ARQA TECHNOLOGIES

QUIK Administrator

Administrator's manual

Version 12.0

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You may email your comments on this Manual to: quiksupport@arqatech.com

1. Working with program

QUIK Administrator program is intended for the user administration and managing user rights. QUIK Administrator allows adding and changing the information about users and rights to view information. This program is addressed to the broker's administrators.

Program functions:

- Registration of new users in the QUIK system and setting their rights to access different program functions;
- Changing the rights of the registered users;
- Managing access keys and digital signature certificates;
- Configuring rights to messaging other users;
- Viewing lists of users, organizations, markets, security classes and informational agencies,
- Configuring the Dealer Library that allows controlling orders received, margin trading, sub-administration and commissions calculation;
- Requesting the reports on settings and user actions; viewing, printing and saving them in formats Word, Excel, PDF, XML, Crystal Report. *

> **(*) Crystal Reports Software is required to be installed on the computer to view, print and save reports.**

1.1 Program installation

The program is installed by copying the files to the folder on the user's computer, for example, named QAdmin. The executable file is QAdmin.exe.

> 1. **The Regional Settings of some Windows versions have number of kopecks after the decimal point equal to 0 instead of 2 which may cause incorrect program behavior. To change the settings, on the Start menu click Control panel / Regional settings, select Currency tab and set 2 under Number of digits after decimal.**
> 2. **The program requires the Default printer to be selected on the computer.**

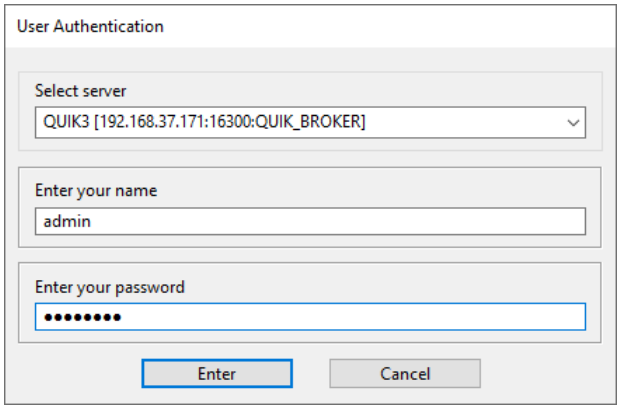
The installation and setup of QUIK Administrator's server are described in the QUIK server's installation instruction.

1.1.1 Equipment and software requirements

For detailed system and software requirements see the official website of QUIK.

1.2 Server connection

When launching the program, the 'User Authentication' window appears. Fill in the information below:



1. **Select server** – select the QUIK server in the list.

> **The list of QUIK servers to be used is configured in the ip.cfg file located in the executable file's directory. Each server is described by a separate string in the format:**

```
<server name>[<server ip address> or <domain server name>:<server port number>:<server key ID>]
```

2. **Enter your name** – name (login) for connection to the QUIK Administrator's database.
3. **Enter your password** – password for connection to database.

The name and password must match case (Uppercase and lowercase) and the language (Russian/English). If entered successfully, the main program menu with the control panel will appears. The notifications appear in the following cases:

- If there are users / service users whose authorization, digital signature certificate or password expires within the time interval set in QUIK Administrator settings;
- If there are users who have been granted or withdrawn the **QAdmin Administrator** permission – the notification is available only for users with the **QAdmin Administrator** permission.
- Last login information: date, time and IP address.

If you are unable to connect to the server, this can happen for one of these reasons:

- The QUIK Administrator user name or password you have specified are incorrect;
- The program is misconfigured. Contact the server administrator for assistance;
- The QUIK Administrator server may have stopped;
- Version of QUIK Administrator Client part does not coincide with QUIK Administrator Server part. An appropriate warning appears.

1.3 Program update

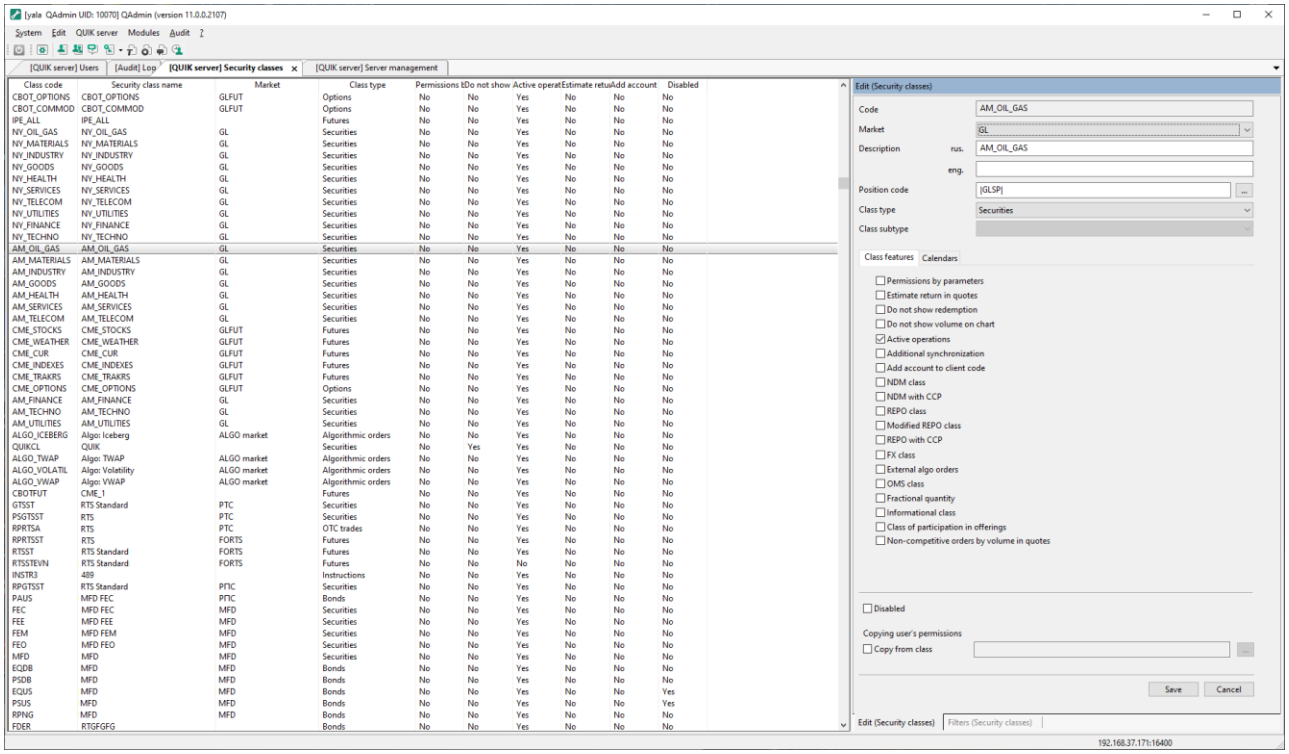
The program has a built-in update procedure. After a connection to the server is established, the program checks if updates are available. If an update is found, the message "QUIK Administrator needs to be updated to continue. The application will be restarted after the update is installed" appears. Click **OK** or close the window.

Before starting the update process, a backup of the existing files will be created in the .\Backup directory. The use may restore the previous versions' data if required.

The update will begin automatically. Computer restart is not required. When updating is complete, the program will restart.

1.4 Interface description

The program window has the main menu and the Control Panel containing icons for quick access to the main program functions. When a menu item is selected or an appropriate button is clicked, the tab with parameters opens. The parameters on the left of the tab are displayed in a tubular view; a data input/editing window for a selected parameter is displayed on the right side.



1.4.1 Functions for working with dictionaries

Moving windows

To move a dictionary window, double-click the edit window title bar or drag it holding the window title bar with the left mouse button.

To return the edit window to its original position click the window title bar once more.

When the mouse hovers over the arrow while moving the edit window, this window moves to the selected side of the screen.

Dictionary filters

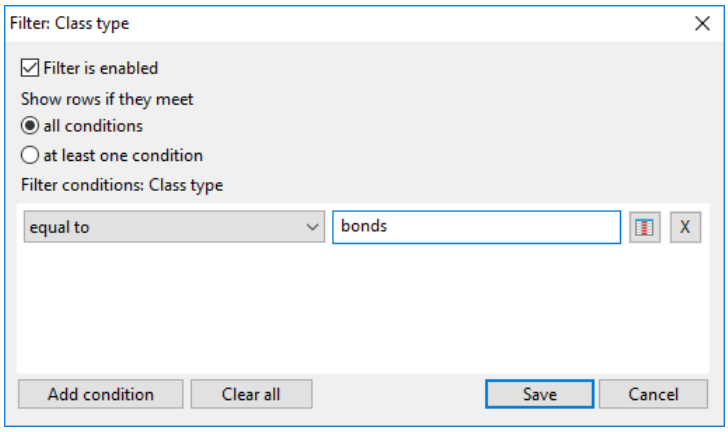
The edit window contains the **Filters** tab (at the bottom of the window). The Filters tab is described in details for each parameter separately.

User-defined filters

> **User-defined filters a not available for the Users dictionary.**

A user can set the filter for each table column *.

To set up the filter, hover on the column title and hold for a while until the icon appears in the title area. Click it to open the filter settings dialog.



The name of the selected column, for which the filter is configured, is specified in the dialog box title.

The dialog box contains the following parameters:

1. **Filter is enabled** check box – if selected, the filter is used. If not selected, the filter is not used, and other parameters are not available.
2. **Show rows if they meet**:
   - **all conditions** – the table contains rows that meet all the filter conditions;
   - **at least one condition** – the table contains rows that meet at least one condition.
3. **Filter conditions**: <name of the column for which the filter is set>:
   - For numeric values, the following conditions are set:
     - equal to;
     - not equal to;
     - less than;
     - less than or equal to;
     - greater than;

- greater than or equal to;
- specified;
- not specified.

- For string values, the following conditions are set:
  - equal to;
  - not equal to;
  - begins with;
  - does not begin with;
  - ends with;
  - does not end with;
  - contains;
  - does not contain;
  - specified;
  - not specified.

4. Clicking the button the user can select any table column except for the one the filter is set for, or specify the value manually (selected by default). If the filter is set for the column with a date, other columns with a date (if any) and the following values can be selected:

   - Today – current date on the user's computer;
   - Trading session date – current date of the trading session. If computers with a QUIK server and a QUIK workstation are set for different time zones, the date can be different from the one on the user's computer.

> **Do NOT specify the ? and * characters as conditions to ensure correct operation of the filters.**

To delete a condition value, click the button next to it.

5. The **Add condition** button is used to add a filter condition.

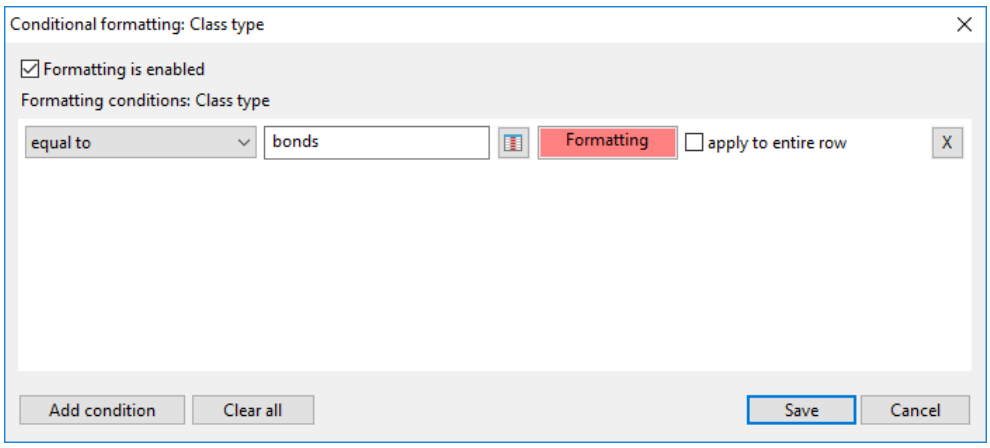
To delete all conditions, click **Clear all**. To use the filter with the specified conditions for a column, click **Save**.

When filter is applied the icon changes to .

Conditional formatting

The parameters for conditional formatting of and cells may be set for each column for all tables *.

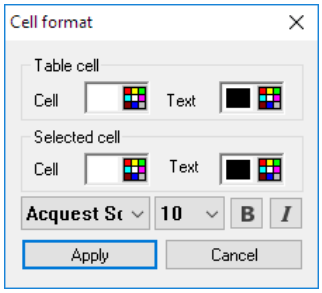
To adjust the filter, position the cursor over the column heading and hold it there for a while. The icon appears in the window heading area. Click it to open the formatting dialog box.



The dialog box contains the following parameters:

1. **Formatting is enabled** check box – if selected, the formatting is used. If not selected, the formatting is not used, and other parameters are not available.
2. **Formatting conditions** – the conditions are the same as described in 1.4.1. The following parameters are additionally available:

   _ The **Formatting** button is used to set the text font color in a cell. Click the button and select colors and font.

   Selected font and color are shown on the **Formatting** button.

   _ The **apply to entire** row check box is used to apply the cell settings to a row containing it.

   To delete a condition value, click the X button next to it.

3. The **Add condition** button is used to add a format condition.

To delete all conditions, click **Clear all**. To use the filter with the specified conditions for a column, click **Save**.

If conditions are set, the icon changes to:

- – if formatting is enabled;
- – if formatting is disabled.

Sorting the table rows

In tables, it is possible to sort the rows relative to the values in a specified column *.

To sort the rows, press and hold the 'Ctrl' key, and click on the column heading. The sorted column is marked with ▼. To disable sorting, press and hold the 'Alt' key and click left mouse button on the column heading.

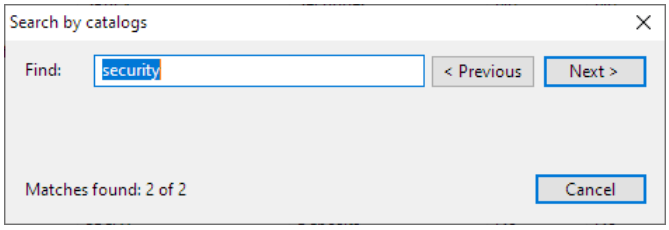
> **(*) When reopened, the Users, List of classes (Select security class), Organizations, Select news agencies and List of organizations dialog boxes contain rows sorted based on the user-defined filter, conditional formatting and sorting settings set when the dialog box was previously open.**

Searching within a table

menu **Edit / Find** or Ctrl+F

The function is intended to search for a specific value within dictionary table cells, as well as in the **Editor of clients codes** dialog box (can be opened from user editing dialog box, on the **Classes permissions** tab, by clicking the **Edit** button for the **Client code on the dealer's side (separated by ,)** box).

Search is made within all content of the table including titles of rows and columns.



The search parameter functions are as follows:

- **Find** – the text or numeric characters for which you need to search.
- The search direction:
  - **< Previous** – search upward, row by row and from right to left on each row;
  - **Next >** (by default) – search downward, row by row and from left to right on each row.

To find the next value within a table that matches the search conditions, hit Enter or F3, or click on one of the search direction buttons.

> **The search dialog box parameters differ for the Users dictionary (see 2.2.4).**

Hotkeys

Many program actions may be launched by pressing certain combinations of keys called 'hotkeys'. If two or more keys need to be pressed together, the Administrator's manual designates them by '+' (plus), for example CTRL+Q (i.e., press the 'Ctrl' and 'Q' keys simultaneously).

Combination	Function
F3	Continue search
Ctrl+Q	Disconnect / connect with server
Ctrl+W	Choose the width of the columns in a table
Ctrl+F4	Close the current window
Ctrl+F6 or Ctrl+Tab	Go to the next window
Shift+Ctrl+F6 or Shift+Ctrl+Tab	Go to the previous window

1.4.2 Main menu

Functions of the program main menu items:

Menu section	Menu item	Function
System	Connect…/Disconnect	Open the server connection window / Disconnect from the server without closing the program
	Reorder data (Ctrl+F5)	Send a query to server to request data again
	Options	Open settings window
	_ Administrative roles	Manage administrative user rights
	_ Data sources	Data sources list
	_ Settings…	General server settings
	Settings…	General server settings
	Quit	Quit the program
Edit	Cut	Remove the selected value
	Copy	Copy the selected value
	Paste	Insert the parameter value in selected tab
	Delete	Delete a string in the list or a selected parameter
	Edit	Edit parameters of a selected string on the tab
	Insert	A new record to the selected dictionary
	Find	Find the desired parameter on the selected tab
	Filter	Select parameters by specified criteria

Menu section	Menu item	Function
	Export table	Export dictionary data to the XLS / XLSX / CSV format file
QUIK server	Users	Full list of clients
	Trade roles	List of trade roles
	Sending messages	List of users who are eligible for sending messages
	Server management	List of users who are eligible for server administration
	Active users	List of users currently connected to QUIK Administrator
	Security	Ensuring the security of the data transfer
	_ QUIK keys	Access keys for a built-in data transfer security system
	_ VERBA OW keys	Verba-OW CIPF keys registration/revocation
	_ CryptoPro keys	CryptoPro CSP CIPF keys registration/revocation
	_ SignalCom keys	Message Pro CIPF keys registration/revocation (Signal-COM company)
	_ CCertPKI keys	CCertPKI CIPF keys registration/revocation
	_ EUSicex keys	EUSicex CIPF keys registration/revocation
	_ KA keys	KA CIPF keys registration/revocation
	_ CSP SSPI keys	CSP SSPI CIPF keys registration/revocation
	_ Bicrypt keys	Bicrypt keys registration/revocation
	_ OpenSSL keys	OpenSSL keys registration/revocation
	_ VPNKey keys	VPNKey keys registration/revocation
	_ Two-factor authentication	Two-factor authentication settings
	_ Logins for another authorization system	Directory with logins for another system authorization
	_ Certificates storage	Manage certificates storage
	_ Save transaction with DS…	Save a transaction with digital signature to file
	_ Revise DS transaction…	Verification of digital signature
	Reports	List of reports on active operations of QUIK users

Menu section	Menu item	Function
	_ Report on transactions…	Report on all sent user instructions
	_ Statistic on transactions…	Report on quantity of transactions sent by users
	_ Report on stop orders…	Report on all contingent (stop-) orders sent by users
	_ Common rights…	Review user settings in view of client codes
	_ Presence of the rights…	Review the list of users by the specified set of rights for selected classes
	_ Report on positions…	Report on operations with positions
	_ Report on messages…	Report on sent and received user messages
	_ Report on users activity…	Save the report on frequency of QUIK system use by clients to file
	_ Inactive users…	Report on QUIK users that did not perform transactions
	_ Codewords…	Report on the QUIK two-factor authentication parameters
	_ Expiring authorization…	Message about users with expiring authorizations, DS certificates or passwords
	_ Report on Quik two-factor authentication	Report on QUIK two-factor authentication by user(s)
	Calendars	Setting calendars to determine a settlement date when keeping positions in calendar days
	_ Calendars	List of calendars with dates that are exceptions to the standard calendar of settlement and non-settlement days that is used on the QUIK server
	_ Class groups	Groups of classes to which calendars can be bound
	Limits calculation libraries…	Settings of the Dealer library intended for setting broker's and trading system's commissions and permissions
	Security classes	List of instrument types with the attributes of allowed operations
	Markets	List of available markets

Menu section	Menu item	Function
	Organizations	List of users organizations
	News agencies	List of available news feeds
	Client modules	Global rights configuration for all users by client modules of the QUIK system
	Technological modules	Global rights configuration for all users by technological modules of the QUIK system
	Access server connections limit	Setting the maximum number of concurrent user connections to the access server
	Organizations connections limit	Setting the maximum number of concurrent connections of users from one organization to the QUIK server
	Export/Import	Data saving/loading
	_ Save UIDs and client codes	Save the list of UID and client code matches
	_ Save rights on news agencies	Save the list of rights for receiving information from news agencies
	_ Load UIDs and client codes	Import the list of UID and client code matches
	_ Load rights on news agencies	Import of rights for receiving information from news agencies.
Audit	Log	View the QUIK system operation log with detailed event descriptions
Modules		List of QUIK system plug-ins available to the user. When selecting a plug-in, the list of corresponding dictionaries is displayed

Settings of Limits Calculation Library are described in a separate document.

