on handling results on the external server.

The structure of handling market requests is shown below.

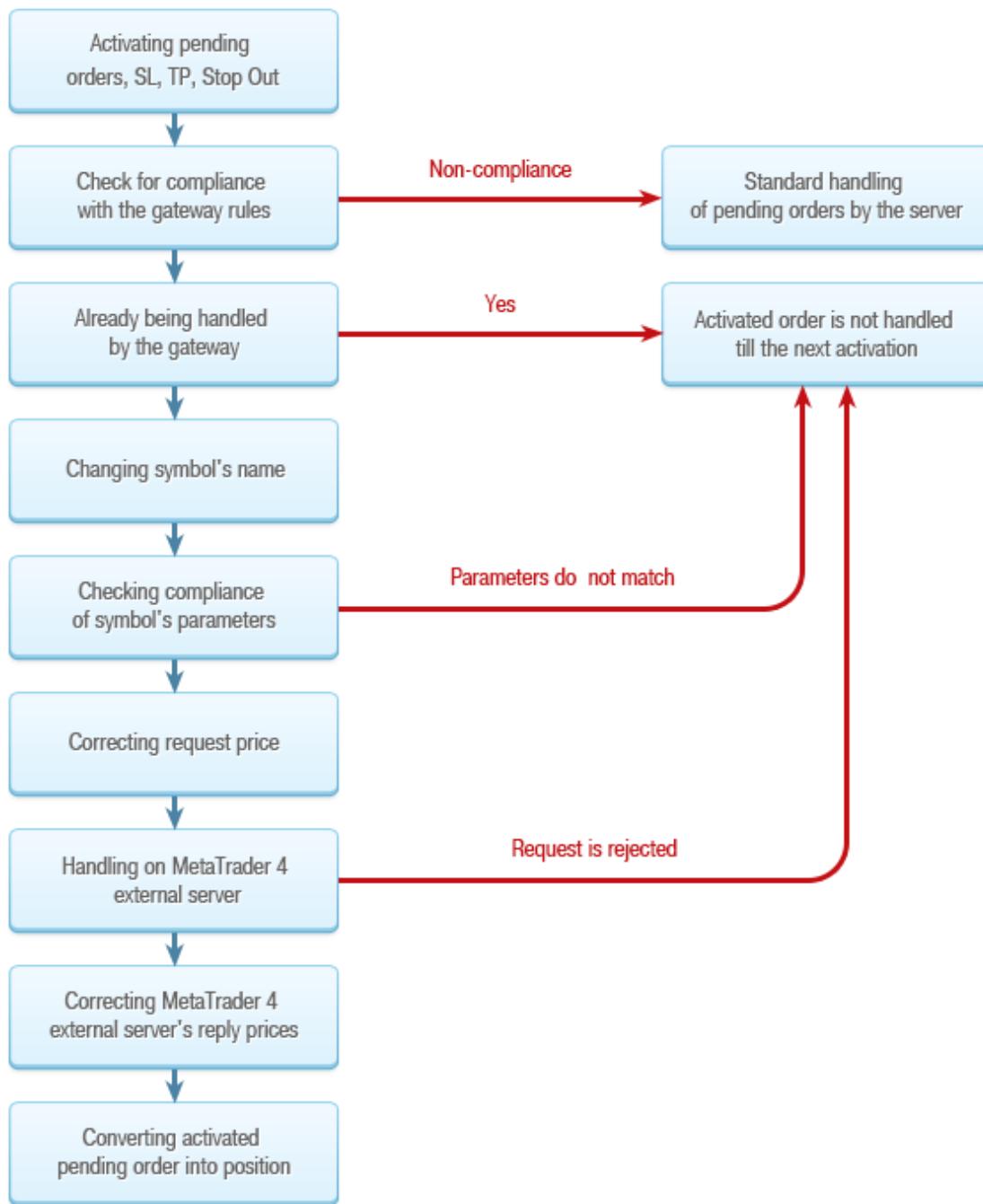


Handling Activation of Pending Orders, Stop Orders and Stop Outs

The following actions are performed when pending orders, Take profits, Stop Losses and Stop Outs are activated:

1. A server defines order activation and notifies the gateway in the same way as this is done by MtSrvTradePendingsApply, MtSrvTradeStopsApply and MtSrvTradeStopoutsApply hooks. The gateway forms the request in its internal queue.
2. Request is checked for compliance with [the gateway rules](#).
3. Changing a symbol name according to the settings in [Gateway Markup section](#).
4. Checking [trade symbol parameters on](#) your own and on an external MetaTrader 4 server.
5. Price correction according to the settings in [Gateway Markup section](#).
6. If local symbol's execution mode is Market Execution, it is changed according to the external server's execution mode.
7. The request is handled on the external server and is accompanied by logging. If the request has been rejected or requoted, the activated order is not processed till the next activation.
8. Prices are corrected for the obtained result according to the gateway settings and spreading at client's side.
9. The activated client's order is converted to the position (for pending orders) or closes a client's position (in case of SL-TP and Stop-Out).

Handling activation of pending orders, stop orders and Stop Outs is shown below.



Ongoing Maintenance

An abnormal situation may occur during the operation of the gateway. A position which no longer exists on the external server can be still available on the trader's account. In this case, it will be impossible to close it.

To solve the issue, open the relevant position on the external server manually by connecting to the [gateway account](#) via the client terminal. The position volume should be set taking into account the "[Coverage percent](#)" parameter specified for the gateway. Next, copy the open position ticket into the "Gateway order" field of the client [order](#) on your trading platform side. Also specify the position volume in the "Gateway lots" field.

After that, the position can be normally closed on your platform side. The corresponding position on the external server will also be closed.

IP Access List

Translate: EN ▾



The "IP Access List" section is intended for setting the fetch protection system. For example, you found out that some negative actions were made from one or several subnetworks. In such cases, you can block the entire subnetwork(s). If the access permission is needed for a part of IP-addresses included into the list of blocked ones, the instruction permitting the access must be located lower than that of blocking. When a group of addresses is blocked, no user (client, manager, administrator) can connect the server from any address inside the blocked group.

Up to 511 rules of access right limitation from different addresses. By default, all addresses are considered as permitted.

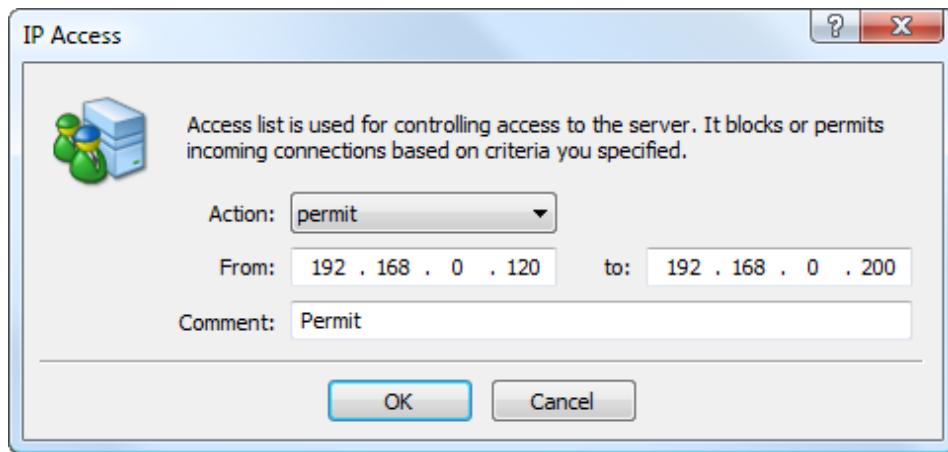
| From | To | Comment |
|---|---------------|---------|
| <input checked="" type="checkbox"/> 192.168.0.1 | 192.168.0.255 | Block |
| <input checked="" type="checkbox"/> 192.168.0.120 | 192.168.0.200 | Permit |

Each address check is made top-to-bottom. The last rule concerning the address should be applied to it regardless of former instructions. Thus, the position of each instruction in the list is a very important condition for access right limitation for IP-addresses. In the example given above, the permitting instruction is located lower than that of blocking and this allows to create a pass within the range of the blocked addresses. But the interchanging the instructions disables this pass since the latest access rule prescribes blocking the whole list. In this case, the permitting instruction will be simply ignored.

The "permit always" rule is applied irrespective of its position in the list. If this rule is met for an IP address, all further instructions will be ignored. Addresses marked as "permit always" are not checked by the [Antiflood control](#) system.

To configure the instruction location in the list, the context menu commands as "Move Up" and "Move Down" should be used, as well as the same commands in the "Edit" menu, and the following buttons of the toolbar: and .

When adding or editing a rule (with the context menu "Add" and "Edit" commands, as well as the same commands of the "Edit" menu, and the following buttons of the toolbar: and) the setting window will open:



Action – action applying to the given list of IP-addresses (Block – block access; Permit – permit access);

From – IP-address to be the first to which the given access rule will be applied;

To – IP-address to be the last to which the given access rule will be applied;

Comment – the text of comment.

The context menu "Delete" command, as well as the "Edit" menu command and the button of  on the toolbar will delete the instruction selected.

Warnings:

Do not block the IP-addresses list including the IP-address used by the administrator when connecting to the server. After the access rules have come into effect, you will not be able to connect to the server.

You should think over in detail both the rules of access blocking and permission, and their location in the list. Keep in mind that only the latest rule concerning the given address can apply to this address. All preceding rules will be – ignored.

[Gateway](#)

[Data Centers](#)

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Data Centers

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This section is intended for creation and for operation check of public access points (data centers). A data center performs several tasks:

It operates as a proxy server to increase the scalability of the system

Receiving some common data, the Data Center caches them and sends to all online traders. This allows decreasing the load of the server since it is the sending quotes, historical data, and news that makes the largest part of the load. If the Data Center and the clients operate in the same local network, the traffic will be saved essentially.

Operates as a Relay Server

Data Centers can perform the functions of a "Relay Server" hiding the real IP-address of the server. In the case of one of the Data Centers falling out, the main server of the system will continue operating in a normal mode. Use of Data Centers enables the server to define the client's real IP-address correctly. High efficiency of the program is provided through using its own protocol allowing to check the frequency of connections and to manage them dynamically.

It balances common load among different access points automatically

It prevents DoS attacks

Data Centers have built-in functions of network activity of online traders. Those functions allow to define and prevent potential DoS attacks in time. Such malicious actions are blocked before they reach the main server.

Note: If a Data Center is not included into the list, all inquiries coming through it will have the same IP-address. In this case, the main server may block the address and the Data Center will not be able to operate.

| Server | Description | Internal IP Address | Priority | Loadi... |
|-------------------|----------------|---------------------|----------|----------|
| 192.168.9.138:400 | Main | | 0 | n/a |
| 66.235.184.160 | 66.235.184.160 | 192.168.0.1 | 5 | n/a |

Server – Data Center address and port;

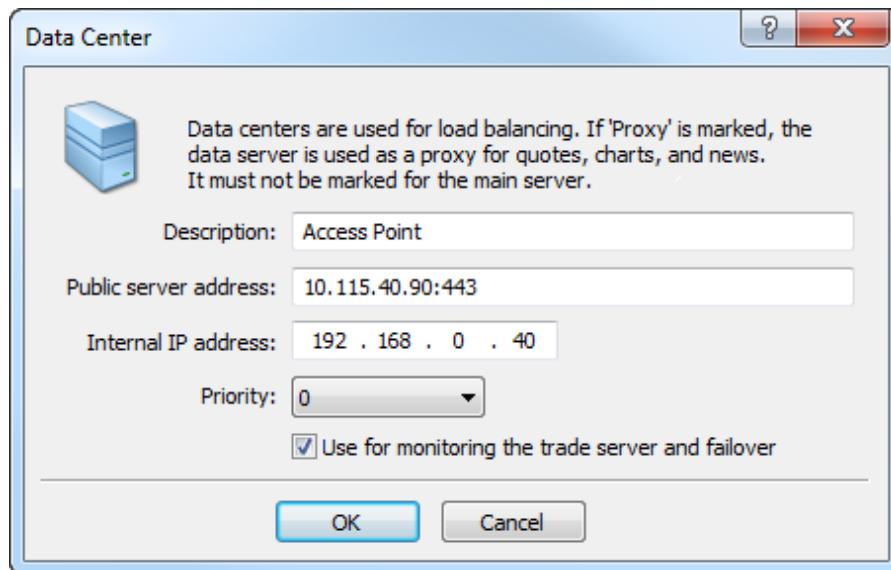
Description – description;

Internal IP Address – Data Center internal IP address;

Priority – priority. Each access point has its basic priority (0 to 255, in descending priorities) showing its accessibility. The lower the priority is, the more preferable for clients the server is. For creating virtual, temporarily non-existing servers, a special priority 255 is intended (Idle). Such servers are used as backup ones. A backup sever starts only if all other Data Centers do not function;

Loading – Data Center loading indicator.

To add an instruction concerning a new Data Center you should use "Add" command, or the same command in the "Edit" menu, or using the  button on the toolbar. The "Edit" command and the  button allow to edit instructions, and the "Delete" button, and the  – button allows to delete entries about Data Centers. When adding and editing entries, the setting window will appear:



Description – description of a Data Center;

Public Server Address – public IP-address of a Data Center. It is used for the connection of clients to the Data Center. You can specify domain name instead of the IP address;

Internal IP Address – internal IP-address of a Data Center. It used by a Data Center to connect to the main trading server;

Priority – priority of a Data Center.

Use for monitoring the trade server and failover – when enabled, the WatchDog server uses this data center to check the availability of the trade (backed up) server. This is used to automatically switch to the backup server if the trade server fails. More detailed information can be found in the [appropriate section](#).

To avoid making changes to the client terminals every time there is a change in the server IP address, it is recommended that domain names be specified instead of IP addresses in "Public server address" field. In this case, if the location of the server (or one of the Data Centers) changes, only the corresponding entry on the DNS server of the hosting provider will need to be updated.

It is recommended no to enable "Use for monitoring the trade server and failover" option for MetaTrader 4 WatchDog added as a data center. Also one should not enable it for non-working data centers. It increases the time of switching to backup and the amount of consumed resources.

For the changes to take effect it is necessary [to restart the server](#).

Data Center Priority

The preference of a data center server for client terminals to connect to a trade server is defined by its priority and connection quality. The lower the value if priority is, the more preferable the data center is. A base priority (Priority parameter) from 1 to 15 can be specified in its settings. It defines the data center preference if all other conditions are equal. The final analysis of a data center is conducted upon the ping and the current priority, which depends on the basic priority and the number of current connections.

The current priority is calculated according to the following formula: $Current\ Priority = (Base\ Priority + Connections / 200)$,

where:

Current Priority is the priority at the server current moment;

Base Priority is the base priority set in data center parameters;

Connections – the number of current connections.

Every 200 client connections increase the current priority of a server by one (maximum increase is 10).

[IP Access List](#)

Time

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Time

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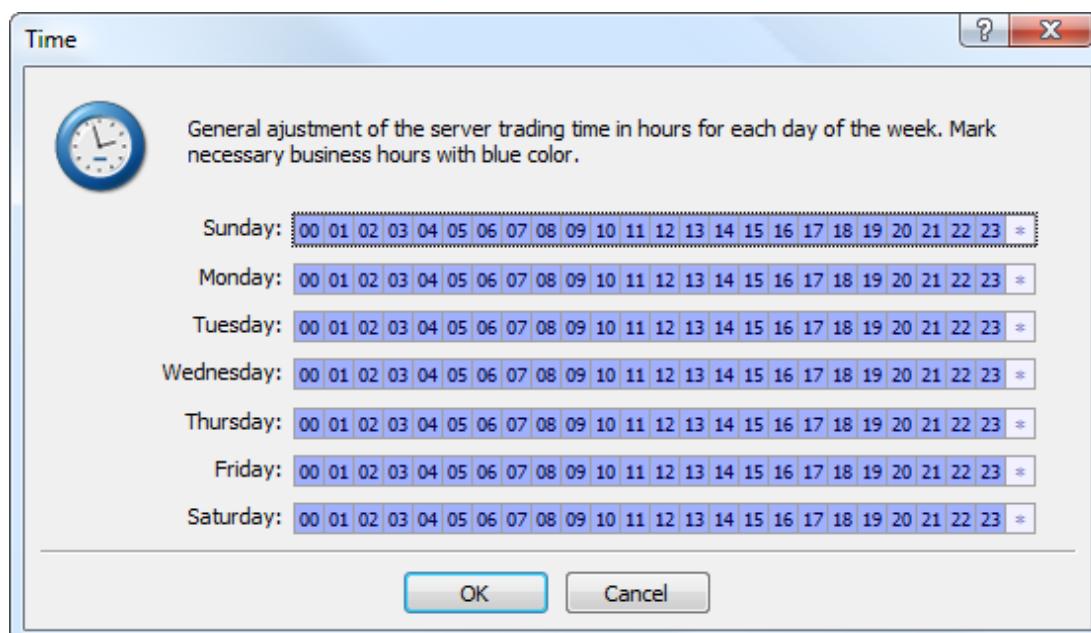


This section is intended for general setting server operating time. [The detailed setting of operation time](#) is performed on each individual financial instrument. As estimated time, the basic time of the server is used. It is indicated in the ["Common"](#) section ([Time Zone](#), [Time Synchronization with](#)).

In this configuration, server makes it possible to operate with clients between Monday 00:00 and Friday 11:59 p.m. On holidays, the server allows clients to login, watch charts, trading histories, but it does not allow them to perform any trading operations.

| Day | Time |
|-----------|-------------|
| Sunday | |
| Monday | 00:00-24:00 |
| Tuesday | 00:00-24:00 |
| Wednesday | 00:00-24:00 |
| Thursday | 00:00-24:00 |
| Friday | 00:00-24:00 |
| Saturday | |

The "Edit" command allows to make changes to the working calendar.



Squares colored blue are working hours, and the light ones are off hours. You can change a working hour to nonworking (and vice versa) by a single click on it. Stars on the right side invert 24 working hours of the day of week.

[Data Centers](#)[Holidays](#)

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Holidays

Translate: EN ▾



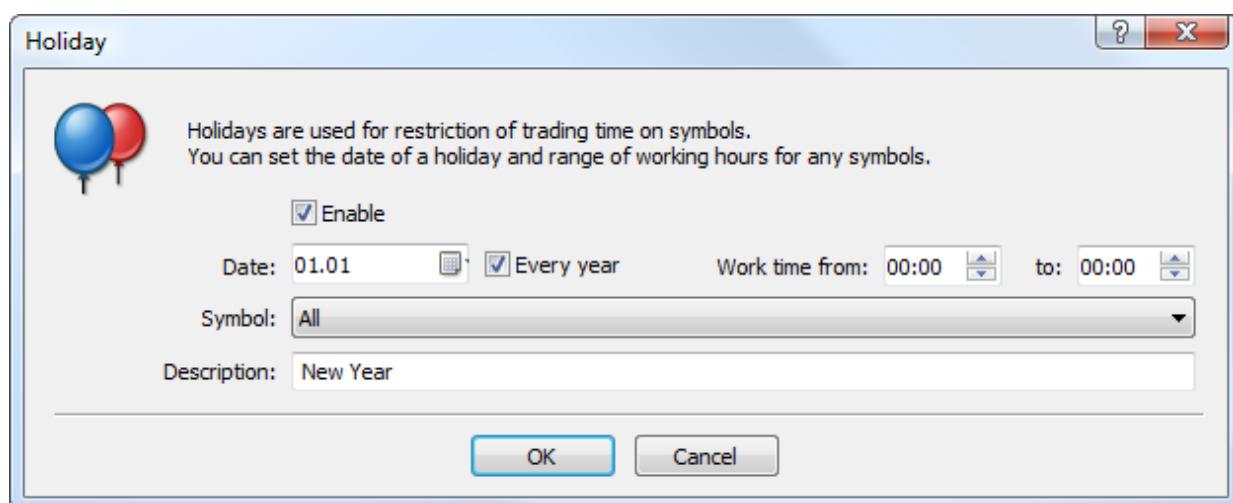
This section allows to introduce holidays to the working schedule both for each group of instruments (forex, cfd, futures, stocks), and for each individual instrument (EURUSD, USDCHF, #GOLD, etc.). These instructions allow to configure holidays during the workweek easily. On holidays, clients can connect to the system, watch charts and bid histories, but they cannot perform any trade operations.

| Day | From | To | Securities | Description |
|------------|-------|-------|------------|-------------|
| ****.01.01 | 00:00 | 00:00 | All | |

The context menu includes:

- Add... Insert
- Edit... Enter
- Delete Delete
- Move Up
- Move Down
- Find... Ctrl+F
- Find Next F3
- Auto Arrange A

When adding a holiday or changing the rules of work on that day (the "Add" è "Edit" commands respectively) you will see the setting window:

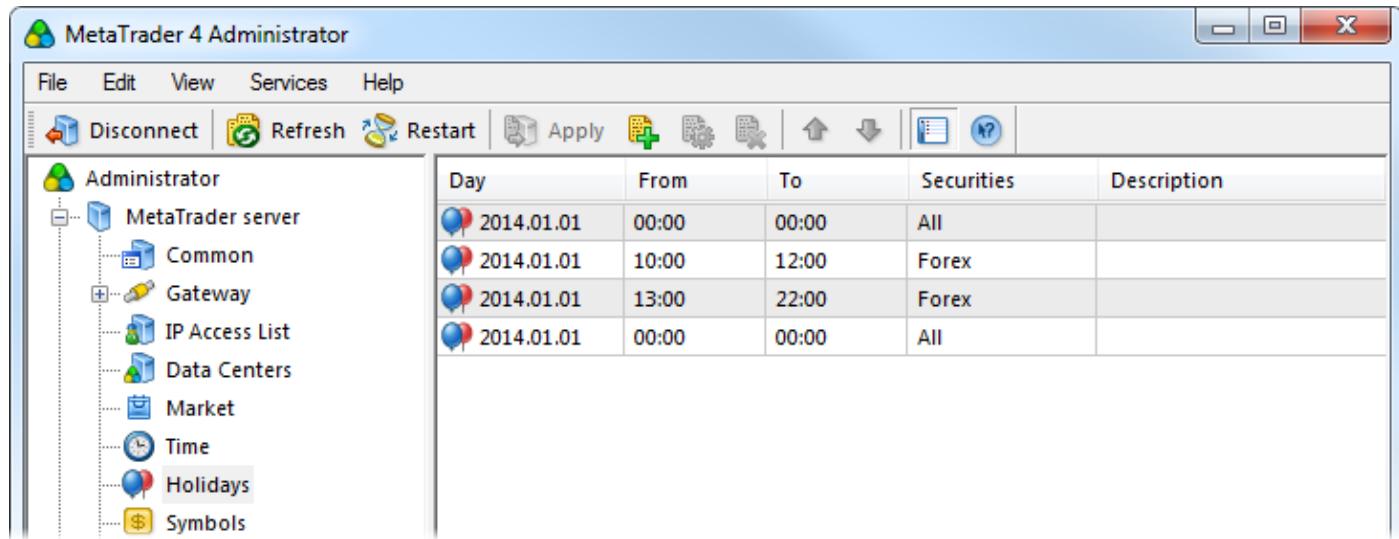


To enable/disable the holiday check/unchek the "Enable" box. Tick the "Every Year" field if the holiday repeats every year. You should indicate the year for other holidays. If market works for several hours on a holiday, you should indicate the working hours in the "Work time" additionally. The name of a financial instrument or that of a group of instruments will be stored in the "Symbol" field ("All" means all financial instruments), and holiday – will be described in the "Description" field.

Quotes transmission and trading continues until the last minute of the work time range inclusive. For example, if the work time is from 00:00 to 18:00, then the actual work time is 00:00:00 – 18:00:59.

Holidays Check

Holiday rules are checked from top downward. The check is stopped at the first permissive rule for the specified symbol-time pack. Let's consider the following example:



The following rules are set:

The first rule prohibits trading all symbols on January 1, 2014

The second one allows trading Forex group symbols from 10:00 to 12:00 on that day

The third one allows trading the same symbols from 13:00 to 22:00

The fourth one prohibits trading all symbols on January 1, 2014

As a result, trading Forex group symbols will be allowed from 10:00 to 12:00 and from 13:00 to 22:00 on January 1, 2014. The fourth rule is ignored, as the check stops at the first one that permits trading. Thus, in order to set several trading intervals inside one time interval, you should first set a prohibitive rule followed by permissive ones.

[Time](#)

[Symbols](#)

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Securities

The "Securities" section is intended for managing the financial instrument groups (not to be confused with [user groups](#)). It makes it possible to set parameters not for an individual instrument, but for the whole group of instruments (see [Holidays](#), [Groups](#), and [Manager](#)). You can create up to 32 groups.

| Administrator | Name | Description | Symbols |
|-------------------|-----------------|-------------------------|--|
| MetaTrader server | Forex | Foreign Exchange | 72: USDCHF, GBPUSD, EURUSD, USDJPY, ... |
| Common | Indexes | Indexes | |
| IP Access List | CFD | Contract For Difference | |
| Data Centers | Futures | Futures | <input checked="" type="checkbox"/> Auto Arrange A |
| Time | Doubleclick ... | | |
| Holidays | Doubleclick ... | | |
| Symbols | Doubleclick ... | | |
| Securities | Doubleclick ... | | |
| Groups | Doubleclick ... | | |
| Managers | Doubleclick ... | | |
| Data Feeds | Doubleclick ... | | |
| Backup | Doubleclick ... | | |
| LiveUpdate | Doubleclick ... | | |
| Synchronization | Doubleclick ... | | |
| Plugins | Doubleclick ... | | |
| Accounts | Doubleclick ... | | |
| Orders | Doubleclick ... | | |
| Charts | Doubleclick ... | | |
| Ticks | Doubleclick ... | | |
| Journal | Doubleclick ... | | |

After the group has been created, the specific instruments will be included. Then group is indicated when configuring the instrument in the "Type" field. After that, the symbol of the new instrument will appear in the "Symbols" field in the corresponding group of the "Securities" section.

Before [creating a financial instrument](#) make sure that you have created a group for it in the "Securities" section.

The name of a group of instruments must not contain spaces.

To change the group name or description, it is necessary to double-click the left mouse button at the corresponding box. After editing, press the Enter key to save changes and send them to the server.

Profit Calculation

Groups

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Symbols

In this section, the list of financial instruments (symbols) and their settings are kept:

| Symbol | Type | Execution | Filter | Spread | Stops | Long | Short | Digits | Trade |
|--------|-------|-----------|--------|--------|-------|---------|---------|--------|-------|
| USDCHF | Forex | Instant | 120 | No | 8 | -0.1400 | -0.1800 | 5 | Full |
| GBPUSD | Forex | Instant | 100 | No | 12 | 1.2500 | -1.8600 | 5 | Full |
| EURUSD | Forex | Instant | 80 | No | 8 | 0.3300 | -1.0400 | 5 | Full |
| USDJPY | Forex | Instant | 120 | No | 6 | 0.2400 | -0.7200 | 3 | Full |
| USDCAD | Forex | Instant | 120 | No | 8 | -0.3900 | 0.0600 | 5 | Full |
| NZDUSD | Forex | Instant | 120 | No | 8 | 1.1200 | -1.3700 | 5 | Full |
| AUDUSD | Forex | Instant | 100 | No | 3 | 1.1600 | -1.4600 | 5 | Full |
| AUDNZD | Forex | Instant | 400 | No | 24 | -0.5200 | 0.1100 | 5 | Full |
| AUDCAD | Forex | Instant | 400 | No | 20 | 0.9600 | -1.2800 | 5 | Full |
| AUDCHF | Forex | Instant | 300 | No | 16 | 1.2200 | -1.5300 | 5 | Full |
| AUDJPY | Forex | Instant | 250 | No | 12 | 1.6200 | -2.0700 | 3 | Full |
| CHFJPY | Forex | Instant | 240 | No | 8 | 0.2200 | -0.6700 | 3 | Full |
| EURGBP | Forex | Instant | 80 | No | 4 | -0.3700 | 0.1000 | 5 | Full |
| EURAUD | Forex | Instant | 400 | No | 20 | -1.6800 | 1.1300 | 5 | Full |
| EURCHF | Forex | Instant | 100 | No | 6 | 0.5700 | -1.1100 | 5 | Full |
| EURJPY | Forex | Instant | 100 | No | 6 | 1.1900 | -1.9600 | 3 | Full |
| EURNZD | Forex | Instant | 500 | No | 24 | -2.6200 | 1.9100 | 5 | Full |
| EURCAD | Forex | Instant | 300 | No | 16 | 0.1700 | -0.7300 | 5 | Full |
| GBPCHF | Forex | Instant | 250 | No | 14 | 1.3300 | -1.9700 | 5 | Full |
| GBPJPY | Forex | Instant | 250 | No | 14 | 2.1200 | -3.0500 | 3 | Full |

Symbol – name of the instrument;

Type – [instruments group](#) (forex, cfd, futures, stocks);

Execution is the way of execution of the trading operations (Request, Instant, Market). In the "Instant" mode, the client makes a transaction at once according to the prices in the "Market Watch" window without advance requesting of prices as in the "Request" mode. The "Market" mode is intended for opening an "at-the-market" position (used for futures only);

Filter shows the level in points at which the filtering of quotes will start operating;

Spread – spread in points;

Stops – shows the price range (in points) from the current market price within which one may not apply Stop Loss or Take Profit;

Long / Short – rollover for transferring a position;

Digits – amount of digits after the point in the instrument price;

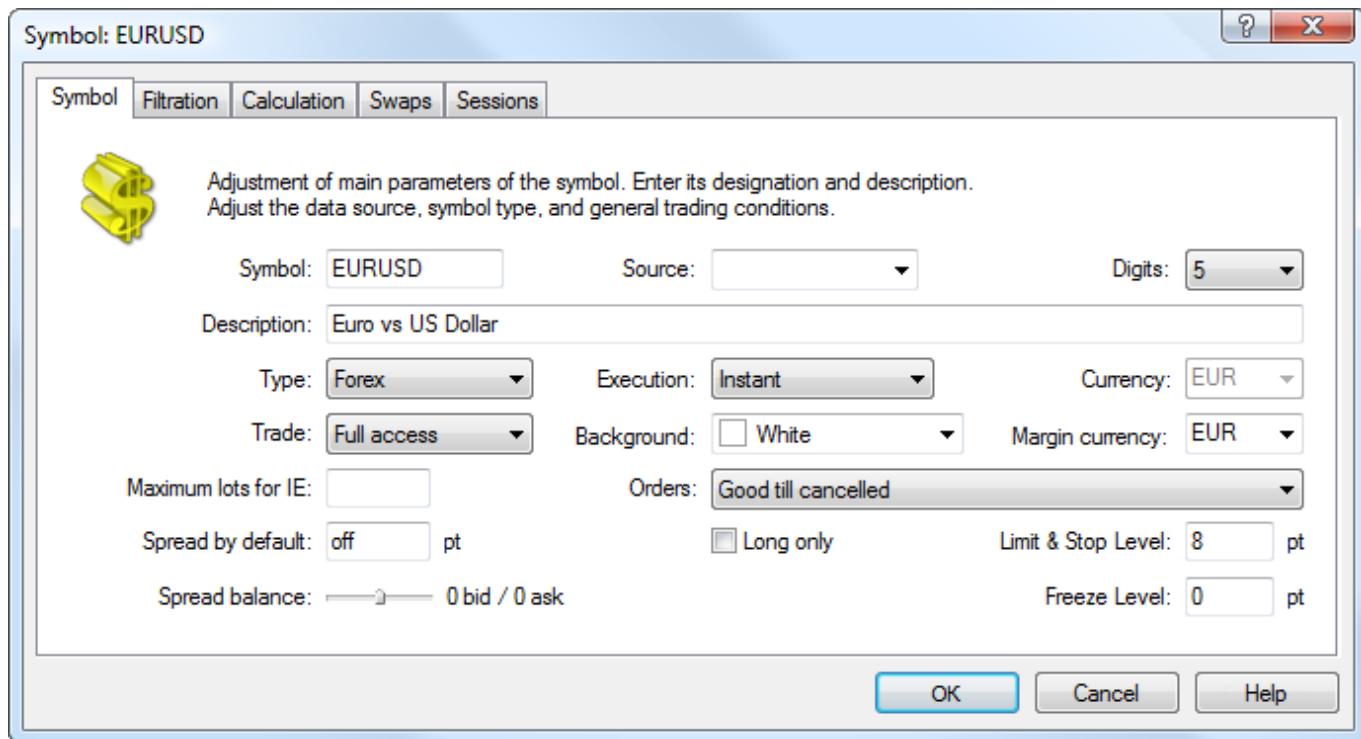
Trade – possibility to deal in the instrument.

Up to 1024 symbols can be created. For creating a new instrument, it is necessary to execute the "Edit – Add" menu command or the same command of the context menu. "Edit – Edit" allows to change settings of the symbols selected, and the "Delete" – command allows to delete them. When adding or adjusting anything, the window with detailed settings of the instrument will appear:

Attention: We highly recommend to perform changing list of financial instruments only on holidays, when

markets are closed.

Financial Instruments Detailed Setting, Symbol Tab



Symbol — short name (symbol) of the instrument, Latin characters only, no punctuation marks, spaces or special characters (".", "-", "&", "#" are allowed). This name of the instrument will be used inside the whole system. One should not use only special characters as a symbol suffix, for example: EURUSD. or EURUSD... The suffix should include also letters, for example: EURUSD.pro;

Source is the synonym of the basic symbol the quotes of which should be used for the current instrument. The name of a real instrument of the system must be given. Note that the quotes will be taken directly from the corresponding symbols in the [data feed](#) (without any transformation according to the settings of the corresponding symbol in the trading platform). After having changed parameter in this field, you should restart server;

Attention: If there are no history data for a symbol, but the "Source" field is filled out, these data will be created after the server restart by automatic copying history data of the symbol specified in the "Source" field.

Digits — the amount of digits after the point in the instrument's quotes;

Description — description of the instrument;

Type — a group type the instrument to be included in (the values are taken from the [Securities](#) section);

Execution is the way of execution of the trading operations (Request, Instant, Market). In the "Instant" mode, the client makes a transaction at once according to the prices in the "Market Watch" window without advance requesting of prices as in the "Request" mode. The "Market" mode is intended for opening an "at-the-market" position (used for futures only);

Currency is calculation currency of the instrument. For the instruments with [Forex profit calculation](#), the currency field denotes the underlying asset. It is always set as the first currency in the pair, and it cannot be changed. The second currency in the pair is used as the profit currency. For the instruments with CFD and

Futures profit calculation, the currency field denotes the underlying assets and the profit currency. For this type of instruments the currency field is editable;

Trade — permission to deal in this instrument: "Full access" allows to close and open positions; "Close only" allows only closing; "No" — full prohibit to trade;

Background — background color of the instrument. This instrument will have the same background color in the "Market Watch" window of the client terminal and the manager terminal;

Margin currency is currency of margin calculation. This field is used when it is necessary to calculate margin requirements for a currency, other than the standard one of a symbol.

Examples of Margin Calculation:

1. On EURUSD for [Contract size](#) equal to EUR100,000 the margin requirements for a client having the deposit currency USD under standard conditions ("Margin currency" field is filled out with "EUR") will be calculated as:

margin = contract_size * price * volume / leverage

I.e. margin = $100000 * 1.2228 * 1 / 100 = \text{USD}1222.8$, where contract_size = 100000, price = 1.2228 (EURUSD price), volume = 1, leverage = 100, respectively.

2. For using margin requirements having [Contract size](#) equal to USD100,000 it is enough to specify USD as a value for the "Margin currency" field. At this, margin requirements will be calculated as:

margin = contract_size * volume / leverage.

I.e. margin = $100000 * 1 / 100 = \text{USD}1000$, where contract size = 100000, volume = 1, leverage = 100, respectively.

"Margin currency" field value does not influence the profit calculations for a position. In both shown examples the profits are calculated for the contract size equal to EUR100,000.