1.5 Settings

1.5.1 Administrative roles

menu **System / Options / Administrative roles**

Purpose

The dictionary with full list of administrative roles. Using this dictionary, it is possible to add new administrative role, edit its rights and delete it.

> **This dictionary is available for users to whom the QAdmin Administrator right is granted.**

The left part of the window displays the dictionary of administrative roles. The right part contains the settings for editing and filtering the dictionary records.

The dictionary contains the following common roles by default:

Role name	Rights
Full access	Access for viewing and editing rights of all modules
View Only	Access for viewing rights of all modules. Exception: the Data import right is not available
Client manager	QUIK Server: Access: _ Expiring authorization and notification settings; _ Security classes and markets; _ Organizations; _ New agencies, _ Technological modules. Modification: _ Users; _ Users: view news; _ Sending messages; _ Client modules. Limits Calculation Library – access: _ Access to Limits Calculation Libraries
Risk manager	QUIK Server – access: _ Security classes and markets; _ Organizations; _ New agencies; _ Users. Limits Calculation Library – modification: _ Access to Limits Calculation Libraries
Security officer	QUIK Server: Access: _ Security classes and markets; _ Organizations; _ New agencies; _ Users. Modification: _ QUIK keys; _ VERBA OW keys; _ CryptoPro keys;

Role name	Rights
	_ SignalCom keys; _ CCertPKI keys; _ EUSicex keys; _ KA keys; _ CSP SSPI; _ Bicrypt keys; _ Two-factor authentication; _ Logins for another authorization system; _ Certificates storage; _ Two-factor authentication. Limits Calculation Library – no rights available
Auditor	**Audit** module – permission for viewing Audit log

Table format

The dictionary contains the following parameters:

Parameter	Function
Name	Administrative role
Users	List of comma-separated users in format <User ID>[<User full name>]

Functions available from the table shortcut menu:

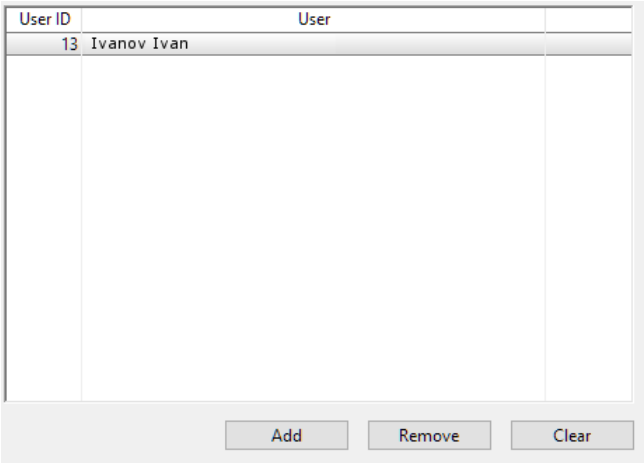
1. Use **Add** to register a new role.
2. Use **Edit** to change a role.
3. Use **Remove** to delete a role.
4. Use **Export table** to export data from dictionary to the XLS / XLSX / CSV format file (comma-delimited).

Configuring the table

The values of the parameters:

1. **Role name** – administrative role name. A value is required for this field.
2. **Users** tab– table containing the list of users in an administrative role.

> **If a user performs several administrative roles, then he has the rights available for these roles.**
> **If a role is assigned to a user with trading access, all his permissions for client terminals are revoked and access type is changed to administrative (see 2.1).**

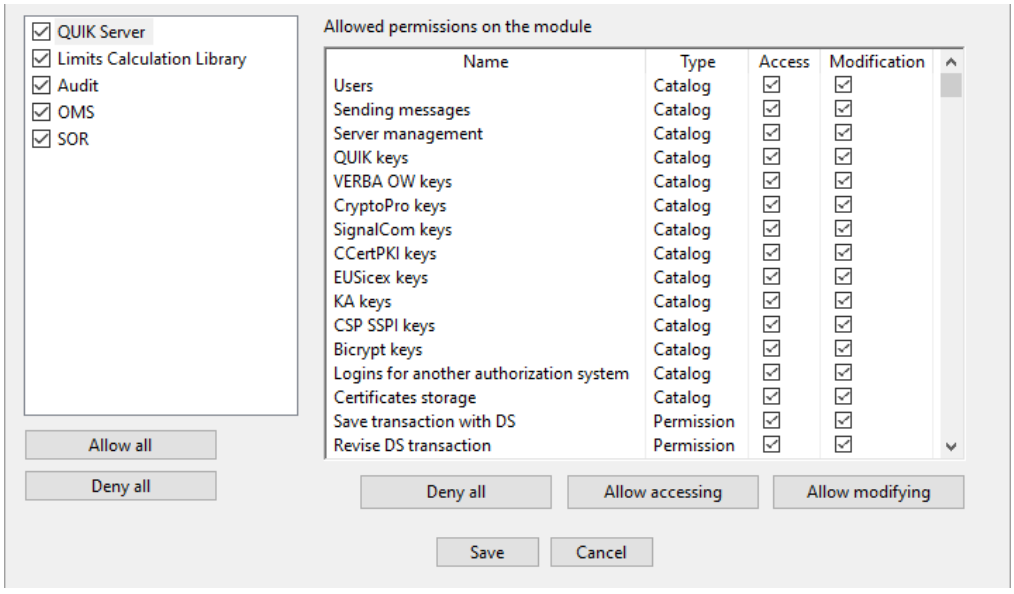


The following parameters are displayed in the table columns:

Parameter	Description
User ID	User's identifier on the QUIK server
User	User's full name

- **Add** – A new user for this role;
- **Remove** – delete a selected user from a role;
- **Clear** – delete all users from a role.

3. **Modules** tab – edit user rights for modules.



The field on the left shows the list of modules to enable / disable the editing rights for. The module for which the rights can be modified is marked by a check box. The minimum set of modules:

- QUIK server;

- Limits Calculation Library.

Click **Allow all** or **Deny all** to make the rights available or not available for users, respectively.

- **Allowed permissions on the module** – the list of special rights and settings to be transmitted by a selected module. Use the check boxes to give the rights to users preforming this role.

  The following parameters are displayed in the table columns:

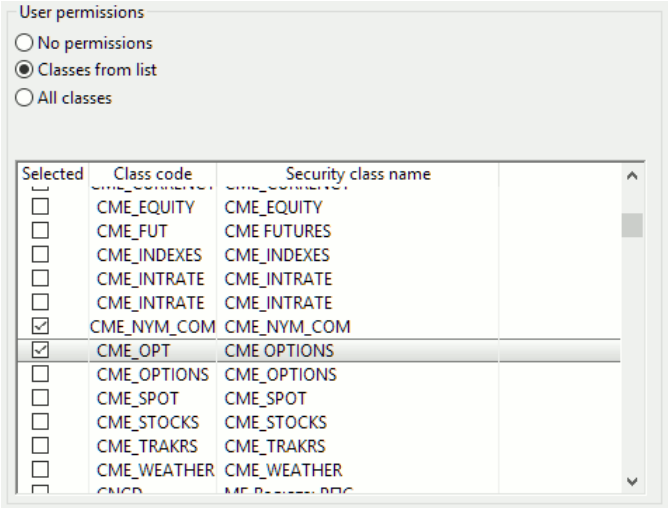
Parameter	Description
Name	Name of the right
Type	Type of the right. Possible values: - Catalog; - Options; - Report; - Permission
Access	Right to view. Check to grant the right. Once the Access right is revoked, the Modification right is also revoked
Modification	Right for editing. Check to grant the right. Once the Modification right is granted, the Access right is granted. Not available for rights of the Report type

  Click the **Deny all** button to make all rights from the list unavailable for users performing this administrative role. Click the **Allow accessing** and **Allow modifying** buttons to grant the right for viewing and editing respectively.

> **If the right editing is disabled for the module in the field on the left, then all rights for this module will be disabled in the Allowed permissions on the module table.**

4. **Classes permission** tab – edit user rights for classes.

> **The tab elements are available for editing if the QUIK server checkbox is enabled in the filed on the left on the Modules tab.**



User permissions:

- **No permissions** – user cannot edit the rights for instruments classes;
- **Classes from list** – user can edit the rights only for selected instruments classes from the list;
- **All classes** – user can edit the rights for any instruments class.

The table contains the list of available instrument classes. The table columns show the code and name of the class of instruments. A selected class is marked by the check box in the **Selected** column.

1. **Save** – save a role.
2. **Cancel** – cancel all the changes.

Filters

Filtering dictionary records by substring contained in any column of the table in the left part of the screen.

1.5.2 Data sources

menu **System / Options / Data sources**

Purpose

Editing of the list of data sources that are used in the QUIK system and setting their peculiarities. The dictionary is available to the users with the **QAdmin administrator** permission only.

The right part of the window displays the settings for editing and filtering the dictionary records. The left part contains the list of data sources.

Functions available from the table shortcut menu:

1. Use **Add** to register a new source.
2. Use **Edit** to change the selected source.
3. Use **Remove** to delete the selected source from the dictionary.

4. Use **Export table** to export data from the dictionary to the XLS / XLSX / CSV format file (comma-delimited).

Configuring the table

1. **Plugin type** – type of the plugin that is used as a data source.
2. **Datasource type** – type of plugin source that is used as a data source. Value: MySQL base.
3. **Access type** – type of access to the data source. Value: ODBC.
4. **Maximum number of simultaneous connections** – maximum number of simultaneous connections to the data source. Value by default: 5.
5. **Server name** – SQL server name. The box is non-editable.
6. **Database name** – database name. For the ODBC access type the ODBS data source name is to be specified.
7. **File path** – name and path to the settings file. The box is non-editable.
8. **Authorization type** – user authorization type. Valid values:
   - login;
   - domain name.
9. **Login** – login for access to the database.
10. **Password** – to change the password click Edit password and specify a new password in the window that opens. Values in the **New password** and **Confirm password** boxes must be the same.
11. **Encrypt the password** – attribute that indicates that the password will be encrypted,
12. **Enable** – attribute that indicates that the data source is available.

1.5.3 Settings

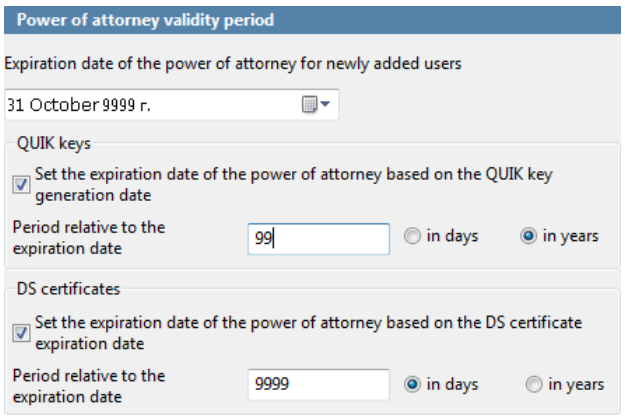
menu **System / Options / Settings...**

General

1. Use **Select language (Changes will take effect after you restart the program)** to change the interface language. Valid values:
   - Russian;
   - English.
2. Use **Display data in dictionaries when disconnected from server** to clean directories when disconnected from the server. Possible values:
   - Enabled (default);
   - Disabled.

QUIK server

1. **Power of attorney validity period** allows you to change the conditions of setting the validity periods for a power of attorney. The access is defined through the rights of a role the user performs (see 1.5.1).



The following options are possible in the dialog:

- Specify the expiration date of the power of attorney for newly added users. To do this, select the date in the **Expiration date of the power of attorney for newly added users** combo box;
- The **Set the expiration date of the power of attorney based on the QUIK key generation date** checkbox – specify the number of days / years the power of attorney is effective in the **Period relative to the expiration date** field. The expiration date of the power of attorney based on the QUIK key can be changed only when assigning the key in the user rights settings dialog;
- The **Set up the expiration date of the power of attorney based on the DS certificate** expiration date checkbox – specify the number of days / years relative to the expiration date of a certificate in the **Period relative to the expiration date** field. The value can be negative. The expiration date of the power of attorney based on the DS certificate expiration date can only be changed when assigning the key in the user rights settings dialog.

2. **Cryptoproviders** – select the cryptoproviders to be used:

- Verba OW;
- CryptoPro;
- SignalCom;
- CCertPKI;
- EUSicex;
- KA;
- CSP SSPI;
- Bicrypt;
- OpenSSL.

Select the appropriate checkboxes. All checkboxes are selected by default.

2. User administration

2.1 User types

There are different types of users based on the access level:

- **Trading access** is granted to users who trade via client terminals, as well as service users which are used for different interfaces, integration utilities, and access servers.
  The access is granted in the following ways:
  - Set user rights in the user settings window for each instrument class manually or by applying a rights template (Firm's client, Firm's manager, Subadministrator) (**Classes permissions** tab, for details, see 2.3.2).
  - Set the list of trade roles in the Trade roles dictionary (menu **QUIK server / Trade roles**, see 2.5) and add roles for a user in the user settings window (**Trade roles** tab, see 2.3.2). This will clear the existing rights and inherit new ones of the roles added.
- **Administrative access** is granted to users who perform administrative functions by means of QUIK Administrator and QMonitor programs.
  The access is granted in the following ways:
  - Enable the **QAdmin administrator** attribute or grant rights to use QMonitor (see 2.7.3).
  - Set the list of administrative roles and assign them to users in the Administrative roles dictionary (menu **System / Options / Administrative roles**, see 1.5.1).

A user with one of the access types cannot use the functionality of the other access type.

2.2 Users

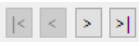
menu **QUIK server / Users** or button

2.2.1 Purpose

The dictionary is intended for viewing and changing the list of the QUIK server users. It is used to edit users.

The left part of the window displays the dictionary of users as a table. The right part of the window contains the parameters for editing (see 2.3) and filtering (see 2.2.3) the dictionary records.

If the total number of users in the dictionary exceeds the value set in the **UsersCountThreshold** parameter in section [QuikOptions] of the server settings ini file, the dictionary is split into pages.

In this case, the bottom of the window has the buttons  allowing switching between pages, the range of users' IDs on the active page, and the total number of users in the dictionary (Total: …).

Only one dictionary can be opened.

2.2.2 Table format

Each table row corresponds to an individual user. The columns display the following parameters:

Parameter	Purpose
User ID	Identification code of the user on the QUIK system server

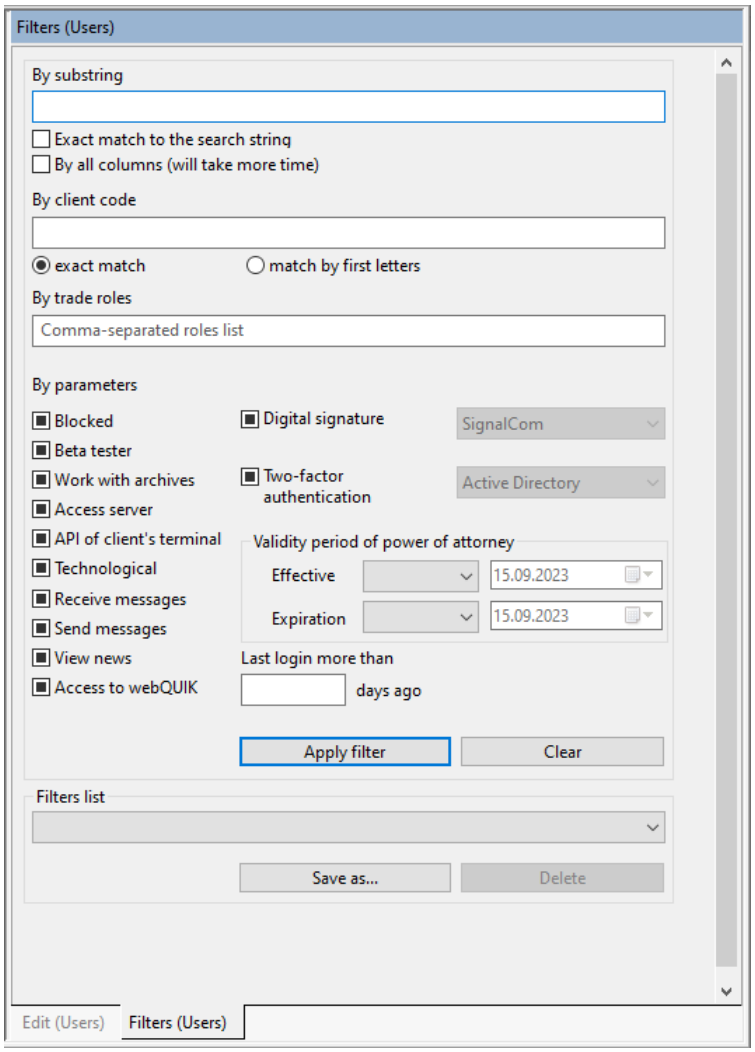
Parameter	Purpose
Last name	Last name of the user
First name	First name of the user
Middle name	Middle name of the user
Login	User login set on the Security tab of the user settings editing form (see 2.3.2)
Effective date	Date when user access to the QUIK system begins
Expiration date	Date when user access to the QUIK system ends
Organization code	Organization code in the dictionary
Organization name	User's organization name
Disabled	Attribute of blocking. Valid values: _ Yes; _ No
Comment	Text comment
Service	Attribute of a service user. Valid values: _ Yes; _ No
Master user UID	Master user identifier on server of the QUIK system
Last login	Information about the last login (if any)
IP-address	IP address from which the last login was made

The following functions are available from the shortcut menu:

1. Use **Add** to register a new user.
2. Use **Edit** to change the information of a selected user.
3. Use **Remove** to delete a user.
4. Use **Export table** to export data from dictionary to the XLS / XLSX / CSV format file (comma-delimited).