Maximum Lots for IE indicates the size of the maximum permissible lot of the order in the "Instant" mode. All clients' orders having lots exceeding the indicated value will automatically be switched to the request execution mode;

Orders — types of allowed orders:

"Good Till Today including SL/TP" — intraday orders, all pending orders, as well as SL and TP levels of orders are removed when the next trading day starts;

"Good Till Canceled" — hold pending orders at the trading day change;

"Good Till Today excluding SL/TP" — daily orders, at the trading day change, the SL and TP levels are kept, only pending orders are deleted;

Spread by default — the spread of the instrument by default. Spread of instrument groups can be changed in the ["Groups"](#) section;

Long only — only long orders are allowed;

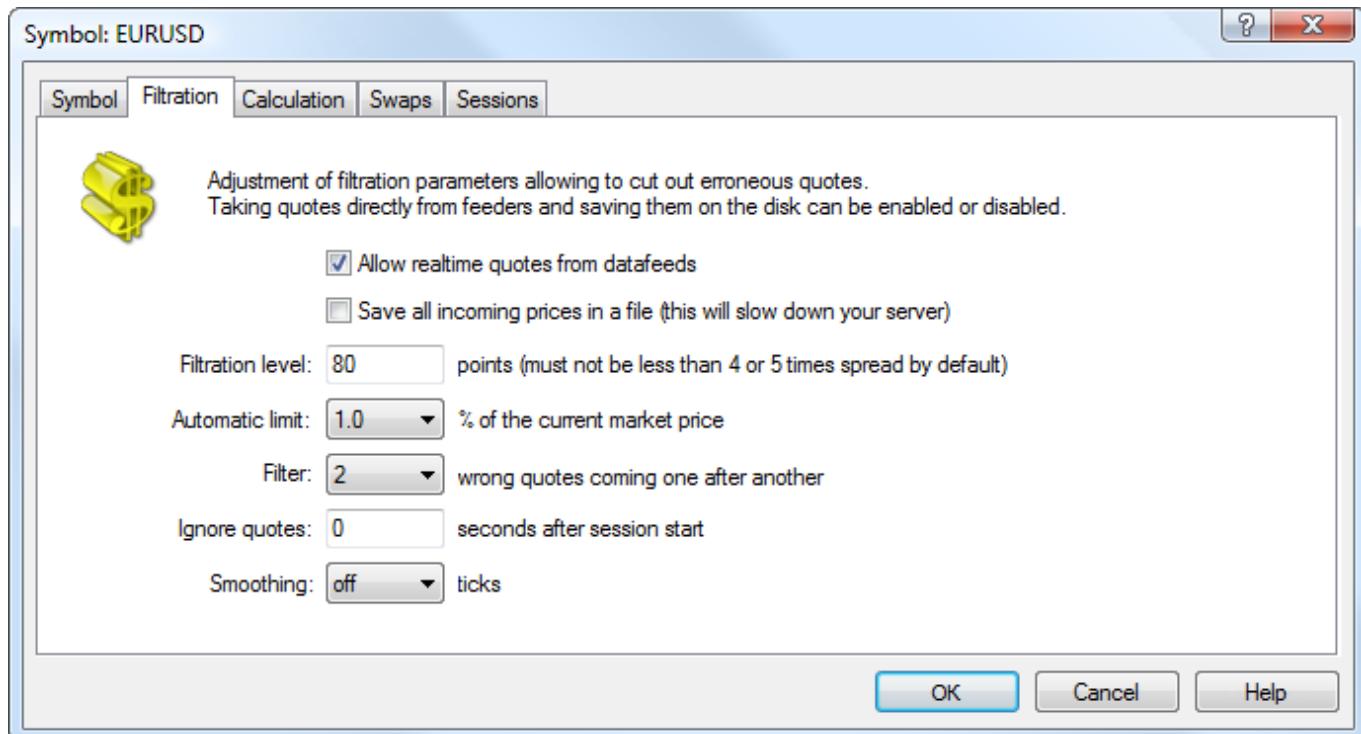
Limit & Stop Level — the price range (in points) from the current market price within which it is not allowed to set Stop Loss, Take Profit, or pending orders. When setting orders within that range, the server will return the "Invalid Stops" message and will not accept the order;

Spread Balance — the balance of spread;

Freeze Level — level for freezing orders that are close to the current price. When an order price is as close to the market price as the value specified here or less than that, its modification or deletion is prohibited. This

limitation is also applied to positions. When current market price is close to a Stop Loss or Take Profit level of a position, modification of these levels is prohibited as well as modification of the position volume and closing of the position.

Financial Instrument Detailed Setting, Filter Tab



Allow Realtime Quotes from Datafeeds – allowing/prohibiting taking realtime quotes for this symbol from datafeeds. If this option is disabled a dealer may throw in the quotes for this symbol manually;

Save all incoming prices in a file – enabling/disabling to save tick prices into the *.dat file.

Attention! This option must be disabled! This option can only be enabled when addition quotes control is needed.

Filtration Level is the level of filtration of incoming quotes in points. You can disable filtration putting 0.

Filtering conditions:

$|Ask - Bid| > \text{filter}$

$|Askcurrent - Askprevious| > \text{filter}$

$|Bidcurrent - Bidprevious| > \text{filter}$

Automatic Limit forms the price range. If a new quote exceeds this range, it will be cut out. The "No" option will disable automatic filtration;

Filter – the amount of quotes needed to confirm a new level (disabling filtering).

Ignore quotes – period in seconds to ignore quotes after session start.

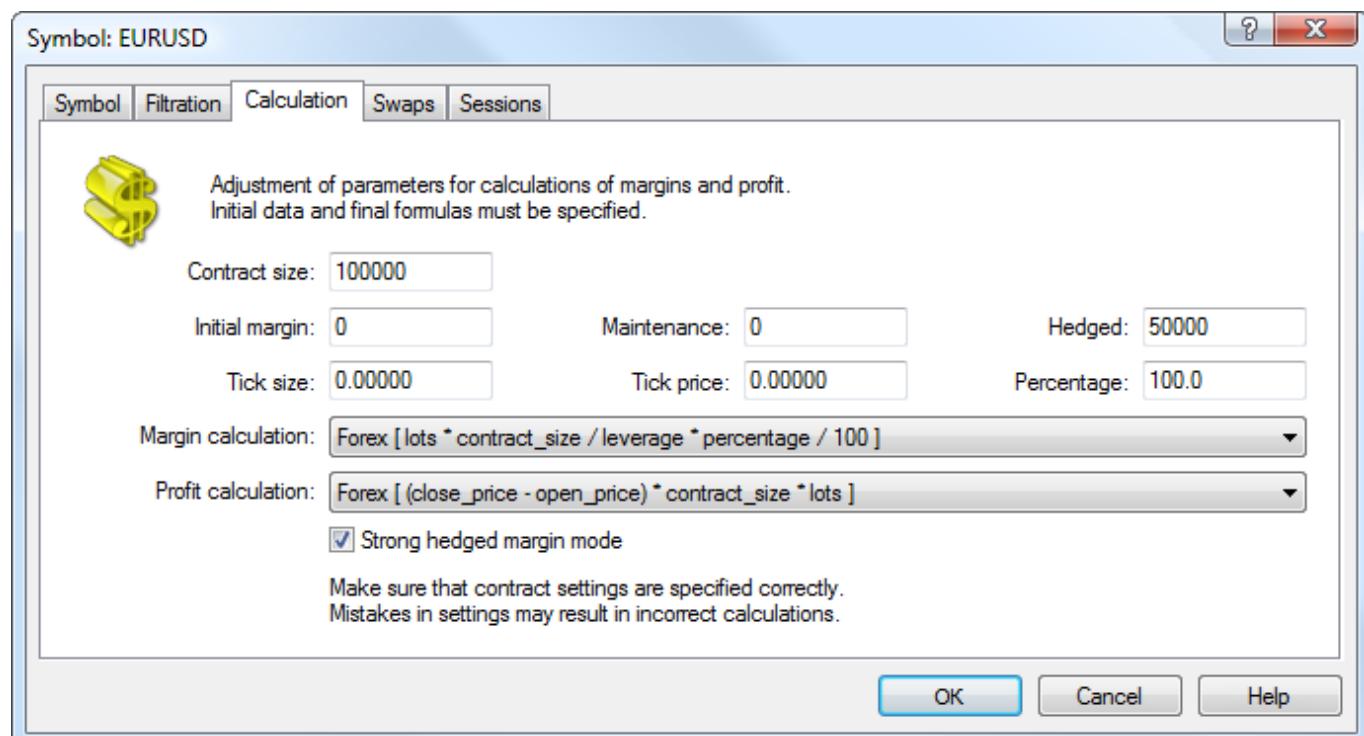
Smoothing – is the parameter of price smoothing in ticks. If this parameter is set, after general filtration incoming prices are smoothed by a weighted moving average.

Example of a smoothing algorithm operation:

1. For EURUSD the smoothing parameter 4 is set.
 2. Last incoming prices for this symbol (before smoothing) are: 1.4536 / 1.4538, 1.4539 / 1.4541, 1.4540 / 1.4542
 3. New price after filtration and spread value changing: 1.4544 / 1.4546.
 4. Calculate the average weighted price, the maximal weight being that of the last quote:
- $\text{SmoothedPrice} = (1.4536*1 + 1.4539*2 + 1.4540*3 + 1.4544*4)/(1+2+3+4) = 1.4541$
5. Calculate a new pair of prices using spread value: 1.4541 / 1.4543.

Attention! Quote smoothing should be used with maximal caution! Use of a large smoothing parameter will result in the delay of prices as compared to a quotes source!

Financial Instrument Detailed Setting, Calculation Tab



Contract size – the size of the contract;

Initial margin – the initial margin (for futures);

Maintenance – the "maintaining" margin (for futures);

Hedged – the "hedged" margin;

Tick size – the tick size (for futures);

Tick Price – the price of a tick (for futures);

Percentage – margin calculation factor, in percentage;

Profit calculation – the formula of profit calculation;

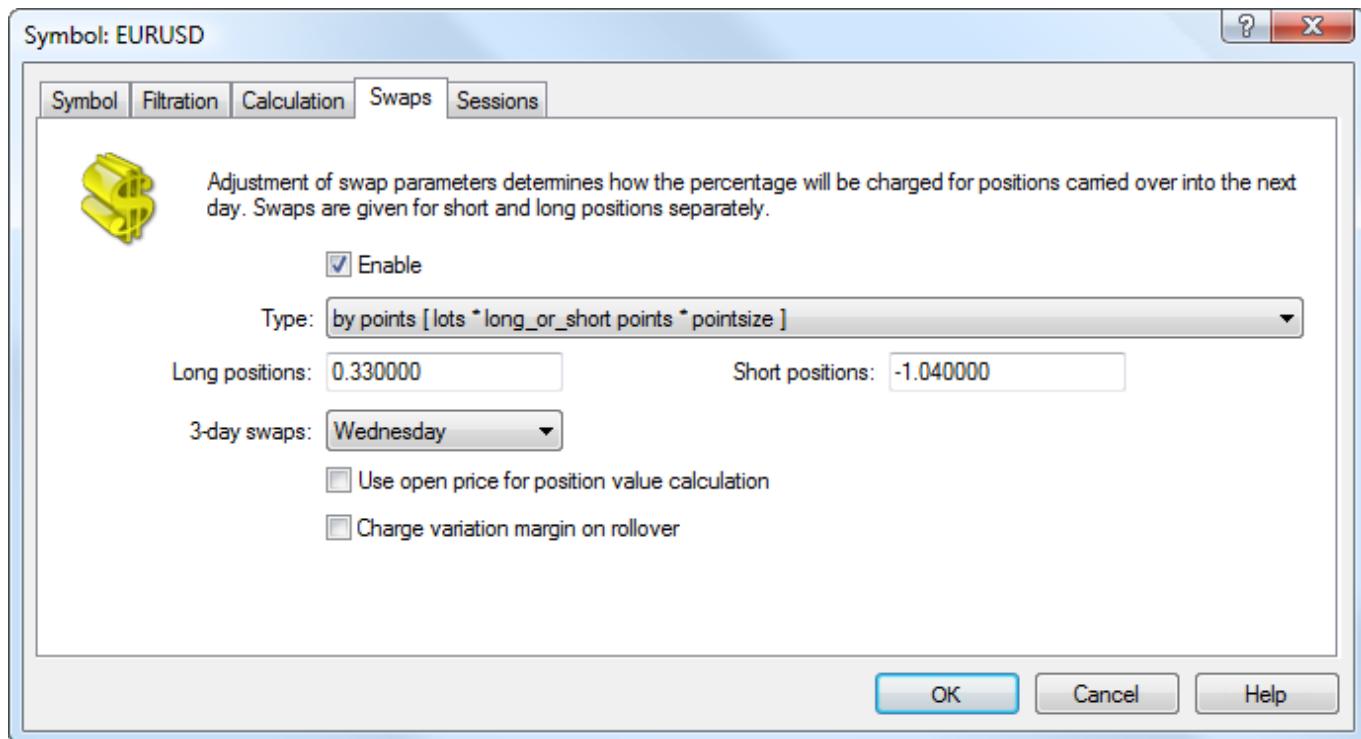
Margin calculation – the formula of margin calculation.

Strong hedged margin mode – strict check of margin requirements when opening a hedge position; when the option is disabled a hedge position can only be opened if free margin remains as non-negative after that

or if margin requirements are reduced after the hedge position has been opened; when the option is enabled opening of a hedge position is only permitted if free margin remains non-negative after that.

Changes in margin settings of a symbol take effect only after restarting the trade server.

Financial Instrument Detailed Setting, Swaps Tab



Enable – enabling/disabling swap calculation for the instrument;

Type – the type of rollover calculation:

by points – swaps are charged in points in the volume specified below for short and long positions. The specified number of points is charged for each lot of a position. Swap size is converted from points to money (deposit currency). To do it, the point size of the corresponding buy position is calculated (regardless of the actual direction of the position).

by money – in [calculation currency](#). The swap size is converted from the base currency into the deposit currency using the average price at the moment of swap charging: (Bid+Ask)/2.

by interest – as annual interest rate. Since swaps are calculated and charged every day at the end of day time, the calculated amount of the annual interest rate is divided by 360. When charging swaps, first the cost of one symbol lot is calculated (the symbol of the opened position), and then the specified percent is calculated, the obtained amount is multiplied by the position volume (in lots) and the result is divided by 360. If the base currency of the symbol is different from the deposit currency, the swap is converted into the deposit currency. The conversion is performed using the average price at the moment of swap charging: (Bid+Ask)/2.

by money in margin currency – in [currency of margin calculation](#). The swap size is converted from the margin currency into the deposit currency using the average price at the moment of swap charging: (Bid+Ask)/2.

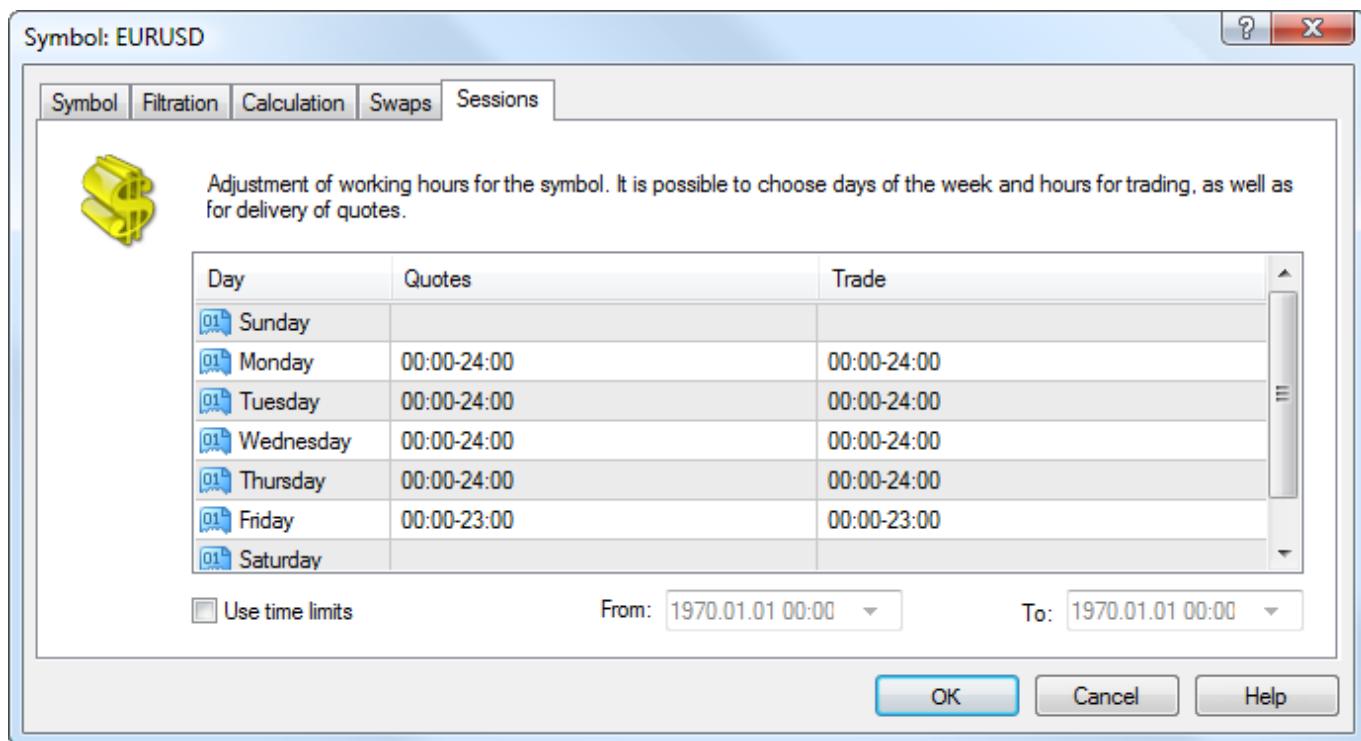
Long & Short positions – rollover values for calculation of long and short positions. The values can be redefined.

3-days swaps — the day of triple swap charge.

Use open price for position value calculation — if this option is enabled the calculation of the position value when charging the swaps in annual interest rates will be performed by the open price of the position (instead of the price at the end of day). This option does not affect the calculation of swaps for Forex symbols ([calculation type is "Forex"](#)).

Charge variation margin on rollover — if this option is enabled then during swap charging of swaps profit of all trade positions for a symbol is recalculated using the current prices, after which the financial result of a position (floating profit + swap) is added or deducted from a client's account in a separate balance operation. After that the position profit and swap are cleared, and the position open price is set equal to the current market price.

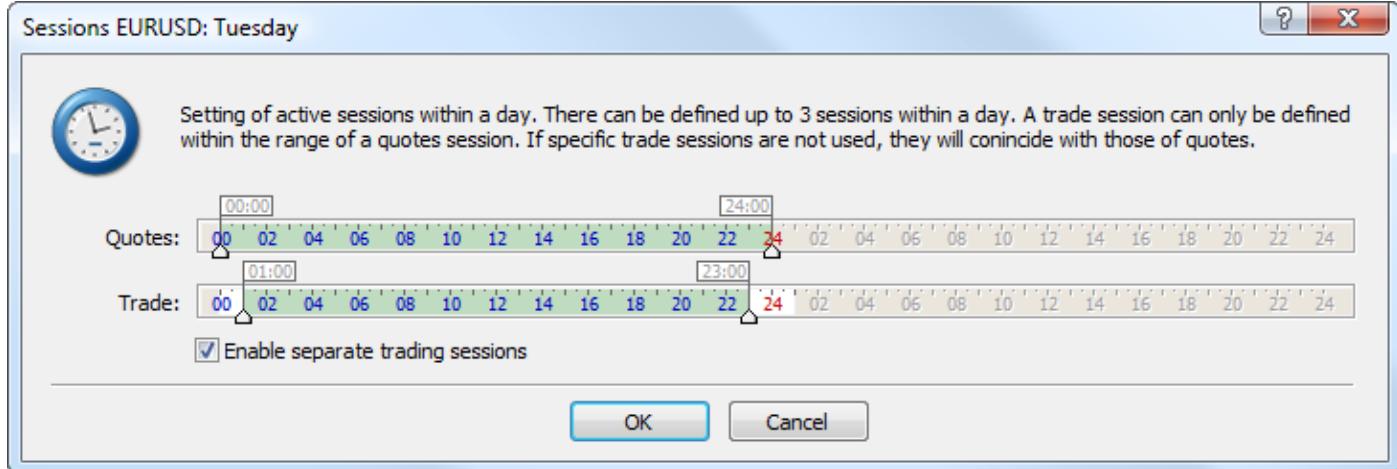
Financial Instrument Operating Time Adjustment, Sessions Tab



The Sessions tab is used for controlling the operating time of a financial instrument on certain days of the week.

To set the allowed trading time for the symbol, enable the "Use time limits" option. Then set the start and end of the period in the "From" and "To" fields. The "Use time limits" option does not affect the ability to transmit quotes for the symbol.

Double-clicking the desired day to adjust the quotes and trade sessions.



In the "Quotes" and "Trade" fields, you can separately adjust time for quotes translation or for the opportunity to trade using the desired instrument. If you need to adjust the different time for quotes translation and trading opportunity you should check the "Enable separate trading sessions" box. You can specify up to three quote and trading sessions for each day. Each trading session must be within the range of quotes session.

Moving the levers that set session start and closing time can be performed both using a mouse and keyboard arrows. If you hold the "Shift" button, their moving will be slowed down. Thus you can adjust the time of sessions within the accuracy of a minute.

Attention: It is highly recommended to perform operations of changing the list of financial instruments on holidays only, when markets are closed.

Holidays

Symbols Import

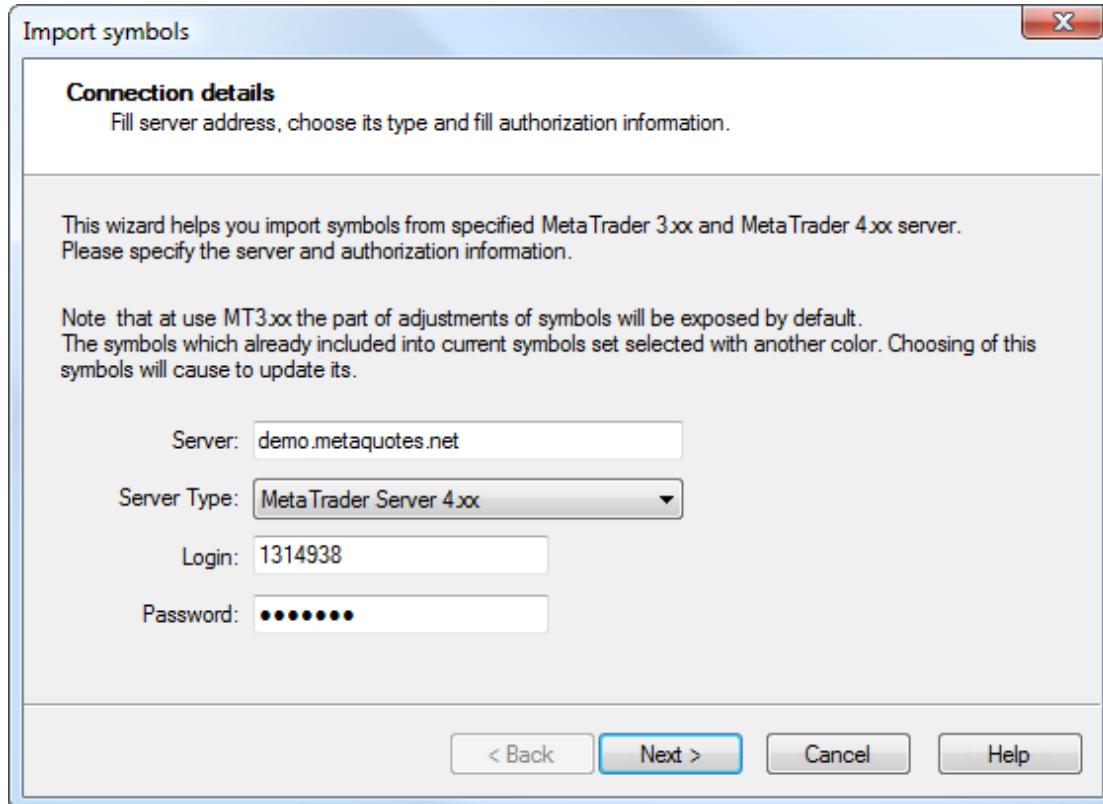
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Symbols Import

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Import is intended for prompt transfer of financial instruments (symbols) from other servers of MetaTrader 3 or MetaTrader 4. It can be useful, for example, when changing MetaTrader 3 for MetaTrader 4, creating a new server or in other similar cases. When importing, not only symbols are transferred, but also [all their settings](#). To start importing an instrument, it is necessary to execute the "Import" context menu command in the "[Symbols](#)" section.



The parameters of connection to the exporting server should be given in this window:

Server – IP address and port of the server from which instruments are imported. It must appear as [IP or server domain] : [port number];

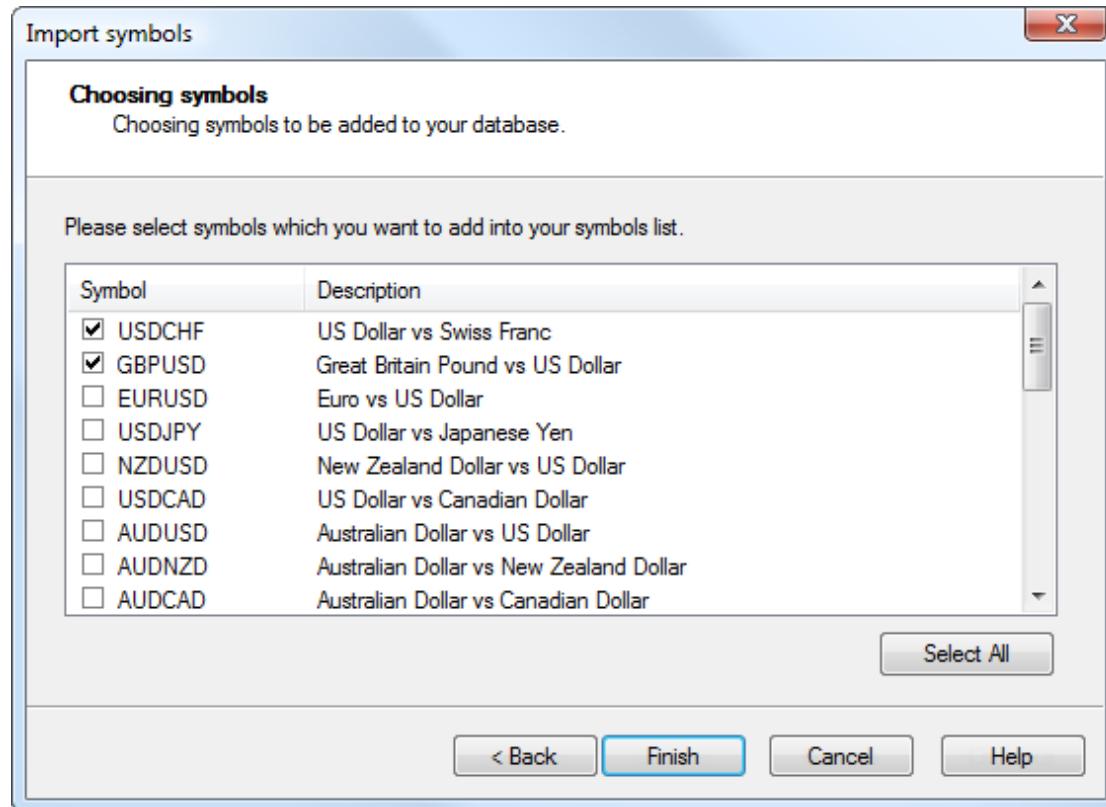
Server Type – type of the server (MetaTrader 3 or MetaTrader 4). It is necessary to know the type of the exporting server exactly since the necessary information is kept differently in different servers;

Login – the account login enabling to connect to the server. Any trader's account is appropriate for importing;

Password – access password.

Note: When importing data from MetaTrader 3, such parameters as [Currency](#), [Background](#) and [Swaps Enable](#) will be set "on default". The matter is that instruments in MetaTrader 3 have less settings than MetaTrader 4.

All desired instruments must be ticked in the following window. "Select All" – select all accessible instruments.



After pressing the "Done" button, the immediate import is performed, and new instruments appear in the "["Symbols"](#)" section. To start operation with imported instruments, it is necessary to restart the server.

Attention:

You may not start operations without checking all imported instruments! Particularly, you should pay attention to: [basic settings](#), [filtering parameters](#), [calculation terms](#), [swaps](#), and [working hours](#)

To start operation with newly imported instruments, it is necessary to restart the server.

You should always check the possibility of delivery quotes for the imported instruments by feeders.

If you try to import an already existing instrument, its parameters will be rewritten. In this case, the server will operate with the changed instrument without restarting.

[Symbols](#)[Margin Calculation](#)

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Margin Calculation

The margin is charged for securing open positions of traders. It is not charged for pending orders.

Generally, the margin for the client's account is calculated as the sum of the margin requirements for all open positions except covered ones. Covered positions are oppositely directed positions opened for a single symbol.

Below are the margin calculation equations for trading symbols according to their type and settings. The final margin is calculated in three stages:

Basic calculation for a certain symbol;

[Conversion of the margin currency into the deposit one](#);

[Multiplying by ratio](#);

[Considering hedged positions](#).

Basic Calculation for a Symbol

If "[Initial margin](#)" parameter value is set in the symbol settings, that value is used for calculation. The equations described in this section are not applied.

The trading platform provides several margin requirement calculation types depending on the financial instrument. You can select the calculation type in Calculation tab ([Margin calculation](#) field):

Forex

The margin for Forex market symbols is calculated using the following equation:

[Volume in lots * Contract size / Leverage](#)

For example, let's calculate the margin requirements for buying one lot of EURUSD, while [the size of one contract](#) is 100 000 and the leverage is 1:100. After placing the appropriate values to the equation, we will obtain the following result:

$$1 * 100\,000 / 100 = 1\,000 \text{ EUR}$$

So, now we have the margin requirements value in [margin currency](#) of the symbol.

CFD

The margin requirements for CFDs and stocks are calculated using the following equation:

[Volume in lots * Contract size * Open market price](#)

For example, let's calculate the margin requirements for buying one lot of oil, the size of the contract is 100 barrels, the current Ask price is 80 USD. After placing the appropriate values to the equation, we will obtain the following result:

$$1 * 100 * 80 = 8\,000 \text{ USD}$$

So, now we have the margin value in margin currency of the symbol.

CFD Leverage

The leverage is also considered in this type of margin requirement calculation for CFDs:

[Volume in lots * Contract size * Open market price / Leverage](#)

CFD Index

For index CFDs, the margin requirements are calculated according to the following equation:

[Volume in lots * Contract size * Open market price * Tick price / Tick size](#)

In this equation, the ratio of [price](#) and [one tick](#) size is considered in addition to a common CFD calculation.

Futures

There are two types of the margin requirements for futures contracts:

Initial margin is the amount that must be available on the account at the moment of attempting to enter the market. Further maintenance of the same sum may not be obligatory.

Maintenance margin is the minimum amount that must be available on the account for maintaining an open position.

Both values are specified in [Calculation](#) tab of the symbol settings. The final size of the margin depends on the volume:

[Volume in lots * Initial margin](#)

[Volume in lots * Maintenance margin](#)

Fixed Margin

If a non-zero value is specified in the "[Initial margin](#)" field of Calculation tab, then no calculations by the above mentioned formulas are performed (except for the calculation of [futures](#)). In this case, for all types of calculations except for Forex and CFD Leverage, the margin is calculated as below:

[Volume in lots * Initial margin](#)

For Forex and CFD Leverage calculation types, the leverage is additionally considered:

[Volume in lots * Initial margin / Leverage](#)

Margin Rate

Percentage parameter is provided in [Calculation](#) tab of the symbol settings. The final size of the margin requirements previously calculated regarding conversion into the deposit currency is multiplied by Percentage/100.

For example, the previously calculated margin for buying one lot of EURUSD is 1 279 USD. This sum is additionally multiplied by Percentage/100. For example, if Percentage is 115, the final margin is $1\ 279 \times 1.15 = 1\ 470.85$ USD.

Converting into Deposit Currency

This stage is common for all calculation types. Conversion of the margin requirements calculated using one of the methods mentioned above is performed in case their currency is different from the [account deposit](#) one.

If conversion is performed for a Forex tool (Margin calculation = Forex):

An ending is derived from a symbol name: the first six characters of the name are considered to be the symbol's main name, while the remaining part is considered to be an ending. For example, for EURUSDmicro pair, the main name is *EURUSD*, while an ending is *micro*.

A conversion currency pair is formed from margin and deposit currencies. An ending (if present) is added to the obtained pair.

If the obtained symbol coincides with the transaction currency pair, the position's open price is used for calculation.

Otherwise, the pair for direct conversion is sought. For example, if position is opened at EURJPYmicro, while USD is the deposit currency, the search for EURUSDMicro is conducted.

If such a pair is found, conversion is performed at an average pair's price at the time of conversion: (Bid + Ask)/2.

If such a symbol is not found, an attempt to convert using USD is made. Suppose that we have a position at EURJPY, while the deposit currency is TRY. If the server has no EURTRY symbol, two symbols (EURUSD and USDTry) are used for conversion. Thus, the conversion is performed in two stages. At each stage, the average price of an appropriate pair at the time of conversion is used: (Bid + Ask)/2.

The presence of an ending is considered when searching for symbols. If a symbol with an open position has an ending, only the symbols with the same ending are used for conversion.

Conversion for other instrument types:

A conversion currency pair is formed from margin and deposit currencies.

The pair for direct conversion is sought. For example, if position is opened at GOLD with USD margin currency, while EUR is the deposit currency, the search for EURUSD pair is conducted.

If such a pair is found, conversion is performed at an average pair's price at the time of conversion: (Bid + Ask)/2.

If such a symbol is not found, an attempt to convert using USD is made. Suppose that we have a position at #LKOH. The margin currency is RUR, while the deposit currency is EUR. If the server has no EURRUR, two symbols (EURUSD and USDRUR) are used for conversion. Thus, the conversion is performed in two stages. At each stage, the average price of an appropriate pair at the time of conversion is used: (Bid + Ask)/2.

Only symbols with the Forex calculation type can be used for conversion. For example, if you have the EURTRY symbol with the Futures calculation type, the platform will not be able to use its prices to convert EUR to TRY.

Hedged margin

Hedged (covered) positions are the ones opened at the same instrument, but in different directions. The margin for such positions can be calculated in two ways. The calculation method is defined by "[Calculate hedged margin using larger leg](#)" option.

If the option is disabled (basic calculation)

For each covered lot of a position, the margin is charged according to the value specified in [Hedged](#) field of the symbol settings.

If the [initial margin](#) is set for the symbol, the hedged margin is displayed as an absolute value (in monetary value).

If the initial margin is not set (equal to 0), the contract size is specified in Hedged field. The margin is calculated by the formula corresponding to the instrument type using the specified contract size. For example, there are two positions – Buy EURUSD 1 lot and Sell EURUSD 1 lot, the contract size is 100 000. If 50 000 is set in Hedged field, the margin is charged for both positions as for 1 lot. If it is set to 0, no margin is charged for the covered volume.

If position open price is used in the margin calculation (for example, for CFD), the average open price is used

for calculating the margin for covered positions: (Buy open price + Sell open price) / 2.

If the option is enabled (using the larger leg)

If "Calculate hedged margin using larger leg" is enabled, the calculation is performed as follows:

The volume of all short and long positions for a symbol is calculated.

A weighted average open price and a weighted average price of conversion to the deposit currency are calculated for each leg.

Then, the margin for short and long legs is calculated using the formulas described above for each symbol type.

The biggest value is used as a total one.

Let's consider the following example. We have 3 positions on EURUSD:

Buy 2 lot EURUSD at 1.38905

Buy 2 lot EURUSD at 1.38605

Sell 2 lot EURUSD at 1.38986

Sell 1 lot EURUSD at 1.38995

The long leg volume is 4 lots. The short leg volume is 3 lots. The open price is not considered when calculating the margin for Forex symbols. Suppose that the contract size is 100 000, the leverage is 1:100. Now, let's calculate the margin:

Margin for the long leg = $4 * 100\ 000 / 100 = 4\ 000$

Margin for the short leg = $3 * 100\ 000 / 100 = 3\ 000$

The total margin value is 4 000.

Checking Margin

The margin is checked in the following cases:

1. When a trader places an order for opening a market position.
2. Additionally, after an order is confirmed for brokers, in case "["Do not check free margin after dealer's answer"](#)" option is disabled for the group in the symbol settings. It is recommended that you enable this option if orders are sent to an external trading system.
3. For pending orders, the margin is checked at the order's activation. If a trader has insufficient funds for opening a position at the moment the pending order is activated, and processing is performed automatically by a server or manager terminal, the pending order is removed. The relevant message is added to the order and the server journal.

Check rules:

1. After an appropriate operation (order) is performed (executed), the trader's free margin considering the [virtual credit](#) should not be negative (it should exceed or be equal to 0).
2. After executing an order, which is opposite to the present position (closing or reversal), the margin should not increase. In fact, it means that a trader can close his or her position or reverse it considering

available funds under any circumstances. This rule is applied only if "[Strong hedged margin mode](#)" option is disabled in the symbol settings.

If strong margin check is disabled, the system will allow placing an order if any of the rules is met. If the trader has enough free margin (1), it does not matter if the margin will increase or not (2) – the system will allow placing an order.

If strong margin check is enabled, the only criterion for placing an order is the availability of the required free margin.

[Symbols Import](#)

[Swap Calculation](#)

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Swap Calculation

Three main swap calculation types are implemented in the trading platform. You can select one of the calculation types in "[Rollover mode](#)" field of the common settings section:

Normal

Reopen by close price

Reopen by bid

In Normal mode, client positions remain unchanged, while swap is charged in the special position field and displayed on the balance after the position is closed. In case of partial closing, the swap is proportionally charged for the balance.

In the modes with reopening at [the end of a trading day](#), the current positions are closed and the new ones are opened at the closing price or at the current Bid price at the moment of rollover. The open price is additionally corrected by the value specified in the [symbol swap settings](#).

When using the reopen rollover mode, charging of swaps in points must be selected in the symbol settings.

During the configuration, the swap size is specified for 1 lot position.

Charging of swaps may be disabled for client groups using "[Enable charge of swaps](#)" option.

Swap Charging Time

Swaps are charged at the end of a trading day. Trading day end time is defined in "[End of day time](#)" field of the common settings section:

End of the day – daily reports for the previous day are first generated, swaps are charged afterwards.

Beginning of the day – swaps are charged first, reports are generated afterwards.

This option also affects the time of newly opened positions when charging swaps by reopening:

End of the day – trading day end time is set as a position opening time.

Beginning of the day – beginning of the next trading session is set as a position opening time. Suppose that the end of a trading day is set to 23:59, while trading sessions continue from 00:00 to 24:00 on weekdays.

When a trading day is closed on Thursday, positions are reopened in 00:00 on Friday. When a trading day is closed on Friday, positions are reopened in 00:00 on Saturday, though 00:00 of Monday is specified as the opening time for such positions.

Swaps are not charged on Saturdays and Sundays (if the end of day time falls on one of these days).

Redefining Swap Settings for Groups

Symbol swap settings can be re-defined for separate client groups. To do that, add the swap configuration on [group's Symbols](#) tab and set new values for the margin by short and long positions.

Swap with Reopening

At the moment of the rollover, positions are closed at the current price and the new ones are opened at the closing price or at the current Bid price. The open price is additionally corrected by the value specified in the symbol swap settings. Suppose that value of 2 is set for long positions. If a position was closed at 1.39805 during the rollover, it is reopened at 1.39807.

If the swap value exceeds one, the number of decimal places in the price, at which the position is reopened, is increased accordingly. For example, the value of 0.33 is set for long positions. If the position was closed at 1.39805, the reopening price is 1.3980533.

Swap in Points

Swap in points is calculated using the following formula:

$$\text{Volume in lots} * \text{Swap size} * \text{Point price}$$

Depending on the position direction, the swap size is taken from "Long positions" or "Short positions" field. The price of a single point is defined as the profit received when a price changes by one point. Calculation (including conversion to the deposit currency) is performed according to [profit calculation types by symbol](#). Calculation is performed the same way as for 1 point of a long position with the volume of 1 lot.

Swap in Base Currency and Margin Calculation Currency

When "by money" option is selected, absolute swap values for positions having appropriate direction are specified in "Long positions" and "Short positions" fields. The values are specified in the symbol's [base currency](#).

When "by money in margin currency" option is selected, absolute swap values for positions having appropriate direction are also specified in "Long positions" and "Short positions" fields. In that case, the values are specified in the [symbol margin currency](#).

If the swap currency is different from the client's [deposit currency](#), it is converted according to the following rules:

An ending is derived from a symbol name: the first six characters of the name are considered to be the symbol's main name, while the remaining part is considered to be an ending. For example, for EURUSDmicro pair, the main name is *EURUSD*, while an ending is *micro*.

A conversion currency pair is formed from swap and deposit currencies. An ending (if present) is added to the obtained pair.

The pair for direct conversion is sought. For example, if a swap is calculated for USDJPYmicro deal, while EUR is the deposit currency, the search for EURJPYmicro is conducted.

If such a pair is found, conversion is performed at an average pair's price at the time of conversion: (Bid + Ask)/2.

If such a symbol is not found, an attempt to convert using USD is made. Suppose that swap is calculated in RUR, while the deposit currency - in EUR. If the server has no EURRUR, two symbols (EURUSD and USDRUR) are used for conversion. Thus, the conversion is performed in two stages. At each stage, the average price of an appropriate pair at the time of conversion is used: (Bid + Ask)/2.

The presence of an ending is considered when searching for symbols. If a symbol with an open position has an ending, only the symbols with the same ending are used for conversion.

Swap in Percentage Value

If the swap is charged as a percentage value per annum, percentage share of the position price is specified in "Long positions" and "Short positions" fields. The calculation is performed the following way:

The price of position's single lot in base currency is defined.

If a base currency is different from the deposit one, 1 lot price is converted according to the rules described [above](#).

The value is multiplied by the position volume

The percentage defined in "Long positions" or "Short positions" field is taken from the obtained value.

The obtained value is divided by 360 (number of days in a banking year), since the swap is charged daily.

The price of 1 lot of a Forex symbol is defined by the contract size specified in the base currency. For example, price of 1 lot of EURUSD with the contract size 100 000 is 100 000 EUR.

The method of defining the price of 1 lot of the symbols belonging to other types depends on "[Use open price for position value calculation](#)" option in the symbol swap settings:

If the option is disabled: Contract size * Current price

If the option is enabled: Contract size * Open price

For Futures symbols, the obtained value is additionally multiplied by [Tick price](#) / [Tick size](#).

Three-Days Swap

The [3-days swap](#), i.e. the weekday to calculate the threefold swap, is set in the symbol swap settings. The 3-days swap is used for deals, the payments for which fall on weekends. For example, Wednesday is the threefold swap day for spot Forex deals (settled at the second business day after the transaction). On this day, the swap for Thursday, Saturday and Sunday is charged (the market is closed on the latter two days).

Charging Variation Margin

"[Charge variation margin on rollover](#)" option is available in the symbol swap settings. When enabled, profit of client positions is calculated at the end of a trading day, as if they were closed at the current market price. The calculated profit is deposited to the client accounts as a separate balance operation. The current market price is specified as the open price of these positions.

In fact, this operation allows you to forcibly fix the current profits/losses of client positions every day.

[Margin Calculation](#)

[Profit Calculation](#)

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Calculation of Profit

For various types of trading instruments, the profit is calculated differently. The final profit is calculated in two stages:

Basic calculation for a symbol;

Conversion of the profit currency into the deposit one.

Basic Calculation for a Symbol

The trading platform provides five types of profit calculation depending on the financial instrument. You can select the calculation type in Calculation tab ("Profit calculation" field).

When calculating the profit, mathematical rounding by the number of decimal places in client's deposit currency is applied. Rounding is designated by Normalize() function in the formulas described below.

Forex

Profit from Buy deals (when performing the opposite operations) at Forex symbols is calculated using the following formula:

`Normalize(Close price * Contract size * Volume in lots) – Normalize(Open price * Contract size * Volume in lots)`

For Sell deals, Open and Close prices switch places in the formula:

`Normalize(Open price * Contract size * Volume in lots) – Normalize(Close price * Contract size * Volume in lots)`

Let's consider closing a Buy position for 1 lot of EURUSD. The position was opened at 1.2000. The price at the closing moment is 1.2050. The contract size is 100 000. After placing these values to the formula, we obtain the following result:

`Normalize(1.2050 * 100 000 * 1) – Normalize(1.2000 * 100 000 * 1) = 500 USD`

So, now we have the profit value in profit currency of the symbol.

CFD

Profit from Buy deals (when performing the opposite operations) at Forex, CFD and Stocks symbols is calculated using the following formula:

`Normalize((Close price – Open price) * Contract size * Volume in lots)`

For Sell deals, Open and Close prices switch places in the formula:

`Normalize((Open price – Close price) * Contract size * Volume in lots)`

Let's consider closing a Buy position for 1 lot of EURUSD. The position was opened at 1.2000. The price at the closing moment is 1.2050. The contract size is 100 000. After placing these values to the formula, we obtain the following result:

`Normalize(1.2050 * 100 000 * 1) – Normalize(1.2000 * 100 000 * 1) = 500 USD`

So, now we have the profit value in profit currency of the symbol.

Futures

Buy deals profit for futures is calculated using the following formula:

`Normalize((Close price – Open price) * Volume in lots * Tick price / Tick size)`

For Sell deals, Open and Close prices also switch places in the formula:

Normalize((Open price – Close price) * Volume in lots * Tick price / Tick size)

Correlation between the [price](#) and one tick [size](#) is considered when calculating profit for futures deals.

Converting into Deposit Currency

Calculated profit conversion is performed if a profit currency is different from the account's [deposit currency](#).

Forex

First, it is checked if a trade symbol can be used for conversion. If yes, the current price is used for conversion: Bid – for Buy positions, Ask – for Sell ones.

Otherwise, an ending is derived from a position symbol name: the first six characters of the name are considered to be the symbol's main name, while the remaining part is considered to be an ending. For example, for EURUSDmicro pair, the main name is *EURUSD*, while an ending is *micro*.

A conversion currency pair is formed from profit and deposit currencies. An ending (if present) is added to the obtained pair.

The pair for direct conversion is sought. For example, if a profit is calculated for USDJPYmicro deal, while EUR is the deposit currency, the search for EURJPYmicro is conducted.

If the pair is found, conversion is performed by Bid price for Buy positions or Ask price - for Sell ones.

If such a symbol is not found, an attempt to convert using USD is made. Suppose that profit is calculated in RUR, while the deposit currency - in EUR. If the server has no EURRUR, two symbols (EURUSD and USDRUR) are used for conversion. Thus, the conversion is performed in two stages. Either Bid (if profit is calculated for Buy positions), or Ask price (for Sell positions) is used for both stages.

The presence of an ending is considered when searching for symbols. If a symbol with an open position has an ending, only the symbols with the same ending are used for conversion.

CFD and Futures

At the start of the conversion, the search for a Forex symbol (symbol of Forex calculation type) with the base and quoted currency coinciding with the profit and deposit one is performed. For example, USDCHF symbol is used to convert USD to CHF.

If such a symbol is found, its current Bid price is used.

If there is no such a symbol, the attempt is made to convert via USD. Suppose that the profit currency is XYZ, while the deposit one is ABC. If the server has no XYZABC or ABCXYZ symbol, two symbols (XYZUSD and ABCUSD) are used for conversion. Thus, the conversion is performed in two stages. Either Bid (if profit is calculated for Buy positions), or Ask price (for Sell positions) is used for both stages.

If conversion using USD is also impossible (no symbols), the profit is equal to zero.

Only symbols with the Forex calculation type can be used for conversion. For example, if you have the EURTRY symbol with the Futures calculation type, the platform will not be able to use its prices to convert EUR to TRY.

Groups

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All users of the system are divided into groups. There are no users on the server who would not belong to a group. Up to 512 groups can be created. Initially, the system has some pre-defined groups having certain rights:

manager – manager accounts (the largest possible rights in the system);

demoforex – demo accounts;

The screenshot shows the 'Groups' section of the MetaTrader 4 Administrator interface. On the left is a tree view of the administrator settings, with 'Groups' selected. The main area is a table listing user groups. A context menu is open over the first row ('manager'). The menu includes standard operations like 'Add...', 'Edit...', 'Delete', and 'Move Up/Down'. It also includes 'Find...' and 'Find Next' for navigating the list, and 'Auto Arrange' for sorting the table.

| Name | Company | MC / SO | Securities |
|------------|---------|---------|------------------------------|
| manager | M | / 0 % | Forex, Indexes, CFD, Futures |
| demoforex | M | / 30 % | Forex, Indexes, CFD, Futures |
| demoforex1 | M | / 30 % | Forex, Indexes, CFD, Futures |
| demoforex2 | M | / 30 % | Forex, Indexes, CFD, Futures |
| demoforex3 | M | / 30 % | Forex, Indexes, CFD, Futures |
| demoforex4 | M | / 30 % | Forex, Indexes, CFD, Futures |
| demoforex5 | M | / 30 % | Forex, Indexes, CFD, Futures |
| demoforex6 | M | / 30 % | Forex, Indexes, CFD, Futures |
| demoforex7 | M | / 30 % | Forex, Indexes, CFD, Futures |
| demoforex8 | M | / 30 % | Forex, Indexes, CFD, Futures |

Name is the unique user group name;

Company is the name of the company servicing the group;

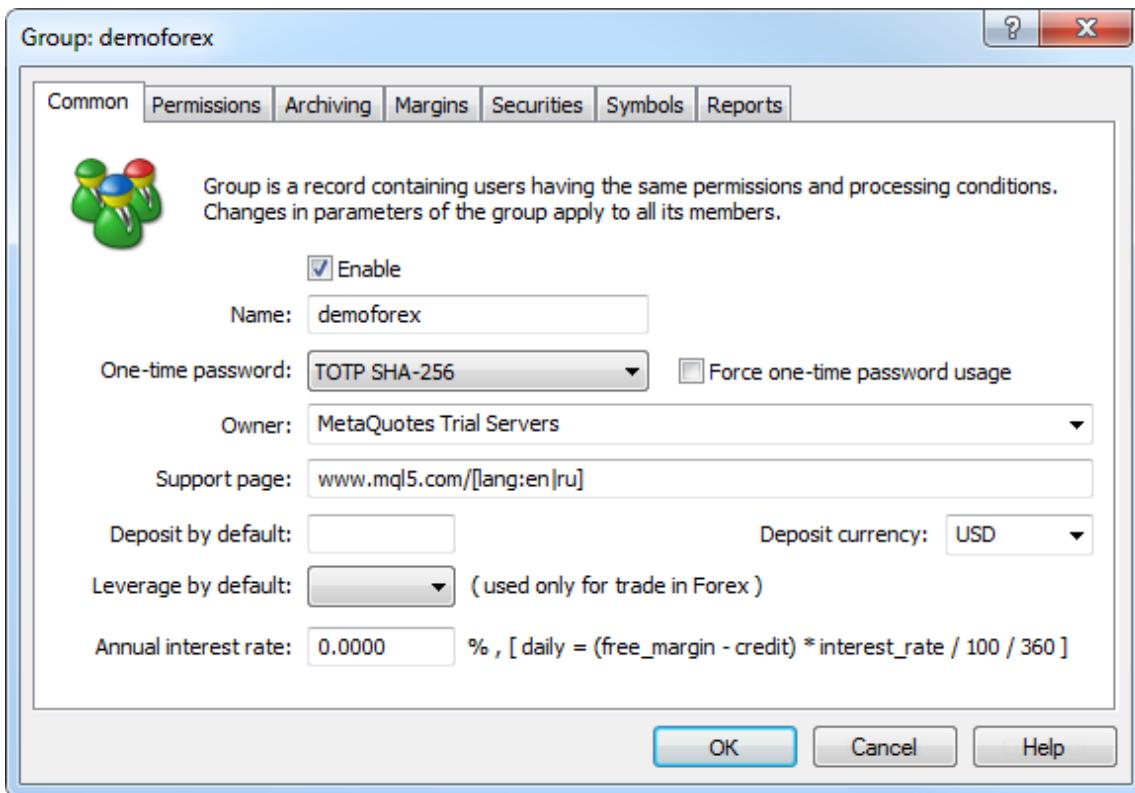
MC/SO are the Margin Call and Stop Out levels;

Securities is the list of securities that are available to the group.

The context menu commands "Add" and "Edit", the same commands of the "Edit" menu, and buttons like and of the toolbar activate window of detailed user group settings. And the "Delete" command and the button delete user group if there are no accounts in it. The "Move Up" and "Move Down" commands allow to move different user groups in the list without changing their properties.

User Group Detailed Setting in the Common Tab

When a group has been added or changed, a setup window will open:



Enable – enable/disable a group. Using this option, you can easily manage groups. For example, after the contest has been finished, you can just disable the "contest" group. Starting the next contest, you can enable it again;

Name is the unique user group name (Latin letters, no spaces or "*" characters). It is recommended to give some reasonable names to the groups (e.g., forex) as traders will see them in the "Account Type" field on the client terminal;

One-time password – use of OTP (one-time password) provides an additional level of security when working with trading accounts. The user is required to enter a unique one-time password every time to connect to an account. One-time passwords are generated in the [mobile terminal for iPhone](#) and the [mobile terminal for Android](#). This option allows to disable the use of OTP or enable OTP using a standard generator TOTP SHA-256. The use of OTP can be [disabled for certain clients](#) in the group.

Force one-time password usage – in some countries, regulators require use of additional account security measures, such as the use of OTP. When this option is enabled, all clients in this group have to use one-time passwords to connect. Otherwise, clients can either use the default authentication method via login and password, or additionally bind their accounts to an OTP generator.

Before you force OTP usage, please inform your clients. Be extremely careful when enabling this option for the only one manager group on the trading server.

The instructions for using one-time password are provide in the client terminal user guide.

One-time passwords are available only for client accounts in desktop and mobile terminals. OTP authorization is currently not available for the manager and administrator terminals as well as for webterminals.

Owner is the name of the company (or of the Introducing Broker of the company) servicing the group. This information is available for traders in the terminal and when reports are being generated;

Support page is an address of the website of the technical support team. The specified page will be displayed in the "Company" tab of the "Toolbox" window in the client terminals. If the address is not specified,

that tab will be hidden.

When specifying the address, one can use macros that are replaced on the client terminal side forming the final address:

[lang:en|rules|..] – list of languages in ISO 639-1 format. If one of the languages in the list matches the one of the client terminal's interface, the latter one is used. Otherwise, the first one from the list is applied. Example: www.broker-support-site.com/[lang:en|rules|cn]/.

[login] – client's current login.

[uniq] – unique ID of the client's PC.

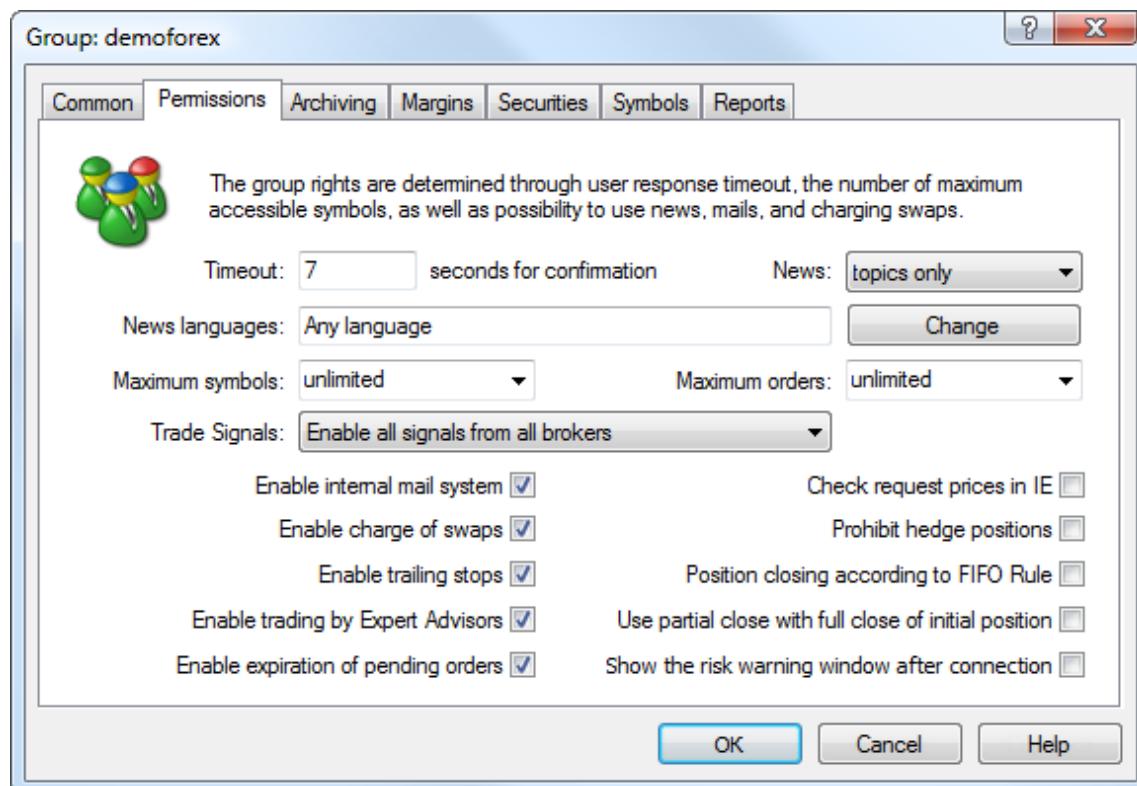
Deposit by default means the deposit by default. This option is used only by opening demo accounts. If a definite value is given, all demo accounts to be opened will have the indicated deposit;

Deposit Currency means the deposit currency by default. Latin characters only, no punctuation marks, spaces or special characters. This option cannot be changed when the server is operating provided at least one client is included into the group;

Leverage by default is the leverage by default. This option is used only by opening demo accounts. If a definite value is given, all demo accounts to be opened will have the indicated leverage;

Annual Interest Rate interest rate to be calculated for free margin (annual interest);

User Group Detailed Setting in the Permissions Tab



Timeout contains the time period within which the user's response can be waited for. The recommended value is 7 seconds (2 seconds - for network deference + 5 seconds for client to think over);

News enables news mode (disable – disables news delivery; topics only – allows to show only topics; full package – enables to deliver all news completely);

News languages — select the language of news that will be broadcast to the clients in this group. To [set up languages](#) click "Change".

Maximum symbols — the available symbol list limitation. Clients will only be allowed to operate with indicated amount of instruments (symbols);

Maximum orders — the maximum amount of both open positions and pending orders for the account of this group;

Trade signals — allow/prohibit using the "[Signals](#)" service in the client terminals.

Disabled — if this option is selected, the signal settings (the "Options" window) and the signal list (the "Toolbox" window) are hidden in client terminals connected using the accounts from this group. Users will not be able to subscribe to any signals both from the terminal and via www.mql5.com.

Enable all signals from all brokers — this option allows using the "[Signals](#)" service in trading terminals without limitations.

Enable signals from my servers only — if this option is selected, clients in this group will be able to subscribe only to the signals created on the basis of accounts opened in your brokerage company (broker name in a signal must match the "Owner" field in the group settings). Signals created on the basis of other accounts will not be displayed in the client terminals.

Enable internal mail system — enable/disable clients' access to the internal mail system;

Enable charge of swaps — enable/disable charging swaps and interests for free margins of the account;

Enable trading by Expert Advisors — enable/disable trading by Expert Advisors;

Enable expiration of pending orders — enable/disable expiration time of pending orders in client terminals;

Enable trailing stops — enable/disable using of trailing stops;

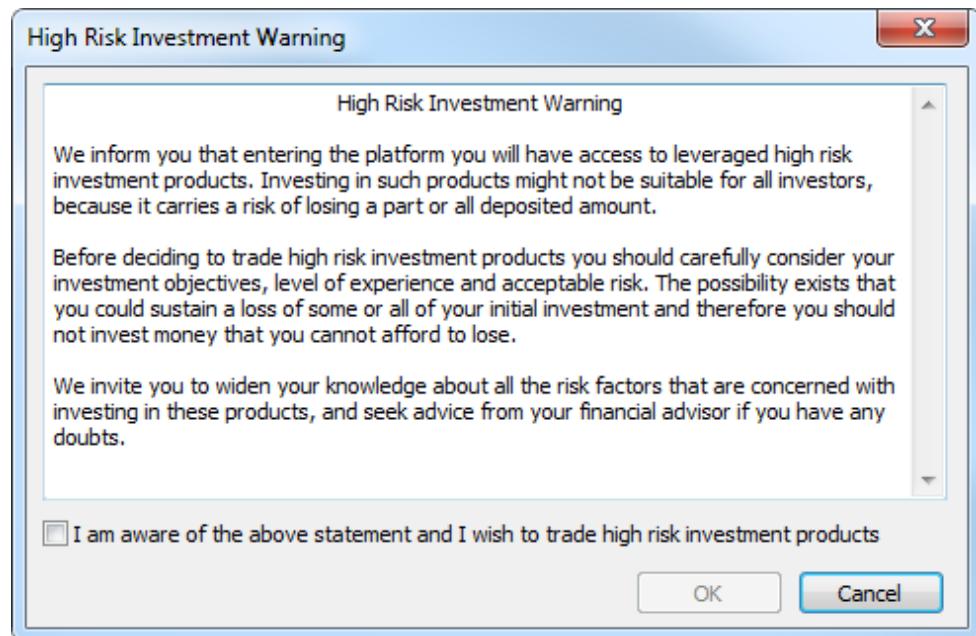
Check request prices in IE — check client's request prices by symbols in Instant Execution mode for presence in the quotes stream from datafeeds;

Prohibit hedge positions — enabling this option prohibits all accounts in the group to have open opposite positions on one symbol at the same time;

Position closing according to FIFO rule — enables/disables the mode of closing positions in accordance with the FIFO rule. If this option is enabled, it is allowed to close positions by each symbol only in the same order as they were opened. Enabling this option also forces enabling the "Prohibit hedge positions" option. More detailed description of the FIFO rule is given in the article: "[NFA and FIFO: Deliberation about NFA Compliance Rule 2-43\(b\)](#)".

Use partial close with full close initial position — enable/disable partial closure mode with full closing of initial position. If this option is disabled, during partial position closing its remaining part is closed too and then reopened with the new volume at the same price. If this option is enabled, the remaining part is reopened at a current price.

Show the risk warning window after connection — if this option is enabled, when a client connects in the trading terminal, a warning about the risks associated with operations on the financial markets appears. Trade operations on a client's account are not allowed until the client confirms that he or she has read the warning and is aware of the risks. To confirm, the client should check "I am aware of the risks and I wish to trade high risk investment products". This warning is displayed once per session of the terminal. The next time it will appear after the restart of the terminal.

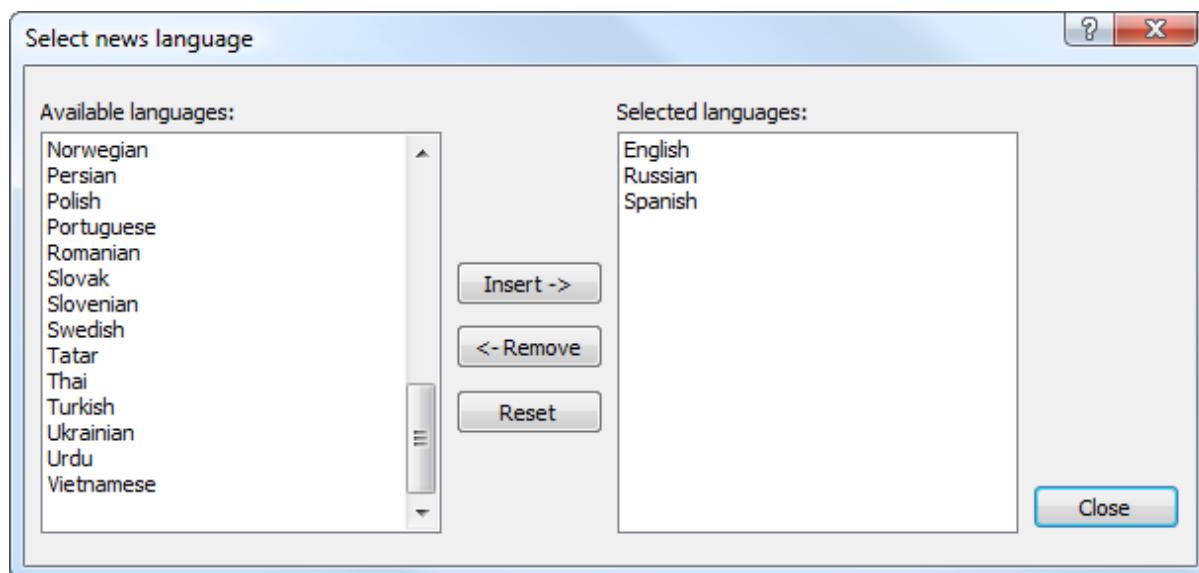


The risk warning is not displayed for [demo accounts](#).

Selecting News Language

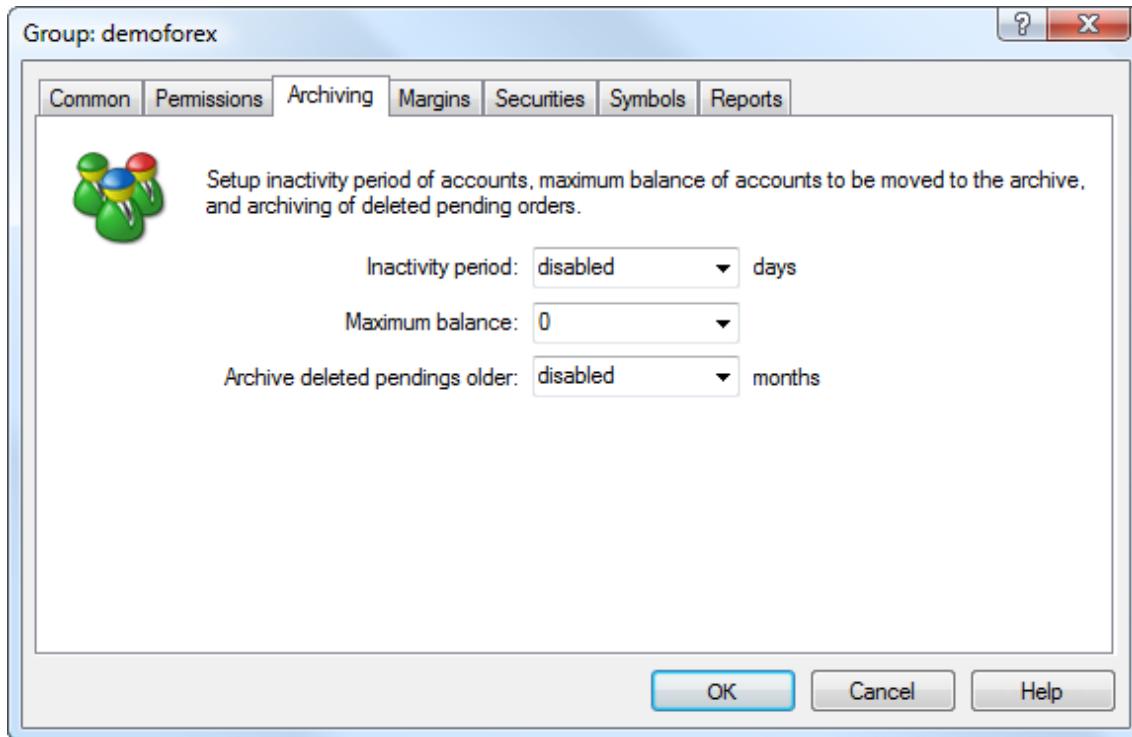
News sent to the clients from a particular group can be filtered. The language parameter is assigned to news in accordance with the [settings of the data feed](#) that translates the news. Also, the language news can be set when sending the news from the manager terminal.

The default parameter "Any Language" is set to the group. This means that the news for the client group will not be filtered by their language. To specify one or more news languages for the group of clients, click "Change" near the "News language" field.



To select a language, move it from the left part of the window to the right one using the mouse or the corresponding buttons. Up eight languages can be selected. If more than eight languages are selected, the "Any Language" parameter is automatically set.

User Group Detailed Setting in the Archiving Tab



Inactivity period — inactivity period (time elapsed after the latest connection, in days), after its expiration the account and its trade positions will be moved to the archive (minimum permissible value is 90 days);

Maximum balance — the highest balance value for accounts to be moved to the archive database;

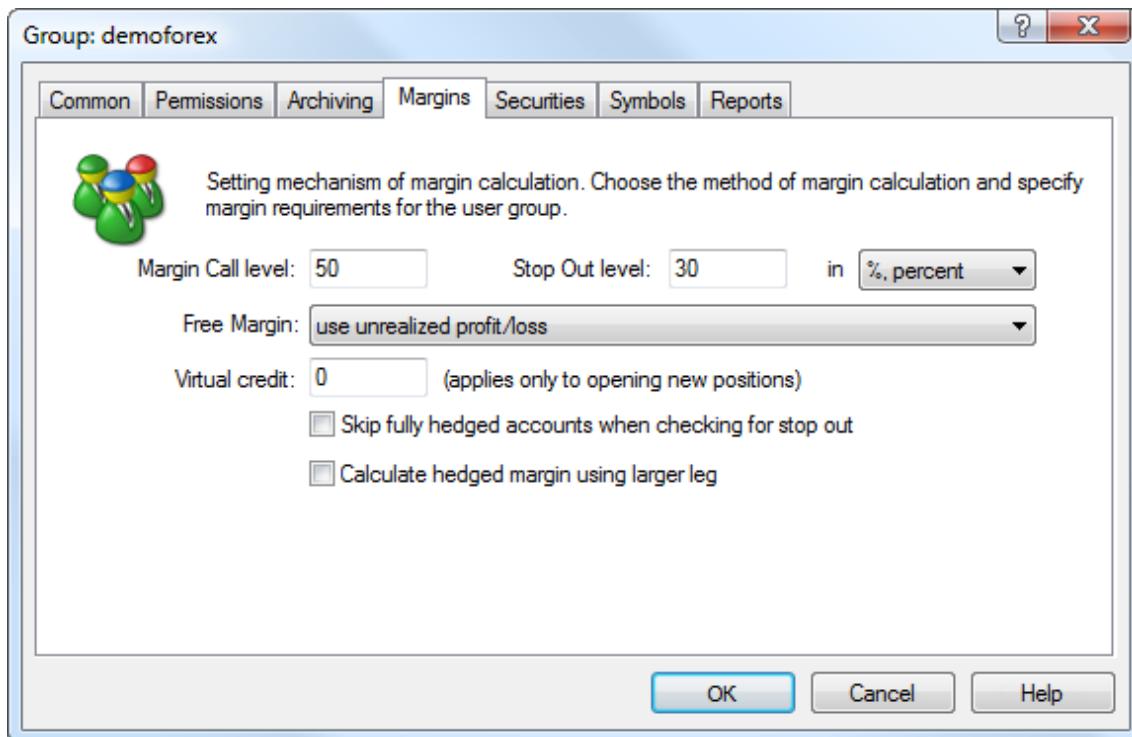
Archive deleted pending older — enabling/disabling the archivation of deleted pending orders. To enable this option, specify the age (in months), older than which deleted pending orders should be archived.

Accounts that belong to demo*, manager and coverage groups are not archived. For deleting old and unused demo accounts the [Time of demo](#) options is provided.

Archivation of deleted pending orders is performed at the same time as other archivations: every Sunday during [the optimization time](#).

See the "[What To Do with Accounts of Inactive Clients?](#)" article for more detailed instructions on working with archiving.

User Group Detailed Setting in the Margins Tab



Margin Call Level – the level of warnings;

Stop Out Level – the level of removing positions;

Margin call level in percentage terms is calculated as follows:

$$MC = \text{Equity} / \text{Margin} * 100$$

Margin call level in monetary terms is equal to equity:

$$MC = \text{Equity}$$

If the current level lies under Margin Call level, the account will get to the alert section appearing in the dealer's Margin Calls window. If the level reaches the point lower than Stop Out level, the most unprofitable position will be closed on accounts quoted automatically, as for those quoted by a dealer, a request will be sent to the latter one for closing the most unprofitable position (but dealer can close any other position of the client at the dealer's will).

A special comment is added to the orders closed as a result of Stop Out. For example, "[so/a: -135.0% -2430.0/1800.0]":

so – StopOut process.

/a – executed by manager automation.

-135.0% – level of margin requirement.

-2430.0 – current equity.

1800.0 – current margin.

As a free margin calculation alternative considering profits/losses of already opened positions the Free Margin parameter is used:

do not use unrealized profit – open positions will not be taken into consideration at all;

use unrealized profit/loss – use both profit and loss;

use unrealized profit – use only profit;

use unrealized loss – use only loss.