2.2.3 Filters

The window contains the following parameters:



1. **By substring** – search the value within words.
   - **Exact match to the search string** – searching for an exact match to a search string.
   - **By all columns (will take more time)** – if the check box is selected, search is made within all content of the table; if the check box is clear, search is made by the User ID, Last name, First name and Middle name columns.
2. **By client code** – search by client code. The value is 12 characters maximum.
   - **exact match** – search by specified client code;
   - **match by first letters** – search by first letters of a client code.
3. **By trade roles** – search by an identifier or name of a trade role. Multiple values are separated by commas: this will search for users who have at least one of the specified roles.
4. **By parameters** – search by parameters:
   - Blocked;

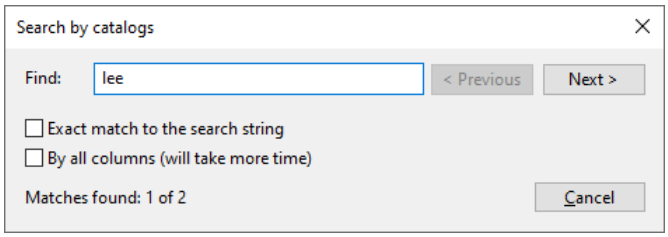
- Beta tester;
- Work with archives;
- Access server;
- API of client's terminal;
- Technological;
- Receive messages;
- Send messages;
- View news;
- Access to webQUIK;
- Digital signature;
- Two-factor authentication.

5. **Validity period of power of attorney**:
   - **Effective date** – date when the power of attorney becomes effective, in <DD:MM:YYYY>;
   - **Expiration date** – date when the power of attorney terminates, in format <DD:MM:YYYY>.
6. **Last login more than … days ago** — filter by the time of the last login, where you can set the number of days (an integer strictly greater than 0). When the filter is enabled, the dictionary displays those users whose login date is less than the current moment (in UTC).
7. **Apply filter** — apply the value of all filters.
8. **Clear** – clear the parameters values in a dialog.
9. **Filters list** – select a filter from the list of templates.
   - **Save as…** – save changes as a filter's template;
   - **Delete** – delete a filter's template.

2.2.4 Searching within a table

menu **Edit / Find** or Ctrl+F

The function is intended to search for a specific value within dictionary table cells.



The search parameter functions are as follows:

- **Find** – the text or numeric characters for which you need to search.
- The search direction:
  - **< Previous** – search upward, row by row and from right to left on each row;

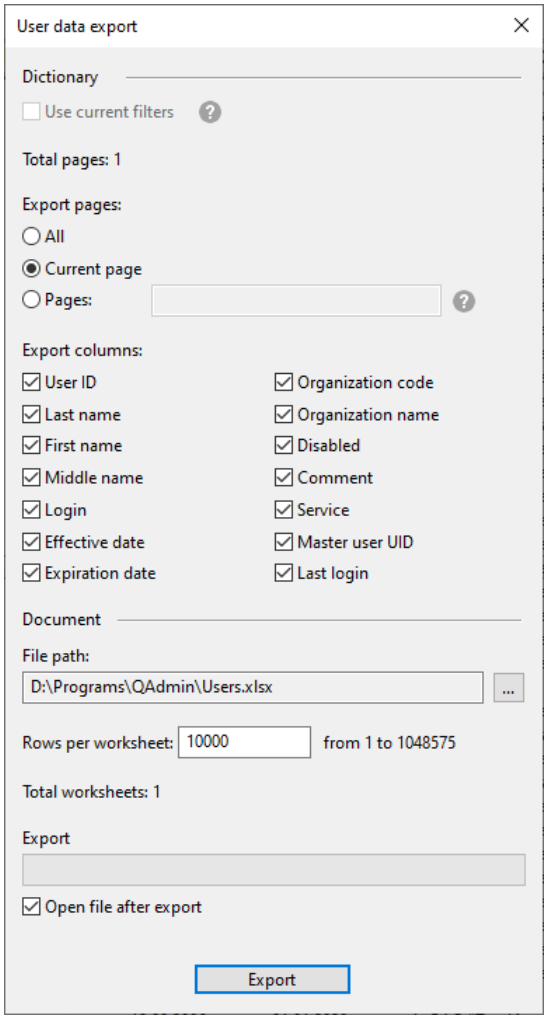
- **Next >** (by default) – search downward, row by row and from left to right on each row.

- **Exact match to the search string** – searching for an exact match to a search string.
- **By all columns (will take more time)** – if the check box is selected, search is made within all content of the table; if the check box is clear, search is made by the User ID, Last name, First name and Middle name columns.

To find the next value within a table that matches the search conditions, hit Enter or F3, or click on one of the search direction buttons.

2.2.5 User data export

To open the dialog box of user data export settings, select Export table under the shortcut menu of the Users dictionary.



The following parameters are available in the dialog:

1. Section **Dictionary**:

   - **Use current filters** – export user data affected by filters. The check box can be edited if the filters are applied to the dictionary (see 2.2.3).
   - **Total pages** – the number of pages available for export. Informational box.

- **Export pages**:
  - **All** – export all pages.
  - **Current page** (default) – export a page currently displayed in the dictionary window.
  - **Pages** – export specific pages. You can specify a page range (for example, 1–3), specific pages (for example, 5), both range and specific pages (for example, 1, 3–5). A range can be specified with no upper limit (for example, 5–): pages starting with the one specified will be exported.
- **Export columns**:
  - User ID,
  - Last name,
  - First name,
  - Middle name,
  - Login,
  - Effective date,
  - Expiration date,
  - Organization code,
  - Organization name,
  - Disabled,
  - Comment,
  - Service,
  - Master user UID,
  - Last login.

2. Section **Document**:
   - **File path** – path to a file to export data to. Supported file formats: XLSX, XLS, CSV. To select a file, click the "…" button. Required.
   - **Rows per worksheet** – the maximum number of rows per a worksheet in the file. Value by default: 10000. The field is not available if a CSV format file is selected. If the box is available, it is required.
   - **Total worksheets** – the number of worksheets in the file. Informational box. The field is not available if a CSV format file is selected.
   - **Export** – export process progress.
   - **Open file after export**. The field is not available if a CSV format file is selected.

> **To export tables to the XLS and XLSX format files, you must have a spreadsheet program (Excel) installed on your computer.**

To start export, click **Export**. To cancel export, click **Cancel**.

2.3 Creating / changing user settings

2.3.1 Purpose

Assigning user permissions for viewing information and performing transactions in the QUIK system. Changing the settings of registered users.

The user settings editing window is located in the Users tab.

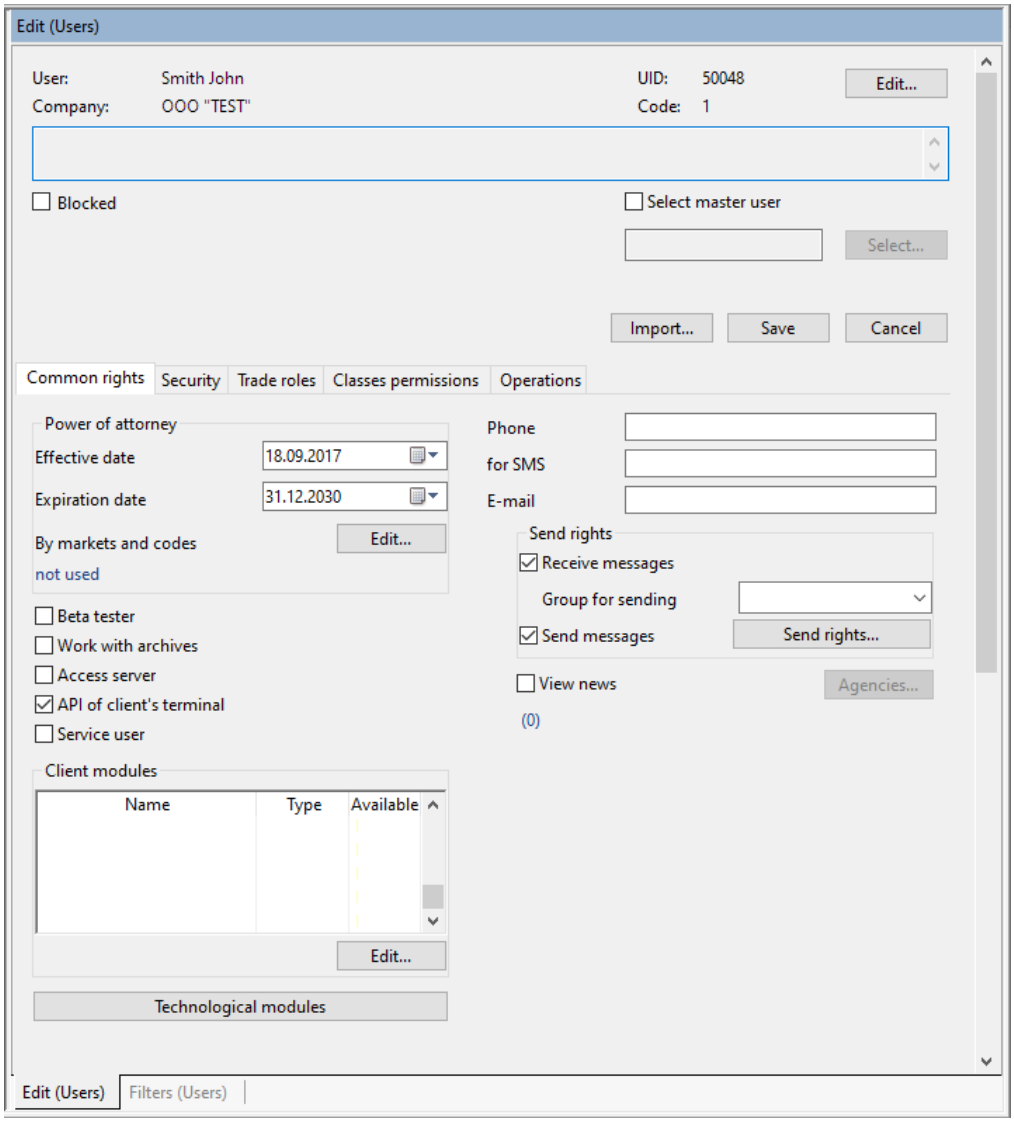
To create a new user, select **Add** in the shortcut menu of the **Users** table. To change the user settings, right-click a corresponding row and select **Edit** in the shortcut menu. To delete a user, select **Remove** in the shortcut menu.

2.3.2 User settings editing form

The user rights settings window contains a large number of parameters whose description is divided on sections.

By default, all checkboxes are deselected.

Parameter	Purpose
User	Last name, first name and middle name
UID	User identifier
Company	Organization name with the code. The field is populated automatically
Code	Organization code
'Edit' button	If you click on the button the user editing dialog will open. Using it you can change the **User** and **Company** parameters as well as the text in comment field
<Field>	Text comment
Blocked	Prevents the user from connecting. The user blocking becomes effective from the moment of the next connection attempt and doesn't affect the active connections
Select master user	Assign the master user to the user being edited. When the checkbox is selected, the **Select...** button is available, which opens a list of users for selection. In this case, the user being edited becomes an auxiliary user and should not be used for trading terminals, service utilities or technological connections. If the checkbox is cleared and is not available for editing, the selected user is already selected as the master user for another one
'Import' button	Import rights of another user. Press this button to open the dialog of selecting a user to import rights. Attributes **Blocked** and **User**, setting of the master user (the **Select master user** checkbox), keys and certificates cannot be imported
'Save' button	Save changes
'Cancel' button	Cancel changes



Common rights tab

Parameter	Purpose
Power of attorney	
_ Effective date	The effective date of providing user with the server access
_ Expiration date	The ending date providing with access
_ By markets and codes	Set up the effective and expiration dates of providing user with access to certain markets and by specified client codes. For details, see 2.3.3
Beta tester	Allows the update of the QUIK Workstation from a specific directory 'beta' on the QUIK server. Consult the QUIK support service before enabling the option
Work with archives	Enables the use of archives for charts. Archives module is required to be installed on the server to use this feature

Parameter	Purpose
Access server	Indicates that the rights of this account will be used for connection to the access server
API of client's terminal	Allows the user to use special terminal like CoLibri or TrustManager in addition to the standard QUIK Workstation
Service user	Attribute that indicates that a user is an access server or has permissions for technological modules
Client modules	Click the **Edit...** button to open the window for setting the rights for using modules. For details, see 2.3.6
'Technological modules' button	If you click on the button the window for setting the rights for technical modules of the QUIK system will open. For details, see 2.3.6
Phone	User's phone number
for SMS	Phone numbers to which SMS notifications generated by the external program such as CoLibri, etc. are to be sent. The user can specify several numbers separated by commas. Alert dispatch module is required to be installed
E-mail	E-mail addresses to which e-mail notifications generated by the external program such as CoLibri, etc. are to be sent. The user can specify several numbers separated by commas. Alert dispatch module is required to be installed
Send rights	
_ Receive messages	Allows receiving messages from other users
_ Group for sending	Include the user into the mailing group for messaging. Select the name of a group in the list. To create a new group, enter a new name in this field
_ 'Send rights' button	If you click on the **Send rights...** button the window for settings of text messaging between the users of a system will open. For details, see 2.6
View news	Determines whether the user can receive news:
_ 'Agencies' button	Opens a window for selection of news sources from the list

Security tab

Parameter	Purpose
Last login information	Information about the last login (if any) and the IP address from which the last login was made

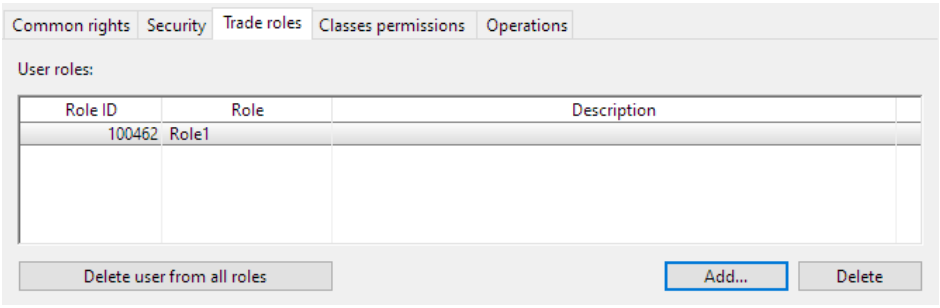
Parameter	Purpose
Allowed IP Addresses	If you click on the **Edit** button the window for setting the list of IP addresses allowed to establish user connection will open. By default, all addresses are allowed. If the list is formed but the user tries to connect from an IP address that is not on the list then the warning will appear and connection will be lost. For details, see 2.3.5
Authentication by login and password	
_ Login	User's login. If the login is not specified, value 'not set' is displayed. Press button **Custom** to open the dialog with parameters of user authentication by login and password (see 2.3.7)
_ Access to applications	
_ webQUIK	Attribute of user's access to webQUIK. Valid values: _ checkbox is not selected – no access to webQUIK; _ checkbox is selected – access to webQUIK; _ filled square icon (by default) – global value is used (see 7)
_ QUIK	Attribute of user's access to QUIK system. Valid values: _ checkbox is not selected – no access to QUIK system; _ checkbox is selected – access to QUIK system; _ filled square icon (by default) – global value is used (see 7)
_ Temporary blocking	Attribute that shows that the user account was blocked because of entering wrong authentication data the specified number of times. If the account is not blocked the setting has "no", otherwise – date and time of blocking expiration in the format <DD.MM.YYYY, HH:MM>. to remove blocking click **Unlock blocking**
Digital signature	Select the digital signature from the list for a selected user. The server configured for work with a corresponding cryptographic tool is required
_ Signature required	Determines whether digital signature is needed
Digital signature keys	If you click the **Edit...** button the window for setting the Cryptographic Information Protection Facility (CIPF) keys that are used for creation and checking of the digital signature will open. If the list of the **Digital signature** parameter select the name of the CIPF to be used and click **Edit...**under the table
QUIK keys	If you click the **Edit...** button the window for assigning access keys will open. For details, see 3.2
Use two-factor authentication	Enables the two-factor authentication

Parameter	Purpose
_ Choose application	Application to which a user is authenticated. The value is All platforms
_ Set individual settings	Indicates that individual settings are to be used for a selected application
_ Type of authentication	The type of the two-factor authentication to be used is selected in the list. Valid values: _ Not used (by default); _ RSA SecurID – authentication using RSA SecurID. For details, see 3.4; _ QUIK – an additional password sent via predetermined communication channel is required to be entered to establish the connection with the QUIK server; _ Active Directory – authentication using username and password stored in the network domain controller; _ RADIUS – authentication using RADIUS protocol
_ <Authentication scenario>	Valid values: _ Authentication for logging in; _ Trading authentication
Additional parameters for two-factor authentication and password recovery	
_ Set parameters	To set up the parameters of two-factor authentication click **Edit...**. Available to be edited if the **Use two-factor authentication** checkbox is checked and the type that is selected in the list is **QUIK** or **RADIUS**. For details, see 2.2.4
_ Do not ask the user for a verification code … days	The number of days for which an additional password for QUIK two-factor authentication will not be requested if the user doesn't change the connection parameters. Allowed values: integer numbers from 1 to 365. Editable when **QUIK** authentication type is selected. If changes of the connection parameters occur then an additional password will be requested. If the box is not filled or the value 0 is specified then a new additional password will be requested every time a session is being established by the user

Trade roles

> **The tab is available for users with trade access (see 2.1).**

This tab is used for set user trade roles.