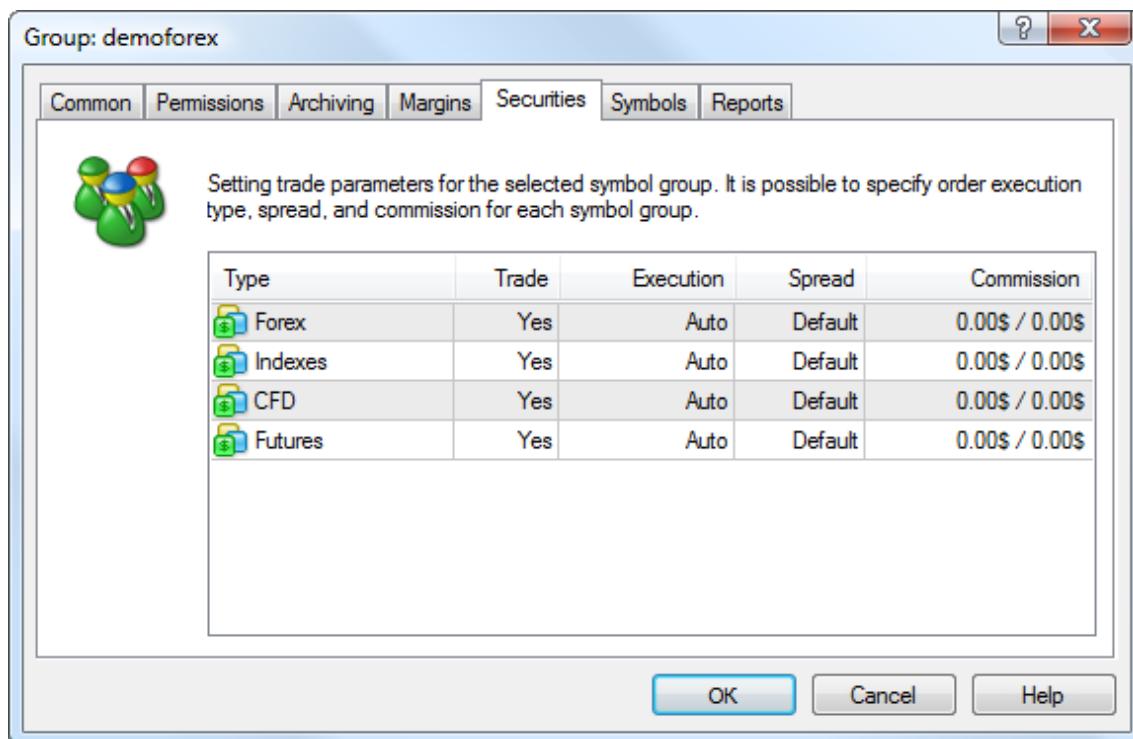
Virtual credit to be used by traders provided they do not have enough cash resources is indicated in the "Virtual Credit" field. If a trader wants to withdraw his/her money, this request will not apply to this credit given to client. And Margin Call levels will also be calculated on the money put on the account but without considering the credit sum.

Option "Skip fully hedged accounts when checking for stop out" allows to skip accounts with completely hedged positions (with zero margin requirements) when checking for stop out. If this option is unchecked, the accounts having completely hedged positions (with zero margin requirements) and negative equity (balance plus unrealized profits/losses) will get into stop out.

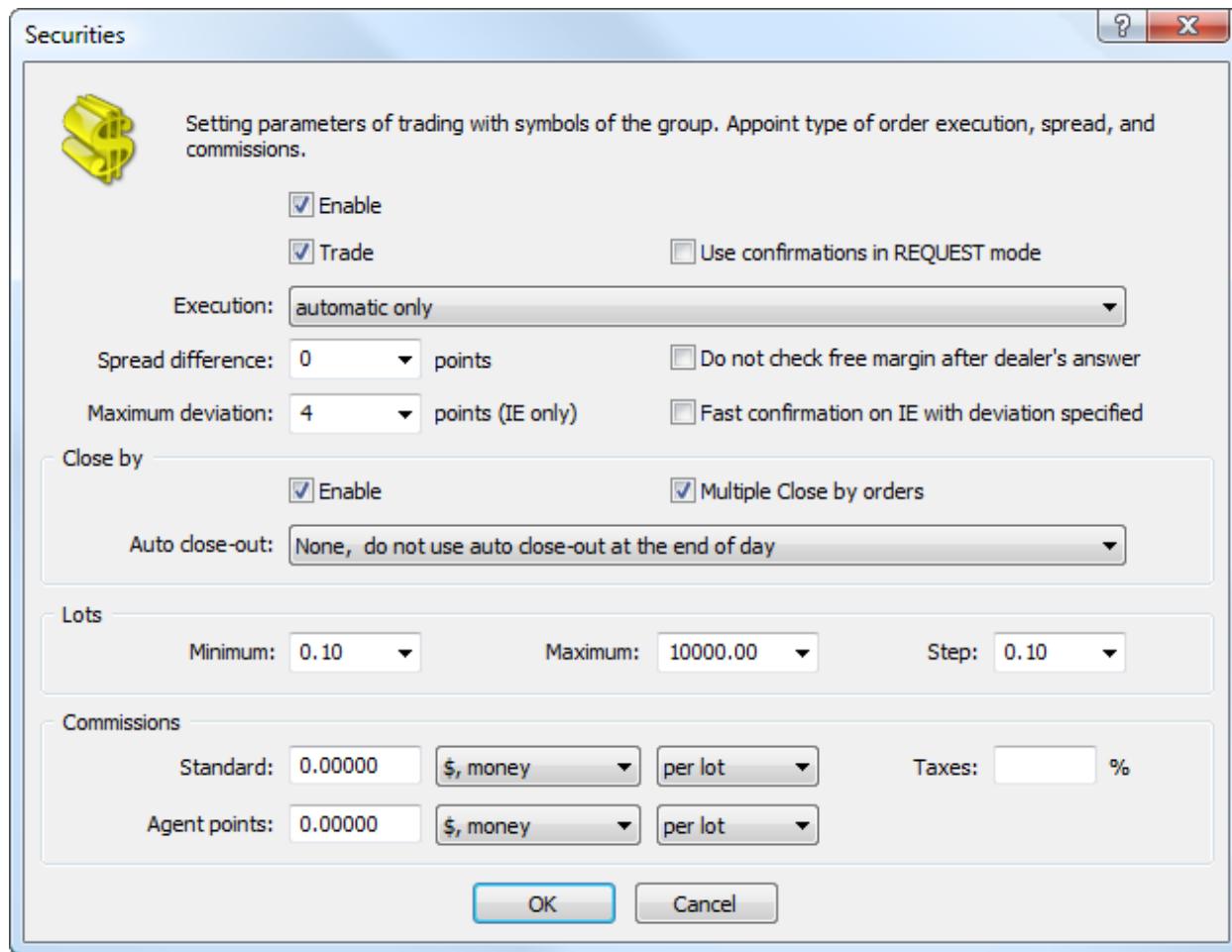
Option "Calculate hedged margin using larger leg" enables the mode of calculation of margin using the larger position. For example, if there are two hedging positions of one symbol, but with different volumes - sell 1.0 EURUSD at 1.21200 and buy 2.0 EURUSD at 1.21300, then the total margin will be equal to the margin of the larger position (buy 2.0 EURUSD at 1.21300).

User Group Detailed Setting in the Securities Tab

This inlay contains the list of all instruments (symbols) available for a given group.



To set instruments in more detail double-click the desired group.



Enable – enabling/disabling of a group of instruments;

Trade – enabling/disabling to trade with the instruments of the group;

Use Confirmations in REQUEST Mode – requesting additional confirmations of trade operations from the dealer in Request execution mode;

Execution – the orders execution mode.

Manual only, without any automation – dealer's manual order execution mode;

Automatic only – automatic orders execution mode;

Manual, but automatic if no dealers online – the orders execution mode is chosen depending on the dealer's activity. If the dealer is not active within 3 min, he/she will be disconnected, and the server switches to the automatic quotation mode. But, as soon as the dealer's request arrives, the execution will be performed manually again.

Spread difference – shows how the financial instrument spread for a specific user group differs from [instruments group basic spread](#);

Maximum deviation – maximum admissible deviation from the current price in the client's request (applies only to Instant Execution). If the request for execution of an operation exceeds this value, the request will be declined, and the client will receive the "Requote" message;

Do not check free margin after dealer's answer – do not recheck free margin after the dealer's answer, the check of the available free margin will only be made before sending the request to the dealer;

Fast confirmation on IE with deviation specified – fast confirmation of the client's order in Instant Execution. This option is enabled by default: if the price given by dealer meets the deviation required by the client, the order will be executed by the server automatically. If the fast confirmation is disabled and the price

given by dealer meets the deviation given by the client, then the order will be corrected according to the dealer's prices and returned to the dealer again;

Close by

Enable – enabling/disabling use of the command to close two orders to the contrary on the same instrument. Having enabled this option, the client terminal can send a command to the server to close two orders in contrary at the same time, the resulting rest being calculated;

Multiple close by orders – enabling/disabling use of the command to close all overlapping orders on the same instrument. Having enabled this option, the client terminal can send a command to the server to close all overlapping orders at the same time, the resulting rest being calculated;

Auto close-out – automatic closing of the counter positions at the end of day. The following variants are available:

None, do not use auto close-out at the end of day – the counter positions will not be closed at the end of a day;

HIHI, highest sell against highest buys – a sell position with the highest profit will be closed by a buy position with the highest profit;

LOLO, lowest sells against lowest buys – a sell position with the lowest profit will be closed by a buy position with the lowest profit;

HILO, highest sells against lowest buys – a sell position with the highest profit will be closed by a buy position with the lowest profit;

LOHI, lowest sells against highest buys – a sell position with the lowest profit will be closed by a buy position with the highest profit;

FIFO, first bought/sold against first sold/bought – the earliest buy/sell position will be closed by the earliest sell/buy position;

LIFO, last bought/sold against first sold/bought – the latest buy/sell position will be closed by the earliest sell/buy position;

Intraday followed by FIFO – the same as FIFO but the position to be closed by is searched within the current day at first.

Lots

Minimum is the minimum permitted amount of a lot;

Maximum is the maximum permitted amount of a lot;

Step is the size of the object changing steps;

Commissions

Standard is standard commission (in the currency of the group deposit, in points, or in percentage; for an operation or for a lot);

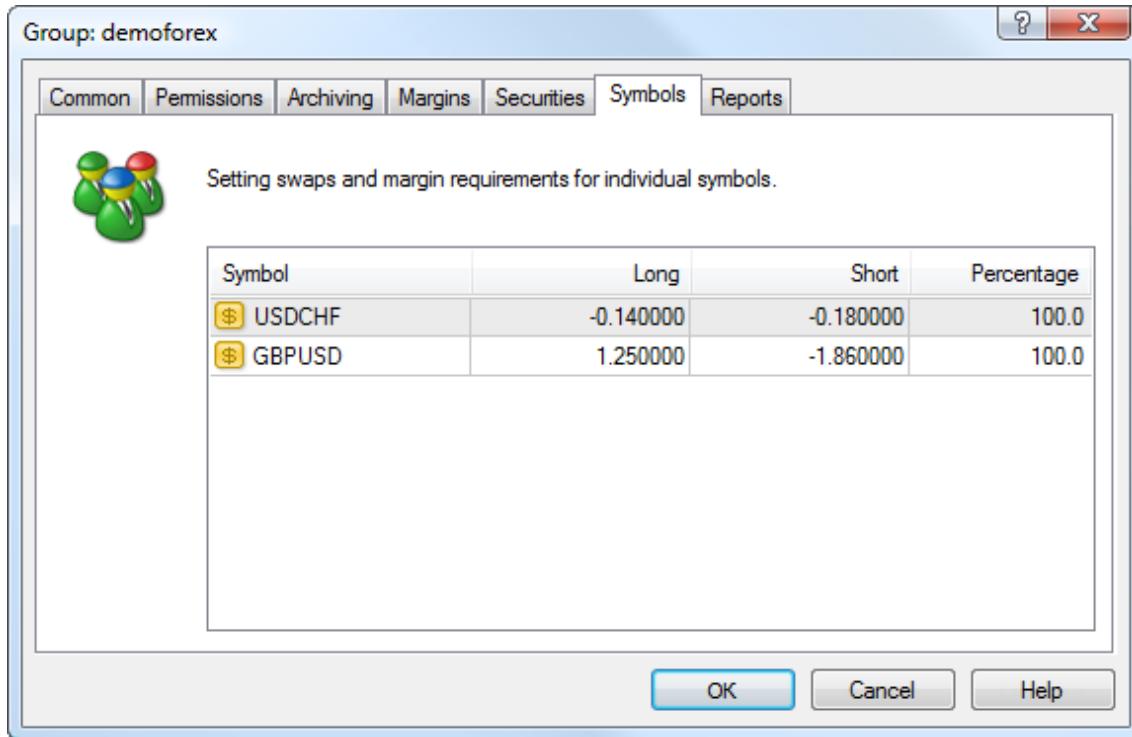
Taxes – taxes to commission (in percentage);

Agent Points means entering the commission in the agent's account (in the deposit currency of the group or in points);

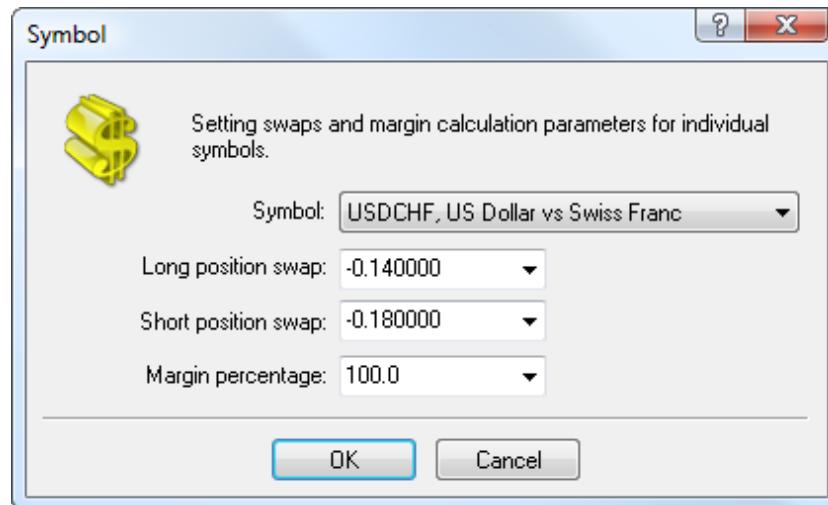
Attention: It is not necessary for the clients of an agent to operate with the same deposit currency as the agent. The commission is converted at the current rates.

User Group Detailed Setting in the Symbols Tab

This inlay is intended for installation of individual values of swaps and margin for the selected group.

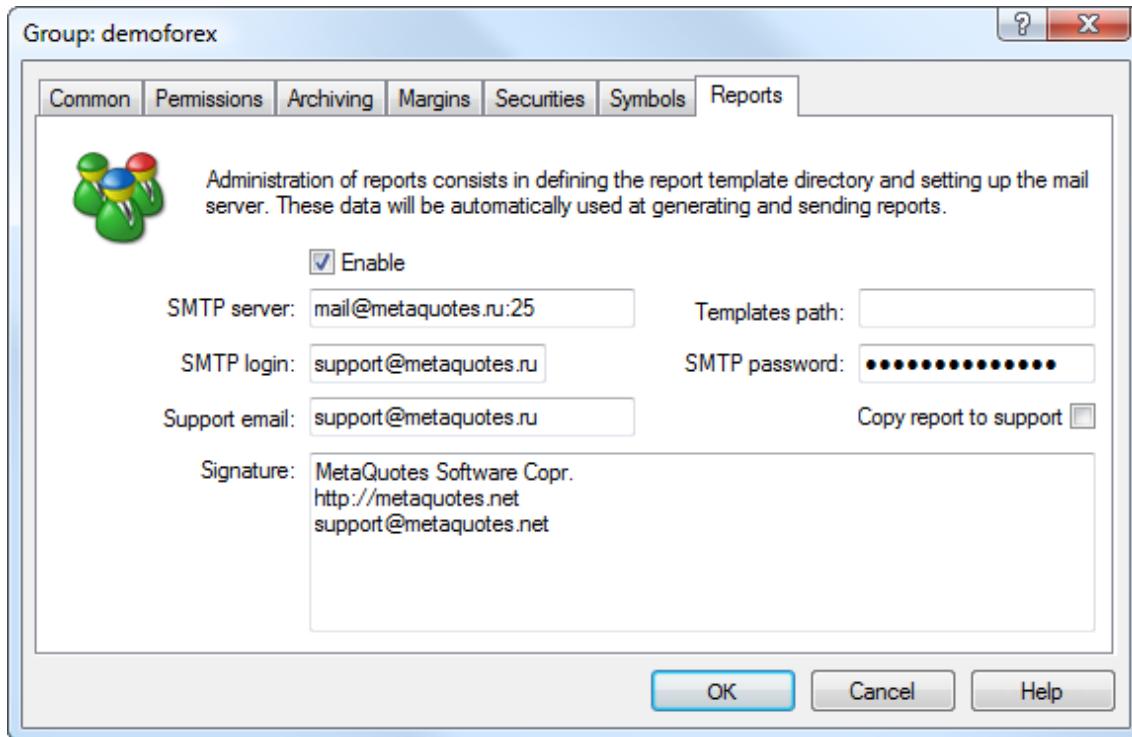


You can add, modify or delete the individual settings of the symbols using the commands of the context menu of the symbols list.



User Group Detailed Setting in the Report Tab

This inlay is intended for managing reports.



Enable – enabling/disabling to generate daily reports;

SMTP Server – the mail server address through which the reports will be distributed;

Templates path – template directory used when generating the specific report. This field remains empty by default, i.e. templates contained in the "confirms" in the server directory are used. If it is necessary to use custom templates for this group only the subdirectory name must be given which contains these templates (modified confirmation.htm and statements.htm files). For example, the subdirectory "my_custom_templates" inside of "confirms" in the server directory is created, and modified template files of confirmation.htm and statements.htm are placed in the subdirectory "my_custom_templates". In this case, my_custom_templates must be given in the "Templates path" field;

SMTP Login – login to send emails;

SMTP Password – password for sending emails through SMTP server;

Support email – email address to be put in the outgoing reports;

Copy reports to support – command to send copies of reports to the Support Center;

Signature – signature at the bottom of each report.

For successful generation of reports, the "Support email" field must be filled out.

You can find more detailed information concerning reports in the article "[Purpose and Functions of MetaTrader SendMail](#)" in [Support Center](#).

Translate: EN ▾



Group Types

The trading platform allows to work with different types of [groups of accounts](#). The system determines the types of groups by their names and processes them respectively. There are following types of groups:

Demo Groups

Demo groups contain demo [accounts](#). They allow to work in a training mode without real money to perfect a trading strategy. This kind of accounts offer the same possibilities as the real ones. The difference is the demo accounts can be opened without corresponding investment, however one cannot pretend to any profit from them. Demo accounts can be opened directly from the client terminal, and the real ones only from the manager and administrator ones.

A created group is considered a demo one if its [name](#) includes "demo" symbols (case sensitive). For example, the "demoforex", "demo-USD" and "real-demoforex-USD" groups are demo and the "Demoforex" "fx-USD" groups are not.

Manager Groups

Only one manager group called "manager" can exist within a trade platform. It is created automatically and cannot be deleted. Only accounts that belong to the manager groups are able to connect to the trade servers using the manager and administrator terminals and the corresponding APIs. [Manager](#) accounts can only be created on the basis of accounts that belong to the manager group.

Contest Groups

This type is intended for conducting contests among traders. Groups are considered contest ones if their names include "contest" symbols (case sensitive). For example, "contest_forex" or "contest-USD".

Preliminary Group

One preliminary group called "preliminary" is automatically created on the server. Preliminary accounts are created in it when requests for opening real accounts are sent from the client terminals. Managers can track such accounts and contact the clients using contact details specified during the registration. As soon as an official agreement with a client is made, a manager can move the account to one of the real groups, what allows the client to start working immediately.

Accounts in this group are created with certain restrictions:

They have a zero balance.

Trading is prohibited (even if you allow trading for the accounts in the "preliminary" group).

Coverage Groups

Only one coverage group called "coverage" can exist within a trade platform. It is not created automatically, it can be created by an administrator of the server. This group is intended for creating accounts that are used for covering client positions. Summary rates by such accounts are displayed in the manager terminal.

Real Groups

This kind of groups contain account for working with real money. If a group doesn't fall into any category by its name among the ones mentioned above, then the system considers it a real one.

Do not use indications of different group types within the name of a group. For example, managers\demo.

Recommendations on Naming Groups

For making the work with groups convenient it is recommend to follow several rules when giving the names to groups:

It is recommended to give sensible names to the demo groups because they will be visible to the clients when opening demo accounts from the client terminals. Only lower-case and upper-case letters, digits and "_" (underline), "-" (hyphen) symbols are allowed in the group names;

Names of user groups of company offices should end with a certain combination of symbols and should not end with '_' symbol. For example, '_kzn';

It is possible to unite the groups by their regional (country) belonging. For example, one can add certain symbol combinations to the group names. For example, '_ru_'.

Groups

Managers

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Managers

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Users opened in the "Manager" group have special rights for administering the system (changing accounts, quoting clients, report generation, etc.).

| Login | Name | Mailbox | Groups | Rights |
|-------|-------------|---------|--------|-----------------------------------|
| 1 | First Admin | | demo* | admin, manager, accountant, de... |
| 4 | Tester | | demo* | admin, manager, accountant, de... |
| 5 | Dealer | | demo* | admin, manager, accountant, de... |

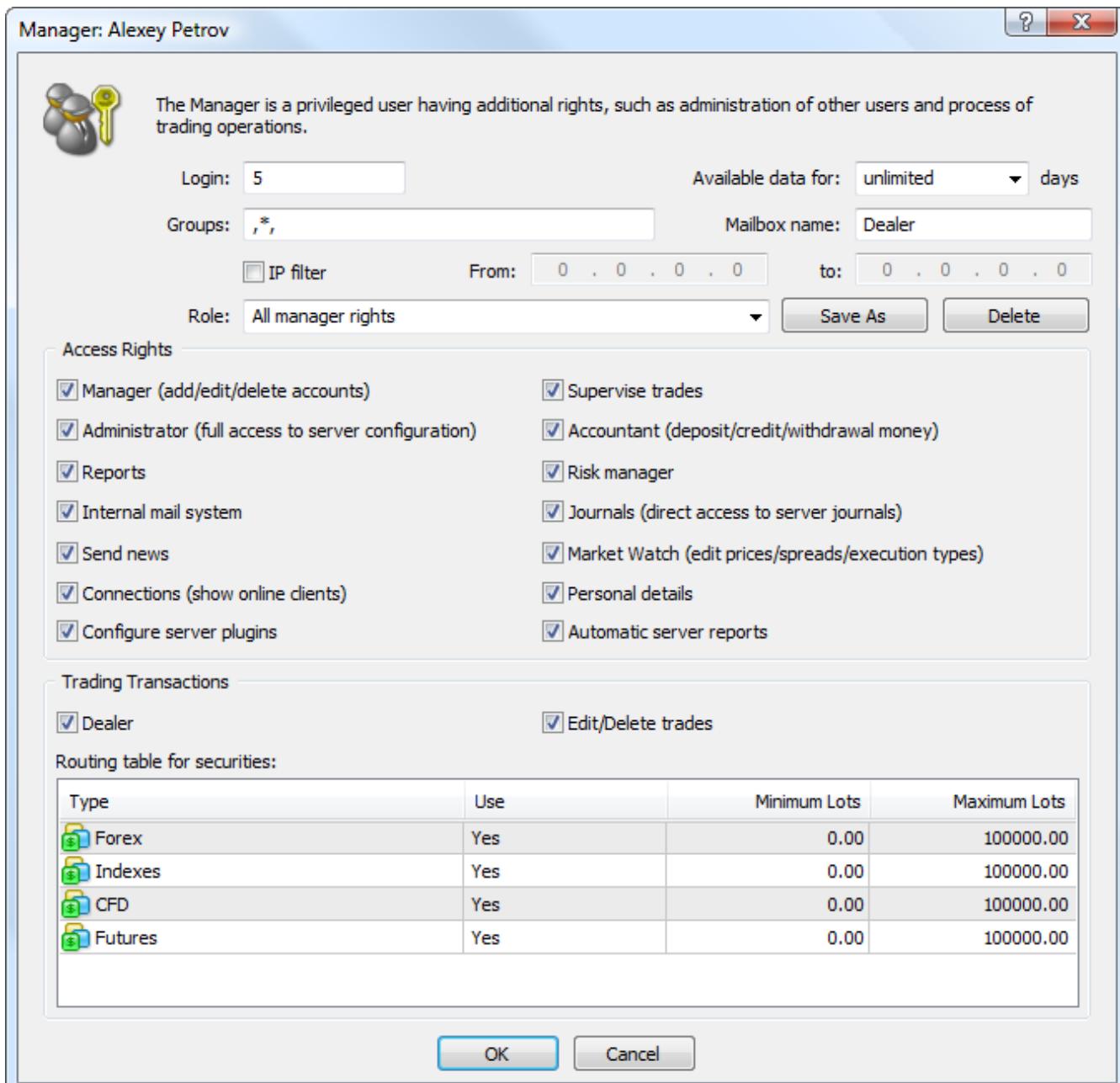
By default, there is only one manager's account in the system having the "Administrator" right (full access the server settings).

Attention:

When setting the server, one administrator's account will automatically be created (Login: 1; Password: manager). After having been authorized for the first time, it is necessary to change the password or to create a new administrator's account, and to remove the current one.

Considerable increase in the number of administrators can influence the velocity of performing trade operations. That is why it is not recommended to create managers' accounts that will not be used in the future.

Newly created accounts have no rights for operating in the system initially. To enable the manager's account operation, it is necessary to indicate its rights obviously. The "Add" and "Edit" context menu commands, the corresponding commands of the "Edit" menu, and the and buttons of the toolbar will activate the manager's account setting window.



It is necessary to indicate the manager's login and email in the internal mailing system. In the field named "Available data", there can be specified the maximum amount of days for which the manager will be allowed to request history reports for closed trades, daily reports and server journal. It is also necessary to indicate the list of the clients' groups to be processed separated by commas in the "Groups" field. As a group name, you can indicate the template using the wildcard characters "*" and "!". For example, the "demo*" template means that the manager administers all the groups the names which begin with "demo...": "demoforex", "democfd", "demo-jp". If you specify "!demo*", *, then the manager will be able to administer all groups except the ones that begin with "demo...".

The list of groups is only applied for connections via manager terminals. Managers connected via the administrator terminal have access to all groups.

The additional information about using the mask is given at the [Support Center](#), [FAQ](#) section.

The use of "IP Filter" allows to limit the IP addresses range from which this manager can connect to the server. Using this option, you can, for example, limit the dealers' connections from any addresses beyond your office or local network.

The "Role" field allows manager to play a role: a certain set of rights and requests routing. The "Save As" button allows saving the current set of rights and routing table for securities as a certain manager's role. The "Delete"

button removes the selected role of a manager.

Access rights define the block of actions available for the manager:

Manager — rights for adding, editing, and removing the clients' accounts. If this right is enabled, the manager is able to see the personal details of users (as if the "Personal details" right is enabled);

Supervise Trades — rights for watching open positions;

Administrator — total access to the server settings;

Accountant — a right for performing financial transactions (transferring, crediting, withdrawing) towards clients' accounts;

Reports — a right for requesting and receiving various reports concerning clients' operations;

Risk Manager — a right to get information about total clients' positions and the company's coverage;

Internal Mail System — a right for sending emails via internal mailing system;

Journals — a right for requesting and receiving the initial logs of the system operation as a whole;

Send News — a right for sending messages in the news flow;

Market Watch — a right for sending the own quotes to the data flow, changing spreads and types of performing operations;

Connections — an access right for statistics of connected users;

Personal details — a right to see personal details of accounts;

Configure server plugins — a right to configure server plugins;

Automatic server reports — a right to receive automatic server reports (Log Analyser reports etc.);

Dealer — a right for processing clients' requests and performing trade operations on their accounts;

Edit/Delete Trades — a special right given to the dealer for changing and deleting clients' open positions (this opportunity is potentially dangerous).

Push notifications — a right to send push notifications to clients' mobile devices using the manager terminal. Messages are sent based on MetaQuotes ID, which is a unique user identifier. To obtain the ID, a user needs to install MetaTrader 4 Mobile for [iPhone](#) and [Android](#). Detailed information is provided in the manager terminal user guide.

The Routing Table for Securities is intended for separation of manager's rights from those of the dealer based on the instrument group and the lot size. For example, when servicing for a group of real accounts, a manager can only operate with Forex instruments, and another one can only with CFD. Or, when servicing for the same account group, with the same financial instrument, a dealer can service all requests having up to five lots in total (Minimum Lots: 0; Maximum Lots: 5), and another one can with the range between five and ten lots (Minimum Lots: 5; Maximum Lots: 10). The latter one will watch all operations (including those below five lots being serviced by the former dealer), but she/he will process only her/his operations.

Names of instrument groups to be processed by the manager are marked with "Yes" in the "Use" column in the list at the bottom of the window. This allows to configure managers' operations in the most detailed way.

Attention:

When creating/setting a manager's account, it is necessary to indicate only the instrument groups which can be processed with the accounts to be serviced by this manager. If, for example, there is a group of real Forex accounts, you should not assign a manager to service it if this manager only operates with CFD instruments.

Account groups having no one "attached" dealer (a manager having the Dealer right) operate in automatic mode. When a request from a client comes in the server will decide how to process this request. If it finds just one dealer in the list who has this client's group indicated, it sends this request to this dealer. A frequent mistake in settings is that manager accounts are created in which many user groups are indicated (including demoforex groups) and for which the Dealer right is enabled. As a result, the server considers these groups to have a "manual" dealer and tries to re-send the request to this dealer.

Group Types

Data Feeds

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Data Feeds

MetaTrader Server allows to connect external data feeds in the "hot" replace mode using the plugin modules ("feed" files). If necessary, you can add support for any data feed just having written your own support module. More details can be found in the article "[DataFeed API: Writing Your Own Data Feeds](#)" in [Support Center](#).

| Vendor | Source | Server |
|---------------------|--------|-------------------------|
| MetaTrader 4 Quotes | Quotes | demo.metaquotes.net:443 |
| Championship Feeder | | 2222 |
| UniFeeder | | |

Main characteristics of each feeder are shown in the program window:

Vendor – the data vendor;

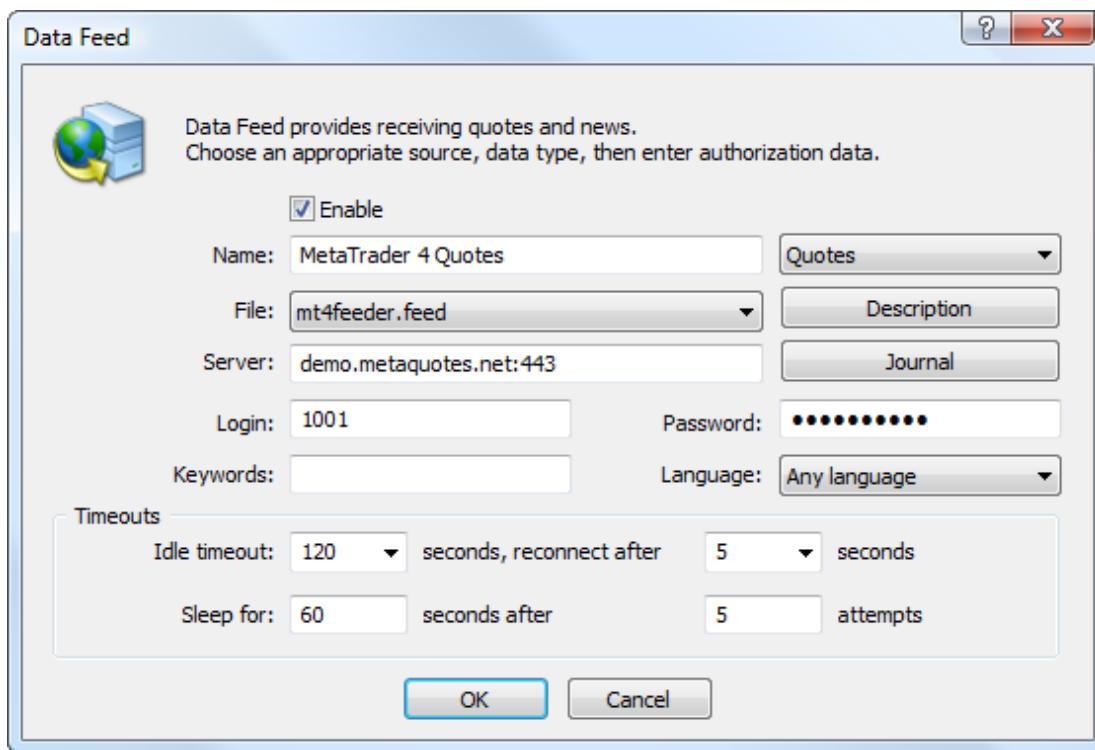
Source – the data provided ("Quotes", "News", or "Quotes and News");

Server – server address and port.

Location of the feeder in the list defines its priority: the higher it is located the higher its priority is. It does not mean that only one or two feeders operate: the server receives information from all data feeds continuously and simultaneously. This allows, in the case of problems, to switch to other feeders immediately. For example, some data feeds provide quotes for the same symbol from different financial companies; the priority defines which of the feeders will be used. If the current data feed does not provide the necessary information within a certain period of time (indicated in the Common section – "[Feeder Switch Timeout](#)" field), the server will automatically switch to the next feeder in the list providing information for the same symbol. However, as soon as the data resumes from the data feed having a higher priority, the server will switch back to using it.

When data feeds priority is changed (position in the list) they are restarted automatically. After that they continue working according to the new priority.

When a feeder is added or changed, a setting window will open:



Enable – enabling/disabling a feeder;

Name – the name of the plugin module and the type of the data feed (Quotes, News, or Quotes and News). The "Quotes and News" type means that the feeder provides both quotes and news. Use of special characters (? , * , < , > etc.) in names is not allowed, as this may cause issues while working with the data feed log files.

File – file name for plugin module;

Server – the server address and port for connection;

Login & Password – login and access password;

Keywords – the list of keywords separated by commas. In case of quotes feeders keywords can be used as symbol filters. For example, if EURUSD is specified in this field, this data feed will translate quotes only for the indicated symbol.

The mask containing wildcard characters '*' or '!' can be used in this field. For example, if '!EURUSD,EUR*' is specified, all quotes for EUR pairs except EURUSD will be translated. Additional information about using the mask is given at the [Support Center](#), [FAQ](#) section.

If a non-existent symbol (or set of symbols) is specified, it will be assumed that filtering is disabled and the data feed will provide data on all available symbols.

Language – the language to mark the news translated by the data feed. By default the "Any language" flag is set to news - this means that the news will match any language. Filtering news by languages can be set for [groups of accounts](#).

Idle timeout – the period of time after which the server reconnects to the data feed if it is not responding (do not confuse with the ["Feeder Switch Timeout"](#) parameter, that is used to switch to another feeder when there are no quotes);

reconnect after – time period between first attempts to reconnect to the feeder;

Sleep For – the time period between attempts used after first failed attempts to reconnect (indicated in the Attempts field);

Attempts — the number of the first attempts to reconnect;

Description — the data feed description. It is highly recommended to read the data feed description before use;

Journal — journal of the feeder.

Note: A new data feed starts operating immediately after it has been added.

Managers

Backup

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Backup

MetaTrader trading system pays much attention to realtime synchronization with reserve server and cyclic backup copying of databases.

| Property | Value |
|-------------------------------------|---|
| Server role | Master |
| Failover server login | 10 |
| Failover server additional password | ***** |
| Failover server IP address and port | 192.168.0.91:449 Synchronized |
| Failover server switch mode | Master server is not accessible to all data centers |
| Failover server switch timeout | 10 second(s) |
| Full backup to | C:\MetaTrader4Backup |
| Full backup every | 1 day 2013.11.06 00:00 |
| Full backup time | 00:00 |
| Archival backup every | 15 min 2013.11.19 13:32 |
| Shift of archive backup time | 2 minute(s) |
| Keep archival backups within | 1 day |
| Archival backup external processing | |
| Export symbols | |
| Export external processing every | 30 min |
| Export external processing | |

Backups Created Locally

The trade server performs two types of the data backup:

Full backup - all trade server data is saved (account and order databases, price history, platform configuration). The data backup time is set in "Full backup time" field, while periodicity is specified in "Full backup every" one. For example, if the backup time is 00:20, while periodicity is 4 hours, then all databases will be saved once per four hours starting from 00:20: in 00:20, 04:20, 08:20, etc. It is reasonable to perform a full backup once per day, as they occupy quite a lot of space and can slow down the server's operation.

Short backup - only the most critical data is saved - account and order databases. Periodicity of saving that data is set in "Archival backup every" field: once per 5, 15, 30 or 60 minutes. In "Shift of archive backup time" field, you can specify the shift in minutes from the beginning of an hour when creation of short backup copies is to be launched.