1. **User roles** – the table contains the list of trade roles assigned to a user.
2. **Delete user from all roles** button – revoke all trade roles of a user. Clicking the button opens the dialog box to choose what to do with user rights granted by the roles being deleted: copy or clear.
3. **Add...** button – add a trade role for a user. Clicking the button opens the dialog box with the list of user roles (see 2.5) except for the ones being assigned earlier. If a role grants rights that conflict the user's existing ones inherited from another role, such a role is highlighted in gray in the list and cannot be added to a user.

   Adding a role clears the following user settings, inherits their values from a trade role, and makes them unavailable for editing:

   - **Common rights** tab – **View news** setting;
   - **Classes permissions** – all except for the following:
     - Code on the dealer's side and Client codes to be managed by sub administrator (separated by ,) (if the Code on the dealer's side field was filled in in the user's settings and the Subadministrator check box is selected for a trade role);
     - Client code on the dealer's side (otherwise).

   If several roles are added, granted rights are combined.
4. **Delete** button – revoke the selected role from a user but keep rights this role gave.

Classes permissions tab

> **The tab is unavailable for users with administrative access type (see 2.1).**

This tab is used for determining user permissions for each instrument class.

Operating principle:

1. Select a class in the **Classes** table. The attributes under the table show the rights of a user for this class.

   Classes table format

Parameter	Purpose
Class code	Class code in the trading system

Parameter	Purpose
Class name	Class name
Market	Market name
Right's template	Right type (Client, Sub administrator or Manager)
Firm code	Firm code for this instrument class
Code on the dealer's side	Code of the trading process participant
Qty. codes	Codes quantity for this instrument class

2. By clicking **Markets** button the **Classes** table turns into the table of markets joining several classes. All settings in classes included in this market change when setting up the rights for a market. The class membership to some market is set up in the **Security classes** dictionary (see 6.1).

   Markets table format

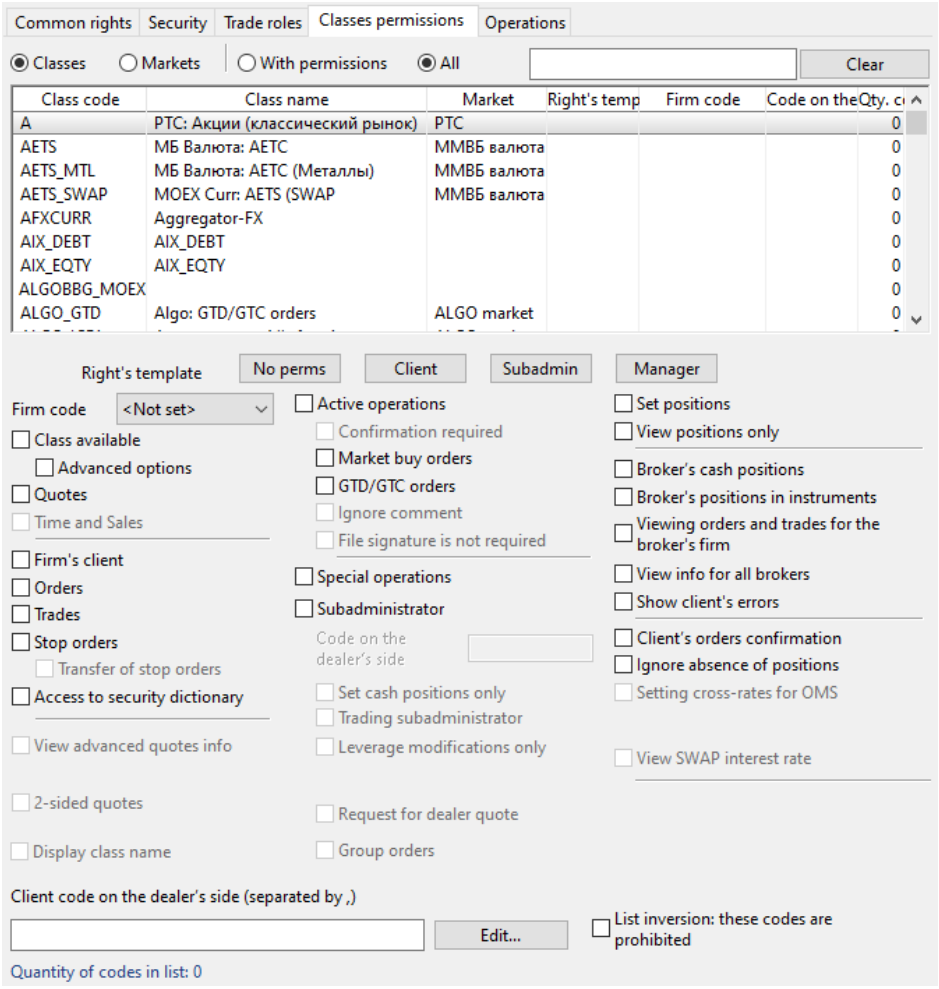
Parameter	Purpose
Market identifier	Market identifier
Market name	Market name
Right's template	Right type (Client, Sub administrator or Manager)
Firm code	Firm code for this instrument class
Code on the dealer's side	Code of the trading process participant
Qty. codes	Codes quantity for this instrument class.

3. **With permissions** option button is used to display classes or markets for which rights are granted. All classes or markets are displayed in the table if **All** option button is selected.
4. Search by substring for filtering. Choose a value to search for in the field under the table. Filtering is performed automatically. To clear the filter, click **Clear**.
5. **Right's template** buttons allow to quickly setting up parameters to get the appropriate access level:
   - **No perms** – all selected permissions are reset.
   - **Client** – a firm's Client executes active transactions if Manager set up cash and instrument positions.
   - **Subadmin** – a Subadministrator views, sets up or changes positions of assigned group of clients (sub-clients). This template is assigned by the Manager.

- **Manager** – a firm's Manager sets up cash and instrument positions for each firm's Client at the beginning of the trading day. A Manager can change positions for any client code during the trading session.

> **A subadministrator user must be in the Subbrokers list and a subclient user must be in the Subclients list in Limits calculation library (page Clients / Subbrokers).**

The template settings may be modified in order to resolve other specialized tasks.



The description of attributes is listed in the table below (for check boxes which are enabled). By default, all check boxes are unchecked.

		Used in the rights template		
Parameter	**Purpose**	**Client**	**Subadministrator**	**Manager**
Firm code	Firm code in the exchange trading system which corresponds to operations for this class is specified in			

Parameter	Purpose	Used in the rights template		
		Client	Subadministrator	Manager
	this field. Affects positions control			
Class available	Base parameters set with the minimum required information about class instruments and without any information about current demand and supply is available (no other parameters determining the data reception need to be selected)	*	*	*
_ Advanced options	Information about current demand and supply for class instruments is available	*	*	*
Quotes	Orders queue in the Level II Quotes Table is available for viewing	*	*	*
Time and Sales	Time and Sales Table is available for client		*	*
Firm's client	The user is a broker's client. This checkbox must be checked for all trading clients. Enabled automatically when the **Subadministrator** checkbox is checked. Client cannot put orders if the positions are not specified for him	*	*	
Orders	Orders table and Market maker liabilities by stock and FX markets, extended table are available and includes orders with an assigned code on the dealer's side (Code dealer)	*	*	*
Trades	Table of trades and Market maker liabilities by stock and FX markets, extended	*	*	*

Parameter	Purpose	Used in the rights template		
		Client	Subadministrator	Manager
	table are available and includes trades with an assigned code on the dealer's side (Code dealer)			
Stop orders	Table of stop orders is available. Using of stop orders is permitted if **Active operations** checkbox is enabled			
_ Transfer of stop orders	Enables the possibility of creation of stop orders with a validity period (date). If the checkbox is unchecked then stop orders are active during the trading session			
Access to security dictionary	Enables the possibility to additional request of instrument dictionary			
View advanced quotes info	Enables displaying additional quotes information in the RFS form. The parameter is editable for the classes of Currency type			
2-sided quotes	Enables displaying 2-sided quotes in the RFS form. If the attribute is disabled then only one-sided quotes (only buy or sell quotes) are displayed in the RFS form. The parameter is editable for the classes of Currency type			
Display class name	Enables displaying of the class name. The check box is available for the classes of Currency and Deposits types with the **Amount in the currency** attribute			
Active operations	Orders entry is allowed.	*	*	*

Parameter	Purpose	Used in the rights template		
		Client	Subadministrator	Manager
	If the check box is clear, it will be enabled automatically and briefly highlighted in color upon selecting the **Special operations** check box. If the Special operations check box is selected, it will be cleared automatically and briefly highlighted in color upon clearing the **Active operations** check box			
_ Confirmation required	All orders should be confirmed by the broker's employee before being sent to the trading system. The right to confirm is granted by enabling the Client's orders confirmation checkbox			
_ Market buy orders	Market buy orders are allowed*			
_ GTD/GTC orders	Orders with validity periods 'Good till date' and 'Good till cancel' are allowed. This attribute is available only for markets supporting orders with these validity periods. The QUIK server special configuration is required			
_ Ignore comment	Delete text comments from the client orders. If the checkbox is enabled then text comment will be deleted from a client order's notice following the client code. This option can be used when the broker's back-office considers all text in the notice as a client code			

Parameter	Purpose	Used in the rights template		
		Client	Subadministrator	Manager
	and responds incorrectly to symbols in it			
_ File signature is not required	Used for granting the client's right not to sign files. If the checkbox is disabled then the QUIK Workstation of this client will be blocked till the moment of all files signing. By default, the checkbox is disabled. The checkbox is available for Reports class only			
Special operations	Used to manage the session in the System of Broker Quotations and for sub administration on the MOEX Derivatives market market. When selecting this check box, the Active operations check box is selected automatically and briefly highlighted. If the check box is clear, it will be cleared automatically and briefly highlighted upon clearing the Active operations check box			
Subadministrator	The user becomes an administrator for a group of users with the codes specified below in the **Client codes...** field and manages them. A subadministrator user must be in the **Subbrokers** list and a subclient user must be in the **Subclients** list in Limits calculation library (page **Clients / Subbrokers**)		*	
_ Code on the dealer's side	Client code on the broker's server where the aggregate			

Parameter	Purpose	Used in the rights template		
		Client	Subadministrator	Manager
	position of a sub broker and his clients is displayed. The codes of the broker's clients should be specified in the **Client codes to be managed by subadministrator** field. And with this, the code of sub broker mustn't be among them			
_ Set cash positions only	If the checkbox is disabled then a sub broker can set up instrument and cash positions; if the checkbox is enabled then he can set up only cash positions, but instrument positions will be set up by a broker			
_ Trading subadministrator	If the checkbox is disabled the user can put orders with client codes but cannot set up the positions for them. If the checkbox is disabled the user has the right both to enter orders on behalf of the clients and to set up the positions			
_ Leverage modifications only	Sub administrator are not allowed to change client positions but he can set up and change the leverage using the **Set balance and leverage** option of the **Client portfolio** shortcut menu			
Request for dealer quote	Attribute of the quotation request for FX and Money Market products using dealer RFQ. The checkbox is available for classes with **Amount in the currency** attribute			

Parameter	Purpose	Used in the rights template		
		Client	Subadministrator	Manager
Group orders	Attribute indicating that group orders may be submitted. The check box is available for the Deposits and Currency class types			
Set positions	Allows the user to set up cash and instrument positions of a selected class for other users – firm clients. **Attention:** this option should be set up only for firm's Managers			*
View positions only	Allows viewing cash and instrument positions by client accounts for this class, no changes allowed for these positions. The **Set positions** checkbox must be enabled			
Broker's cash positions	Allows access to the Participant's cash positions table			*
Broker's positions in instruments	Allows access to the Participant's positions in instruments, Participant's positions on trading accounts and Participant's positions in instruments on trading accounts tables			*
Viewing orders and trades for the broker's firm	Allows viewing of the following tables: Orders, Trades, Quotes for off-exchange trades, Trades for execution, Reports on trades for execution displaying the information on all client codes. Available if the **Firm's client** checkbox is enabled			

Parameter	Purpose	Used in the rights template		
		Client	Subadministrator	Manager
View info for all brokers	Allows viewing of orders, stop orders and trades. The setting has a high priority over the **Orders**, **Trades**, **Stop orders** settings, when restricting user rights, you must first restrict the **View info for all brokers** rights. This option is used for sub administration on this market			
Show client's errors	Enables displaying of messages about the client orders rejected by the trading system on the QUIK Workstation with the rights of firm's Manager			*
Client's orders confirmation	Right to confirm orders of other users (with the Confirmation required checkbox enabled) before sending to the exchange trading system. Enables transmission of the Market maker liabilities table data			*
Ignore absence of positions	Send an order by client code to the trading system, when there are no loaded cash positions. Enabling this function disables the check of the following restrictions in the Limits calculation library: _ For global settings (for all clients); _ Trading accounts not allowed for client operations;			*

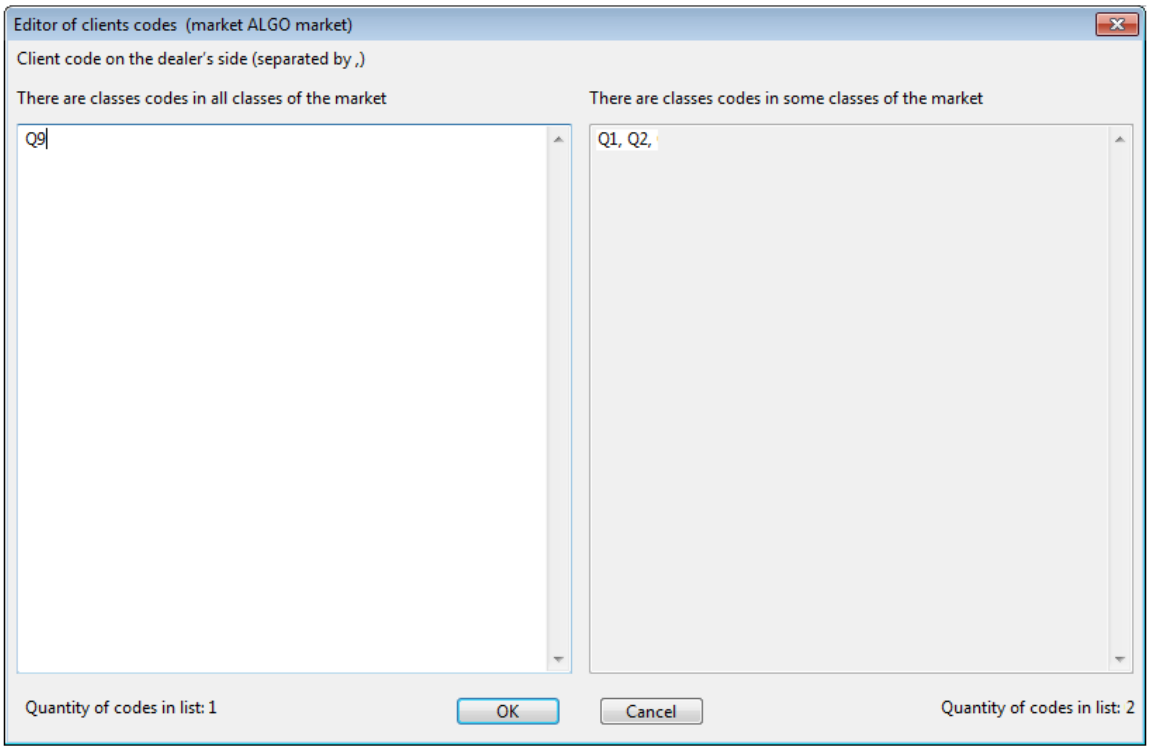
Parameter	Purpose	Used in the rights template		
		Client	Subadministrator	Manager
	_ Clients disallowed for operations with mutual funds; _ For global and individual settings (for a client, for a client template); _ Permissions and restrictions on instruments trading in view of classes and trading accounts			
Setting cross-rates for OMS	Specify manually the cross-rate value when executing OMS order by OTC trade. The check box is available for OMS classes only			
View SWAP interest rate	Interest rate transmittion for SWAP operations attribute. The check box is available for **Currency** type classes with **Amount in the currency** attribute only			
Send alerts	Method of sending messages. The parameters are available for SMS classes only	*	*	*
_ By SMS messages				
_ By Push notifications				
Chats with users	Enabling messaging between two users from the same or different companies who are clients of the same			

Parameter	Purpose	Used in the rights template		
		Client	Subadministrator	Manager
	broker. The checkbox is available only for classes of **Messaging** type with **Direct chat** subtype			
Chats with companies	Enabling the ability to exchange messages between users of two companies within a group chat, who are clients of the same broker. The checkbox is available only for classes of Messaging type with **Direct chat** subtype			
Inter-broker chats	Enabling messaging between users who are clients of different brokers. The checkbox is available only for classes of Messaging type with **Direct chat** subtype			
* Client code on the dealer's side / Client codes to be managed by sub administrator (separated by ,)	List of client codes that are available to the user separated by commas. The user can be assigned several client codes. The client code compares the received orders with set limits and positions and is used for controlling the funds adequacy for orders execution. The alphabetic characters are case-sensitive. If the attribute **List inversion: these codes are prohibited** is selected, it is allowed to set the client code mask consisting of beginning of the client code and symbol "*"			
List inversion: these codes are prohibited	If the checkbox is enabled the **Client code on the**			

Parameter	Purpose	Used in the rights template		
		Client	Subadministrator	Manager
	dealer's side list contains client codes which are prohibited to be used by this client. If the **Firm's client** or **Subadministrator** rights templates are set then this checkbox is not available. If the checkbox is enabled, then the prohibition of obtaining information on clients from the **Client code on the dealer's side** list has priority over the View information on all brokers right. Exception for negotiated orders: negotiated orders from clients of the user's company, whose code is present in the **Client code on the dealer's side** list, the user will receive if the partner's company code matches the user's company code. In the **Negdeal orders tabl**e such orders are transmitted without a client code and a comment			

The table contents can be sorted. To do this, select **Sort by [<parameter>]** in the shortcut menu of a column whose contents you want to sort. The sorting can be direct or reverse; the direction of sorting changes by sequential selection of sorting in the same column. To disable sorting, select **Disable sorting** in the shortcut menu.

> **(*) The dialog 'Editor of client codes (market <Market name>)' is used for editing the list of client codes in the context of market.**



The dialog provides:

- List of client codes present in all classes of a given market;
- List of client codes present in certain classes of a given market.

Quantity of client codes in the list is shown for both lists below.

List of client codes present in all classes may be edited by adding, changing or deleting client codes. List of client codes present in certain classes provides only deleting client codes.

Comment to market buy orders:

By default, clients are prohibited to use market buy orders. This is because the execution prices of such an order can differ from the prices in the trading system at the moment of checking the client's funds availability that can lead to overspending.

The possibility of using the market buy orders in the QUIK system is provided by an additional funds reservation. An amount to be blocked is calculated according to the following formula:

Best offer price + (Best offer price / 100 * Percent of add. reserving) * Number of securities in order * Lot size,

where **Percent of add. reserving** – value of the **% add. margin for a market order** parameter.

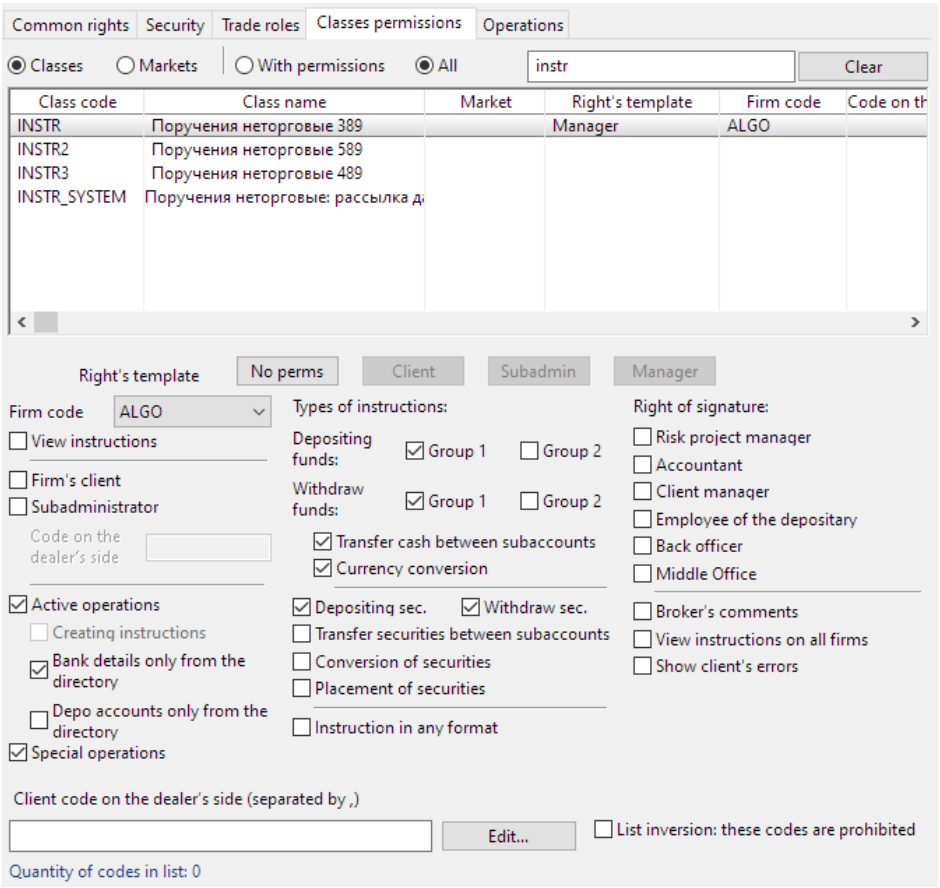
To use market buy orders, enable the **Market buy orders** checkbox and specify a value of the **% add. margin for a market order** parameter in the Dealer library settings (**Common params** section, **Part 2** tab).

If elements of this tag are forcibly edited, the edited elements are highlighted in red color. When pressing the Save button and saving the selected value in database, the highlighting disappears.

When editing rights for class/market the automatic changes occur in the following cases:

- Incorrect combination of rights;
- Incorrect firm code.

Non-trade instructions class is intended for setting up user rights for using the non-trade instructions. The Non-trade instructions module is required to be installed on the QUIK server.



The description of attributes for Non-trade instructions class is listed in the table below:

Parameter	Purpose
* Firm code	Firm code in the trading system. The firm code in the exchange trading system which corresponds to operations for this class is specified in this field. Affects positions control
View instructions	Instructions table is available for viewing
* Firm's client	The user is a broker's client. This checkbox must be checked for all trading clients. Enabled automatically when the **Subadministrator** checkbox is checked. Client cannot put orders if the positions are not specified for him

Parameter	Purpose
* Subadministrator	The user becomes an administrator for a group of users with the codes specified below in the **Client codes...** field and manages them. A subadministrator user must be in the **Subbrokers** list and a subclient user must be in the **Subclients** list in Limits calculation library (page **Clients / Subbrokers**)
_ * Code on the dealer's side	Client code on the broker's server where the aggregate position of a sub broker and his clients is displayed. The codes of the broker's clients should be specified in the **Client codes to be managed by subadministrator** field. And with this, the code of sub broker mustn't be among them
Active operations	Orders entry is allowed
_ Creating instructions	Right for active operations with instructions (**View instructions** checkbox must be selected)
_ Bank details only from the directory	Manual entry of bank details is prohibited
_ Depo account only from the directory	Manual entry of depo details is prohibited
Special operations	Right to manage the session, update the dictionaries from the accounting system, upload the instructions over the past days
Types of instructions:	
Depositing funds: Group 1	Permission to use instructions for the funds depositing in cash
Depositing funds: Group 2	Permission to use instructions for non-cash funds depositing
Withdraw funds: Group 1	Permission to use instructions for the withdrawal of funds in cash
Withdraw funds: Group 2	Permission to use instructions for non-cash withdrawal of funds
Transfer money between subaccounts	Permission to use instructions for the funds transfer between subaccounts
Currency conversion	Permission to use the conversion of funds from one currency to another
Depositing sec.	Permission to use instructions for the positioning of securities
Withdraw sec.	Permission to use instructions for the withdrawal of securities
Transfer securities between subaccounts	Permission to use instructions for the transfer of securities between accounts
Conversion of securities	Permission to use the securities conversion
Placement of securities	Permission to use instructions for the securities placement

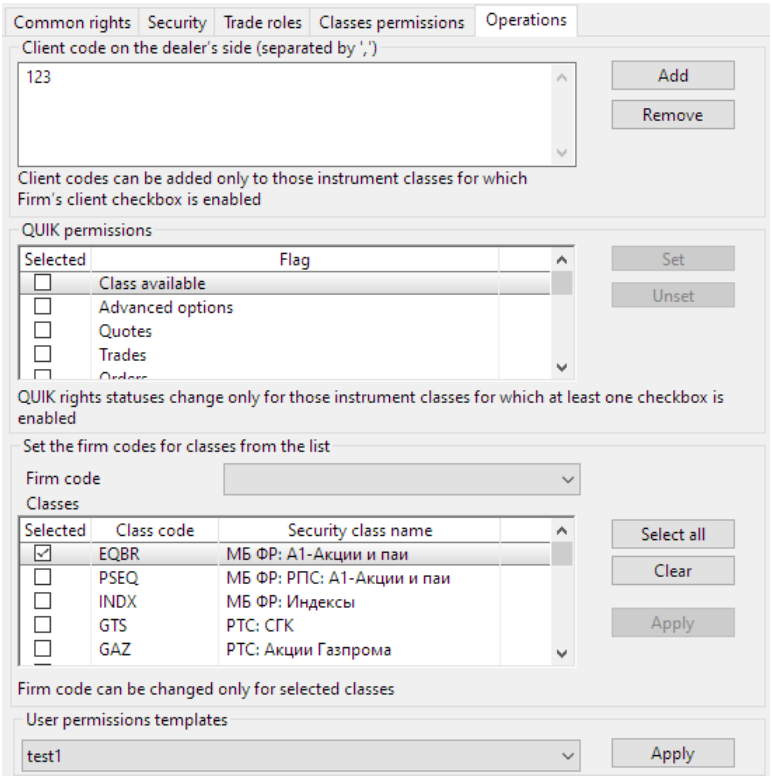
Parameter	Purpose
Instruction in any format	Permission to enter an instruction in any format
Right of signature:	
Risk project manager	Confirm instructions as a risk manager
Accountant	Confirm instructions as an accountant
Client manager	Confirm instructions as a manager of the customer service
Employee of the depositary	Confirm instructions as an employee of the depositary
Back officer	Confirm instructions as an employee of the back office
Middle Office	Confirm instructions as an employee of the middle office
Broker's comments	Permission to create, change and view the comments in the **Broker's comment** field on the form for entering instruction of any type
View instructions on all firms	Allows viewing the instructions by several firms' identifiers. It is used for connection to the access servers
Show client's errors	Show messages about client's orders rejected by the trading system in the QUIK Workstation operating under the rights of firm Manager
* Client code on the dealer's side / Client codes to be managed by subadministrator	List of client codes that are available to the user separated by commas. The user can be assigned several client codes. The client code compares the received instructions with set limits and positions and is used for controlling the funds adequacy for instructions execution. The alphabetic characters are case-sensitive. If the attribute **List inversion: these codes are prohibited** is selected, it is allowed to set the client code mask consisting of beginning of the client code and symbol *
* List inversion: these codes are prohibited	If the checkbox is enabled the **Client code on the dealer's side** list contains client codes which are prohibited to be used by this client. If the **Firm's client** or **Subadministrator** rights templates are set then this checkbox is not available. If the checkbox is enabled, then the prohibition of obtaining information on clients from the **Client code on the dealer's side** list has priority over the View information on all brokers right. Exception for negotiated orders: negotiated orders from clients of the user's company, whose code is present in the **Client code on the dealer's side** list, the user will receive if the partner's company code matches the user's company code. In the **Negdeal orders tabl**e such orders are transmitted without a client code and a comment

* – it is set up in the same way as for other trading classes which are available for the user.

Operations tab

> **The tab is unavailable for users with administrative access type (see 2.1).**

This tab is intended for changing the parameters settings for all available classes simultaneously.



1. **Client code on the dealer's side (separated by ',')** – assigning or removing a client code on the dealer's side. To A new client code to the list of available codes, specify it in the field and click **Add**. To delete any code from all classes for which the **Firm's client** option is selected, specify it in the field and click **Remove**.
2. **QUIK permissions** – assigning or removing a selected attribute (checkbox). Select the needed parameter from the list and click **Set** to set up the attribute or **Unset** to disable it.

   > **If no attributes enabled for a class (the user has no access to this class) then changes do not apply.**

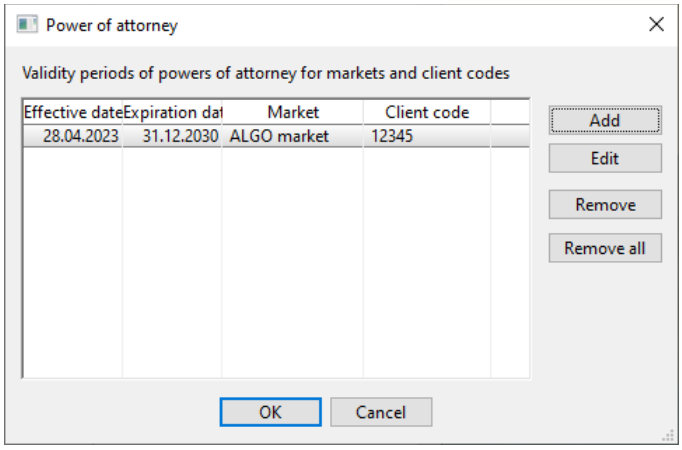
3. **Set the firm codes for classes from the list** – assigning a firm code to a selected class set. Select a firm's code from the list and then select the class codes you want to assign to this firm's code from the **Classes** table. Use **Select all** button to select all values in the list; use **Clear** to uncheck all checkboxes. Click **Apply** to save the changes.

   > **The changes in the user profile will be applied to the classes you have selected with the enabled Firm's client checkbox.**

4. **User permissions templates** – applying the user rights template specified in [UserRightsTemplates] section of the file with user rights templates. The list contains templates' names from the settings file. To save the settings, select the needed template and click **Apply**. For details, see 2.4.

2.3.3 Setting validity periods of powers of attorney for markets and client codes

The **Power of attorney** window is opened by clicking **Edit...** (to the right of the option **By markets and codes**) in the user rights settings window. This dialog allows you to set validity periods of powers of attorney to allow the user access to certain markets and client codes. If a user connects to the server outside the validity period of power of attorney for a market then data and active operations will not be available for him.



To create a new validity period click **Add**. In the appeared dialog specify the following fields: **Client code**, **Effective date** and **Expiration date**. To save the changes click **OK**. To edit an existing validity period, select the row with name of required market and make the changes in the appeared dialog.

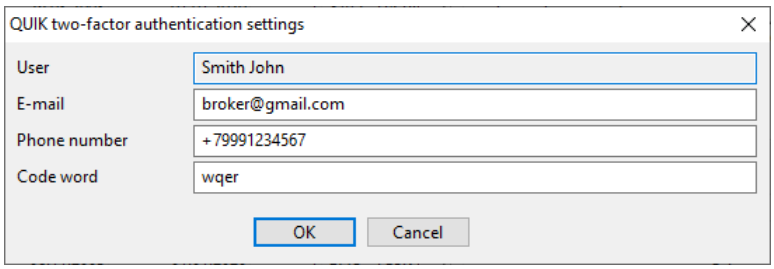
> **You cannot assign more than one validity period of power of attorney to the same client code for one market.**

Click **Remove** to delete a selected row from the list. Click **Remove all** to clear the list.

To save the changes click **OK**. To close this window without saving changes click **Cancel**.

2.3.4 QUIK two-factor authentication

To open the **QUIK two-factor authentication settings** window in the user permissions settings window on the **Security** tab enable the Use **two-factor authentication** checkbox, select QUIK authentication type and click **Edit...** on the right of the **Set parameters** field. This window contains the settings used to send an additional password (for two-factor authentication) to the user.

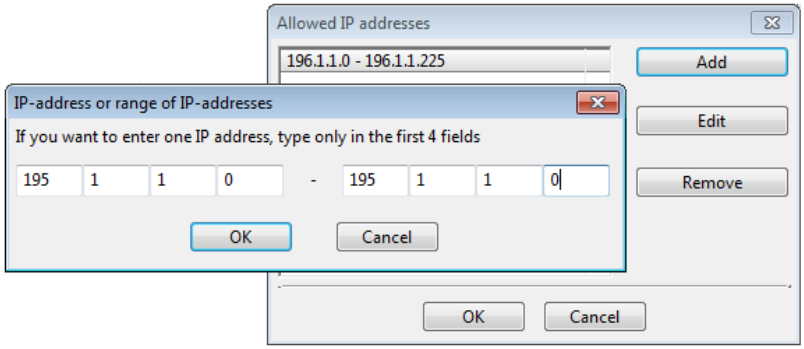


The settings in this dialog:

1. **User** – an information field containing UID and username.
2. **E-mail** – an email address to which an additional password will be sent.
3. **Phone number** – a mobile number to which SMS message with an additional password will be sent.
4. **Code word** – a code word which identifies a client when he contacts his broker to receive an additional password on the phone.

2.3.5 Setting allowed IP-addresses

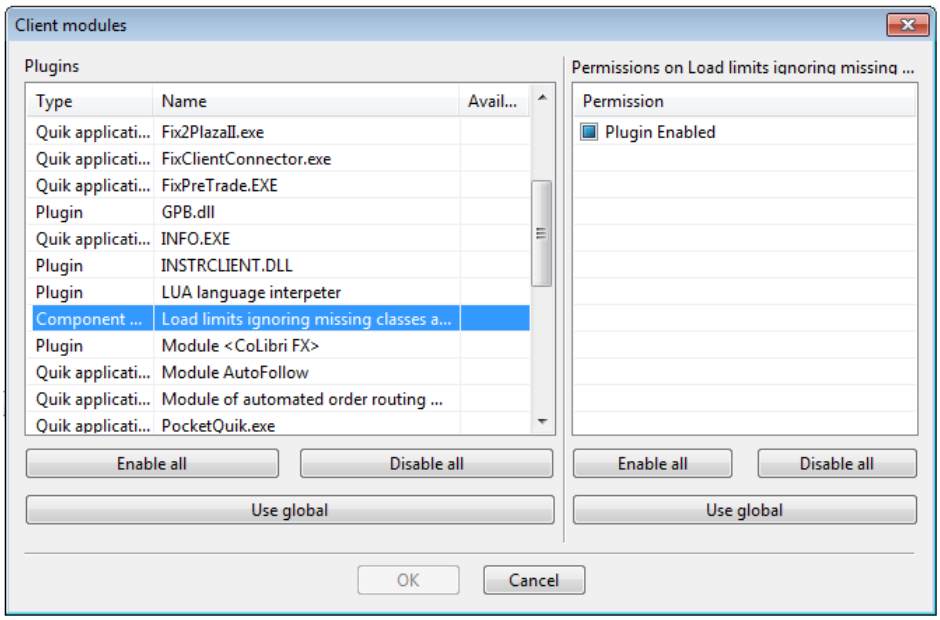
To open the **Allowed IP addresses** window for users with all access levels, click the **Edit...** button which is located under the **IP-addresses** field in the user rights settings window.



Operating principle:

1. If the **Allowed IP addresses** list is not empty then the user is allowed to connect only from specified addresses.
2. If this list is empty then there are no restrictions on the IP addresses.
3. The list can contain several addresses added one by one.
4. IP address range can be specified instead of one address.
5. To change the information, use the buttons to the right of the list and fill in the required fields.