All backup copies are stored in the directory specified in "Full backup to" parameter. Inside the directory, the backup copies are stored in the following way:

BASES - the last backup copy of the price data history.

CONFIG - backup copies of platform configuration files by days. The storage depth is defined by "Keep archival backups within" parameter. If the parameter's value is not specified or is less than 3 days, the copies for the last 3 days are stored.

ARCHIVE - the following copies are stored in the directory:

periodically created copies of order and position databases - files of orders_YYYYMMDD_HHMMSS_backup.dat, users_YYYYMMDD_HHMMSS_backup.dat forms. The storage depth is defined by "Keep archival backups within" parameter.

copies of order and user databases created during the full backup. The storage depth is defined by "Keep archival backups within" parameter.

archival account and order databases - files of orders_archive_YYYY.dat and users_archive_YYYY.dat forms.

files generated during the removal of one and more user accounts or one and more orders - files of orders_YYYYMMDD_HHMMSS_delete.dat and users_YYYYMMDD_HHMMSS_delete.dat forms. The storage depth is defined by "Keep archival backups within" parameter.

last day report databases - daily.dat and ind_daily.dat files.

The server launches MetaTrader BackUp support program once a day. This program archives daily backups of databases and deletes out-dated backups according to the parameters in "Keep archival backups within".

In addition to automatic archive creation, the server can launch an external program indicated in the "Archival backup external processing" field. In addition to automatic archive creation, the server can immediately launch an external program or script (*.bat, *.cmd, *.vbs and others) indicated in the "Archival backup external processing" field. When an external processor of backups has been called, it will get names of the current archives of databases of clients and orders as parameters additional to those given in the "Archival backup external processing" field.

For example, if

`ftpbackup.bat myserver mylogin mypassword`

has been specified in the "Archival backup external processing" field, the server will execute the command

`ftpbackup.bat myserver mylogin mypassword users_20051125_120017_backup.dat
orders_20051125_120017_backup.dat`

Warning:

All external commands and scripts must be located in the \TOOLS sub-directory of the server directory.

The scripts/databases to be launched must not apply to open databases of the trading system in the \BASES directory. This can result in conflicts when bases are applied to both from the server and from scripts at the same time. You should operate only with databases copied by the server in the ARCHIVE sub-directory of the directory defined by the parameters in "Full backup to".

Export historical data and charts publication

It is often necessary to export historical data, for example, when you need to make charts for publishing on the Internet in online mode. To enable cyclic export of quotes (to *.FXH files of the \EXPORT directory), it is necessary to indicate the list of instruments formatted as "Symbol,Period;Symbol2,Period2;" in the "Export securities" field, and to indicate the external script in "Export external processing" for further processing the exported data. Data will not be exported if the external script is not indicated. The export schedule can be indicated in the "Export external processing every" field.

For more details about charts publication refer to article [WebServices: Charts Publication](#) at MetaQuotes Support Center.

Real-time Backup using the MetaTrader 4 WatchDog Tool

The trade server should operate in 24/7 mode. However, it is difficult to ensure such faultless operation for a single physical server since it bears plenty of technical risks (equipment failure, power outage, etc.). MetaTrader 4 WatchDog has been designed for synchronization between the main server and the back-up server in real-time mode. It has the following functions:

Synchronization of executable files, plugins and data feeds

Synchronization of configuration files (the first one is performed at the start followed by one synchronization per hour)

Full synchronization of trade and client databases, as well as the daily report one (the first one is performed at the start followed by one synchronization per day)

Synchronization of quote history (the first one is performed at the start followed by one synchronization per 30 minutes)

Support for identity of trade and client databases to the main server

Generation of backup copies of all databases, as well as creation of configuration files (once per day)

Synchronization of custom directories (for example, working files of plugins and data feeds)

Thus, in case of a main server failure, a backup server can be deployed within a few minutes to continue operation.

MetaTrader 4 WatchDog replicates data according to the folders the data is stored in on the main trade server. Paths to databases (orders.dat, users.dat, history bases), logs and backup files may differ from the standard ones. WatchDog checks the availability of these paths on the backup server. If they are available, the replication is performed to the appropriate directories. Otherwise (for example, in case the bases are stored in F:\history, while the appropriate disk section is not physically present on the backup server), the replication is performed to the default directories.

To configure the backup system in real time via MetaTrader 4 WatchDog, use the following parameters in the Backup section of the Administrator terminal:

Sever role - sever role:

Standalone - backup server is not used;

Master - this server is being replicated;

Slave - this status is intended for servers restored from a backup.

Failover server login - an existing [account](#) that will be used by MetaTrader 4 WatchDog for connecting to the trade server. The account must not belong to the "managers" group.

Failover server additional password - a password for additional authorization of MetaTrader 4 WatchDog on the server (the Master Password field in the MetaTrader 4 WatchDog settings).

Failover server IP address and port - an address and port of a server for creation of backups in the real-time mode:

Synchronized - backup copy synchronized with master server;

Synchronizing - data is being synchronized;

Disconnected - backup server disabled.

Before launching the MetaTrader 4 WatchDog component on the backup server, configure the main server: switch its status to Master and set address and password for the backup server (the backup server password is used in

MetaTrader 4 WatchDog for additional authentication). Besides, the backup server address should be entered to the list of access points, so that client terminals are able to try to connect to it in case of the main server failure.

Make sure to restart the server after making all the changes.

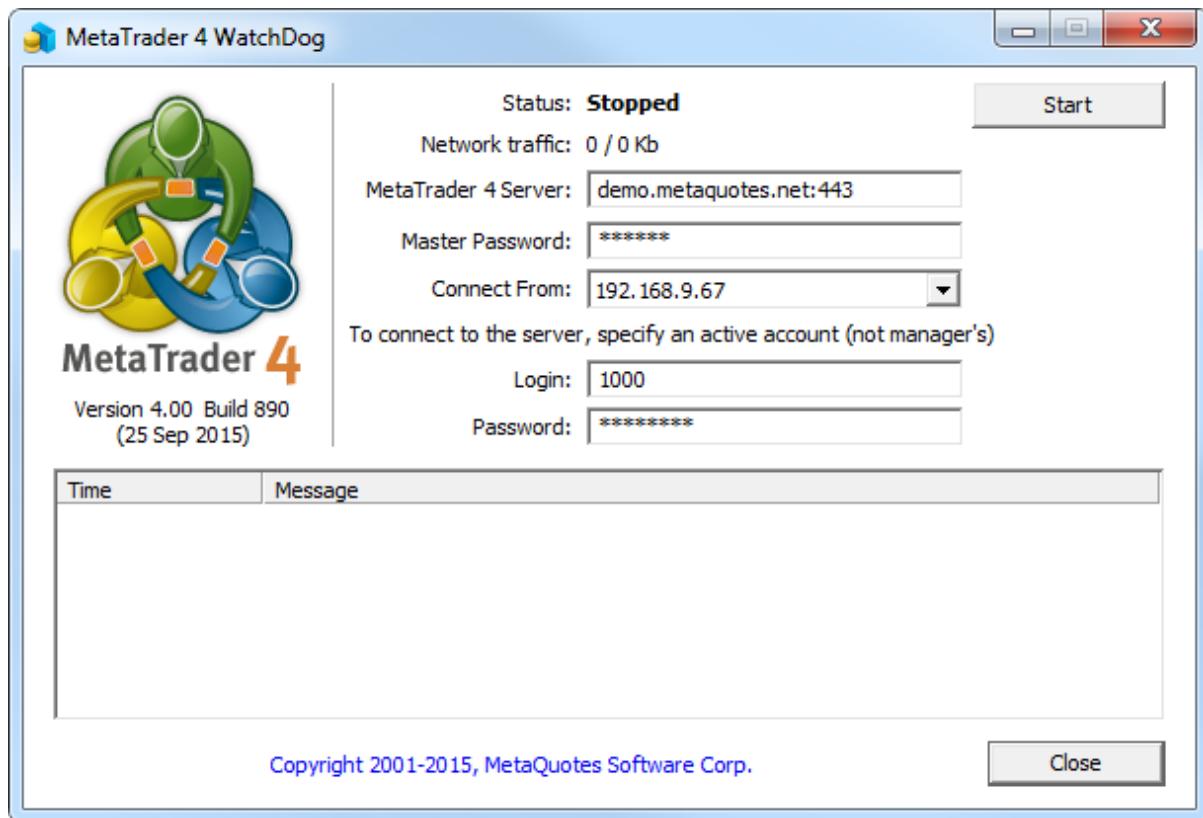
If MetaTrader 4 Server has the status of Master or Slave, a connection to the pair server is established before the start. If the connection is successful, the server is not launched in order to prevent the parallel operation of clients on two different servers.

Installing and Configuring MetaTrader 4 WatchDog

By default, MetaTrader WatchDog is supplied together with MetaTrader Server and located in the server root directory (mtwdsrv.exe file). During its first launch, the setup process is activated. Simply follow the setup wizard instructions.



After the setup is complete, MetaTrader 4 WatchDog configuration window appears.



Specify the main server address and the Master Password used for additional authentication on the server ([Failover server additional password](#)). Specify the account from the [Failover server login](#) field in the Login box, as well as the appropriate connection password - in the Password box. Next, launch MetaTrader 4 WatchDog clicking Start. Synchronization messages start appearing in the logs.

Configuring Synchronization of Custom Directories

MetaTrader 4 WatchDog allows you to synchronize not only the standard files and the platform databases, but also any custom directories and files as well. For example, many data feeds and plugins require LIC, DAT and other files for their operation. These files should also be backed up.

Specify custom directories for synchronization in the mtwdsrv.ini file located in the [MetaTrader 4 WatchDog installation folder]\config. You can specify up to 64 custom directories. The paths are set relative to the trade server root.

Never specify the 'base' folder of the trade server or files from it as custom files and directories for synchronization. The server will not be able to read its databases, and WatchDog will not be able to create backup copies.

Subdirectories are not replicated. Each added directory should be specified as a separate line in mtwdsrv.ini.

You can specify the filters for including or excluding files of a specified type during synchronization for each directory. A single line may contain up to three entries separated by a semicolon:

```
Folder=<folder_path>;[list of files for synchronization];[list of skipped files]
```

Here:

<folder_path> is a directory name relative to a root folder a trade server is installed at. If no file masks are specified, all files inside the directory are copied;

list of files for synchronization - list of copied files separated by commas. File names can be defined using masks. If the list is specified, only listed files matching the mask are copied;

list of skipped files - list of ignored files separated by commas. File names can be defined using masks. If the list is specified, all listed files matching the mask are skipped.

Sample entry:

```
Folder=plugins\HistoryPlugin;EURUSD*.*,*.lic,* .dat;*.log,* .tmp
```

.lic and .dat files, as well as files beginning with EURUSD are synchronized in the <server_installation_directory>\plugins\HistoryPlugin folder, while .log and .tmp files are skipped.

Emergency Switching to the Backup Server and Restoring the Main Server

If the main server is not available via the Administrator terminal, you should switch to the backup server manually.

Make sure that the main server is stopped. Check if MetaTrader Server service status is set to Disabled or the server is disabled physically. Also, switch MetaTrader Server service launch type to Manual.

Stop MetaTrader 4 WatchDog on the backup server by the Stop dialog command or by stopping the system service.

If a data center has been installed and launched on the backup server along with the WatchDog service (as an additional access point of the main server), stop it as well.

Launch the backup server: a trade server service is installed in the system when installing MetaTrader 4 WatchDog. Launch it.

Start history synchronization (the backup server may not have the history for the last 30 minutes, since WatchDog synchronizes the history only once per 30 minutes).

Start the platform update manually from the Services menu of the Administrator terminal.

ATTENTION: Before you launch the backup server, make sure the main server is stopped. Otherwise, your clients may start working with different servers. For example, suppose that something has happened to your provider's Internet link, the main server is unavailable (though it works properly) and the backup server is deployed. After a while, connection to the main server is restored causing two servers to work simultaneously. In this case, call your provider and ask him to disable the main server immediately.

After the main server's operability is restored, switch back to it from the backup server. Wait for a break between trading sessions (for example, on Saturday or Sunday) and take the following steps:

Stop the backup server.

Move the following files from the backup server to the main one:

*.exe files

database files: users.dat, orders.dat and daily.dat

configuration files: license.lic, access.ini, common.ini, feeders.ini, groups.ini, holidays.ini, managers.ini, plugins.ini, secgroups.ini, securities.ini, servers.ini, sync.ini, time.ini

plugins and their settings from the 'plugins' directory

history files from the 'history' folder

Launch the main server.

Launch WatchDog on the backup server.

Switching to the Backup Server

This procedure allows you to quickly and automatically switch to the backup server (MetaTrader 4 WatchDog) instead of history or trade one. Switching is suitable for the following cases:

Switching to the backup server in case of the main server malfunction.

Trade server transfer. You just need to install MetaTrader 4 WatchDog on the new server, properly setup the backup server via MetaTrader 4 Administrator and switch to the newly installed backup server afterwards.

Switching to the backup server can be performed both [manually](#) and [automatically](#).

Possible Data Loss

MetaTrader 4 WatchDogs backs up all critical trade server data in real time. Some non-critical trade server data, as well as history server data are backed up at specific intervals. Critical and non-critical data are displayed in the table below:

| Data | Trade server |
|---|---|
| Critical (real time backup) | User base (users.dat file in \bases folder) Order base (orders.dat file \bases folder) |
| Non-critical (backup every thirty minutes) | Archive databases (orders_archive_*.dat and users_archive_*.dat files in \bases folder) Price database (*.fxh files in \history folder) Plugins (*.dll files in \plugins folder) Configuration databases (*.ini files in \config folder) Custom folders |
| Non-critical (backup every day/at WatchDog reconnections) | Data feeds (*.feed and *.ini files in \datafeed folder) Mail templates (*.htm files in \confirms folder) Daily report databases (daily.dat files \bases folder) |

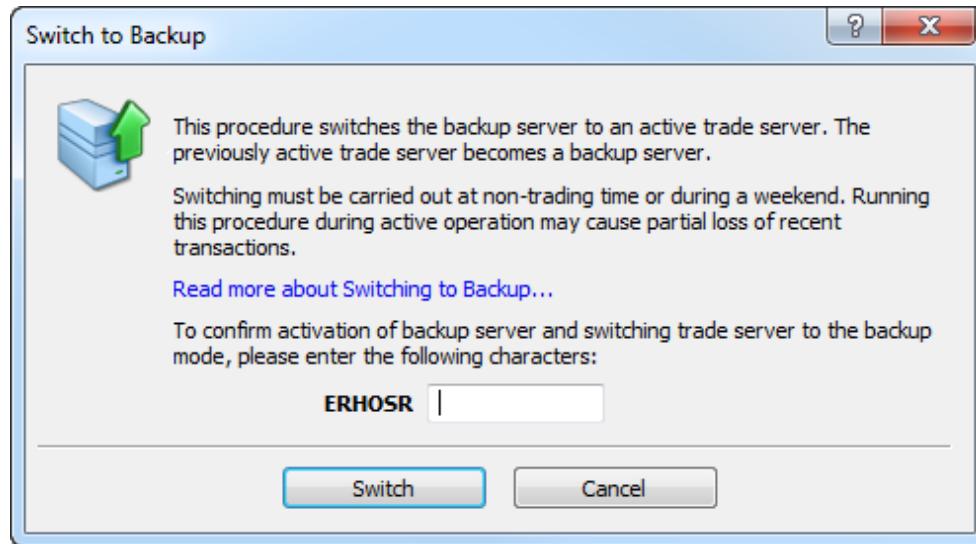
Server migration must only be performed in non-trading hours. When switching to the backup server, it does not copy data that the main server continues to receive.

In order to prevent important data from being lost, trading operations and changes in the client base are not allowed on the main server right after the start of switching to the backup server. The ban is valid for one minute. If the platform fails to switch to a backup server within this period, the ban is removed.

To avoid the loss of data that is backed up every 30 minutes, restart the WatchDog. After that, the latest data backup is created. A message of the following type in the WatchDog log indicates completion of the backup copy creation: "Network: 39 Kb received / 21 Kb sent" Synchronized".

Switching

In order to switch to the backup server, execute " Switch to Backup" command in [Services](#) menu. The confirmation window appears after that.



To launch the procedure, enter the confirmation code and click Switch. The switching is performed as follows:

MetaTrader 4 WatchDog installs the trade server service.

Updates the configuration.

Sends notifications to the main server.

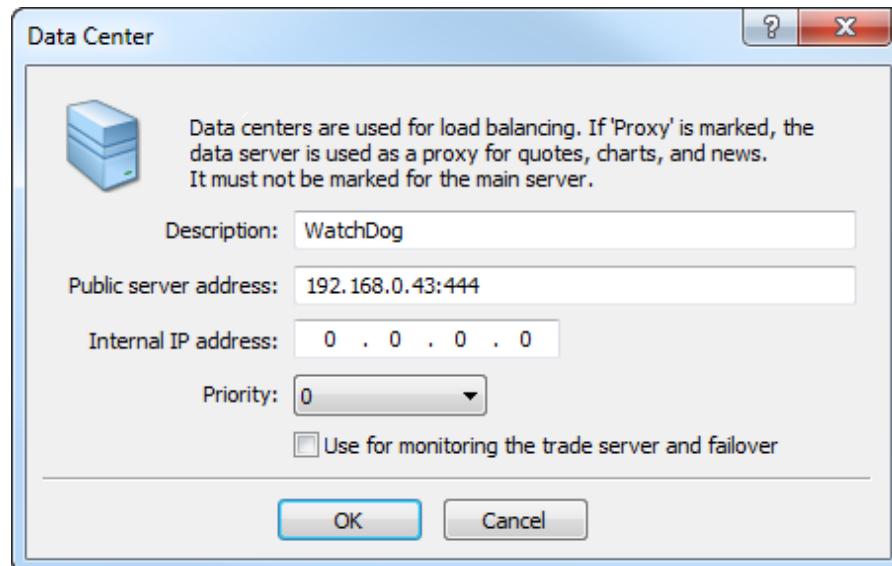
The main server switches to MetaTrader 4 WatchDog mode.

After completing the switching process, a new [administered server](#) in MetaTrader 4 Administrator should be created to connect to the trade server. To do this, specify the IP address, on which the MetaTrader 4 WatchDog server has been installed.

For the client terminals to be able to connect to the new server installed instead of MetaTrader 4 WatchDog, the "[Data Centers](#)" section must include:

either IP address of the server where MetaTrader 4 WatchDog is installed,

or a data center (that is capable of going through the addresses of the main and the backup servers automatically).



Switching to the Backup Server Automatically

In case of any emergency, the main server can be automatically switched to the backup one. This process is similar to switching manually but the need for switching is managed by MetaTrader 4 platform.

The necessity to switch to the backup server is defined by the monitoring ("witness") servers. The MetaTrader 4 WatchDog, as well as [data centers](#) (with monitoring mode enabled) act as the monitoring ones. The back-up server monitors the availability of the main server in real time mode and checks if it is available for the data centers as well.

Automatic switching can be enabled in Backup section:

| Property | Value | |
|-------------------------------------|---|------------------|
| Server role | Master | |
| Failover server login | 10 | |
| Failover server additional password | ***** | |
| Failover server IP address and port | 192.168.0.91:449 | Synchronized |
| Failover server switch mode | Master server is not accessible to all data centers | |
| Failover server switch timeout | 10 second(s) | |
| Full backup to | C:\MetaTrader4Backup | |
| Full backup every | 1 day | 2013.11.06 00:00 |
| Full backup time | 00:00 | |
| Archival backup every | 15 min | 2013.11.19 13:32 |
| Shift of archive backup time | 2 minute(s) | |
| Keep archival backups within | 1 day | |
| Archival backup external processing | | |
| Export symbols | | |
| Export external processing every | 30 min | |
| Export external processing | | |

"Failover server switch mode" field allows selecting one of the two options:

Master server is not accessible to most data centers – the number of the monitoring servers unable to access the main server should exceed the ones able to access it at least by one for the switch to occur.

Master server is not accessible to all data centers – the main server should be unavailable for all monitoring servers for the switch to occur.

The number of monitoring servers should not be less than 2.

In "Failover server switch timeout" parameter, you can specify the time (in seconds) during which the server should be unavailable for monitoring servers to start switching to the back-up server. Also, after this time period, the data centers start their attempts to connect to the current backup server's IP address specified in "Failover server IP address and port" parameter (trying to connect to it as to the trade server).

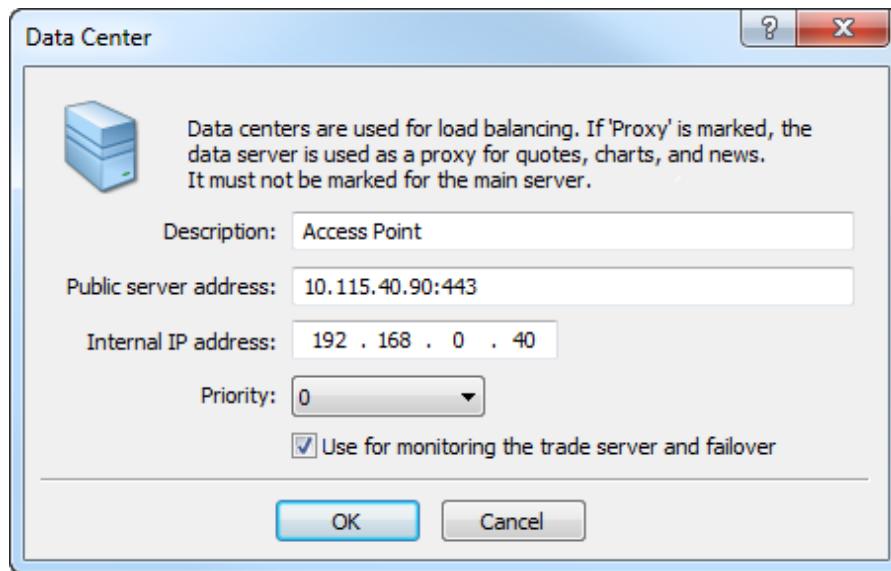
When measuring the time of the master server's unavailability, its cause is considered. In case of a manual restart of the server, the unavailability time is increased according to the time required for restart.

Unexpected failure – switching is performed after the specified timeout.

The server or the system service or the operating system is restarted by the administrator – switch time is increased by the time spent for restart. The minimum time is 30 seconds and the maximum time is 300 seconds.

Server restart during update ([LiveUpdate](#)) – switch time is increased by the time spent for restart. The minimum time is 180 seconds and the maximum time is 300 seconds.

In case the connection is not established by the end of the timeout, MetaTrader 4 WatchDog starts checking the monitoring data centers. To make a data center monitor the main server, enable "Use for monitoring the trade server and failover" option in its settings:



It is recommended no to enable this option for MetaTrader 4 WatchDog added as a data center. Also one should not enable it for non-working data centers. It increases the time of switching to backup and the amount of consumed resources.

To connect to a data center, MetaTrader 4 WatchDog uses its public address (Public server address). If the data center is not available at this address, it tries to connect to its internal address (Internal IP address) using the port specified for the public address.

If the data center is unavailable for the backup one, that does not mean that the main server is also unavailable. In this case, the number of monitoring servers is reduced.

After checking the data centers, MetaTrader 4 WatchDog analyzes to how many of them the trade server is accessible/not accessible:

In case "Master server is not accessible to most data centers" option is selected: in order to start switching, the number of monitoring servers to whom the trade server is not accessible must be strictly greater than the number of servers to whom it is accessible (for example, $2 > 1$, $3 > 2$, $4 > 3$). In case they are equal (for example, accessible to 2 servers and not accessible to 2 servers), switching will not be performed.

In case "Master server is not accessible to all data centers" option is selected: in order to start switching, the trade server must be not accessible to all monitoring servers.

If a condition is fulfilled, switching will start. In case it is not fulfilled, MetaTrader 4 WatchDog will check the monitoring data centers again. Repeated checks are performed with 10 seconds intervals (10 attempts) and then with 60 seconds intervals.

After switching the new trade server will be available at "Failover Server IP address and port". As soon as the old server is restored or its network environment is restored, it will detect the new trade server and switch itself to a backup server. The process of detecting a new (opposite) trade server is described in details below.

Detecting Opposite Trade Server

As a trade server starts it checks whether another trade server works at the address specified in "Failover Server IP address and port". To do it, it tries to connect to this address as MetaTrader 4 WatchDog. If connected, it tries authorizing on it as MetaTrader 4 WatchDog. Successful authorization means that an opposite server is detected.

Further it analyzes the data available on the opposite server: the number of accounts, the number of orders and the last time of switching to the trade server from a backup one.

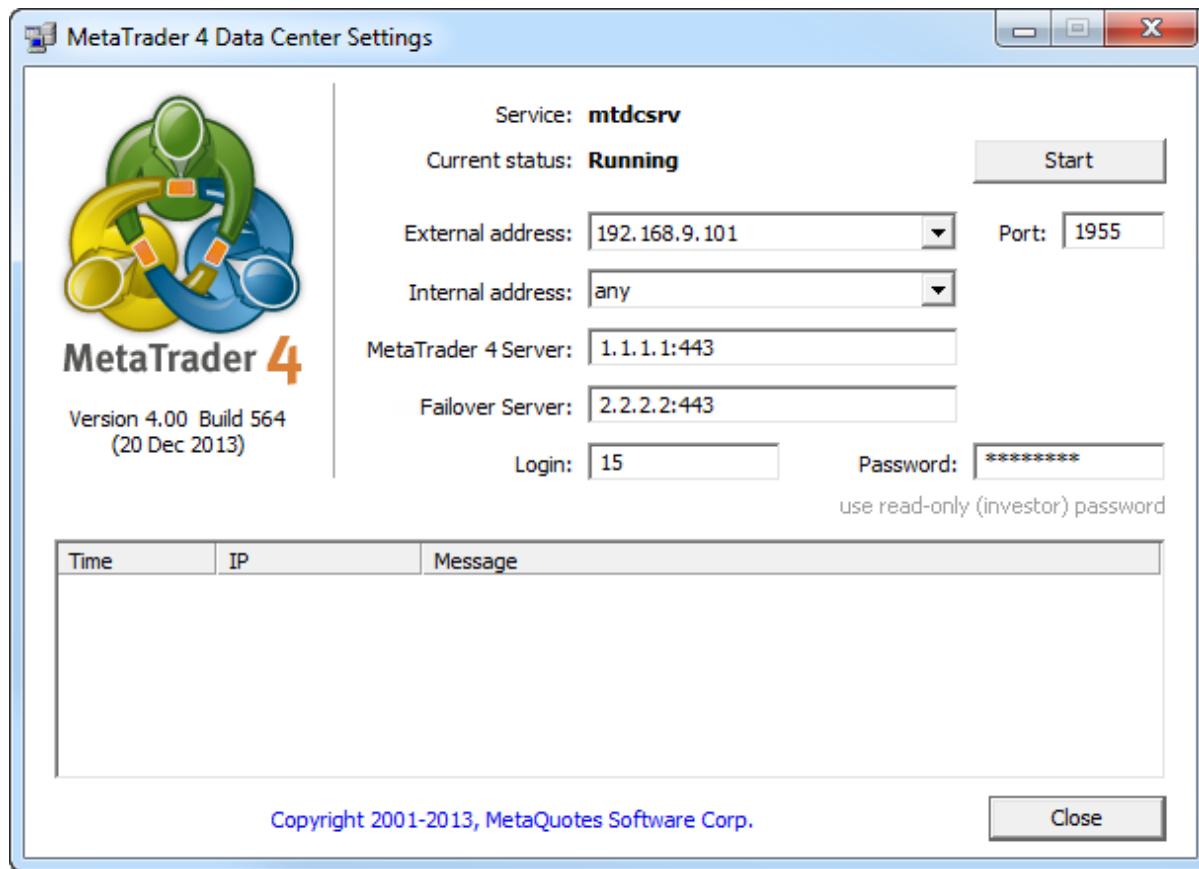
If the sum of accounts and orders on the current server is greater than that on the opposite server, the current server will remain trade sever and the opposite server will be switched to backup.

If the sum of accounts and order is equal on both servers, the date of last switching from backup is compared. If the current server has a greater date, it will remain trade server and the opposite server will be switched to backup.

If the sum of accounts and orders on the current server is less than that on the opposite server, the current server will be switched to backup.

Automatic Switching of Data Centers to the New Trade Server

After losing connection to the trade server, the data centers automatically try to connect to the backup server as to the main one after the time specified in "Failover server switch timeout" parameter. The data center uses the address specified in "Failover Server IP address and port" field, as well as the one specified in "Failover Server" field of the data center settings for connection:



The data center successively tries to connect to the backup server: first, at "Failover Server" address, then at "Failover Server IP address and port" one.

If connection at "Failover Server" address is successful, the data center starts using it as the main server's address (it is written to "MetaTrader 4 Server" field), while the old address of the trade server is used as the backup server's one (written to "Failover Server").

Sample settings before switching:

MetaTrader 4 Server - external address 1.1.1.1:443 (the trade server actually works in the local network at the address 192.168.9.1:443).

Failover Server - external 2.2.2.2:443 (MetaTrader 4 WatchDog actually works in the local network at 192.168.9.2:443).

Failover Server IP address and port - internal address 192.168.9.2:443.

The same settings after the switching:

MetaTrader 4 Server - 2.2.2.2:443.

Failover Server - 1.1.1.1:443.

Failover Server IP address and port - 192.168.9.1:443.

If connection at "Failover Server" address failed, the data center tries to connect to the address specified in "Failover Server IP address and port" field. If connection is successful, the data center starts using it as the main server's address (it is written to "MetaTrader 4 Server" field), while the old address of the trade server is used as the backup server's one (written to "Failover Server"). The address previously specified in "Failover Server" field is deleted, as it becomes unnecessary.

Sample settings before switching:

MetaTrader 4 Server - external address 1.1.1.1:443 (the trade server actually works in the local network at the address 192.168.9.1:443).

Failover Server - external address 2.2.2.2:443 (MetaTrader 4 WatchDog actually works in the local network at 192.168.9.2:443).

Failover Server IP address and port - internal address 192.168.9.2:443.

The same settings after the switching:

MetaTrader 4 Server - 192.168.9.2:443.

Failover Server - 1.1.1.1:443.

Failover Server IP address and port - 192.168.9.1:443.

If the data center is unable to connect to "Failover Server IP address and port" address, the cycle of connection attempts is restarted.

Specifying an additional backup server's address in "Failover Server" field of the data center settings allows using the system of automatic and manual switching in case of complex network configurations, for example, when the backup server is installed in the local network, while the data center is connected to it from the outside via a router.

Logging Monitoring Results

You can view MetaTrader 4 WatchDog journal to control the process of monitoring the main server. The sample entry is shown below:

```

1 11:15:53      Failover : master server is unavailable
0 11:15:53      Failover : master server is unavailable for data center server
0 11:15:53      Failover : master server is available for 0 and unavailable for
1 11:16:53      Failover : master server is unavailable
0 11:16:53      Failover : master server is unavailable for data center server
0 11:16:53      Failover : master server is available for 0 and unavailable for
2 11:16:53      Failover : master server is unavailable for 5 min
2 11:16:53      Failover : start switching to master mode
  
```

These entries mean as follows:

The main server is unavailable.

The main server is unavailable for the data center having IP address '192.168.0.117:1955'.

The main server is available for 0 witnesses and not available to 2 witnesses within 4 minutes.

The main server is unavailable.

The main server is unavailable for the data center having IP address '192.168.0.117:1955'.

The main server is available for 0 witnesses and not available to 2 witnesses within 5 minutes.

MetaTrader 4 WatchDog has started switching to the main server mode.

The entries related to switching to the backup server are saved in the separate mtfailover.log file.

[Data Feeds](#)

[Live Update](#)

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Live Update

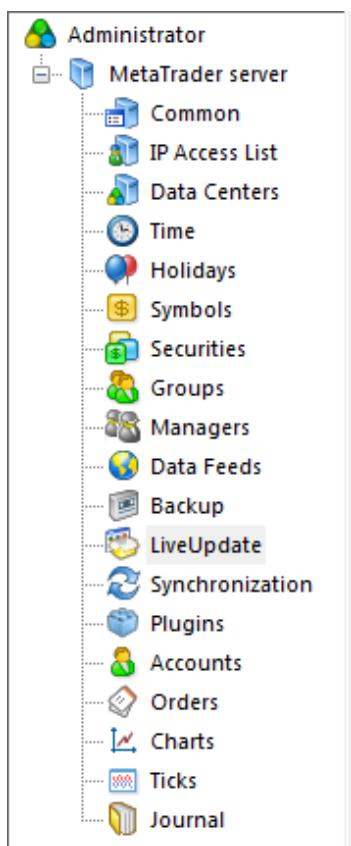
Translate: EN ▾



MetaTrader LiveUpdate is a computer-based system providing secure and effective distribution of program updates of the whole information trading complex MetaTrader. The important features are: full automation of updating processes and minimum attention from trading server administrators. Security is provided with secure data transfer through shrinking algorithms, coding, and obligatory digital signature for each file. More details about the LiveUpdate can be found in the article "["MetaTrader LiveUpdate Overview"](#)".

If automatic updates are enabled, the server checks and installs updates on Sundays 5 minutes after the Optimization time set in the [common settings](#) of the server. For critical updates one may need to start the updates manually. To do it, click "Tools – Start LiveUpdate"; make sure to set up [live update parameters](#) before doing it.

Updates are applicable to the following components of MetaTrader: MetaTrader Server (and all assisting modules), MetaTrader Data Center, MetaTrader Administrator, MetaTrader Manager and client terminals MetaTrader (including palm versions). To be sure that all components of the system are always updated, the administrator of the trading server has just to enable automatic downloading of updates. Unfortunately, updates cannot be downloaded in free mode and is only accessible for trading servers (according to the IP address lists) of our clients.



| Company | Type | Version | Path |
|---------|------------------------|--------------------|--|
| any | Client | 400.430 [65 files] | D:\MetaTrader4\liveupdate\terminal |
| any | Manager | 400.430 [15 files] | D:\MetaTrader4\liveupdate\manager |
| any | Administrator | 400.430 [9 files] | D:\MetaTrader4\liveupdate\administrator |
| any | Data Center | 400.430 [3 files] | D:\MetaTrader4\liveupdate\datacenter |
| any | Client (Pocket PC2002) | 400.430 [8 files] | D:\MetaTrader4\liveupdate\terminal_ppc2002 |
| any | MultiTerminal | 400.430 [18 files] | D:\MetaTrader4\liveupdate\multiterminal |
| any | Watch Dog | 400.430 [1 files] | D:\MetaTrader4\liveupdate\watchdog |
| any | Client (Smartphone) | 400.430 [7 files] | D:\MetaTrader4\liveupdate\smartphone |

The LiveUpdate contains the following information:

Company – full and exact name of the company owning the specific program ("any" - for any owner);

Type – select type of the program (MetaTrader, Administrator, Manager, Data Center, MultiTerminal, Watch Dog). Set "any" for Administrator and Manager terminals, as well as for Data Centers;

Version – the number of the program version and build separated with a decimal point;

Path – the path to the folder containing a new version of the program.

When starting, all the programs of the complex (MetaTrader, Administrator, Manager, DataCenter, Client Terminal) call to the server and request the number of the latest program version, and, having found a new version, run Live Update module. When updating files, the digital signature of MetaQuotes Software Corp. is checked and the check

sum of files are calculated, as well as automatic pumping in the case of disconnection. All this provides the precise updating file transferring.