2.3.6 Setting permissions for QUIK modules



To open the **Client modules** window, click the **Edit...** button which is located under the **Client modules** table in the user rights settings window. To open the **Technological modules** window, click the **Technological modules** button.

The left part of the dialog contains the list of Modules (QUIK system plugins and applications) and is used to set the user's usage rights.

The right part of the dialog displays specific rights and settings which are translated by a selected Module and is also used to set the user's usage rights.

The **Dynamic transactions import** option is used to set permissions or restrictions on use of the transactions import from modules or a file by the user. This option allows setting up the rights for the following components:

- QPILE transactions;
- Trans2QuikAPI transactions;
- *.tri file transactions.

> **The user can load any limits without restrictions by activating the component Load limits ignoring missing classes and securities. Global setting (disabled) is used by default.**

Rights to use Modules

When clicking **Enable all / Disable all** all modules from the list become available / unavailable for the user accordingly.

When clicking **Use global** the settings which are described in section 7 are used. The global settings are used by default.

Rights transmitted by the selected Module

The checkbox used to change the rights has three possible options:

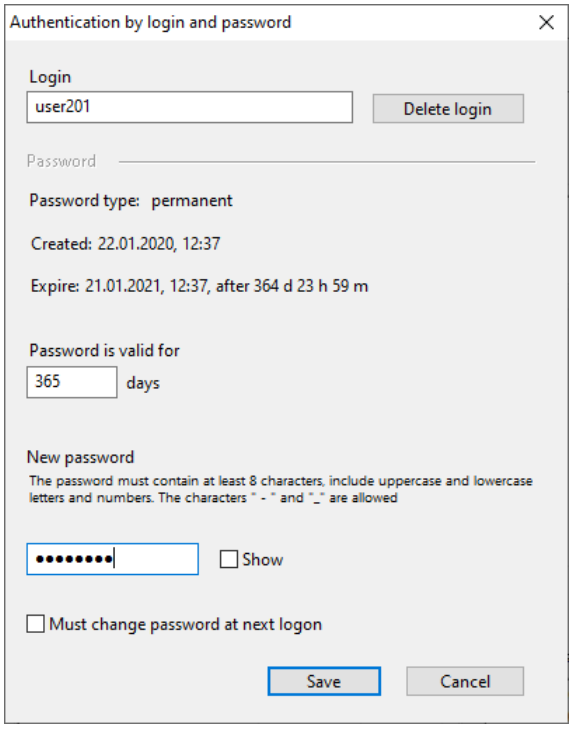
- Unchecked – right is not available for a user;
- Checked – right is available for a user;
- Indeterminate (by default) – global value which is set in the **Client modules** or **Technological modules** dictionaries (see **QUIK server/Client modules** or **QUIK server/Technological modules** menu items) is used.

When clicking **Enable all / Disable all** all rights from the list become available / unavailable for the user accordingly.

> **The settings of an individual user take precedence over the global settings (see section 6).**

2.3.7 Authentication by login and password

'Authentication by login and password dialog' can be called from window of user rights settings if pressing **Custom** button on the **Security** tab.



The dialog settings:

1. **Login** – user's login.

> **Do not use login different from one already registered on server by only case.**

On clicking on the **Delete login** button the login is deleted after confirmation. The **Authentication by login and password** dialog box is closed and in the user permissions dialog box login is switched to the 'unspecified' status (see 2.3.2).

2. **Password type**: temporary / permanent.
3. **Created** – date and time of password creation.
4. **Expire** – date and time of password expiration.
5. **Password is valid for** – password's validity period. Valid characters: integer numbers from 1 to 365.
6. **New password** – user's password. Password length must be equal or more than 8 symbols. Valid characters are A – Z, 0 – 9, - (dash) and '_' (underline) case-sensitive. Select the **Show** checkbox to view the password.
7. **Must change password at next logon** – attribute of a need to change password at the next logon. Value by default:
   - Enabled – when creating a new user;
   - Disabled – when editing a user.

Click **Save** to finish the authentication setting procedure. Click **Cancel** to close the window without saving changes.

2.4 User rights templates

The QUIK Administrator program can be used for creating templates for assigning user rights that allows adding users to some groups with determined rights. The user can create an unlimited number of such templates and apply them when creating new users and changing the existing ones.

Creating and configuring new user templates

To create a new user rights template, A new section [UserTemplates] to the .ini configuration file of the broker. This section contains a path to the file with templates which are available when editing user rights. For example:

```
[UserTemplates]
File=.\user_templates.tmpl
```

The file with user rights templates contains the [UserRightsTemplates] section with the templates described as follows:

```
<Template code>=<Template name in QUIK Administrator>
```

Then, it is necessary to create a section for each template in accordance with the following rule:

```
[URT_<Template code>]
```

> **The list of user rights which will be used after a template is selected is set in these sections.**

> **The section of [URT_<Template code>] view must contain at least one parameter (in spite of the OnlyAdd parameter).**

The section contains the following parameters:

1. **FirmID** – firm's global identifier, in format:

```
FirmID=<Firm identifier>
```

2. **GlobalRight** – list of codes of the user rights which are set in the user editing window in the QUIK Administrator program on the **Common rights** tab. For details, see 2.3.2.

   String format:

```
GlobalRight=<list of identifiers without separators>
```

Parameter identifiers:

Code	Case	Description
8		Access to security dictionary
r	Lower	Receive messages
s	Lower	Send messages
n	Lower	View news
P	Upper	API of client's terminal
l	Lower	Blocked
Q	Upper	Digital signature
W	Upper	Access server
z	Lower	Beta tester
h	Lower	Work with archives

> **When setting the identifiers, consider using exact casing. The ordering of rights identifiers is unimportant.**

For example:

```
GlobalRight=rsn
```

This example creates the template using which you can assign the user rights for sending and receiving messages and for viewing news.

3. **NewsAgency** – list of allowed for viewing news agencies.

   This parameter if specified in the section containing the required template, in format:

   ```
   NewsAgency=<list of agencies identifiers, separated by commas>
   ```

   The news agencies codes are described in the News agencies dictionary (see 6.4).

   For example:

   ```
   NewsAgency=INTERFAX,REUTERS_ENG,REUTERS_RUS
   ```

4. **2Auth** – two-factor authentication type. Value by default: 0.
5. **OnlyAdd** – determines whether the existing rights should be supplemented with those specified in the template. Valid values:
   - 0 (by default) – reset existing rights and apply those specified in the template;
   - 1 – supplement existing rights with those specified in the template.
6. The user's rights by classes/markets are set in the section containing the required template, in format:

   ```
   <Class code>=<list of identifiers without commas>    ;Rights for a class
   Market<Market identifier>=<User rights>;Rights for a market
   ```

   User rights identifiers by classes/markets:

Code	Casing	Description
v	Lower	Class available

Code	Casing	Description
p	Lower	Advanced options
b	Lower	Quotes
t	Lower	Trades
o	Lower	Orders
P	Upper	Broker’s cash positions
d	Lower	Broker’s positions in instruments
T	Upper	Stop orders
G	Upper	Transfer of stop orders
x	Lower	Active operations
M	Upper	Special operations
a	Lower	View info for all brokers
L	Upper	Set positions
F	Upper	Client’s orders confirmation
I	Upper	Ignore absence of positions
E	Upper	View positions only
B	Upper	Market buy orders
Z	Upper	GTD/GTC orders
S	Upper	Subadministrator
U	Upper	Set cash positions only
C	Upper	Firm’s client
A	Upper	Confirmation required
e	Lower	Ignore comment
N	Upper	Viewing orders and trades for the broker’s firm
c	Lower	Time and Sales (the code specified means that viewing of the Time and Sales Table is prohibited) (for all classes except for classes of the Report generation module)
c	Lower	File signature is not required (only for classes of the Report generation module)
f	Lower	Show client’ errors
O	Upper	Trading subadministrator
g	Lower	Leverage modifications only

Code	Casing	Description
V	Upper	Inversion of the list, listed codes are prohibited
0		2-sided quotes
9		View advanced quotes info
#		Group orders

For example:

```
TQBR=botpvxTGC
Market8=vpto
```

User rights for Non-trade instructions class is set in the same way as for other classes (see 2.3.2) but this class has a unique set of attributes:

Code	Casing	Description
v + o + t	Lower	View instructions
M	Upper	Special operations
x	Lower	Active operations
O	Upper	Prohibiting of instruction creation
o+t+v+x	Lower	Creating instructions
2		Bank details only from the directory
3		Depo account only from the directory
p	Lower	Risk project manager
b	Lower	Accountant
P	Upper	Client manager
D	Upper	Employee of the depositary
X	Upper	Back officer
c	Lower	Middle-Office
1		Broker's comments
a	Lower	View instructions on all firms
d	Lower	Depositing funds: Group 1

Code	Casing	Description
T	Upper	Depositing funds: Group 2
G	Upper	Withdraw funds: Group 1
L	Upper	Withdraw funds: Group 2
E	Upper	Transfer cash between subaccounts
H	Upper	Currency conversion
B	Upper	Depositing sec.
F	Upper	Withdraw sec.
U	Upper	Transfer securities between subaccounts
K	Upper	Conversion of securities
Y	Upper	Placement of securities
J	Upper	Instruction in any format
C	Upper	Firm’s client
S	Upper	Subadministrator

If you wish to conduct active operations for Non-trade instructions class, then the template should contain the firm’s identifier in the trading system as a string of the following view:

```
<Class code>_FirmID=<firm’s identifier in TS>
```

For example:

```
INSTR_FirmID=NC0000000000
```

7. The firm’s identifier for a specific class/market is set in the section containing the required template, in format:

```
<Class code>_FirmID=<firm’s identifier>;Firm’s identifier for a specified class
Market<Market identifier>_FirmID=<firm’s identifier>;Firm’s identifier for
a specified market
```

For example:

```
TQBR_FirmId=NC0038900000
Market8_FirmId=NC0038900000
```

8. The rights for client's modules are set in the section containing the required template, in format:

```
Module_<Module code>=<Type of rights>  ;Rights for the module with the <Module code>
code
ModuleOption_<Module code>_<Setting number>=<Type of rights>     ;Rights for the
setting <Setting number> in the Module <Module code>
```

Types of rights:

Type of right	Description
0	Prohibited work with module
1	Allowed work with module
<empty line>	Use global settings for work with module

Codes of client's modules:

Module code	Module description
1001	TrustManager workstation
1002	CoLibri workstation (stock market)
1004	PocketQUIK workstation
1015	FIX Program Interface
1021	Multi-broker workstation
1024	CoLibri workstation (derivatives market)
1031	BasketTrading workstation
1032	Market maker's workstation
1037	FIX2MICEX
1038	FIX2CETS
1039	FIX2Plaza2
1040	MICEXPreTrade

Module code	Module description
1041	FIXPreTrade
1042	Option analysis workstation
1043	Customer profile module
1047	Non-trading instructions module
1048	Report generation module
1052	FIX Client Connector
1053	LUA interpreter
1055	FIX2LSE
1056	CoLibri workstation (currency market)
1060	Auto-follow module
1061	Auto-follow terminal module
1064	Terminal module FX
1066	Dynamic transaction import
1071	Limits uploading with absence of classes and instruments descriptions
1080	Ignoring additional restrictions

Setting numbers of client modules:

Module code	Setting number	Setting description
1066	1	QPILE transactions
1066	2	Trans2QuikAPI transactions
1066	3	Transactions from *.tri file
1004	1	'Active operations' for Android mobile terminals
1047	1	Prohibition for viewing signature statuses

9. Login and password authentication:

- **WebUser** – **Access to: webQUIK** attribute. Valid values:
  - 0 (by default) – a user does not have access to webQUIK;

- 1 – a user has access to webQUIK;
- default – default value is used.

- **UserAuthByLogin – Access to: QUIK** attribute. Valid values:
  - 0 (by default) – a user does not have access to QUIK;
  - 1 – a user has access to QUIK;
  - default – default value is used.
- **UserValidityTerm** – password validity period in days. Valid values: from 1 to 365. Value by default:365.

2.5 Trade roles

menu **QUIK server / Trade roles**

2.5.1 Purpose

The dictionary is the list of trade roles. A trade role contains a specific set of rights and is used to assign them to users without the need of assigning personal rights.

The left part of the window displays the dictionary of trade roles as a table. The right part contains the parameters for editing and filtering the dictionary records.

A trade role can be added for a user in the user settings window (**Trade roles** tab, see 2.3.2).

2.5.2 Table format

The dictionary contains the following parameters:

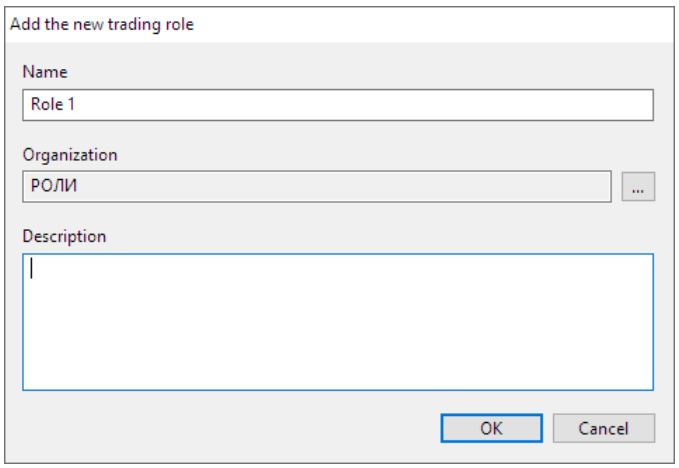
Parameter	Purpose
Role ID	Trade role identifier
Name	Trade role name
Description	Trade role description

The following functions are available from the shortcut menu:

1. Use **Add** to add a new role.
2. Use **Copy** to add a new role by copying the parameters of a selected role.
3. Use **Edit** to change the parameters of a selected role. Changing the parameters changes the rights of a user included into this role.
4. Use **Remove** to delete a selected role from the dictionary.
5. Use **Export table** to export data from dictionary to the XLS / XLSX / CSV format file (comma-delimited).

2.5.3 Creating/editing role

When adding a role, the dialog box with the following parameters opens:



1. **Name** – trade role name. Required parameter.
2. **Organization** – organization name. To select an organization, click "…". Required parameter.

> **It is recommended that you create a specific organization for trade roles (see 6.3).**

3. **Description** – trade role description.

Clicking the OK button opens the window for editing a trade role.

The window contains the following parameters:

1. **UID** – trade role identifier.
2. **Role** – trade role name.
3. **Edit...** button – change the basic parameters of a role. Clicking the button opens the dialog box to change the **Name**, **Organization** and **Description** parameters.
4. Trade role description set when a role was created.
5. **Role users** – the number of users to which this role is assigned.
6. **Import...** button – import of trade role of a user. Clicking the button opens the dialog box to choose a user whose rights will be imported.
7. **Save** button – save the changes.
8. **Cancel** button – cancel the changes.
9. **Common rights** tab:
   - **View news** – indicates if a client receives news.
   - **Agencies...** button – clicking the button opens the window to choose news sources from the ones available.
10. **Classes permissions** tab – parameters are the same as of the **Classes permissions** tab on the user settings window (see 2.3.2).

2.5.4 Filters

Filtering dictionary records by substring contained in any column of the table in the left part of the screen.

2.6 Sending messages

menu **QUIK server / Sending messages** or button

2.6.1 Purpose

It is used for setting the user rights for sending text messages to other users.

2.6.2 Configuration

The selected user can send messages to other users depending on the organization they belong to. So that the user can text to sub broker's employees, the organization the sub broker's employees belong to is selected as a recipient.

The **Send message** window in the QUIK Workstation contains all users from allowed organizations (for which the **Receive messages** attribute is enabled in the user rights settings window).

The left part of the window displays the dictionary in view of users. The right part contains the parameters for editing and filtering the dictionary records.

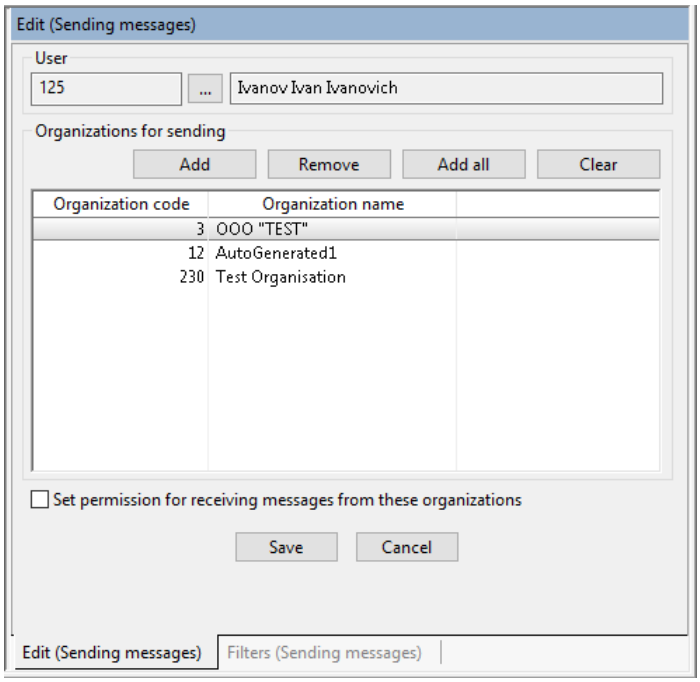
Table format
The dictionary contains the following parameters:

Parameter	Description
User ID	User identifier
User	User's full name
Organizations qty	Quantity of organizations whose staff is allowed to send messages

The following functions are available from the shortcut menu:

1. **Add** – add a user and a list of organizations to send messages.
2. **Edit** – change the rights of the selected user for sending messages.
3. **Remove** – delete the rights of the selected user for sending messages.
4. **Exchange among all users** – allow exchanging messages among all users.

Edit



Description of the window fields:

1. **User** – UID of the QUIK system's user to be assigned the right to send messages. The fields are available for editing in the mode of adding the sending messages rights. When clicking the **'...'** button the **Users list** dictionary opens.
2. **Organizations for sending** – list of organizations whose employees are allowed to be the recipients:
   - **Add** – select an organization from the dictionary;
   - **Remove** – delete an organization from the list;
   - **All** – All organizations from the dictionary to the list;
   - **Clear** – delete all organizations from the list.
3. **Set permission for receiving messages from these organizations** – if the attribute is enabled then the user can receive messages from users included to organizations listed above.

Click **Save** to save changes. Click **Cancel** to cancel changes.

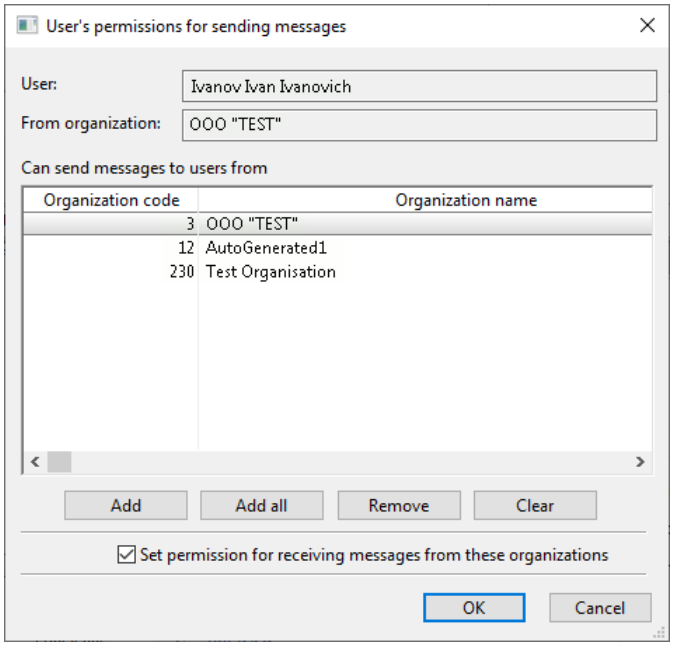
> **If the Send messages check box is disabled in the user settings then this user will not be able to send messages to recipients.**

Filters

Filtering users by substring in any column of the table located in the left side of the screen.

2.6.3 Configuring sending messages from user settings window

Sending messages may be configured in the user editing window. Click the **Send rights...** button to open the dialog with the messaging settings of this user. The table contains the list of organizations allowed to receive messages from the user.



Click **Add** / **Remove** to add / delete organizations. Use **All** to All organizations from the dictionary to this list. Use **Clear** to clear the list.

If the **Set permission for receiving messages from these organizations** checkbox is enabled then all users from selected organizations will have the right to send messages to the organization to which the user is included.

2.7 Server management

menu **QUIK server / Server management**

2.7.1 Purpose

Ii is intended for changing the list of users who are eligible for managing the main server and access servers connected to it using the Qmonitor program.

The left part of the window displays the user dictionary in tabular form. The right part contains the parameters for editing and filtering the dictionary records.

2.7.2 Table format

The following information is displayed in the table columns:

Parameter	Description
Organization name	Organization name

Parameter	Description
Administrator name	Full name of the user
QAdmin Administration	Defines the user who has the QAdmin Administrator rights: Yes / No. If the attribute is enabled, the Administrative roles dictionary is available for a user
Access server IDs	_ Yes – manage all access servers; _ Otherwise – list of access server identifier, separated by commas
Access server names	_ Yes – manage all access servers; _ Otherwise – list of names of users who are the Access server *

* — Maximum 5 elements of the list can be displayed, further are replaced by ellipses.

Functions available from the table shortcut menu:

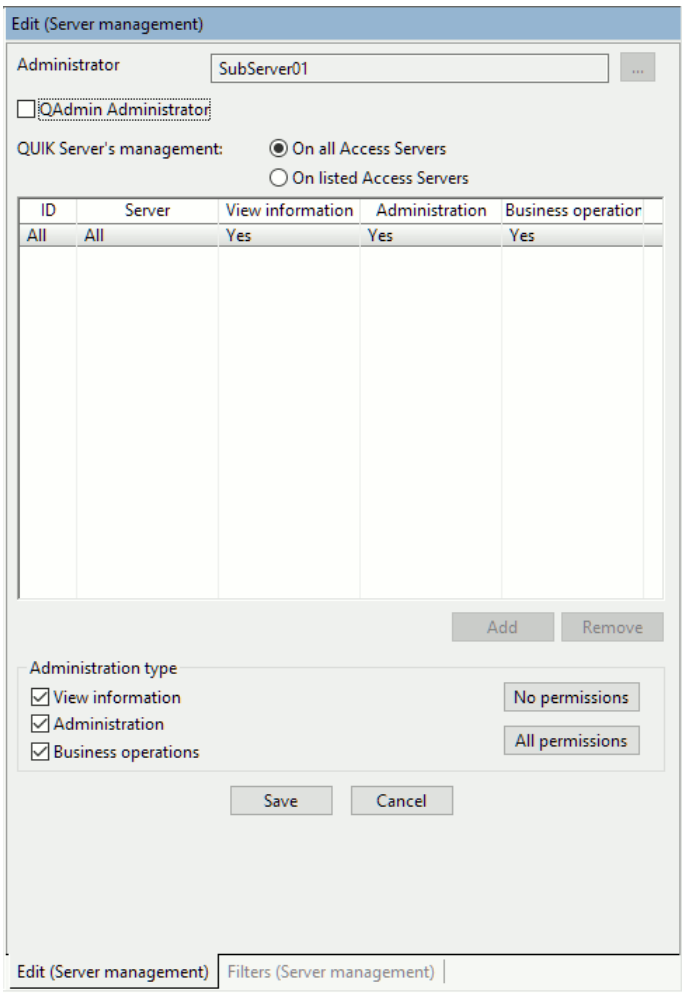
1. **Add** – add user.
2. **Edit** – change user settings.
3. **Remove** – delete user.
4. **Export table** – export dictionary data to the XLS / XLSX / CSV format file (use commas as separators).

2.7.3 Edit

The following parameters are available in the user editing window:

5. **Administrator** – a user that is eligible for managing the specified servers. Click the **'...'** button and select a user from the list. Available for editing when adding a new user to the Server management dictionary.
6. **QAdmin Administrator** – grant the QAdmin Administrator right to a user. Available for editing to users to which the QAdmin Administrator right is granted.
   Users having this right can do the following:
   - Receive the dictionary of rules and add, change, delete its elements.
   - Change the roles (include or delete the users to or from roles).
   - Grant / revoke the QAdmin Administrator right.
   - Receive the Users dictionary, create a new user.
   - Manage RSA keys (QUIK keys).

> **If the QAdmin Administrator permission is assigned to a user with trading access, all his permissions for client terminals are revoked and access type is changed to administrative (see 2.1).**



7. **QUIK server's management** – determines whether the user is eligible for monitoring of access servers connected to this QUIK server. Valid values:
   - **On all Access Servers** – allows monitoring of the main server and all access servers;
   - **On listed Access Servers** – allows monitoring of the specified access servers.

> **The list of access servers is formed from the list of users who have the enabled Access server checkbox in the Common rights settings. See the description in 2.3.2.**

> **If the QUIK server's management permission is assigned to a user with trading access, all his permissions for client terminals are revoked and access type is changed to administrative (see 2.1).**

8. The table contains the list of users who are the Access servers. The table columns display the following information:

Parameter	Description
ID	User identifier. If the type "On all Access Servers" is selected, then the value All is displayed
Server	Full name of the user. If the type "On all Access Servers" is selected, then the value All is displayed
View information	Indicates the right for viewing information: Yes / No
Administration	Indicates the right for administration: Yes / No
Business operation	Indicates the right for conduction business operations: Yes / No

To change the list of users, use the **Add** and **Remove** buttons. These buttons are available if the user permission type "On listed Access Servers" is selected.

9. **Administration type** – assign the rights to conduct operations to the user of the QMonitor program specified in the selected table row above:
   - **View information** – rights for viewing the information about connections and managing the QMonitor program;
   - **Administration** – rights for managing the logging, certificates base reload, start/stop of connections to the database, blocking/unblocking and disconnecting users, blocking/unblocking active operations, sending messages *;
   - **Business operations** – rights for reload of the Limits calculation library, managing stop orders and positions, MOEX derivatives market intermediate clearing, blocking/unblocking active operations, sending messages *.

(*) The right for viewing information is required to send messages to users.

Click **No permissions** to cancel the assigned rights. Click **All permissions** to enable all right types.

Click **Save** to save the settings. Click **Cancel** to cancel the changes.

2.7.4 Filters

- By substring – filtering the dictionary records by substring in any column of the table located in the left side of the screen. Click **Clear** to clear search row.
- By parameters:
  - QAdmin Administrator –filtering the dictionary records by the flag "QAdmin Administrator" The check box is tristate:
    - selected – right is required;
    - not selected – right should not be granted;
    - filled square (by default) – filtering is not applied.
    - Click **Clear** to revert to default.

3. Security

3.1 Registration of unique QUIK access keys

menu **QUIK server / Security / QUIK keys**

3.1.1 Purpose

The dictionary is intended to assign the unique access keys of the integrated data communication security management system that is built based on the Asymmetric encryption method. It is used to suspend and revoke the keys.

The left part of the window displays the keys dictionary in view of users. The right part contains the parameters for editing and filtering the dictionary records.

3.1.2 Table format

The dictionary contains the following parameters:

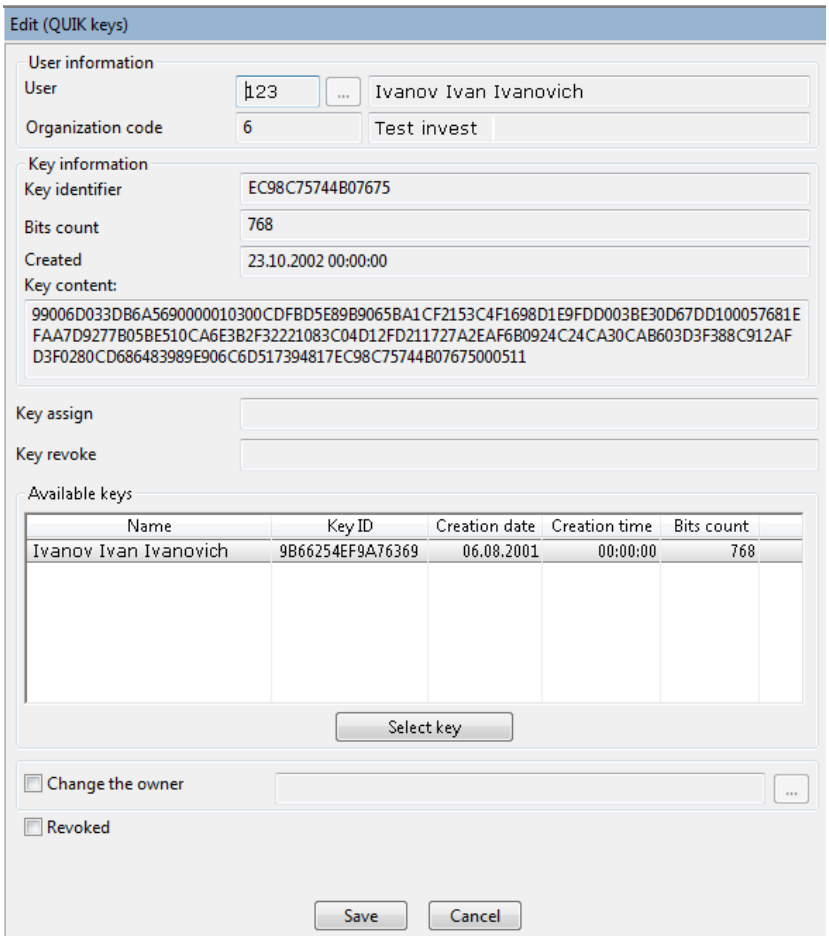
Parameter	Purpose
User ID	User identifier
User	User full name
Organization code	Organization code
Organization name	Organization name
Key ID	Key identifier
Creation date	Key creation date
Creation time	Key creation time
Disabled	Attribute of blocking. Valid values: – Yes; – No
Assign date	Date of key assignment
Assign time	Time of key assignment
Revoke date	Date of key revocation
Revoke time	Time of key revocation

The following functions are available from the shortcut menu:

1. **Add** – register a new QUIK key.
2. **Edit** – change QUIK key.

3. **Remove** – delete QUIK key.
4. **Export table** – export dictionary data to the XLS / XLSX / CSV format file (use commas as separators).

3.1.3 Edit



Description of the window fields:

1. **User information**:
   - **User** – specify user's UID or select it from the dictionary using the '…' button. The full name of the user is displayed in the field on the right;
   - **Organization code** – information field displaying the organization number in the dictionary. The organization name is displayed in the field on the right.
2. **Key information** – the fields below are automatically populated when the user selects a key in the **Available keys** table:
   - **Key identifier** – key serial number;
   - **Bits count** – key size in bits;
   - **Created** – key creation date and time;
   - **Key content** – key content.
3. **Key assign** – date and time of a key assignment. Information field.

4. **Key revoke** – date and time of a key revocation. Information field.
5. **Available keys** – list of available keys in a selected file. The information is presented as a table. The columns display the following parameters:

Parameter	Purpose
Name	Key owner name
Key ID	Key serial number
Creation date	Key creation date
Creation time	Key creation time
Bits count	Key size in bits

   - **Select key** – select the file containing the public key of the user (pubring.txk).
6. **Change the owner** – transfer the key to another user. Select a user using the **'...'** button. The full name of the user is displayed in the field on the right.
7. **Revoked** – if the checkbox is enabled the certificate will be saved to the database but will be disallowed to use.

Click **Save** to save the changes. Click **Cancel** to close the certificates registration window without saving.

3.1.4 Filters

Filtering the keys by substring in any column of the table located in the left side of the screen.

3.2 Registration of external CIPF

3.2.1 Purpose

The QUIK system allows using of digital signature. Thus, each transaction to be transmitted to the trading system via QUIK is signed by the private key of a sender by using certified CIPF (Cryptographic Information Protection Facility). The QUIK system supports several CIPF certified by FAPSI (Federal Agency of Government Communications and Information). The use of external CIPF for transactions digital signature is provided in the basic QUIK system configuration. These external CIPF are not provided as a part of the QUIK system and must be purchased on your own.

To use the digital signature mode, the QUIK server must be aware of the assigned user keys:

1. User certificates are stored in the storage readable by the QUIK server. Normally, this is a directory with the files, for example, CERTS.
   - Files with client certificates for CIPF SignalCom and CSP SSPI are stored in a different folder;

- A storage where all user certificates are stored for CryptoPRO CSP CIPF is the .sto file. This storage is provisioned from the QUIK Administrator program, see 3.5;
- Storage for Verba OW CIPF is a set of several files in a special format. It can be administrated using the Verba OW CIPF software.

The crypto provider library QCertUtils.dll must be located in the directory where the Client's QUIK Administrator is installed. To use the CryptoPro, CCertPKI and CSP SSPI keys, additional libraries CPCSP_Pr.dll, ccert_pki_pr.dl and CSP_SSPI_Pr.dll are required.

2. The QUIK Administrator program is used to assign certificates to users.

   When assigning the digital signature certificates of different types (except of Verba OW and KA) to a user the system verifies that email specified in the user rights matches the one in the certificate. In case of discrepancy the notification about email mismatch appears.

   The process of assignment of different certificate types to the QUIK system users is described below.

3.2.2 Verba OW CIPF

menu **QUIK server / Security / VERBA OW keys**

Purpose
The dictionary is intended to register the Verba OW CIPF certificates.

The left part of the window displays the Verba OW keys dictionary in view of users. The right part contains the parameters for editing and filtering the dictionary records.

Table format
The dictionary contains the following parameters:

Parameter	Purpose
User ID	User identifier
User	User full name
Organization code	Organization code
Organization name	Organization name
Key Verba identifier	Key identifier
Revoked	Attribute of blocking. Valid values: - Yes; - No

The following functions are available from the shortcut menu:

1. **Add** – register a new key.
2. **Edit** – change the **Revoked** parameter value.

3. **Remove** – delete a key.
4. **Export table** – export dictionary data to the XLS / XLSX / CSV format file (use commas as separators).

Edit

Click **Add** in the shortcut menu of the keys dictionary to assign a certificate to a user. The right part of the window contains the form for registering Verba OW keys.

Description of the window fields:

1. **User information:**
   - **User** – specify user's UID or select from it the dictionary using the '…' button. The full name of the user is displayed in the field on the right;
   - **Organization code** – information field displaying the organization number in the dictionary. The organization name is displayed in the field on the right.
2. **Key information** – the fields below are automatically populated when the user selects a key in the **Available keys** table:
   - **Key identifier** – Verba OW certificate serial number assigned to this user;
   - **Revoked** – if the checkbox is enabled the certificate will be saved to the database but will be disallowed to use.
3. **Available keys** – list of available keys in a selected file. The information is presented as a table.
   - **Select key** – select the file containing the keys.

Click **Save** to save the changes. Click **Cancel** to close the certificates registration window without saving.

Filters

Filtering the keys by substring in any column of the table located in the left side of the screen.

3.2.3 CryptoPro CIPF

menu **QUIK server / Security / CryptoPro keys**

Purpose

The dictionary is intended to register the CryptoPro CIPF certificates.

The left part of the window displays the CryptoPro keys dictionary in view of users. The right part contains the parameters for editing and filtering the dictionary records.

Table format

The dictionary contains the following parameters:

Parameter	Purpose
User ID	User identifier

Parameter	Purpose
User	User full name
Certificate owner	Certificate owner name
Certificate number	Certificate serial number
Certificate Authority	Name of the Certification Authority issued a certificate
Effective date	Certificate effective (issue) date
Expiration date	Certificate expiration date
Revoked	Attribute of blocking. Valid values: _ Yes; _ No
Organization code	Organization code
Organization name	Organization name
Assign date	Date of key assignment
Assign time	Time of key assignment
Revoke date	Date of key revocation
Revoke time	Time of key revocation

The following functions are available from the shortcut menu:

1. **Add** – register a new key.
2. **Edit** – change a key.
3. **Remove** – delete a key.
4. **Export table** – export dictionary data to the XLS / XLSX / CSV format file (use commas as separators).

Edit

To add correspondence between a user and a certificate, select **Add** in the shortcut menu of the keys dictionary. The CryptoPro key registration form will be opened in the right part of the window.