[Backup](#)[Synchronization](#)

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Synchronization

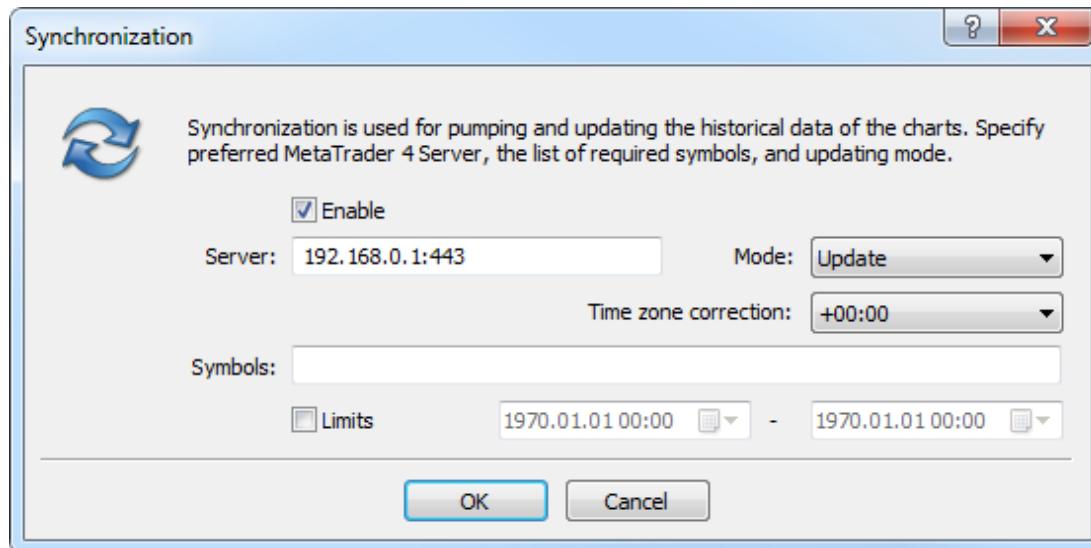
Translate: EN ▾



Synchronization is used for quickly filling missing data through other MetaTrader servers. This function has been introduced into our platforms to solve the problem of missing data.

| Server | Mode | Symbols |
|-------------------------|--------|---------|
| demo.metaquotes.net:443 | Add | All |
| 192.168.0.1:443 | Update | |

The "Add" and "Edit" context menu commands, the corresponding commands of the "Edit" menu, and and buttons of the toolbar will activate the synchronization setup window:



Enable – enabling/disabling using the server for synchronization;

Server – the server address from which data will be downloaded;

Mode – data update mode (Add – adding missing data; Update – changing the existing data; Replace – replacing all data and store the missing ones);

Time zone correction – function of correcting time zones. It allows to easily synchronize history data by MetaTrader servers located in different time zones. There are two variants of operation of this function:

Auto detect – If this variant is selected, the time difference will be detected automatically. Besides, it will also be detected, whether the option of [Daylight saving time](#) is enabled on both servers.

Setting a precise correction – when this variant is chosen, history data will be shifted strictly by this value, not taking into account the DST.

Symbols – the list of symbols (separated with commas) to be updated. Empty list means that all data must be used;

Limits – setting time limits when charts synchronizing.

To synchronize data, it is necessary to execute the "Operations – Synchronize Historical Charts" command or press the  button of the toolbar.

Note:

To perform successful synchronization, it is necessary to use only those servers which operate in the same time zone and have the same parameters of checking the Daylight Saving Time as your server.

The server to synchronize with must have at least one demo group (even a disabled one) with all necessary symbol types permitted in its settings.

It is very important that not only charts are synchronized, but also system time of the computer is correct. A standard network protocol of time synchronization TIME is used for this purpose (the [Common](#) section). Time synchronization is performed every start of the server.

Attention: You may not use time synchronization programs developed by any outside producers! In this case, the mistiming of quotes delivery is possible (messages of the server journal having the Old tick USDCHF x.xxxx / x.xxxx appearance).

[Live Update](#)

[Plugins](#)

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Translate: EN ▾



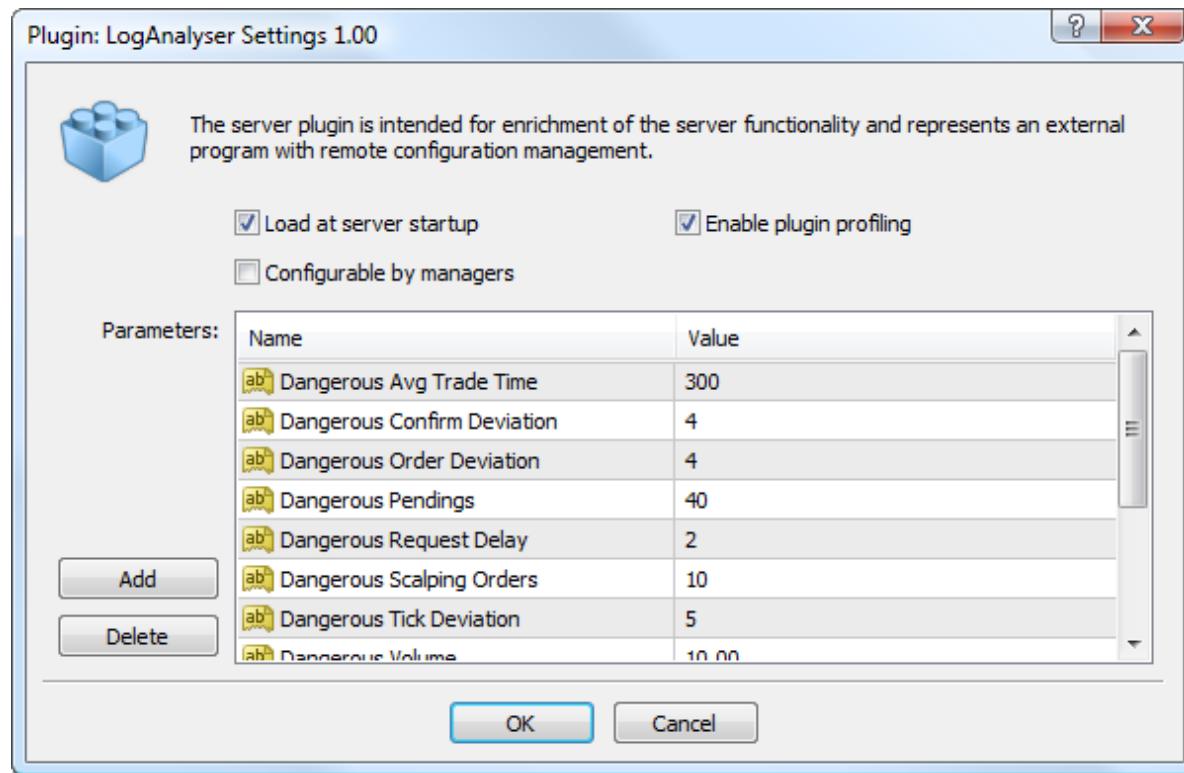
Plugins

"Plugins" section is intended for controlling plugins - the server functionality extension modules in the form of DLL-files. Plugins allocate in /plugins server folder, which the server views at each start for creation of the list of existing plugins. For the plugins located in the list, it is possible to change priority by "Move Up" and "Move Down" commands in the context menu.

| Name | Version | Copyright | File |
|----------------------|---------|---------------------------|-----------------|
| LogAnalyser Settings | 1.00 | MetaQuotes Software Corp. | LogAnalyser.dll |
| TopTraders Settings | | Enter | TopTraders.dll |

Plugin settings

To change plugin settings, it is necessary to execute the "Edit – Edit" menu command or the same command of the context menu. The window with detailed settings of the plugin will appear:



Load at server startup — load the plugin at server startup;

Configurable by managers — plugin can be configured in the manager terminal if the manager account has the appropriate right.

Enable plugin profiling — if [profiling](#) is enabled, the server collects statistics on the plugin operation, which can be used to evaluate the plugin performance and identify possible problems. Do not keep this parameter permanently enabled, because it affects the performance of the plugin and the trading server.

The plugin, as well as the profiling mode, is enabled/disabled after server restart.

Changes in priority of plugins (change of position) take effect after server restarting.

Each plugin can contain a set of some parameters serving for adjustment of its operation. Current parameters are displayed in "Parameters:" of plugin. For changing value or name of the parameter, it is necessary to select a necessary field in the list using doubleclick. After changing the edited field, it is necessary to press Enter key. To add the new parameter, it is necessary to press "Add" button. To delete the selected parameter, it is necessary to press "Delete" button.

Check of Plugins on Loading

When loading plugins, the trade server performs several checks. In case it detects a problem, the corresponding message is written to the server [journal](#):

The server measures the number of threads in the system before and after loading a plugin. In case the number of threads increases by more than 50, it will write the corresponding message in the journal.

In case a plugin include the [debug section](#), the corresponding message will be added to the journal.

It checks a digital signature of plugins. If there is no signature, the corresponding message will be added to the journal. If there is a signature, the journal message will display the name of an organization, who has signed the plugin.

If a plugin uses Java or .NET, the journal message will recommend not using this plugin. Such recommendation is due to using Java or .NET in plugins increases the loading of the trade server.

After loading a plugin dll, the server checks, whether exception handlers have been substituted (`SetUnhandledExceptionFilter`, `_set_new_mode`, `_set_new_handler`, `_set_invalid_parameter_handler`). In case it finds a substitution of handlers, the following message will be written to the journal: "it is recommended to remove handler replacement in the plugin as it negatively impacts the server's self-test system". This message may also appear due to compiling a plugin using Microsoft Visual Studio 6.0.

Profiling

Profiling allows evaluating the performance of the plugin by measuring the time and number of plugin hook calls. Measurement is performed for each hook available in the plugin.

To start profiling, enable the corresponding option in [plugin settings](#) and restart the trading server. After that, the server will begin to collect the plugin operation statistics and will output it to the [Journal](#). Statistical data is output once a minute after the monitoring data. To request logs, use the "API" keyword.

The profiling mode is only recommended for the plugin testing time, because it slows down the plugin operation.

Statistics is the cumulative data on all hooks of all plugins that were called during the trading server operation:

```
22:10:01.382      API      : 'Routing.dll' - MtSrvHistoryTickApply profile, to
22:10:01.384      API      : 'Routing.dll' - MtSrvTradeTransaction profile, to
```

The following information is displayed for all hooks:

total time – the total time spent in the hook. Together with "count", the value allows identifying an excessive amount of hook calls.

count – the total number of hook calls during the plugin operation time.

max – the maximum time spent in the hook. The value allows tracking rare, but large delays in performance.

calls – the number of current calls of the hook, which the plugin has not yet exited. The value allows detecting the full freeze of the hook.

If the hook call time exceeds 50 milliseconds, the following warning is added to the journal (no more than once every 5 seconds):

```
22:09:49.860      API      : 'Routing.dll' - MtSrvTradeTransaction profile, ca
```

In this case, it is strongly recommended to disable the plugin and optimize it. Otherwise, the performance of the trading server can be significantly reduced or completely hang.

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Accounts

The "Accounts" section is intended to manage accounts of the system. Accounts are represented as a table. Use the "Columns" sub-menu of the context menu, to adjust fields displayed in it.

The screenshot shows the "Accounts" section of the MetaTrader 4 Administrator. On the left is a tree view of administrator settings, with "Accounts" selected. The main area is a table of accounts:

| Login | Group | Email | Date | Balance | Status |
|-------|-----------|---------------------|------------|------------|--------|
| 4 | demoforex | | 2012.05.11 | 250 000.00 | |
| 6 | demoforex | | 2012.05.11 | 250 000.00 | |
| 7 | demoforex | | 2012.05.11 | 250 000.00 | |
| 8 | de | | 2012.05.11 | 250 000.00 | |
| 9 | de | | 2012.05.11 | 250 000.00 | |
| 10 | de | New Account... | Insert | 250 000.00 | |
| 11 | de | Edit Account... | Enter | 250 000.00 | |
| 12 | de | Delete Account | Delete | 250 000.00 | |
| 13 | de | Group Operations... | | 250 000.00 | |
| 14 | de | Find... | Ctrl+F | 250 000.00 | |
| 15 | de | Find Next | F3 | 250 000.00 | |
| 16 | de | Auto Arrange | A | 250 000.00 | |
| 17 | de | Columns | | 250 000.00 | |
| 18 | de | | | 250 000.00 | |
| 19 | de | | | 250 000.00 | |
| 20 | demoforex | | | 250 000.00 | |
| 21 | demoforex | | 2012.05.11 | 250 000.00 | |
| 22 | demoforex | | 2012.05.11 | 250 000.00 | |
| 23 | demoforex | | 2012.05.11 | 250 000.00 | |

A context menu is open over the 8th row (Login 8, Group de). The menu includes:

- Request Base
- New Account... (with Insert sub-command)
- Edit Account... (with Enter sub-command)
- Delete Account (with Delete sub-command)
- Group Operations...
- Find... (with Ctrl+F sub-command)
- Find Next (with F3 sub-command)
- Auto Arrange (with A sub-command)
- Columns

At the bottom of the window are buttons: demoforex, Database: Current, Request.

The "Request" button and the corresponding context menu command allow to request the accounts of a specific group or those of all groups simultaneously. The parameters of the request should be indicated in "Group" and "Database" fields. As a request parameter in the "Group" field you can indicate both a group or a group wildcard (like a file wildcard). For example, if you need to find all accounts of all demo groups you can write in this field "demo*" as a request. Also you may indicate a list of logins, commas being delimiters. In the "Database" field, you can specify either the current database or an archive or backup one.

To find the required client's account by a certain given criterion among the results of a request from data base, use the "Find" window (press "Ctrl+F" to show this window).

The "Delete Account" command will delete the account selected. "Group Operations" – allows to execute [group operations](#).

The "New Account" command will allocate new account. The "Edit Account" command allows to edit an account.

Personal data of the account (Personal tab)

When having executed the "Edit Account" context menu commands, the account parameter window will appear. The personal data of the account are located in "Personal" tab:

Enable enables/disables the account;

Registration date is the date the account was registered;

MetaQuotes ID is a unique identifier assigned to each user during installation of the MetaTrader 4 for [iPhone](#) or [Android](#). This identifier is used like a phone number. By specifying MetaQuotes ID in the desktop terminal settings, a user can send notifications about various trade events on their mobile devices. MetaQuotes is also supported by [MQL5.community](#): by specifying the identifier in profile, a user can receive important notifications from the website and communicate with other members of the community via private messages. For more information please refer to the article [MetaQuotes ID in MetaTrader Mobile Terminal](#). MetaQuotes ID is added to the client record on the server side, once the client specifies it in the terminal settings.

Login is the account number (it appears only in the window of account creation. Once an account has been created Login can not be changed). If this field is not filled out when adding an account, the server will fill it out automatically;

Name is the account holder's name;

Phone password is a password for the account holder's identification when trading by telephone;

City is location of the holder;

State is a state (region, other political subdivision);

Country is the account holder's country;

Address is the account holder's mailing address;

Zip-code is the account holder's zip-code or postal code;

Phone is the account holder's telephone number;

Email is the account holder's email;

ID number is the account holder's SIN, TIN, ITN, or other identification number;

Status is the field where you should indicate resident/non-resident;

Color is the color the information about the account will be displayed with in the dealer's window when a new trading request comes from the account owner;

Group is a group to which the account belongs;

Attention:

Transferring the account from one group to another is impossible if deposit currencies are different in these groups.

An account is immediately moved from one group to another one even if there are open orders and positions (server restart is not required) on condition that the groups have the same deposit currency. After transferring, connections of all active terminals with the corresponding logins are terminated in order to apply trading group settings on the client terminal's side.

Comment is a description;

Leverage is a leverage;

Tax rate is a tax on the amount obtained at calculation of interests charged on free assets (annual interest). Collected monthly at charging of the annual interest;

Agent account is the account number of agent servicing for the selected account;

LeadSource – this field is used for marketing campaigns allowing you to track where a client came from. To receive the data, add the following to the client or mobile platform download link:

```
https://download.mql5.com/cdn/web/metaquotes.software.corp/mt4/mt4setup.exe?utm_campaign=YourLeadSource  
https://download.mql5.com/cdn/mobile/mt4/ios?server=ABC-Demo,ABC-Real&utm_campaign=YourLeadSource  
https://download.mql5.com/cdn/mobile/mt4/android?server=ABC-Demo,ABC-Real&utm_campaign=YourLeadSource
```

where YourLeadSource is a name of a campaign. In the "server" parameter of the mobile platform links, enter the list of your servers to be shown to traders when they open an account.

When opening a demo account and connecting to any trading account via the terminal downloaded using such a link, utm_campaign value is set in a client record at the server side.

Allow to change password is the field where you can permit/prohibit changing password;

Enable one-time password – using this option, you can disable the OTP use for individual clients in the group. If use of OTP is [disabled for a group](#), enabling this option does not have any effect.

Read only (without trading) is the field where you can permit trading or reading charts only;

Send reports – enable/disable sending of [daily and monthly reports](#) to this account. If sending of reports is disabled, reports for this client are still generated.

The "Update" command updates personal data of an account on the server.

Account Orders (Trades tab)

Account: 598671, John Smith, USD

Personal Trades Security

| Deal | Login | Time | Type | Symbol | Lots | Price | S / L | T / P | Price | Swap | USD |
|-----------------------|-------------------|------------------|----------------------------|--------|------|---------|---------|---------|---------|---------|----------|
| 35650647 | 598671 | 2012.05.30 12:08 | balance | | | | | | | Deposit | 5 000.00 |
| <input type="radio"/> | Deposit: 5 000.00 | Withdrawal: 0.00 | Credit: 0.00 | | | | | | | 0.00 | 0.00 |
| 35650648 | 598671 | 2012.05.30 12:15 | buy | eurusd | 1.00 | 1.24368 | 0.00000 | 0.00000 | 1.24430 | 0.00 | 62.00 |
| | Balance: 5 000.00 | Credit: 0.00 | Accumulated interest: 0.00 | | | | | | | 0.00 | 62.00 |

Open only Refresh

Cancel Help

The "Trades" tab allows to request the client's order list. Double click on the transaction opens the [window of transaction details](#). If you check the "Open only" field and press the "Refresh" button, only open trades of this account will be represented on the tab.

Account Security (Security tab)

Account: 598671, John Smith, USD

Personal Trades Security

Check password

Checking password allows to verify Master account password.

Password: Check

Change password

You can change Master or Investor passwords for the account. Password must be complex enough, at least 5 symbols long and at least two or three character types present - lowercase, uppercase, digit.

You can also disable one-time password usage for the account. If forced OTP usage is enabled for the group, the user will be requested to bind his account to the one-time password generator on the next connection to the server.

Reset one-time password secret
 Change read-only (investor) password

New password: Change

Cancel Help

The "Security" tab makes it possible to check Master password of the account and to change the Master/Investor password of the account, as well.

There is an opportunity to reset the secret key of the account on the server for the accounts from the group having authorization via [one-time passwords](#) enabled. A secret key is required when using a custom generator of one-time passwords. This functionality is under development.

Password must be rather complex: at least 5 characters long and containing at least two of three character types (lowercase, uppercase, or digits). The maximum password length is 15 characters.

Once the password is changed, the connection of the account to the trader server is reset. A reconnection with the new password is required.

Plugins

Group Operations

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Translate: EN ▾



Group Operations

Group Operations make it possible to process a group of accounts selected in the table in the "Accounts" section (not to be confused with accounts groups, such as demo forex, contest, and others), but not individual accounts. To do so, it is necessary to execute the "["Group Operations"](#)" command of the context menu. Upon doing so, all available group operations are located in the same window:

The screenshot shows the "Group operations" window. At the top, there is a message: "Operations with the set of accounts. You can enable or disable accounts, change account group, or change account leverage. Balance can be checked or fixed for a group of accounts." Below this is a toolbar with buttons for "Group:" (set to "demoforex"), "Set Group", "Leverage:" (set to "1 : 100"), "Set Leverage", "Enable", "Disable", "Delete", "Check Balance", and "Fix Balance". A "Close" button is at the bottom right. The main area contains a table with columns: Login, Name, Group, Leverage, and Balance. Three accounts are listed, all belonging to the "demoforex" group with a leverage of "1 : 100" and a balance of "1000000.00". Each account has its own row of buttons: "Enable", "Disable", "Delete", "Check Balance", and "Fix Balance".

| Login | Name | Group | Leverage | Balance |
|--------|--------|-----------|----------|------------|
| 598656 | Tester | demoforex | 1 : 100 | 1000000.00 |
| 598659 | Tester | demoforex | 1 : 100 | 1000000.00 |
| 598661 | Tester | demoforex | 1 : 100 | 1000000.00 |

Set Group transfers accounts to another group (demo forex, contest, etc.);

Set Leverage sets a new leverage;

Enable enables accounts;

Disable disables accounts. This option applies to newly connected accounts only, and it does not apply to those already existing. At this point, the icons of the corresponding accounts become gray;

Delete deletes accounts. When you delete an account, all its closed and open positions are also deleted.

Check balance helps to check balances of accounts. After having pressed this button, the correspondence of the client's balance and the sum of all positions profits/losses of the trader is checked. At that the window of group operations is closed. The difference between the current and the calculated balance will be displayed in Checked column in the list of accounts. In case the balances do not match, the account row will be highlighted with red color. In case there are no errors in the balances all accounts, the following messages is written to the journal: "account balances have been checked. All balances are correct.";

Fix balance helps to correct balances. This command calculates the sum of profits of the client's closed positions, and the result is stored as the current deposit. More detailed information is located in the "["Account Restore"](#)" section.

Transferring accounts between groups with different deposit currency is only possible if the accounts have zero balance and credit.

An account is immediately moved from one group to another one even if there are open orders and positions (server restart is not required) on condition that the groups have the same deposit currency. After transferring, connections of all active terminals with the corresponding logins are terminated in order to apply trading group settings on the client terminal's side.

[Accounts](#)[Account Restore](#)

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Accounts Restore

Translate: EN ▾



Accounts can be restored completely or partially. What is the difference? The complete restore will apply when all client's data have been lost, including trade operations. The partial restore will apply when only account data has been lost (user's name, address, etc.). If you have deleted an account by mistake, or when you need to perform complete restore for any other reason, you should carry out the following actions:

1. [restore the account data \("Accounts" section\)](#)
2. [restore the account orders \("Orders" section\)](#)
3. [check and recalculate the restored account balance](#)

For partial restore, it is necessary to [carry out only the first action](#).

You should use the "Find" window to find the necessary client's account on the given criterion among the results of the data base request. You can activate this window using "Ctrl+F" buttons.

Account Data Restore

You need [accounts bases](#) for restoring the account data. These bases are created within a certain schedule (indicated in the ["Archive backup every"](#) field of the ["Backups"](#) section). They are stored when any account is being deleted.

| Login | Group | Email | Date | Balance |
|--------|-----------|---------------|------------|--------------|
| 598617 | demoforex | test@test.com | 2012.05.24 | 1 000 000.00 |
| 598618 | demoforex | test@test.com | 2012.05.24 | 977 228.66 |
| 598626 | demoforex | test@test.com | 2012.05.24 | 1 000 000.00 |
| 598627 | demoforex | test@test.com | 2012.05.24 | 1 000 000.00 |
| 598629 | demoforex | test@test.com | 2012.05.24 | 851 569.30 |
| 598631 | demoforex | test@test.com | 2012.05.24 | 706 963.42 |
| 598635 | demoforex | test@test.com | 2012.05.24 | 1 000 000.00 |
| 598636 | demoforex | test@test.com | 2012.05.24 | 1 000 000.00 |
| 598637 | demoforex | test@test.com | 2012.05.24 | 928 305.85 |
| 598639 | demoforex | test@test.com | 2012.05.24 | 1 000 000.00 |
| 598640 | demoforex | test@test.com | 2012.05.24 | 1 000 000.00 |
| 598643 | demoforex | test@test.com | 2012.05.24 | 1 000 000.00 |
| 598645 | demoforex | test@test.com | 2012.05.24 | 1 000 000.00 |
| 598646 | demoforex | test@test.com | 2012.05.24 | 1 000 000.00 |
| 598647 | demoforex | test@test.com | 2012.05.24 | 1 000 000.00 |
| 598648 | demoforex | test@test.com | 2012.05.24 | 698 304.48 |
| 598649 | demoforex | test@test.com | 2012.05.24 | 849 433.94 |
| 598650 | demoforex | test@test.com | 2012.05.24 | 851 577.64 |
| 598656 | demoforex | test@test.com | 2012.05.24 | 1 000 000.00 |

[Any base](#) fits for restore if it contains information about the necessary account. First, you should request the base in the ["Accounts"](#) section. As soon as the desired account is found in bases you will have to execute the "Restore Accounts" context menu command. After that, you can find the restored account in the current base ("Current Account Base" in the "Database" field). Take into consideration, please, the deposit of the account having been restored is still zero. It is not a problem since you can restore your balance, as well, if you know all trade operations.

Note: It is recommended to request bases created after having deleted accounts (files having the "Deleted" postfix). Requesting all databases can cause unnecessary server load, and, moreover, it is difficult to retrieve necessary information in a large amount of data. It is also recommended not to request all the bases, but to request only backups created approximately at the time of the account deletion.

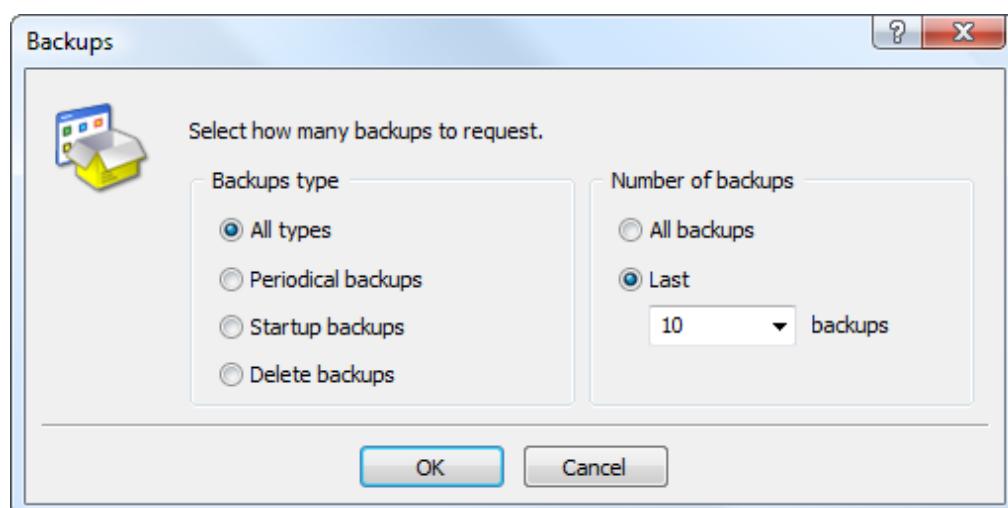
Orders Restore

The technique of orders restore is rather similar to that of [account restore](#), except for that, in most cases, not all, but the latest order base containing trade operations of the selected account is necessary. The fact is that it is the latest base that contains information of all trade operations of the deleted account. Normally, when the account is being restored, it is a base having the "delete" postfix and information about the time of the account deletion. All orders and positions not yet closed at the moment of deletion are stored in it.

| Deal | Login | Time | Type | Symb... | Lots | Price | Price | Profit |
|----------|--------|------------------|------------|-----------|---------|---------|---------|------------|
| 29611072 | 536093 | 2012.05.18 10... | buy ... | eurchf | 2106... | 1.20175 | 1.20126 | |
| 29611117 | 534548 | 2012.05.18 10... | sell li... | audnz... | 379.70 | 1.29978 | 1.29908 | |
| 29611121 | 534504 | 2012.05.18 10... | sell | eurchf | 185.90 | 1.20090 | 1.20126 | -7 066.80 |
| 29611159 | 528914 | 2012.05.18 10... | buy l... | usdjpy | 2036... | 79.213 | 79.323 | |
| 29611161 | 533871 | 2012.05.18 10... | sell | cadjpy... | 17.60 | 77.859 | 77.889 | -665.64 |
| 29611182 | 553014 | 2012.05.18 10... | sell li... | eurnz... | 1816... | 1.67729 | 1.67420 | |
| 29611213 | 552590 | 2012.05.18 10... | buy | gbpch... | 219.80 | 1.49538 | 1.49510 | -6 501.31 |
| 29611215 | 552584 | 2012.05.18 10... | sell s... | cadch... | 2612... | 0.92874 | 0.92920 | |
| 29611216 | 552573 | 2012.05.18 10... | sell s... | gbpch... | 3002... | 1.49434 | 1.49506 | |
| 29611218 | 552556 | 2012.05.18 10... | sell li... | chfjpy | 822.20 | 83.852 | 83.757 | |
| 29611220 | 552519 | 2012.05.18 10... | sell | eurca... | 264.30 | 1.29201 | 1.29243 | -10 896.08 |
| 29611223 | 552477 | 2012.05.18 10... | buy l... | cadch... | 3184... | 0.92844 | 0.93000 | |
| 29611224 | 552471 | 2012.05.18 10... | sell li... | audch... | 1175... | 0.93292 | 0.93140 | |
| 29611228 | 552332 | 2012.05.18 10... | sell s... | euraud | 2775... | 1.28848 | 1.28886 | |
| 29611231 | 552253 | 2012.05.18 10... | sell li... | cadjpy... | 3006... | 77.895 | 77.837 | |
| 29611240 | 552114 | 2012.05.18 10... | sell | gbpch... | 72.10 | 1.49477 | 1.49571 | -7 156.71 |
| 29611245 | 551465 | 2012.05.18 10... | buy l... | audusd | 781.60 | 0.98329 | 0.98434 | |
| 29611251 | 550559 | 2012.05.18 10... | sell | eurca... | 80.70 | 1.29198 | 1.29252 | -4 277.42 |
| 29611255 | 550469 | 2012.05.18 10... | sell | eurchf... | 218.70 | 1.20090 | 1.20125 | -8 083.40 |
| 20611256 | 550280 | 2012.05.18 10... | all | | 1775 | 1.26015 | 1.26045 | |

demoforex Current Request

To find a desired base, it is necessary to select "More Backups" in the "Database" field of the ["Orders"](#) section:



You should check the "Delete backups" field and choose the request range in the "Number of Backups" field. Then you should find the latest base having the "delete" postfix and containing information of operations of the desired account (the time of base creation can help you in doing this). To restore orders it is necessary to execute the "Restore orders" command, having selected all (or just some of) operations. The last task of complete restore is collation of orders and the account, and balance recalculation.

Attention:

Account orders of the account group which did not exist after the server had been started cannot be restored. At this stage, unlike order, the account of a non-existing group can be restored. restore of orders for a non-existing account is impossible.

Balance Check and Recalculation

After having restored the account and its orders you see that balance is still zero. To correct it, you should execute the "[Group Operations](#)" context menu command in the "[Accounts](#)" section. Then you should execute the "Check balance" command. The balance recalculation for the restored trade operations (including initial deposit at the account opening) and collation of the balance and the current balance value will be performed. As a result, there will be either "OK" or "Wrong" written in the "Accounts" section in the "Status" field of the selected account. In the first case, the balance and the result of recalculation on operations coincide. In the second case, values differ, this is a standard situation at complete restoring proves. To complete it for the account, it is necessary to execute the "Fix Balance" command in the group operations window. The result is that there is "OK" written in the "Status" field, and the deposit is equal to the amount resulting from recalculation on operations.

Attention: Do not forget to check and recalculate balances when restoring accounts!

[Group Operations](#)

[Account Archive](#)

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Account Archive

Translate: EN 

In the course of server operation, a large amount of unused accounts is accumulated: closed accounts, accounts with expended balance, etc. The most of these accounts cannot be deleted since they are necessary, for example, for settlement of disputes with customers. As a result, the databases of the server will grow with the time to significant sizes, which can negatively influence the trade server performance.

Archives of clients' accounts and orders are intended to solve this problem: every Sunday, during optimization, the server checks all clients' records in the system for two basic parameters - "[Inactivity period](#)" and "[maximum balance](#)". If there were no connections for the given account within the preset period of time and its balance does not exceed the preset value, this account with all its orders will be moved to the archive. Additional conditions for moving to the archive are absence of open positions and trade activity during the inactivity period (including withdrawals and deposits to the account and charging agent commission).

Accounts archive represents files that appear as users_archive_xxxx.dat and orders_archive_xxxx.dat - archive file of accounts and archive file of orders, respectively, where xxxx is the year, for which the archive is created. These files are located in [database directory](#). Their backups are created once a day when the full backup is performed.

MetaTrader 4 Administrator allows viewing and restoring data from the archive like what is made at [accounts restoring](#) and [orders restoring](#). It is necessary to select in the the list of available backups databases of "users archive" to work with accounts and "orders archive" to work with orders.

Accounts that belong to demo*, manager and coverage groups are not archived. For deleting old and unused demo accounts the [Time of demo](#) options is provided.

To be archived, an account must not connect to the server using the master password during the period specified in the "[Inactivity period](#)" field.

A more detailed information about archiving is available in the article ["What To Do with Accounts of Inactive Clients"](#).

[Account Restore](#)[Account Redirection](#)

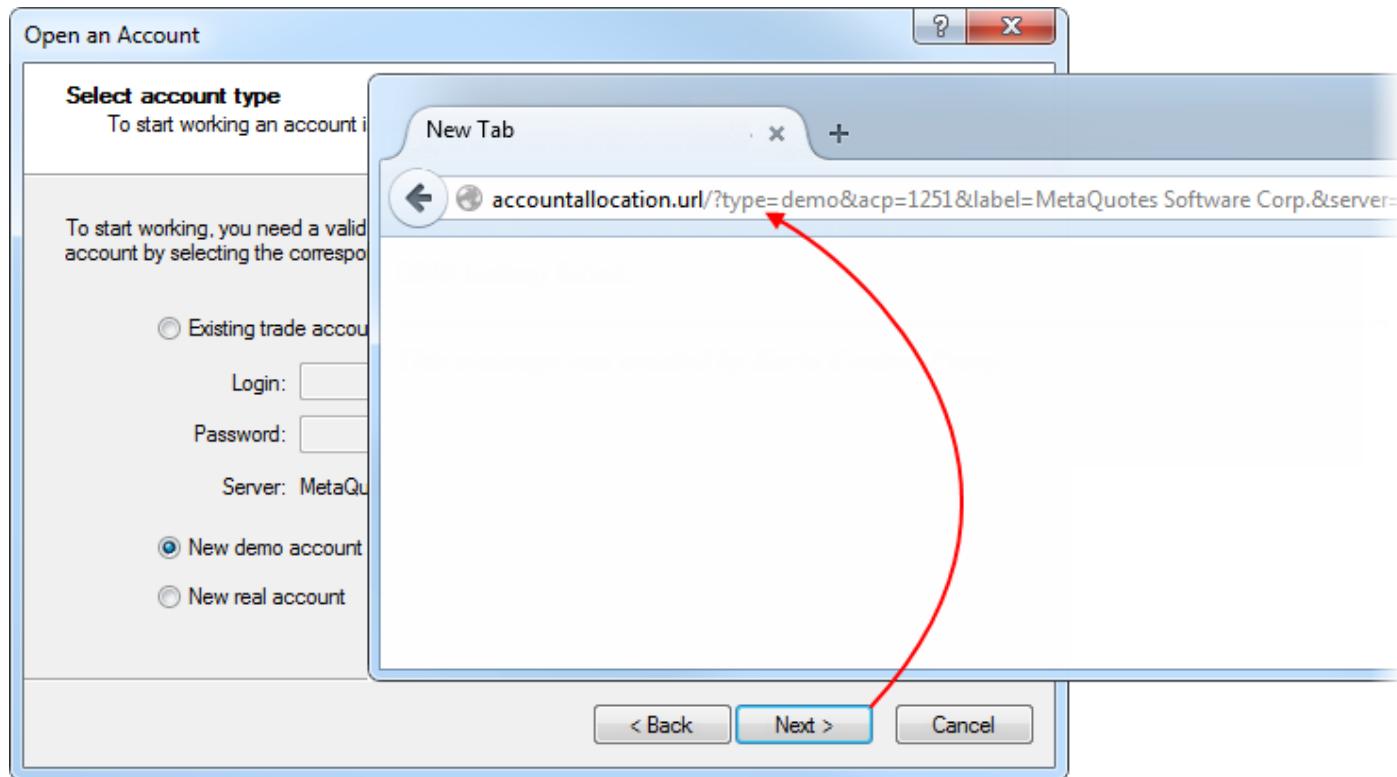
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Account Redirection

Translate: EN



In "[Account allocation URL](#)" parameter available in "Common" section one can the address a client is redirected to when opening an account from the client terminal. If the address is set, a trader is redirected to the specified web page when opening an account from the client terminal:



Request parameters separated by "&" symbol are additionally passed in the address line:



type – account type: demo or real.

acp – code page used by a trader.

label – name of the company which owns the terminal White Label.

server – name of the server a trader has selected when opening an account.

interface – client terminal's interface language.

cid – trader PC's unique ID.

When forming a request, the presence of "?" symbol in Account allocation URL parameter is checked. In other words, it is checked whether the specified address contains its own request parameters:

If there is no "?" symbol in the address, it is formed with the standard set of parameters described above. For example, <https://www.mycompany.com>.

If "?" symbol is present in the address, standard parameters are added to the specified custom ones. For example, if https://www.mycompany.com?utm_campaign=terminal address is specified, the final line has the following look: https://www.mycompany.com?utm_campaign=terminal&type=demo&acp=.....

The link address must start with "https://" or "http://".

[Account Archive](#)

[Orders](#)

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Orders

Translate: EN ▾



You can request information about all trade operations of any accounts in the "Orders" section. Parameters are set in the "Group" and "Database" fields, the "Open only" check box allows to request only open orders. The "Request" button or the corresponding context menu command allows to proceed the request.

The "Open only" option works only when requesting orders by login or group. When requesting a specific order it is not considered.

To search a necessary entry according a certain criterion among the results of the request from the database, you should use the "Find" window. Activation of this window can be performed with "Ctrl+F" buttons.

The screenshot shows the "Orders" section of the MetaTrader 4 Administrator. On the left is a tree view of administrator settings, with "Orders" selected. The main area is a grid table showing trade orders:

| Deal | Login | Time | Type | Symb... | Lots | Price | Price | Profit |
|----------|--------|------------------|------------|------------|---------|---------|---------|------------|
| 29611072 | 536093 | 2012.05.18 10... | buy ... | eurchf | 2106... | 1.20175 | 1.20126 | |
| 29611117 | 534548 | 2012.05.18 10... | sell li... | audnz... | 379.70 | 1.29978 | 1.29908 | |
| 29611121 | 534504 | 2012.05.18 10... | sell | eurchf | 185.90 | 1.20090 | 1.20126 | -7 066.80 |
| 29611159 | 528914 | 2012.05.18 10... | buy l... | usdjpy | 2036... | 79.213 | 79.323 | |
| 29611161 | 533871 | 2012.05.18 10... | sell | cadjpy... | 17.60 | 77.859 | 77.889 | -665.64 |
| 29611182 | 553014 | 2012.05.18 10... | sell li... | eurnz... | 1816... | 1.67729 | 1.67420 | |
| 29611213 | 552590 | 2012.05.18 10... | buy | gbpch... | 219.80 | 1.49538 | 1.49510 | -6 501.31 |
| 29611215 | 552584 | 2012.05.18 10... | sell s... | cadch... | 2612... | 0.92874 | 0.92920 | |
| 29611216 | 552573 | 2012.05.18 10... | sell s... | gbpch... | 3002... | 1.49434 | 1.49506 | |
| 29611218 | 552556 | 2012.05.18 10... | sell li... | chfjpy | 822.20 | 83.852 | 83.757 | |
| 29611220 | 552519 | 2012.05.18 10... | sell | eurca... | 264.30 | 1.29201 | 1.29243 | -10 896.08 |
| 29611223 | 552477 | 2012.05.18 10... | buy l... | cadch... | 3184... | 0.92844 | 0.93000 | |
| 29611224 | 552471 | 2012.05.18 10... | sell li... | audch... | 1175... | 0.93292 | 0.93140 | |
| 29611228 | 552332 | 2012.05.18 10... | sell s... | euraud | 2775... | 1.28848 | 1.28886 | |
| 29611231 | 552253 | 2012.05.18 10... | sell li... | cadjpy... | 3006... | 77.895 | 77.837 | |
| 29611240 | 552114 | 2012.05.18 10... | sell | gbpch... | 72.10 | 1.49477 | 1.49571 | -7 156.71 |
| 29611245 | 551465 | 2012.05.18 10... | buy l... | audusd | 781.60 | 0.98329 | 0.98434 | |
| 29611251 | 550559 | 2012.05.18 10... | sell | eurca... | 80.70 | 1.29198 | 1.29252 | -4 277.42 |
| 29611255 | 550469 | 2012.05.18 10... | sell | eurochf... | 218.70 | 1.20090 | 1.20125 | -8 083.40 |
| 29611256 | 550280 | 2012.05.18 10... | sell | eurca... | 1275 | 1.76815 | 1.76845 | |

At the bottom, there are buttons for "Current" and "Request".

Information about the time of closing a position, agent's commission, and the futures contract expiring dates is located in this window. The "Order" window also allows to change information about trade operations. The "Delete" button and the corresponding context menu command will delete the selected orders. The execution of the "Delete Orders" command is not sufficient to delete orders. After that, it is necessary to execute "Check balance" and "Fix balance" commands in the group operations window in the ["Accounts"](#) section. You can find more details in the [Order Removing and Restore](#) section.

On the "Edit order..." context menu command, the detailed information window will appear:

Order #70080297

Editing of an order from the current database. If open/close time has been changed, swaps must be recalculated. If open/close price has been changed for closed positions, profit must be recalculated.

| | | | |
|------------------|---------------------|--------------------|---------|
| Login: | 646809 | Reason: | Expert |
| Type: | BUY | Lots: | 1.00 |
| Open time: | 2013.10.17 08:07:29 | Open price: | 0.91092 |
| Close time: | 2013.10.17 08:07:39 | Close price: | 0.91063 |
| 1st conv.rate: | 1.00000 | 2nd conv.rate: | 1.00000 |
| Commission: | 0.00 | Agent commission: | 0.00 |
| Comment: | #70080296 | | |
| Expiration date: | 2014.08.15 14 | Magic: | |
| Gateway order: | | Open price delta: | pips |
| Gateway lots: | | Close price delta: | pips |

Update **Reopen** **Cancel**

Order — order number;

Login — account login;

Reason — a reason of placing the order:

Client — the order is placed manually by a client via the client terminal;

Expert — the order is placed by a client using an Expert Advisor;

Dealer — the order is placed by a dealer via the manager terminal;

Signal — the order is placed as a result of copying a [trade signal](#) according to a subscription in the client terminal;

Gateway — the order is placed via the [STP gateway](#).

Mobile — the order is placed via MetaTrader 4 for iPhone or Android.

Web — the order is placed via WebTerminal.

API — the order is placed via Server API or Manager API.

Type — type of operation (buy, sell, sell limit, buy limit, buy stop, sell stop, balance, credit);

Lots — the volume of the lot of a position;

Symbol — financial instrument;

Open time — time of opening a position;

Close time — time of closing a position;

Open price — opening price of a position;

Close price — closing price of a position;

S / L — the level of the Stop Loss order indicated;

T / P – the level of the Take Profit order indicated;

1st conv. rate – the basic currency rate of the instrument against the deposit currency by the moment of opening a position. The algorithm of conversion is the same as the one used for [margin calculation](#);

2nd conv. rate – the basic currency rate of the instrument against the deposit currency by the moment of closing a position. The algorithm of conversion is the same as the one used for [margin calculation](#);

Margin rate – the coefficient of conversion of the order margin currency into the deposit currency. The algorithm is described in the ["Margin calculation"](#) section;

Swaps – swaps being accounted;

Commission – the amount of commission;

Agent Commission – the amount of agent commission;

Taxes – taxes for commission;

Comment – the text of the comment;

Profit – the trade operation profit;

Expiration date – the date of expiration of the order;

Magic – order identifier (Magic Number) set by a client's Expert Advisor.

Value date – the date of credit repayment;

Gateway order – order number (ticket) at an external MetaTrader 4 server when working through the [gateway](#);

Gateway lots – the volume used when the order was passed to an external trade server via the gateway.

[Coverage percentage](#) is configured in the gateway rules;

Open price delta – difference between the order open price in the external system and the order open price on the local trade server. Specified in pips. The total open price on the gateway is obtained by adding the difference to the order open price on the local server;

Close price delta – difference between the order close price in the external system and the order close price on the local trade server. Specified in pips. The total close price on the gateway is obtained by adding the difference to the order close price on the local server.

The "Update" button saves modifications made in an order.

Attention:

When changing the account login of the order, it is necessary to make sure that the "Commission", "Swap", "Profit", "1st conv. rate", "2nd conv. rate" parameters are set correctly. In the other case, significant distortion of the client's trade account parameters can occur. For example, if the order belonged to a client having JPY as basic currency, and it was transferred to the client having USD as basic currency, false (too high) values of margin demands, commission, swaps, and profits are possible.

After modifying an order, you should correct the account balance. To do it, execute the ["Group Operations..."](#) command in the context menu of the necessary account and run the "Fix Balance" procedure.

Reopening Orders

Orders in the trade history of a client can be reopened. To do it, go to the "Orders" section, open the order and then click "Reopen":

| | | | | | | |
|---|---------------|--------------------|------|--------|---------|--------|
| Commission: | 0.00 | Agent commission: | 0.00 | Swaps: | 0.00 | |
| Comment: | #70080296 | | | | Taxes: | 0.00 |
| Expiration date: | 2014.08.15 14 | | | | Profit: | -31.85 |
| Gateway order: | | Open price delta: | | pips | | |
| Gateway lots: | | Close price delta: | | pips | | |
| <input type="button" value="Update"/> <input type="button" value="Reopen"/> <input type="button" value="Cancel"/> | | | | | | |

Pending Orders

When reopening a pending order, check what price it has. The order should not trigger right after being reopened.

Market Orders

When reopening, carefully check the Stop Loss and Take Profit levels of the order. In the current market situation, these levels may be already hit and thus the reopened order will be closed again on the next tick.

Also one should consider the margin state of the client after reopening the order. The client should not fall under stop out, as the server will force position closing.

After reopening a market order, fix the client's balance. Select the [client account](#) in the corresponding section and execute "Group operations" in the context menu. Click "Fix Balance" in the appeared window.

| Login | Name | Group | Leverage | Balance | |
|--------|--------|-----------|----------|------------|--|
| 598656 | Tester | demoforex | 1 : 100 | 1000000.00 | <input type="button" value="Enable"/> |
| 598659 | Tester | demoforex | 1 : 100 | 1000000.00 | <input type="button" value="Disable"/> |
| 598661 | Tester | demoforex | 1 : 100 | 1000000.00 | <input type="button" value="Delete"/> |

Translate: EN ▾



Order Deleting and Restore

If it is necessary to delete one or more orders, it is not enough to execute the "Delete" context menu command in the "[Orders](#)" section. After having used it, select accounts in the "[Accounts](#)" section orders of which have been deleted, and execute the "[Group Operations](#)" context menu command. Press the "Check Balance" button in the window which appears. The recalculation of balances on the rest of trade operations will now be performed and will be compared to the current value.

As a result, either "OK" or "Wrong" will be written in the "Status" field of the selected accounts in the "Accounts" section. In the first case, the balance and the result of recalculation on the operation coincide with each other. It means no other action should be taken. In the second, more probable case, the values will differ from each other. To complete the order deleting, it is necessary to execute the "Fix Balance" command in the Group Operations window. After that, "OK" will appear in the "Status" fields, and deposits will equal in the sum recalculated for operations. Only after having recalculated and compared the balances, the operation of order deleting can be considered as completed.

Order Restore

To restore one or more orders being deleted for any reasons, it is necessary to perform the following actions:

[restore the deleted orders](#)

[check and recalculate balances of appropriate accounts](#)

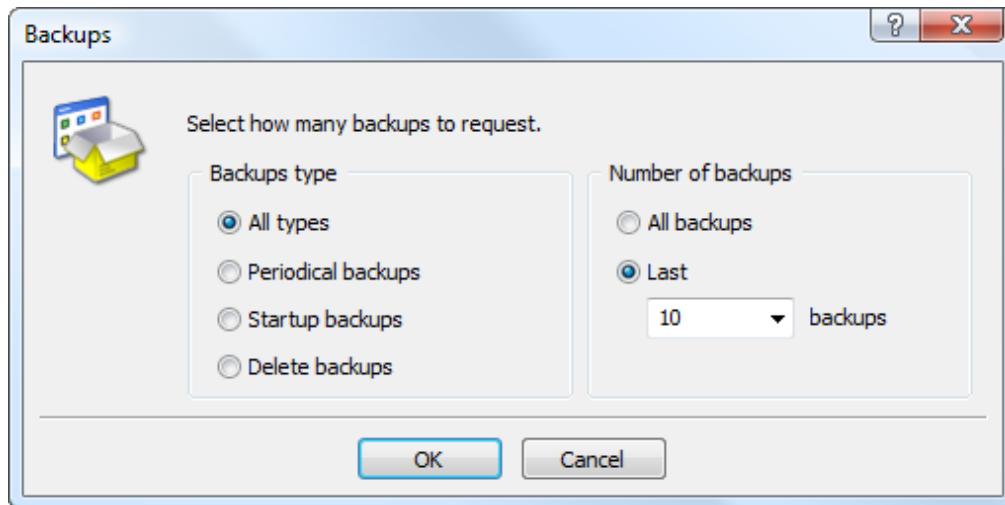
Order Restore

To restore, you need backups of the order databases. These bases are created with a certain schedule (indicated in the "[Archive Backup Every](#)" field of the "[Backups](#)" section), and also when fifteen or more orders are deleted at the same time.

The screenshot shows the 'Administrator' section of the MetaTrader 4 software. On the left, there is a tree view of the administrator menu with 'Orders' selected. The main area displays a table of trade deals. The columns are labeled: Deal, Login, Time, Type, Symb..., Lots, Price, Price, and Profit. The table contains 20 rows of data, each representing a trade deal with specific details like login ID, date/time, type (buy/sell), symbol, lots, and profit.

| Deal | Login | Time | Type | Symb... | Lots | Price | Price | Profit |
|----------|--------|------------------|------------|-----------|---------|---------|---------|------------|
| 29611072 | 536093 | 2012.05.18 10... | buy ... | eurchf | 2106... | 1.20175 | 1.20126 | |
| 29611117 | 534548 | 2012.05.18 10... | sell li... | audnzd... | 379.70 | 1.29978 | 1.29908 | |
| 29611121 | 534504 | 2012.05.18 10... | sell | eurchf | 185.90 | 1.20090 | 1.20126 | -7 066.80 |
| 29611159 | 528914 | 2012.05.18 10... | buy l... | usdjpy | 2036... | 79.213 | 79.323 | |
| 29611161 | 533871 | 2012.05.18 10... | sell | cadjpy... | 17.60 | 77.859 | 77.889 | -665.64 |
| 29611182 | 553014 | 2012.05.18 10... | sell li... | eurnz... | 1816... | 1.67729 | 1.67420 | |
| 29611213 | 552590 | 2012.05.18 10... | buy | gbpch... | 219.80 | 1.49538 | 1.49510 | -6 501.31 |
| 29611215 | 552584 | 2012.05.18 10... | sell s... | cadch... | 2612... | 0.92874 | 0.92920 | |
| 29611216 | 552573 | 2012.05.18 10... | sell s... | gbpch... | 3002... | 1.49434 | 1.49506 | |
| 29611218 | 552556 | 2012.05.18 10... | sell li... | chfjpy | 822.20 | 83.852 | 83.757 | |
| 29611220 | 552519 | 2012.05.18 10... | sell | eurca... | 264.30 | 1.29201 | 1.29243 | -10 896.08 |
| 29611223 | 552477 | 2012.05.18 10... | buy l... | cadch... | 3184... | 0.92844 | 0.93000 | |
| 29611224 | 552471 | 2012.05.18 10... | sell li... | audch... | 1175... | 0.93292 | 0.93140 | |
| 29611228 | 552332 | 2012.05.18 10... | sell s... | euraud | 2775... | 1.28848 | 1.28886 | |
| 29611231 | 552253 | 2012.05.18 10... | sell li... | cadjpy... | 3006... | 77.895 | 77.837 | |
| 29611240 | 552114 | 2012.05.18 10... | sell | gbpch... | 72.10 | 1.49477 | 1.49571 | -7 156.71 |
| 29611245 | 551465 | 2012.05.18 10... | buy l... | audusd | 781.60 | 0.98329 | 0.98434 | |
| 29611251 | 550559 | 2012.05.18 10... | sell | eurca... | 80.70 | 1.29198 | 1.29252 | -4 277.42 |
| 29611255 | 550469 | 2012.05.18 10... | sell | eurchf... | 218.70 | 1.20090 | 1.20125 | -8 083.40 |
| 29611256 | 550280 | 2012.05.18 10... | sell | eurchf... | 1275 | 1.76815 | 1.76815 | |

It is necessary to request all accessible databases ("Database – More Backups") from the "[Orders](#)" section.



It is recommended to request a base having the "Delete" postfix ("More Backups", and further "Delete backups" are bases created when accounts are deleted), however, if it does not exist, it is possible to use cyclic backups. Then, having selected the desired accounts, it is necessary to execute the "Restore Accounts" context menu command. After that, the restored accounts will appear in the current base, but deposits of accounts do not consider the restored orders yet.

Note: If you deleted less than fifteen orders, bases having the "Delete" postfix and containing all orders will not be created, and the preceding schedule created backup may not contain all the deleted orders. This can happen if you deleted orders opened after you had stored the latest schedule created backup to the disc. In this case, it is impossible to restore orders using the cyclic backups.

Balance Checking and Recalculating

After the orders have been restored, the balances of the accounts and the results of the sum of trade operations are not equal. To correct this, it is necessary to execute the "[Group Operations](#)" context menu command in the "[Accounts](#)" section. Then, the "Check Balance" command should be executed. At this point, the balance for all trade operations (including the restored ones) is recalculated and compared to the current balance value. As a result, either "OK" or "Wrong" will be written in the "Status" fields of the selected accounts in the "Accounts" section. In the first case, the balance and the result of recalculation on the operation coincide with each other. It means no other actions should be taken. In the second, more probable case, the values will differ from each other. To complete the order restore, it is necessary to execute the "Fix Balance" command in the Group Operations window. After that, "OK" will appear in the "Status" fields, and deposits will equal in the sum recalculated for operations. Only after having recalculated and compared the balances, the operation of order deleting can be considered as completed.

Attention: When deleting or restoring orders do not forget to check and recalculate balances of the accounts!

Order Database Optimization

Translate: EN ▾



A significant number of trading orders is accumulated in the course of server operation. In order to provide high server performance, the order database optimization is conducted every Sunday consisting of the two stages:

Moving canceled pending orders to the archive

Compressing the trading database with the physical deletion of all removed orders as well as orders belonging to deleted accounts.

The following entries appear in the server journal:

```
Scheduler: trade base optimization started  
...  
Scheduler: trade base optimization finished
```

Physical deletion of orders from the database takes place only if the amount of removed orders exceeds 32 786.

The following entries appear in the server journal during compression:

```
TradeBase: database file compact started  
...  
TradeBase: database compact finished [XXX record(s) cleaned]
```

If the number of removed orders is less than 32 thousand, the message about skipping the database compression appears in the journal:

```
TradeBase: database file compact skipped
```

Optimization is performed only if there are no requests in the trade server queue.

[Order Deleting and Restore](#)[Charts](#)

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Charts

Translate: EN ▾



Using this section, one can modify any quotes in the database on any instrument or period, and also add new ones.

| Time | Open | High | Low | Close | Volume |
|------------------|---------|---------|---------|---------|--------|
| 2012.05.30 00:00 | 1.24832 | 1.24834 | 1.24830 | 1.24831 | 6 |
| 2012.05.30 00:01 | 1.24840 | 1.24850 | 1.24830 | 1.24840 | 31 |
| 2012.05.30 00:02 | 1.24830 | 1.24850 | 1.24830 | 1.24850 | 25 |
| 2012.05.30 00:03 | 1.24840 | 1.24850 | 1.24838 | 1.24838 | 10 |
| 2012.05.30 00:04 | 1.24839 | 1.24839 | 1.24830 | 1.24832 | 15 |
| 2012.05.30 00:05 | 1.24832 | 1.24839 | 1.24830 | 1.24832 | 22 |
| 2012.05.30 00:06 | 1.24832 | 1.24839 | 1.24830 | 1.24832 | 22 |
| 2012.05.30 00:07 | 1.24832 | 1.24839 | 1.24830 | 1.24832 | 22 |
| 2012.05.30 00:08 | 1.24832 | 1.24839 | 1.24830 | 1.24832 | 22 |
| 2012.05.30 00:09 | 1.24832 | 1.24839 | 1.24830 | 1.24832 | 22 |
| 2012.05.30 00:10 | 1.24832 | 1.24839 | 1.24830 | 1.24832 | 22 |
| 2012.05.30 00:11 | 1.24832 | 1.24839 | 1.24830 | 1.24832 | 22 |
| 2012.05.30 00:12 | 1.24832 | 1.24839 | 1.24830 | 1.24832 | 22 |
| 2012.05.30 00:13 | 1.24832 | 1.24839 | 1.24830 | 1.24832 | 22 |
| 2012.05.30 00:14 | 1.24832 | 1.24834 | 1.24830 | 1.24831 | 6 |
| 2012.05.30 00:15 | 1.24840 | 1.24850 | 1.24830 | 1.24840 | 31 |
| 2012.05.30 00:16 | 1.24830 | 1.24850 | 1.24830 | 1.24850 | 25 |
| 2012.05.30 00:17 | 1.24840 | 1.24850 | 1.24838 | 1.24838 | 10 |
| 2012.05.30 00:18 | 1.24839 | 1.24839 | 1.24830 | 1.24832 | 15 |
| 2012.05.30 00:19 | 1.24832 | 1.24839 | 1.24830 | 1.24832 | 22 |

The parameters of the request are given in fields at the bottom of the list: financial instrument, its period of time, or requesting depth.

Context Menu Commands:

Request Chart – requesting the chart of the selected instrument;

Correct History – correct history bases of instrument based on lower timeframes;

Attention: History correction may take time and result in temporary trading halt on the trade server for the time of history correction.

It is strongly recommended to conduct history correction during holidays.

Add Bar – adding a bar to the chart;

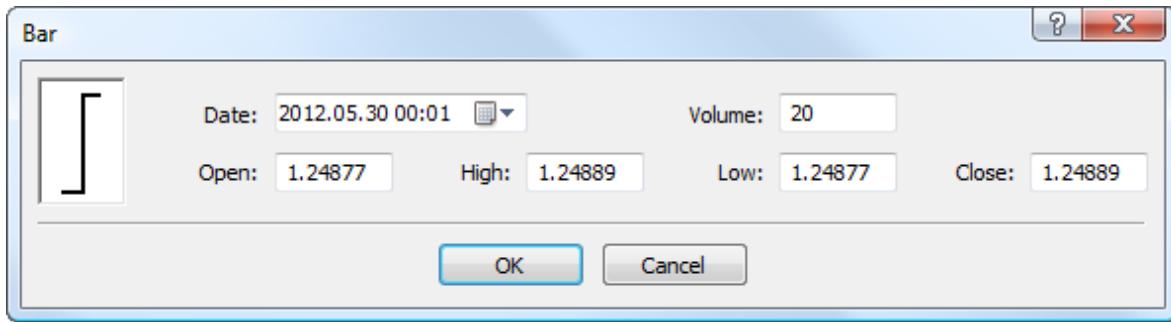
Update Bar – changing a bar;

Delete Bars – deleting bars;

Export – exporting charts to the file (CSV or HTM format). It is not recommended to use the *.HTM format when exporting a large amount of charts (more than 5000 bars);

Import – importing data from an external file. More details can be found in the [History Import](#) section.

The "Add Bar" and "Update Bar" commands activate a window of detailed setting:



Date – the bar changing or creating date;

Volume – the volume;

Open – at-the-opening price;

High – maximum price;

Low – minimum price;

Close – at-the-close price.

Note:

If, when creating a new bar, you write the value of an existing bar in the "Date" field, the bar will be updated.

If the changes made are not correct, the bar will be displayed in red color in the window. In all other cases, after pressing "OK", the new or changed quote will come to the base immediately.

[Order Database Optimization](#)

[History Import](#)

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History Import

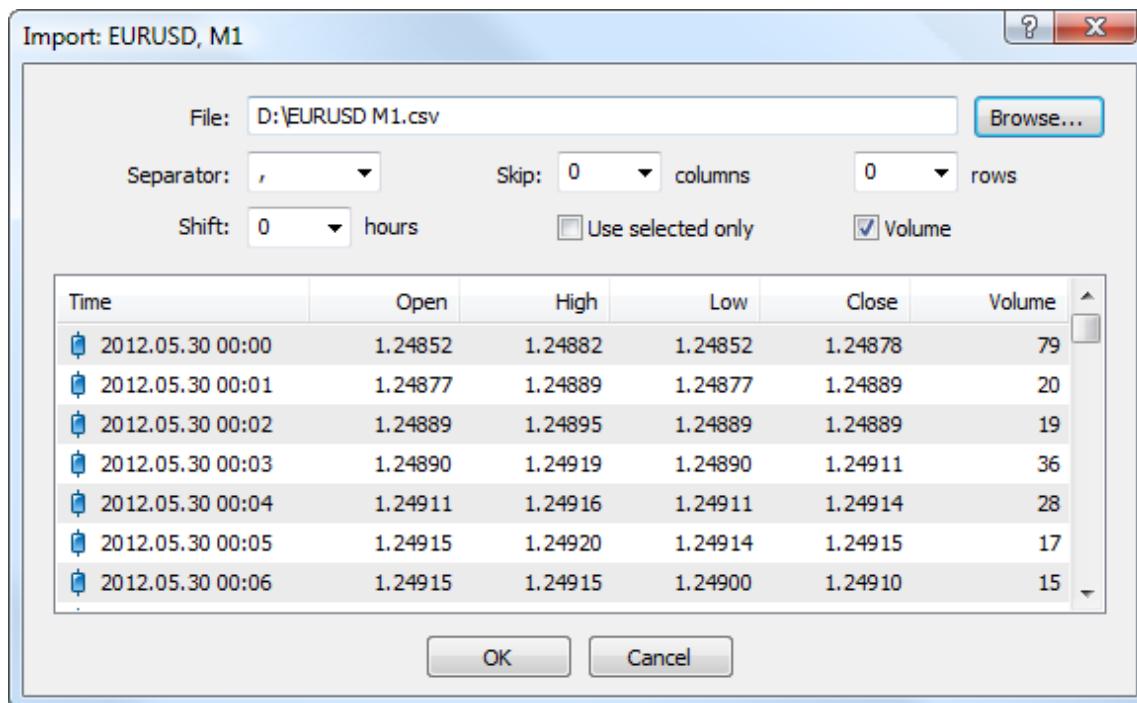
Translate: EN ▾



Import is converting and transferring history data (charts) from external sources to the server of the system. It helps to carry out the following tasks:

- creating a history when adding a new instrument;
- filling in gaps in the history of any existing instrument;
- correcting of specific history components, if necessary.

To start importing history, it is necessary to execute the "Import" command of the context menu in the "[Charts](#)" section.



In the "File" field please select file containing data to be imported. Now you can use files of different formats: *.hst, history data of servers and terminals of MetaTrader 3 and MetaTrader 4; *.csv and *.prn, text files with separators. For importing history data from text files the following data formats are supported:

YYYY.MM.DD HH:MM O H L C V

YYYY-MM-DD HH:MM O H L C V

YYYY/MM/DD HH:MM O H L C V

DD.MM.YYYY HH:MM O H L C V

DD-MM-YYYY HH:MM O H L C V

DD/MM/YYYY HH:MM O H L C V

YYYY.MM.DD,HH:MM O H L C V

YYYY-MM-DD,HH:MM O H L C V

YYYY/MM/DD,HH:MM O H L C V

DD.MM.YYYY,HH:MM O H L C V

DD-MM-YYYY,HH:MM O H L C V

DD/MM/YYYY,HH:MM O H L C V

It is also necessary to indicate:

Separator — separator of text file elements;

Skip columns — skipping columns in the LTR order;

Skip rows — skipping rows in the top-down order;

Use selected only — import only selected bars;

Volume — import volumes. If data files contain information concerning volumes, it is necessary to put in this flag. If not, it should be disabled;

Shift — time shifting in hours. This option should be used for importing data from other time zones.

The "OK" button completes the history import.

It is highly recommended to import data only for your own period and instrument. Otherwise, discrepancies in values of bars and time can occur.

Limitation of the Amount of History Data

MetaTrader 4 Server has the following limitations on the history data:

65536 bars for M1 charts (equal to several months);

32768 bars for M5 charts (equal to about 6 months);

16384 bars for M15, M30, H1, H4, and D1 charts;

1024 bars for W1 charts;

256 bars for MN1 charts.

The above figures indicate the maximal history depth that can be stored for the indicated timeframes if the server has no more than 50 symbols. The more symbols are created on the server, the smaller is the amount of history data that can be stored.

Copying History Data from Another Symbol

For newly created symbols without any price data, one can copy the data from another symbol in the platform. To do it, specify the name of the symbol from which you need to copy the data in the "[Source](#)" field of the new symbol. The server will automatically copy the entire price history.

Once copying is finished, delete the value of the "Source" field from the new symbol settings.

Copying works only if the new symbol doesn't have any price data.

Ticks

Translate: EN ▾



Using this section one can request and export quotes data collected by the server.

| Time | Bid | Ask | Source |
|---------------------|---------|---------|---------------------|
| 2012.05.30 12:59:55 | 1.24257 | 1.24276 | MetaTrader 4 Quotes |
| 2012.05.30 12:59:55 | 1.24257 | 1.24276 | MetaTrader 4 Quotes |
| 2012.05.30 12:59:56 | 1.24255 | 1.24275 | MetaTrader 4 Quotes |
| 2012.05.30 12:59:56 | 1.24255 | 1.24275 | MetaTrader 4 Quotes |
| 2012.05.30 12:59:58 | 1.24256 | 1.24275 | MetaTrader 4 Quotes |
| 2012.05.30 12:59:58 | 1.24256 | 1.24275 | MetaTrader 4 Quotes |
| 2012.05.30 12:59:58 | 1.24255 | 1.24275 | MetaTrader 4 Quotes |
| 2012.05.30 12:59:58 | 1.24255 | 1.24275 | MetaTrader 4 Quotes |
| 2012.05.30 12:59:59 | 1.24256 | 1.24275 | MetaTrader 4 Quotes |
| 2012.05.30 12:59:59 | 1.24256 | 1.24275 | MetaTrader 4 Quotes |
| 2012.05.30 13:00:00 | 1.24255 | 1.24276 | MetaTrader 4 Quotes |
| 2012.05.30 13:00:00 | 1.24255 | 1.24276 | MetaTrader 4 Quotes |
| 2012.05.30 13:00:00 | 1.24253 | 1.24274 | MetaTrader 4 Quotes |
| 2012.05.30 13:00:00 | 1.24253 | 1.24274 | MetaTrader 4 Quotes |
| 2012.05.30 13:00:00 | 1.24252 | 1.24271 | MetaTrader 4 Quotes |
| 2012.05.30 13:00:00 | 1.24252 | 1.24271 | MetaTrader 4 Quotes |
| 2012.05.30 13:00:01 | 1.24252 | 1.24270 | MetaTrader 4 Quotes |
| 2012.05.30 13:00:01 | 1.24252 | 1.24270 | MetaTrader 4 Quotes |
| 2012.05.30 13:00:01 | 1.24251 | 1.24270 | MetaTrader 4 Quotes |
| All ticks | ▼ | ▼ | 2012.05.01 00:00 ▾ |
| | | | 2012.05.31 00:00 ▾ |
| | | | Request |

In field below the list, the request parameters are specified: security, request mode (ticks from historical data (Raw ticks), ticks accepted by the server (Filtered ticks), and all data together (All ticks)) and the request depth. Ticks processed by the server (filtered) are marked with the special icon in the list.

Context menu commands:

Request Ticks — request ticks for a selected security;

Export — export ticks into a file (CSV or HTM format). *.HTM format is not recommended for exporting large volumes of history (more than 5000 records);

Please note:

Ticks are collected only for securities, for which the options "Allow realtime quotes from datafeeds" and "Save all incoming prices in a file" are enabled.

The depth of the presented data is determined by the starting time of data collection and the time period of storing ticks in the server settings (option "Keep ticks" of window "Common").

[History Import](#)

[Server Journal](#)

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Server Journal

All operations performed and all events are stored in special statistical logs representing text files and being kept in the /LOGS directory. The "Journal" section allows to look through these records. Here you can also view the logs of the platform's service components.

The screenshot shows the 'Administrator' section of the Server Journal. On the left is a tree view of various system components: MetaTrader server, Common, IP Access List, Data Centers, Time, Holidays, Symbols, Securities, Groups, Managers, Data Feeds, Backup, LiveUpdate, Synchronization, Plugins, Accounts, Orders, Charts, Ticks, and Journal. The 'Journal' node is selected. To the right is a large table with columns: Time, IP, and Message. The table lists numerous entries from May 30, 2012, at 11:33:32 to 11:43:27. The 'Message' column contains log entries such as '5: datafeed config added/changed', '5: datafeeds config deleted [1]', and '5: journal (common, 2012.05.30 - 2012.05.31)'. At the bottom of the window, there are several buttons: a search field, dropdown menus for filtering by type (Standard, Errors, etc.), date range, and a 'Request' button.

| Time | IP | Message |
|---------------------|--------------|--|
| 2012.05.30 11:33:32 | 192.168.9.95 | '5: datafeed config added/changed ['Championshi... |
| 2012.05.30 11:33:38 | 192.168.9.95 | '5: datafeed config added/changed ['UniFeeder'] |
| 2012.05.30 11:33:53 | 192.168.9.95 | '5: datafeeds config deleted [1] |
| 2012.05.30 11:33:56 | 192.168.9.95 | '5: datafeeds config deleted [1] |
| 2012.05.30 11:35:27 | 192.168.9.95 | '5: journal (common, 2012.05.30 - 2012.05.31) |
| 2012.05.30 11:35:27 | 192.168.9.95 | '5: journal (time 16 ms, size: 26 kb) |
| 2012.05.30 11:35:44 | 192.168.9.95 | '5: journal ('3', 2012.05.30 - 2012.05.31) |
| 2012.05.30 11:35:44 | 192.168.9.95 | '5: journal (time 16 ms, size: 0 kb) |
| 2012.05.30 11:36:21 | 192.168.9.95 | '5: manager config added/changed ['3'] |
| 2012.05.30 11:42:59 | 192.168.9.95 | '5: check Administrator version (MetaQuotes Softw... |
| 2012.05.30 11:42:59 | 192.168.9.95 | '5: liveupdate 'API\ManagerAPI.zip' |
| 2012.05.30 11:43:10 | 192.168.9.95 | '5: liveupdate 'Languages\LiveUpdate_Russian.lng' |
| 2012.05.30 11:43:11 | 192.168.9.95 | '5: liveupdate 'Languages\MetaTraderAdmin_Chine... |
| 2012.05.30 11:43:11 | 192.168.9.95 | '5: liveupdate 'Languages\MetaTraderAdmin_Chine... |
| 2012.05.30 11:43:11 | 192.168.9.95 | '5: liveupdate 'Languages\metatraderadmin_russia... |
| 2012.05.30 11:43:11 | 192.168.9.95 | '5: liveupdate 'liveupdate.exe' |
| 2012.05.30 11:43:12 | 192.168.9.95 | '5: liveupdate 'metatraderadmin.chm' |
| 2012.05.30 11:43:20 | 192.168.9.95 | '5: liveupdate 'metatraderadmin.exe' |
| 2012.05.30 11:43:27 | 192.168.9.95 | '5: liveupdate 'metatraderadmin_russian.chm' |

The date and time of the event are written in the "Time" field. "IP" is the address from which the action was performed. No entry in this field means that the action was performed by the server itself. The events are described in the "Message" column. The icons in the time column allow to select various types of entries: show information about errors; show warnings and alerts; show normal messages.

To find an entry by a given criterion among the results of the database request, you can use the "Find" window. This window can be activated through "Ctrl+F" buttons.

Control log request items are located at the bottom of the window (from left to right):

search field where the unique key words can be set;

scanning mode:

Standard - all messages except for authorization information.

Logins - authorization messages.

Trades - messages about trade operations.

Errors - only error messages.

Full - all messages.

LiveUpdate - the log of the platform components update module (mtsrvupdate.exe).

SendMail - the log of the module for sending reports to clients (mtsendmail.exe).

Failover - the log of the the utility for real time data backup (MetaTrader 4 WatchDog).

pre-defined request periods: Today (the current day), Last 3 Days (the last three days), Last Week (the last week), Last Month (the last month), Last 3 Months (the last three months), and Last 6 Months (the last six months);

you can indicate the request period manually in two latter fields: the first one means the beginning of the request period, and the second one is the end of that period.

Keywords united with logical operators can be specified as the string in the search field. The search string supports the following logical operators:

| (or) – logical operator OR, allows to select lines in journal that contain either the first or the second keyword;

& (and) – logical operator AND, allows to select lines in journal if they contain both the first and the second keyword, the space between keywords is considered as AND operator;

! (^, not) – logical operator of avoidance (NOT), allows to select lines in journal that do not contain the keyword to be avoided.

Making the search string as precise as possible with the assistance of logical operators allows to select the required lines in journal effectively. For example, the search line of "1|4|5" and (" allows to select dealers' replies from journal where market prices are specified, "!5" and reject" – rejections of all dealers except for that having login of '5'.

You can also use keywords to find messages concerning certain events. Examples of keywords are given on the [Support Center](#) website, [FAQ](#) section.

After you have indicated all desired request parameters, press the "Request" button. Considering that the journal can contain hundreds of thousands of entries, it is recommended to formulate the request as accurately as possible. This will allow to shorten the search time and to find a desired entry faster. The "Save As" context menu command allows to save the resulting log in CSV or HTML format.

The context menu allows to execute the following commands:

Request – request logs from the server;

Technical Details – receive details of IP address connection;

Add to Black List – [lock](#) IP address;

Search – using this submenu, you can easily form new requests on the basis of an already found entry in the journal:

Account – copy an account from the found entry to the request field of the journal;

Order – copy an order ticket from the found entry to the request field of the journal;

Symbol – copy a symbol name from the found entry to the request field of the journal;

IP – copy an IP address the found entry to the request field of the journal.

Copy As:

Lines – copy the selected strings in the log to the clipboard;

List of Logins – copy only the logins from the selected strings in the log to the clipboard;

Lines of IP Addresses – copy only the IP addresses from the selected strings in the log to the clipboard;

Find – find a string by the criterion in the requested log;

Find Next – find the next string;

Save As — save the requested log to the file.

[Ticks](#)

[State Monitoring](#)

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State Monitoring

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Every 5 minutes, MetaTrader 4 servers save important parameters to the monitoring database. These parameters allow you to evaluate the state of the trading platform's components. That data is displayed graphically in [Monitor](#) section. The server status data is also shown in the journal in more details. Such entries can be requested using "Monitor" keyword.

Sample entries:

```
2014.02.17 08:15:01.903 Monitor memory available: 8991 Mb, memory commit: 329
2014.02.17 08:15:01.903 Monitor allocators: 18950 Kb (fragments: 27, used 454)
2014.02.17 08:20:01.903 Monitor connections: 0, trades: 0, cpu: 4%, threads: 1
2014.02.17 08:20:01.903 Monitor total packets: 18, contexts: 13, external cont
```

The entries contain the following data:

connections – number of the current server connections (all connection types are considered, including data centers, MetaTrader 4 WatchDog, client, manager and administrator terminals).

free memory available – the lesser of two values:

total size of free memory blocks available for the process,

size of the available (free) physical memory.

cpu – current CPU load in %.

net – total volume of the incoming and outgoing traffic in kilobits on the adapter [selected for measurement](#).

sockets – total number of sockets in the operating system.

threads – number of threads in the server process.

handles – number of handles in the server process.

[Server Journal](#)[Toolbox](#)

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Toolbox

Translate: EN 

The "Toolbox" window is intended for working with mail and the journal of the administrator terminal as well as for monitoring the state of servers. The description of the "Toolbox" window consists of the following sections:

[Monitor](#)[Mailbox](#)[Journal](#)[Support](#)[Articles](#)

[State Monitoring](#)[Monitor](#)

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Monitor

Translate: EN 

MetaTrader Server saves important parameters allowing to estimate the status of the trading server in the monitoring database every minute:

Connections

The amount of connections is the sum of all standard working connections of terminals and time connections established to make transactions, upload history or news. For the immovable market, a rather precise number of online users will be shown in this window.

Active Sockets

This rate shows the total number of connected TCP endpoints in the operating system (a TCP endpoint is a combination of the IP address and a port used). The rate includes half-open connections (when there is no connection already, but the socket is not closed by the operating system yet).

The number of active sockets is a good indicator for detecting DDoS attacks. For example, a sharp increase in the number of active sockets without an increase in the number of client connections, may indicate the start of a DDoS attack on the server. One should analyze the dynamics of this rate, not its absolute values.

Free Memory Capacity

It is very important that server possesses a large capacity of free memory: this enables to serve for a larger amount of simultaneously connected users and operate with large databases. If there is less than 100Mb of free memory, the chart will be colored with red.

Use of Processor

The total load of all accessible processors is measured. The speed of servicing for users and processing their trade operations depends on this parameter directly. If the load of the processor stably exceeds 50%, it is the high time to upgrade the computer. If it exceeds 85%, the chart is colored with red. But there is no reason to worry about non-permanent overloads.

Use of Network

The total load of the selected network interface is measured. The traffic of all programs launched on the computer must be considered. Unexpected loading jumps will indicate DoS attacks attempts.

Switching between charts is performed via context menu or by the "Space" button. Charts can be looked through every 5 minutes, every 15 minutes, or every 1 hour. All four charts can be saved as pictures using the context menu commands.

[Toolbox](#)[Mailbox](#)

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Mailbox

Translate: EN ▾



Online trading system MetaTrader 4 includes internal mailbox allowing clients and managers to exchange messages. The "Mailbox" tab of the "Toolbox" window contains the list of income messages.

| Time | Server | From | Subject |
|------------------|-------------------|--------------------------|--------------|
| 2012.05.30 13:09 | 192.168.0.130:400 | Dealer | New versions |
| 2012.05.11 15:57 | 192.168.0.130:400 | MetaQuotes Trial Servers | Registration |
| 2012.03.09 17:09 | 192.168.8.188:444 | MetaQuotes Trial Servers | Registration |

Toolbox Monitor **Mailbox** Journal | Support | Articles 1 |

The received messages are saved in the subdirectory of /mailbox directory in which the administrator terminal is installed. When a new message incomes the event set for the mail receiving will sound, and a record about the income message will be done in the terminal journal.

The following commands are available in the context menu:

Create – write and send a new message in internal mailbox;

View – open a message to view it;

Delete – delete the message from the list and from HDD;

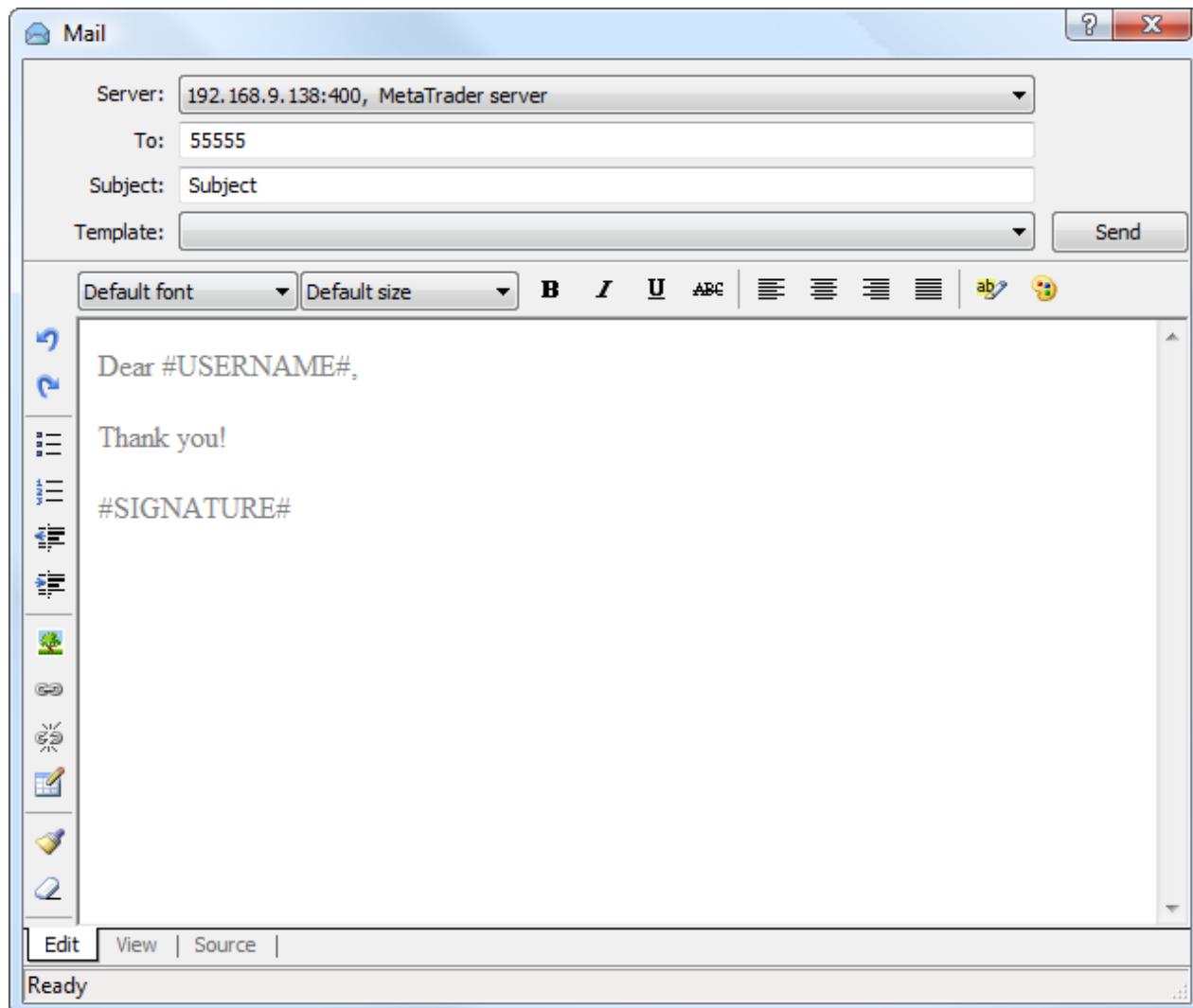
Auto Arrange – automatic arrangement of column sizes when the window size is changed;

Grid – show/hide the grid to separate columns.

The command of creating a mail is active only if the mailbox name is specified in the [settings](#) of the manager's account. The right to use the internal mail should also be enabled for the manager's account.

New Message (Mail window)

The "Mail" window allows to write and send a new message in internal mailbox. It is necessary to input the account number(s) of the recipient(s), separated by commas, or the range of accounts, separated by hyphen, the subject of the message, and its text. Mail-templates are located in "templates\mails" subfolder as plain text files or html files.



When setting up the messages to be sent, it is possible to use a set of macros - key words that will be replaced with the user's record data when composing the message:

| Macro | Description |
|------------------|--|
| #LOGIN# | Account login |
| #USERNAME# | User name |
| #BALANCE# | Account balance |
| #CREDIT# | Account credit |
| #EQUITY# | Account equity |
| #MARGIN# | Margin requirements |
| #MARGIN_LEVEL# | Margin level |
| #MARGIN_SHORT# | Margin shortage |
| #MARGIN_CALLLEV# | Margin call level for the user group to which the recipient belongs (MT Administrator->Groups->Margins->Margin Call level) |

| Macro | Description |
|-------------|---|
| #SIGNATURE# | Company signature from settings of the user group to which the recipient belongs (MT Administrator->Groups->Reports->Signature) |

The "Send" command will send the message to receivers.

[Monitor](#)[Journal](#)

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Journal

Translate: EN 

"Journal" tab contains the information about all actions of administrator terminal for the current session. In the journal is fixed all information about terminal start and about the events during its operation, including all trading operations. In the window are placed only the last messages. To check the previous messages it is necessary to run the command "Open" and choose the required file.

[Mailbox](#)[Support](#)

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Support

Translate: EN ▾



This tab is intended to help users of the MetaTrader 4 platform. It contains useful information, links, and it allows contacting [MetaQuotes Ltd.](#) in case you need help.

The tab contains four sections. To switch between them, use the upper pane.

[Service Desk](#)

[Online Assistant](#)

[MetaQuotes Support Center](#)

[TeamViewer](#)

Service Desk

Service Desk is a bug tracking system based on the [TeamWox](#) groupware. It allows contacting [MetaQuotes Ltd.](#) to report about an error in the operation of the platform components occur, as well as to express your suggestions on the platform improvement.

Communication with the developer company is performed via requests that are processed by the technical support service and directly by the platform developers.

Communication with developers is totally confidential and is performed over an encrypted channel.

| Service Desk Online Assistant MetaQuotes Support Center TeamViewer | | | |
|--|------------------------------------|--|---------------|
| 10343 | Cannot connect to new trade server | | 14:53 Today |
| 10244 | Question | | 14:35 Today |
| 10288 | Error | | 14:06 Today |
| 1 | 2 | | |

List of Requests

All the previously created requests are displayed as a table where their numbers, subjects and creation dates are specified. The requests can be filtered by their current status: open () – the requests that are currently being processed, closed () – the ones that are already processed. To do so, one should press the "Filter" button at the top part of the tab and choose one of the variants: "Open", "Closed" or "All".

Creating Request

To create a new request, one should press the " New request" button located in the top part of the tab. After that the following window will be opened:

Service Desk Online Assistant MetaQuotes Support Center TeamViewer Назад

Subject:

Attach files

Add Cancel

Here you should fill in the subject field with a short gist of your application.

The box for writing a description for the request is located below; there you should describe the request in more details. Using the [Attach files](#) button, one can attach any files to the request.

To send a request, click the "Add" button. If you press the "To list" or "Cancel" button, you will go back to the viewing of the list of previously created requests.

View Request and Writing Comments

To go to the viewing of a request, one should click with the left mouse button on its name in the list.

Service Desk Online Assistant MetaQuotes Support Center TeamViewer Back

Cannot connect to new trade server

15:13 | Today #12392 Close New comment

I installed secondary trade server and added it in the "Network" section, but I can't connect to it.

◀ Alex Stone | 15:12 | Today
Please attach a screenshot with the settings of the server from the Network section.

▶ First Admin | 15:13 | Today
Here you are

Attached files:
1. [Screenshot.png](#) (625 bytes)

In the viewing window the names of employees of the developer company are displayed with the red color, and the name of administrator is displayed with the blue one. The following commands are available here:

Close – move the request to the closed category as soon as its processing is finished;

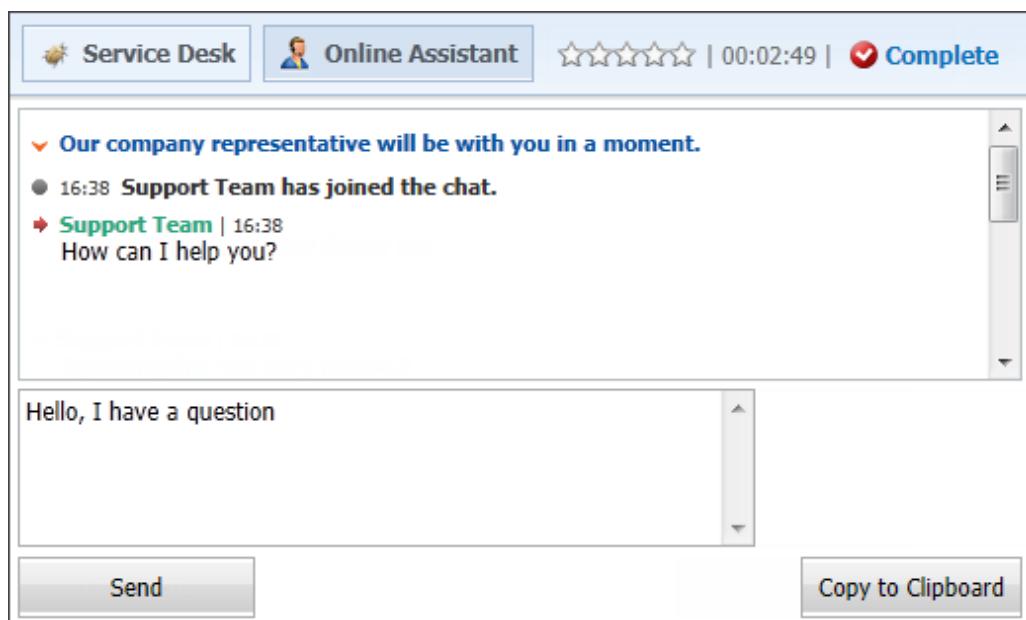
New Comment – write a new message in the request. A field for typing a text will appear in the bottom part of the window as soon as this button is pressed.

Online Assistant

Online Assistant – is a integrated chat that is also based on the corresponding public component of the [TeamWox](#) collaboration system. Using the Online Assistant you can contact the technical support service.

The screenshot shows a support center interface with tabs for Service Desk, Online Assistant, MetaQuotes Support Center, and TeamViewer. The main area displays a form for entering contact information: Name (John Smith), Email (john@smith.com), and Phone (empty). A button labeled "Enter" is present. Below the form, a note states "From 7:30 till 16:30 GMT on weekdays".

Specify your name, e-mail and a phone number, then click "Enter".



The upper part of the chat displays messages written by the technical support team. The lower part is intended for writing your messages. At the end of a dialog you can rate the quality of technical support. To do it, click on one of the stars located in the upper part of the tab.

To end a dialog, click "Complete" in the upper part of the tab.

MetaQuotes Support Center

To help the clients of MetaQuotes Software Corp., a specialized technical support site - [MetaQuotes Software Support Center](#) has been created. There you can download and purchase the products of the developer company and find plenty of useful information on managing them:

The latest news about releases of new versions of the platform components: servers, terminals, gateways, data sources, API;

Answers to Frequently Asked Questions (FAQ);

Plenty of useful articles thoroughly describing the features of working with the platform;

Actual on-line documentation;

The forum where you can communicate with other users and ask your questions to developers.

If you do not have an account on the web site, contact technical support team via Service Desk or Online Assistant.

TeamViewer

For remote service you are offered the widely known [TeamViewer](#) system. It will allow the technical support team to quickly establish a remote connection to your server and solve your problems in a timely manner.

TeamViewer is a software package for PC remote control and file exchange. Besides, TeamViewer helps you with your presentations, PC settings, chat communication etc. Privacy and safety are provided by built-in protection against unauthorized access. The software has been tested and [certified](#) by well-known international organizations.

You can find more detailed information in the article "[Technical Support with TeamViewer](#)" published on MetaQuotes Software Corp. technical support web site.

[Journal](#)[Articles](#)

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Articles

Translate: EN ▾



This tab displays news and articles published at the [MetaQuotes Software Corp. Support Center](#) website. These articles describe how to work with the trading platform.

| Name | Category | Date |
|---|----------|------------|
| New Versions of the MetaTrader 4 Components build 427 | News | 2012.05.25 |
| Preliminary Announcement of the New MetaTrader 4 Build 421 | News | 2012.05.16 |
| Support for Client Terminal builds below 416 to be discontinued on June 1 | News | 2012.05.16 |
| New Phone Number for MetaQuotes' Technical Support | News | 2012.05.10 |
| "Crosshair" Mode, OHLC Prices Display and Data Window Have Been Added to the Updated M... | News | 2012.05.03 |
| MetaQuotes Software Corp. Opens Its Representative Office in Brazil | News | 2012.05.02 |

Monitor | Mailbox | Journal | Support | **Articles 1**

The articles are displayed as a list:

Name – name of an article;

Category – category an article belongs to. To show/hide a category, use the context menu.

Date – date when an article was published.

To view a short description of an article, put the mouse cursor over its name. To read a full article, double-click on its name. Once you do it, the corresponding page of the Support Center is opened in your web browser.

The context menu of this tab allows to execute the following commands:

View – open a selected article in a web browser;

Refresh – refresh the list of articles;

Categories – open the submenu of working with the categories of articles;

Select All – select all categories for displaying in the list;

Unselect All – hide all categories;

List of categories – the list of all existing categories is shown below. In order to select a category, put a checkmark against it by a single mouse click;

Category – show/hide the column of article categories. The same action can be performed using the "R" key;

Auto Arrange – enable/disable the automatic setup of the column size. The same action can be performed by pressing the "A" key;

Grid – show/hide grid to separate fields. The same action can be performed by pressing the "G" key.

Support

Articles

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Articles

Translate: EN 

In this section you can find links and short descriptions articles dedicated to working with the MetaTrader 4 platform.

[Common](#)[Security](#)[How to...](#)[API](#)[Articles](#)

Common

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Common

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[Tuning the MetaTrader 4 Client Terminal](#)



In this article we'll consider our clients' most often request on changing the client terminal White Label. How to change the terminal appearance? How to add one's own profiles, templates and symbol sets? How to include an additional server to the terminal? Is it possible to add one's own scripts, Expert Advisors and indicators? What is and what is not changeable in the White Label of the client terminal?

[MetaTrader 4 Mobile White Label - Perfect Investment Into Your Business Success!](#)



No marketing or PR campaign will ever produce the same convincing power, than a positive word-of-mouth message passing from one trader to another, about your company name (brand) and services in the market. MetaTrader 4 Mobile branded under your company name and logo - is an excellent tool for that!

[Implementation of NFA Compliance Rule 2-43\(b\) Requirements in MetaTrader 4](#)



On the 13th of April, 2009 NFA (National Futures Association) published new requirements for Forex brokers - NFA Compliance Rule 2-43(b). These rules come into effect on Friday, July 31, 2009. The article contains the description of new operation principles of the MetaTrader 4 platform adjusted for these requirements. The article also describes actions to be taken in order to satisfy the NFA Compliance Rule 2-43(b).

[NFA and FIFO: Deliberation about NFA Compliance Rule 2-43\(b\)](#)



On the April 13-th, 2009 NFA (National Futures Association) published the new rules for Forex brokers NFA Compliance Rule 2-43(b). The problems that will appear once the requirements of positions closing by the FIFO rule take effect are described in this article. It is impossible to fulfil the requirement of closing positions using FIFO described in NFA Compliance Rule 2-43(b) without serious changes in the functionality of MetaTrader 4 platform: any solutions found will not be complete. What do the brokers think?

[Extras for MetaTrader 4](#)



MetaTrader 4 is a complete solution for Brokerage companies. However, we have chosen to develop helpful plugins and additional components for the needs and the best service of our clients. The purpose of this article is to list all the "extra" products that are produced by MetaQuotes Software Corp. and give a briefly explanation about their use. For detailed description of all plugins and additional components please read the addressed links.

[Problems with Quotes](#)



Most problems faced by our clients when adding new data feeds result from incorrect configuration of the feeder terminal, UniDDE Connector or incorrect settings on the server side in the Datafeed section of MetaTrader Administrator. This article will help to solve these problems.

[White Label: Tips to Ordering](#)



You have just signed an agreement and are ready to start working. Or you have ordered an additional client terminal. Perhaps, your company has changed its "face". In all these cases our specialists need additional information from you. In this article you will find the detailed description of all necessary files that should be submitted to us at support@metaquotes.net.

[Quote and News Feeds for MetaTrader 4 Server](#)



The main question that almost all companies face when starting to work with MetaTrader 4 Server is "Where can we get quotes from?". In this article you will find an answer to this question.

[MetaTrader Report Server: Installation and Setup](#)



MetaTrader 4 Report Server is a tool for real-time replication of trade server bases in MySQL. This component can be useful to companies that need to generate their own reports.

[Publishing Your Articles on Our Website](#)



MetaQuotes Software Corp. invites you to become the co-author of MetaQuotes Support Center by writing original articles. To estimate the reasonability of our proposal, we are conducting a small poll.

[Starting Operations with MetaTrader 4: Our Solutions for Your Growing Business](#)



Congratulations! You have just signed the agreement, now you are ready to begin providing online trading services to your clients through online trading platform MetaTrader 4. Before you start working with your trade server, please study this article very carefully. It deals with the key stages in the technical evolution of a newly established brokerage company. Once you have read this article, you will get an insight into what kind of a company you can become in the future.

[Secrets of MetaTrader 4 Client Terminal: File Library in MetaEditor](#)



When creating custom programs, code editor is of great importance. The more functions are available in the editor, the faster and more convenient is creation of the program. Many programs are created on basis of an already existing code. Do you use an indicator or a script that does not fully suit your purposes? Download the code of this program from our website and customize it for yourselves.

[Secrets of the MetaTrader 4 Client Terminal: Indicators](#)



Are you going to write your own indicator? Perhaps you will find that what you need among indicators already embedded in the client terminal. So why to reinvent the wheel? A summary table of integrated indicators' characteristics; special features and methods of attaching indicators to a chart; building levels; displaying indicators on different timeframes.

[Secrets of MetaTrader 4 Client Terminal: Alerting System](#)



How to be aware of what happens in the terminal and on your account without permanent looking at the monitor. System events; custom events; wave and executable files; electronic messages; setting up SMTP server access; publications; setting up FTP server access.

[Secrets of MetaTrader 4 Client Terminal](#)



21 ways to ease the life: Latent features in MetaTrader 4 Client Terminal. Full screen; hot keys; Fast Navigation bar; minimizing windows; favorites; traffic reduction; disabling news; symbol sets; Market Watch; templates for testing and independent charts; profiles; crosshair; electronic ruler; barwise chart paging; account history in the chart; types of pending orders; modifying StopLoss and TakeProfit; undo deletion; chart print.

[Welcome Messages in Client Terminals](#)



Three welcome messages 'Welcome!', 'Mobile Trading - It's Easy!' and 'What Is Automated Trading?' give an idea of the terminal itself, as well as of mobile and automated trading. This knowledge helps a trader get quite a full notion of the used technologies and their practical application.

[Receiving Quotes through Universal DDE Connector 9.00](#)



Receiving quotes through the new version of Universal DDE Connector 9.00 with new automated filtration modes.

[Multiple Requests Processing in MetaTrader 4](#)

Starting with build 313 of the MetaTrader 4 Server, a new opportunity to automate clients' requests processing has appeared.

[Utility MetaTrader to XML Converter](#)

Intended for presentation of users' and orders databases as XML files. Operation principles, launching parameters of the utility and formats of generated files are described in the article.

[Setup and Use of MetaTrader 4 WatchDog](#)



MetaTrader WatchDog enhances fail-safety of the online trading platform MetaTrader 4 by synchronizing the master and the backup server in the real-time mode. Thus, technical risks are reduced and the customer services are improved.

[MetaTrader to SQL Converter](#)



Many of our clients would like to have a utility to process their users and orders databases. In this connection, we have developed MetaTrader to SQL Converter that also supports export into .sql files for MSSQL, MySQL, and Oracle.

[Exposure in MetaTrader Manager](#)



The article describes analysis of exchange-rate risks in MetaTrader Manager.

[New Server Tool: MetaTrader TopTraders](#)

An extra component has been included into MetaTrader Server as a risk management tool: MetaTrader TopTraders.

[MetaTrader Server LogAnalyser: Function and Principles of Operation](#)

MetaTrader Log Analyser (utility for automated analysis of log files), its function and principles of operation are described.

[Preset Computer for MetaTrader Server 4 Operation](#)

Stepwise description of choosing and setting computer and its operating system for a dedicated single MetaTrader Server 4.

[MetaTrader SendMail Function and Principles of Its Operation](#)

In this article description of MetaTrader SendMail, the tool for automatic mailing group reports, is given. Also, manual operation questions are answered.

[MetaTrader 4 Server Installation](#)

This article describes installation of the MetaTrader 4 Server.

[Using MultiLanguage Pack for Translating the Program Interface](#)

Program MultiLanguage Pack allows the creation of language projects in Unicode format for each program, giving the convenient mechanism for the editing of resources: lines, the menu and dialogues.

[MetaTrader Data Center Installation](#)

One of the innovative technologies of MetaQuotes Software Corp. is the special proxy-server for client terminals - MetaTrader Data Center.

[Articles](#)[Security](#)

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Security

[DDoS Attack Prevention in MetaTrader System](#)



DDoS Attack Prevention in MetaTrader System: Distributed Architecture + Built-In AntiFlood Methods.

[Use of Remote Administrator for Server Maintenance](#)



Description of remote administration system - Remote Administrator, installation process and use. Recommendations related to Remote Administrator settings.

[The Use of the Server Configurator](#)



The Server Configurator is a tool that allows you to quickly optimize most settings of a Windows operating system for effective work of a single dedicated MetaTrader Server.

[Authorization on MetaTrader Server 4](#)



A detailed description of password storing and authorization procedures is given in this article.

[The Review of Crash-Log Processing](#)



The method of detection, collection, and processing program errors is described. Importance of enabling CrashLogs-module is explained and access to liveupdate.metaquotes.net is described.

[MetaTrader LiveUpdate Overview](#)



MetaTrader LiveUpdate is an automated system ensuring the secure and efficient distribution of new software versions for the entire information trading system, MetaTrader.

[Common](#)[How to...](#)

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How to...

[Receiving Quotes and News from IQFeed provider](#)



We've developed the new module - IQFeeder.feed that allows receiving both quotes and news from IQFeed company. The new module is available free of charge. To be able to use this data feed, first you have to contact representatives of IQFeed company to apply for subscription with them.

[Choosing a hoster provider for trade server](#)



Many companies periodically face the question of which hosting provider to choose to locate their servers at. You should be maximally attentive solving this question. Choosing the right hosting provider can affect the growth, stability and success of your company in the future. The article deals with the problems of trade and backup server configurations and location of access points, as well as with questions of server virtualization and hosting problems that may occur.

[What To Do with Accounts of Inactive Clients](#)



The constant growth of trade bases can affect the performance of the entire MetaTrader 4 trading platform. To solve this question, use the function of moving client bases with all trades to an archive in MetaTrader 4 Server. Archive clients and their orders can be requested from the MetaTrader 4 Administrator and can be restored if necessary. Moving bases to the archive helps to free the trade server from old and invalid data, which has a positive effect on the performance of all components of the trading platform.

[Universal Filter: Installation and Setup](#)



MetaTrader Universal Filter is a specialized utility for the filtration of quotes coming from different feeders. As a filtration algorithm a mechanism borrowed from UniDDE Connector is used.

[Video: MetaTrader 4 Server Installation and Setup](#)



The video instruction describes the process of MetaTrader 4 Server installation and its initial setup in MetaTrader 4 Administrator.

[Video: Preparing Computer for MetaTrader 4 Server Installation](#)



A video instruction about how to prepare a computer for MetaTrader 4 Server installation is published. The material is an addition to the previously published article "Preset Computer for MetaTrader Server 4 Operation".

[How to Use the Support Site Efficiently](#)



How to solve problems appearing when working with the trading platform? Whom and in what cases should one call? How to get the additional access to the support site?

[MetaTrader 4 Server Transfer to Forex Symbols Having Five Decimal Places](#)



In the latest builds of MetaTrader 4, the correct support of symbols having five decimal places is implemented. The article describes basic steps to be made in order to transfer the MetaTrader 4 Server to work with Forex symbols having five decimal places.

[How to Lose Money without Protective Limit & Stop Level and Freeze Level?](#)



Everyone must be aware of it. How to lose money without protective Limit & Stop Level and Freeze Level? Protection mechanisms from pip-traders in the standard configurations of the server.

[Calculation of Swaps in MetaTrader 4](#)

The article provides definition of swap in FOREX market, demonstrates formulas of swaps calculation. The attached file contains an exemplary calculation of swaps for some currencies.

[Account Registration Message Templates](#)



Starting with build 296, MetaTrader Server 4 allows to set up messages of the internal mailing system to be sent to the client at opening an account. At that, one can use specialized message templates in HTML format and compose account registration messages not only in English, but in any other language!

[MetaTrader 4 Server Transfer](#)



The sequence of operations of transferring MetaTrader 4 Server from one dedicated server to another one is described.

[Security](#)[API](#)

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API

Translate: EN ▾



[MetaTrader 4 Server API: Work with Trade Functions and Hooks](#)

This article contains examples of working with positions and pending orders that allow you to fully or partially change the trading logics of the server. Besides that, the article contains the detailed description of step-by-step actions of the trade server when trade hooks are called. First of all, this article will be useful for developers of plug-ins to help implement the correct processing of trade orders and positions. This article is also useful for trade server administrators to help them understand the operating principles of plug-ins installed on the server.

[Generation of Server Reports according to NFA Requirements](#)



NFA's new capital requirements for Forex Dealer Members registered in the USA became effective on December 21, 2007. In this connection, our company has developed a server plug-in named "NFA Reports" to gather and store all necessary information.

[Automated Depositing of Clients' Funds through PayPal](#)



The article describes the characteristics and settings of the server plugin PayPal Deposit, used for integration with PayPal service.

[Additional Daily Reports of the Server](#)



The article describes server plugins to generate additional daily server reports.

[Receiving Quotes via UBS Connector](#)



The article describes how to install the specially designed component named UBS Connector and how to set up the MetaTrader 4 Server to receive quotes from UBS.

[MetaTrader 4 Server API: Processing Traders' Requests, Pending Orders and Stop Orders](#)



The article contains the schemes of processing traders' requests in different modes of execution (Instant Execution, Request Execution and Market Execution) and modes of processing actuated pending orders and stop orders.

[MetaTrader 4 Server API: Additional Functions and Hooks](#)



The article contains a list of MetaTrader 4 Server API additional hooks and functions that can help to enhance the server functionality.

[Automated Depositing of Clients' Funds through WebMoney](#)



The article describes the characteristics and settings of the server plugin WebMoney Deposit, used for integration with Merchant WebMoney Transfer service.

[Server Plugin: AgentCommission](#)



The article describes and gives exemplary realization of server plugin named AgentCommission that allows to set a flexible logic for calculation of agent's commissions.

[MetaTrader 4 Server API: Client Functions and Hooks](#)



The article contains the list of client functions and hooks of the MetaTrader 4 Server API. They can be used to advance the server functionality for working with customers.

[Server Plugin WebRegistration](#)



The WebRegistration plugin allows to create accounts via Telnet with the MetaTrader Server and to implement the web-server interface for creation of client accounts.

[Server Plugin Stopouts](#)

The plugin allows to modify standard closing of client's positions at stopouts: Instead of closing the most



unprofitable position by the server, all client's positions will be closed. The plugin is available in source codes as an exemplary use of MetaTrader Server API.

[FSA Markets Transaction Report Plugin](#)



The server plugin FSA Markets Transaction Report is designed for the automated generation of FSA reports at the end of the workday.

[Server Plugin Description: DealerHelper](#)



The plugin named DealerHelper is one of the Server API samples and intended for partial automation of the dealer's activities.

[MetaTrader 4 Server API: Hooks and Trade Functions](#)



MetaTrader 4 Server API: Hooks and Trade Functions

[MetaTrader Manager Report API](#)



Report API, a standard interface for writing own Manager Terminal reports, is described.

[Server Plugin: Client Profits and Volumes](#)



This article gives an example of server plugin named Client Profits and Volumes that, using synthetic symbols, accumulates customer trade statistics: non-realized profit/loss and volume of open client positions.

[Use of MetaTrader 4 Manager API](#)



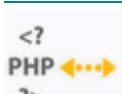
Using Manager API, you can construct your own administrator's and manager's utilities and tools.

[What is MetaTrader Server API?](#)



What is MetaTrader Server API? It is a large amount of functions to be intercepted, description of data structures used, and virtual interface of the trading server. To make the most of these functions, special plugins in the form of DLL files must be written.

[WebServices: Traders' Contest Organization](#)



Traders' contest organization: set of PHP-scripts, description of web-service API.

[WebServices: API Commands](#)



API commands description, example of a PHP-script.

[WebServices: Access to Account](#)



Trader's private room structuring: the set of PHP scripts, description of web-service APIs.

[WebServices: Charts Publication](#)



The technique of periodical chart generation using the built-in 'mtchartdraw.exe' utility is described. The utility makes it possible to create a set of various charts and send them automatically to the website through FTP.

[WebServices: Quotes on the Site](#)



Publishing quotes to the site: example of an informer, set of PHP scripts, description of web-service API.

[DataFeed API: Writing Your Own Data Sources](#)



How to write your own data sources using DataFeed API — a short guide with examples.

How to...

Additional Features

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Additional Features

This section describes additional features of the components of the MetaTrader 4 trading platform:

[URL Schemes](#)

[Marketing Campaigns](#)

URL Schemes

Mobile terminals [MetaTrader 4 for iPhone](#) and [MetaTrader 4 for Android](#) support a special URL scheme for launching the application with predefined settings on a device. Currently, the terminal can be launched with a certain account. Create a link of the following look on your website:

```
metatrader4://account/?login=<account_login>&server=<account_server>
```

where <account_login> and <account_server> are trading account login and server. When such a link is clicked from a mobile device browser, MetaTrader 4 starts and tries to connect to the specified account. If the account is already present in the terminal and has a predefined password, connection is performed successfully. Otherwise, the account connection form is shown with the account and server already specified, and a user is prompted to enter the password.

A server name should exactly match the name in the White Label.

Marketing Campaigns

A user record in the trading platform has a special field [LeadSource](#). It is used for marketing campaigns allowing you to track where a client came from. To receive the data, add the following to the client or mobile platform download link:

```
https://download.mql5.com/cdn/web/metaquotes.software.corp/mt4/mt4setup.exe?utm_campaign=YourLeadSource  
https://download.mql5.com/cdn/mobile/mt4/ios?server=ABC-Demo,ABC-Real&utm_campaign=YourLeadSource  
https://download.mql5.com/cdn/mobile/mt4/android?server=ABC-Demo,ABC-Real&utm_campaign=YourLeadSource
```

Where YourLeadSource is a name of a campaign. In the "server" parameter of the mobile platform links, enter the list of your servers to be shown to traders when they open an account.

When opening a demo account and connecting to any trading account via the terminal downloaded using such a link, utm_campaign value is set in a client record at the server side. Additional information is available in the article [New Analytics in MetaTrader 4/5: from Website and Installer to Opening an Account. What are the Advantages for Brokers?](#)

[API](#)

[Manager](#)

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