Description of the window fields:

1. **User information:**
   - **User** – specify user's UID or select from it the dictionary using the **'...'** button. The full name of the user is displayed in the field on the right;
   - **Organization code** – information field displaying the organization number in the dictionary. The organization name is displayed in the field on the right.

2. **Key information** – the fields below are automatically populated when the user selects a key in the **Available keys** table:
    - **Certificate owner** – certificate owner information;
    - **Certificate number** – serial number of a certificate assigned to this user;
    - **Certificate Authority**– information on the certification authority issued a certificate;
    - **Valid from … till …** – start and end date of the certificate validity period.
3. **Key assign** – date and time of a key assignment. Information field.
4. **Key revoke** – date and time of a key revocation. Information field.
5. **Available keys** – list of available keys in a selected file. The information is presented as a table. The columns display the following parameters:

Parameter	Purpose
Certificate number	Serial number of a certificate
Certificate Authority	Name of the Certification Authority issued a certificate
Certificate owner	Certificate owner information
Signature algorithm	Name of an algorithm used for forming the digital signature
Cryptographic algorithm	Name of an algorithm used for data stream encryption
Email	Email
Effective date	Starting date of the certificate validity period (date of issue)
Expiration date	Ending date of the certificate validity period

    - **Select key** – select the file containing the keys.
6. **Use to sign transactions** – attribute of using the certificate key for forming of digital signature in the client's instructions.
7. **Use to encrypt data stream** – attribute of using the certificate for encrypting data to be transferred between the user and the broker's server. Before using this option, contact the QUIK system developer.
8. **Revoked** – if the checkbox is enabled the certificate will be saved to the database but will be disallowed to use.

Click **Save** to save the changes. Click **Cancel** to close the certificates registration window without saving.

Filters

Filtering the keys by substring in any column of the table located in the left side of the screen.

3.2.4 Message/PRO CIPF by Signal-COM

menu **QUIK server / Security / SignalCom keys**

Purpose

The dictionary is intended to register the Message/PRO CIPF certificates (offered by Signal-COM).

The left part of the window displays the SignalCom keys dictionary in view of users. The right part contains the parameters for editing and filtering the dictionary records.

Table format

The dictionary contains the following parameters:

Parameter	Purpose
User ID	User identifier
User	User full name
Certificate owner	Certificate owner name
Certificate number	Certificate serial number
Certificate Authority	Name of the Certification Authority issued a certificate
Effective date	Certificate effective (issue) date
Expiration date	Certificate expiration date
Revoked	Attribute of blocking. Valid values: _ Yes; _ No
Organization code	Organization code
Organization name	Organization name
Assign date	Date of key assignment
Assign time	Time of key assignment
Revoke date	Date of key revocation
Revoke time	Time of key revocation

The following functions are available from the shortcut menu:

1. **Add** – register a new key.
2. **Edit** – change a key.
3. **Remove** – delete a key.

4. **Export table** – export dictionary data to the XLS / XLSX / CSV format file (use commas as separators).

Edit

To add correspondence between a user and a certificate, select **Add** in the shortcut menu of the keys dictionary. The SignalCom key registration form will be opened in the right part of the window.

Description of the window fields:

1. **User information**:
   - **User** – specify user's UID or select from it the dictionary using the '…' button. The full name of the user is displayed in the field on the right;
   - **Organization code** – information field displaying the organization number in the dictionary. The organization name is displayed in the field on the right.
2. **Key information** – the fields below are automatically populated when the user selects a key in the **Available keys** table:
   - **Certificate owner** – certificate owner information;
   - **Certificate number** – serial number of a certificate assigned to this user;
   - **Certificate Authority** – information on the certification authority issued a certificate;
   - **Valid from … till …** – start and end date of the certificate validity period.
3. **Key assign** – date and time of a key assignment. Information field.
4. **Key revoke** – date and time of a key revocation. Information field.
5. **Available keys** – list of available keys in a selected file. The information is presented as a table. The columns display the following parameters:

Parameter	Purpose
Certificate number	Serial number of a certificate
Certificate Authority	Name of the Certification Authority issued a certificate
Certificate owner	Certificate owner information
Signature algorithm	Name of an algorithm used for forming the digital signature
Cryptographic algorithm	Name of an algorithm used for data stream encryption
Email	Email
Effective date	Starting date of the certificate validity period (date of issue)
Expiration date	Ending date of the certificate validity period

   - **Select key** – select the file containing the keys.

6. **Use to sign transactions** – attribute of using the certificate key for forming of digital signature in the client's instructions.
7. **Use to encrypt data stream** – attribute of using the certificate for encrypting data to be transferred between the user and the broker's server. Before using this option, contact the QUIK system developer.
8. **Revoked** – if the checkbox is enabled the certificate will be saved to the database but will be disallowed to use.

Click **Save** to save the changes. Click **Cancel** to close the certificates registration window without saving.

Filters
Filtering the keys by substring in any column of the table located in the left side of the screen.

3.2.5 CCertPKI CIPF

menu **QUIK server / Security / CCertPKI keys**

Purpose
The dictionary is intended to register the CCertPKI CIPF certificates.

The left part of the window displays the CCertPKI keys dictionary in view of users. The right part contains the parameters for editing and filtering the dictionary records.

Table format
The dictionary contains the following parameters:

Parameter	Purpose
User ID	User identifier
User	User full name
Certificate owner	Certificate owner name
Certificate number	Certificate serial number
Certificate Authority	Name of the Certification Authority issued a certificate
Effective date	Certificate effective (issue) date
Expiration date	Certificate expiration date
Revoked	Attribute of blocking. Valid values: _ Yes; _ No
Organization code	Organization code
Organization name	Organization name
Assign date	Date of key assignment

Parameter	Purpose
Assign time	Time of key assignment
Revoke date	Date of key revocation
Revoke time	Time of key revocation

The following functions are available from the shortcut menu:

1. **Add** – register a new key.
2. **Edit** – change a key.
3. **Remove** – delete a key.
4. **Export table** – export dictionary data to the XLS / XLSX / CSV format file (use commas as separators).

Edit

To add correspondence between a user and a certificate, select **Add** in the shortcut menu of the keys dictionary. The CCertPKI key registration form will be opened in the right part of the window.

Description of the window fields:

1. **User information**:
   - **User** – specify user's UID or select from it the dictionary using the '…' button. The full name of the user is displayed in the field on the right;
   - **Organization code** – information field displaying the organization number in the dictionary. The organization name is displayed in the field on the right.
2. **Key information** – the fields below are automatically populated when the user selects a key in the **Available keys** table:
   - **Certificate owner** – certificate owner information;
   - **Certificate number** – serial number of a certificate assigned to this user;
   - **Certificate Authority** – information on the certification authority issued a certificate;
   - **Valid from … till …** – start and end date of the certificate validity period.
3. **Key assign** – date and time of a key assignment. Information field.
4. **Key revoke** – date and time of a key revocation. Information field.
5. **Available keys** – list of available keys in a selected file. The information is presented as a table. The columns display the following parameters:

Parameter	Purpose
Certificate number	Serial number of a certificate

Parameter	Purpose
Certificate Authority	Name of the Certification Authority issued a certificate
Certificate owner	Certificate owner information
Signature algorithm	Name of an algorithm used for forming the digital signature
Cryptographic algorithm	Name of an algorithm used for data stream encryption
Email	Email
Effective date	Starting date of the certificate validity period (date of issue)
Expiration date	Ending date of the certificate validity period

- **Select key** – select the file containing the keys.

6. **Use to sign transactions** – attribute of using the certificate key for forming of digital signature in the client's instructions.
7. **Use to encrypt data stream** – attribute of using the certificate for encrypting data to be transferred between the user and the broker's server. Before using this option, contact the QUIK system developer.
8. **Revoked** – if the checkbox is enabled the certificate will be saved to the database but will be disallowed to use.

Click **Save** to save the changes. Click **Cancel** to close the certificates registration window without saving.

Filters
Filtering the keys by substring in any column of the table located in the left side of the screen.

3.2.6 EUSicex CIPF

menu **QUIK server / Security / EUSicex keys**

Purpose
The dictionary is intended to register the EUSicex CIPF certificates.

The left part of the window displays the EUSicex keys dictionary in view of users. The right part contains the parameters for editing and filtering the dictionary records.

Table format
The dictionary contains the following parameters:

Parameter	Purpose
User ID	User identifier
User	User full name

Parameter	Purpose
Certificate owner	Certificate owner name
Certificate number	Certificate serial number
Certificate Authority	Name of the Certification Authority issued a certificate
Effective date	Certificate effective (issue) date
Expiration date	Certificate expiration date
Revoked	Attribute of blocking. Valid values: _ Yes; _ No
Organization code	Organization code
Organization name	Organization name
Assign date	Date of key assignment
Assign time	Time of key assignment
Revoke date	Date of key revocation
Revoke time	Time of key revocation

The following functions are available from the shortcut menu:

1. **Add** – register a new key.
2. **Edit** – change a key.
3. **Remove** – delete a key.
4. **Export table** – export dictionary data to the XLS / XLSX / CSV format file (use commas as separators).

Edit

To add correspondence between a user and a certificate, select **Add** in the shortcut menu of the keys dictionary. The EUSicex key registration form will be opened in the right part of the window.

Description of the window fields:

1. **User information**:
   - **User** – specify user's UID or select from it the dictionary using the '…' button. The full name of the user is displayed in the field on the right;
   - **Organization code** – information field displaying the organization number in the dictionary. The organization name is displayed in the field on the right.
2. **Key information** – the fields below are automatically populated when the user selects a key in the **Available keys** table:

- **Certificate owner** – certificate owner information;
- **Certificate number** – serial number of a certificate assigned to this user;
- **Certificate Authority** – information on the certification authority issued a certificate;
- **Valid from … till …** – start and end date of the certificate validity period.

3. **Key assign** – date and time of a key assignment. Information field.
4. **Key revoke** – date and time of a key revocation. Information field.
5. **Available keys** – list of available keys in a selected file. The information is presented as a table. The columns display the following parameters:

Parameter	Purpose
Certificate number	Serial number of a certificate
Certificate Authority	Name of the Certification Authority issued a certificate
Certificate owner	Certificate owner information
Signature algorithm	Name of an algorithm used for forming the digital signature
Cryptographic algorithm	Name of an algorithm used for data stream encryption
Email	Email
Effective date	Starting date of the certificate validity period (date of issue)
Expiration date	Ending date of the certificate validity period.

- **Select key** – select the file containing the keys.

6. **Use to sign transactions** – attribute of using the certificate key for forming of digital signature in the client's instructions.
7. **Use to encrypt data stream** – attribute of using the certificate for encrypting data to be transferred between the user and the broker's server. Before using this option, contact the QUIK system developer.
8. **Revoked** – if the checkbox is enabled the certificate will be saved to the database but will be disallowed to use.

Click **Save** to save the changes. Click **Cancel** to close the certificates registration window without saving.

Filters

Filtering the keys by substring in any column of the table located in the left side of the screen.

3.2.7 CSP SSPI CIPF

menu **QUIK server / Security / CSP SSPI keys**

Purpose

The dictionary is intended to register the CSP SSPI CIPF certificates.

The left part of the window displays the CSP SSPI keys dictionary in view of users. The right part contains the parameters for editing and filtering the dictionary records.

Table format

The dictionary contains the following parameters:

Parameter	Purpose
User ID	User identifier
User	User full name
Certificate owner	Certificate owner name
Certificate number	Certificate serial number
Certificate Authority	Name of the Certification Authority issued a certificate
Effective date	Certificate effective (issue) date
Expiration date	Certificate expiration date
Revoked	Attribute of blocking. Valid values: _ Yes; _ No
Organization code	Organization code
Organization name	Organization name
Assign date	Date of key assignment
Assign time	Time of key assignment
Revoke date	Date of key revocation
Revoke time	Time of key revocation

The following functions are available from the shortcut menu:

1. **Add** – register a new key.
2. **Edit** – change a key.
3. **Remove** – delete a key.
4. **Export table** – export dictionary data to the XLS / XLSX / CSV format file (use commas as separators).

Edit

To add correspondence between a user and a certificate, select **Add** in the shortcut menu of the keys dictionary. The CSP SSPI key registration form will be opened in the right part of the window.

Description of the window fields:

1. **User information**:
   - **User** – specify user's UID or select from it the dictionary using the '…' button. The full name of the user is displayed in the field on the right;
   - **Organization code** – information field displaying the organization number in the dictionary. The organization name is displayed in the field on the right.
2. **Key information** – the fields below are automatically populated when the user selects a key in the **Available keys** table:
   - **Certificate owner** – certificate owner information;
   - **Certificate number** – serial number of a certificate assigned to this user;
   - **Certificate Authority** – information on the certification authority issued a certificate;
   - **Valid from … till …** – start and end date of the certificate validity period.
3. **Key assign** – date and time of a key assignment. Information field.
4. **Key revoke** – date and time of a key revocation. Information field.
5. **Available keys** – list of available keys in a selected file. The information is presented as a table. The columns display the following parameters:

Parameter	Purpose
Certificate number	Serial number of a certificate
Certificate Authority	Name of the Certification Authority issued a certificate
Certificate owner	Certificate owner information
Signature algorithm	Name of an algorithm used for forming the digital signature
Cryptographic algorithm	Name of an algorithm used for data stream encryption
Email	Email
Effective date	Starting date of the certificate validity period (date of issue)
Expiration date	Ending date of the certificate validity period

   - **Select key** – select the file containing the keys.
6. **Use to sign transactions** – attribute of using the certificate key for forming of digital signature in the client's instructions.

7. **Use to encrypt data stream** – attribute of using the certificate for encrypting data to be transferred between the user and the broker's server. Before using this option, contact the QUIK system developer.
8. **Revoked** – if the checkbox is enabled the certificate will be saved to the database but will be disallowed to use.

Click **Save** to save the changes. Click **Cancel** to close the certificates registration window without saving.

Filters
Filtering the keys by substring in any column of the table located in the left side of the screen.

3.2.8 Bicrypt CIPF

menu **QUIK server / Security / Bicrypt keys**

Purpose
The dictionary is intended to register the Bicrypt CIPF certificates.

The left part of the window displays the Bicrypt keys dictionary in view of users. The right part contains the parameters for editing and filtering the dictionary records.

Table format
The dictionary contains the following parameters:

Parameter	Purpose
User ID	User identifier
User	User full name
KUC	Certificate number (key of Certification Authority)
Revoked	Attribute of blocking. Valid values: _ Yes; _ No
Organization code	Organization code
Organization name	Organization name
Assign date	Date of key assignment
Assign time	Time of key assignment
Revoke date	Date of key revocation
Revoke time	Time of key revocation

The following functions are available from the shortcut menu:

1. **Add** – register a new key.
2. **Edit** – change a key.
3. **Remove** – delete a key.
4. **Export table** – export dictionary data to the XLS / XLSX / CSV format file (use commas as separators).

Edit

To add correspondence between a user and a certificate, select **Add** in the shortcut menu of the keys dictionary. The Bicrypt key registration form will be opened in the right part of the window.

Description of the window fields:

1. **User information**:
   - **User** – specify user's UID or select from it the dictionary using the '…' button. The full name of the user is displayed in the field on the right;
   - **Organization code** – information field displaying the organization number in the dictionary. The organization name is displayed in the field on the right.
2. **Key information**:
   - **Device number** – enter a numeric key of the Certification Authority.
3. **Assign date** – date and time of a key assignment. Information field.
4. **Revoke date** – date and time of a key revocation. Information field.
5. **Use to sign transactions** – attribute of using the certificate key for forming of digital signature in the client's instructions. The option is enabled and cannot be edited.
6. **Use to encrypt data stream** – attribute of using the certificate for encrypting data to be transferred between the user and the broker's server. The option is disabled and cannot be edited.
7. **Revoked** – if the checkbox is enabled the certificate will be saved to the database but will be disallowed to use.

Click **Save** to save the changes. Click **Cancel** to close the certificates registration window without saving.

Filters

Filtering the keys by substring in any column of the table located in the left side of the screen.

3.2.9 Encryption by means of OpenSSL cryptography library

menu **QUIK server / Security / OpenSSL keys**

Purpose

The dictionary is intended to register the certificates of encryption by means of OpenSSL cryptography library.

The left part of the window displays the SSL certificates dictionary in view of users. The right part contains the parameters for editing and filtering the dictionary records.

Table format
The dictionary contains the following parameters:

Parameter	Purpose
User ID	User identifier
User	User full name
Certificate owner	Certificate owner name
Certificate number	Certificate serial number
Certificate Authority	Name of the Certification Authority issued a certificate
Effective date	Certificate effective (issue) date
Expiration date	Certificate expiration date
Revoked	Attribute of blocking. Valid values: _ Yes; _ No
Organization code	Organization code
Organization name	Organization name
Assign date	Date of key assignment
Assign time	Time of key assignment
Revoke date	Date of key revocation
Revoke time	Time of key revocation

The following functions are available from the shortcut menu:

1. **Add** – register a new key.
2. **Edit** – change a key.
3. **Remove** – delete a key.
4. **Export table** – export dictionary data to the XLS / XLSX / CSV format file (use commas as separators).

Edit
To add correspondence between a user and a certificate, select **Add** in the shortcut menu of the keys dictionary. The SSL certificate registration form will be opened in the right part of the window.

Description of the window fields:

1. **User information**:
   - **User** – specify user's UID or select from it the dictionary using the **'...'** button. The full name of the user is displayed in the field on the right;
   - **Organization code** – information field displaying the organization number in the dictionary. The organization name is displayed in the field on the right.
2. **Key information** – the fields below are automatically populated when the user selects a key in the **Available keys** table:
   - **Certificate owner** – certificate owner information;
   - **Certificate number** – serial number of a certificate assigned to this user;
   - **Certificate Authority** – information on the certification authority issued a certificate;
   - **Valid from ... till ...** – start and end date of the certificate validity period.
3. **Key assign** – date and time of a key assignment. Information field.
4. **Key revoke** – date and time of a key revocation. Information field.
5. **Available keys** – list of available keys in a selected file. The information is presented as a table. The columns display the following parameters:

Parameter	Purpose
Certificate number	Serial number of a certificate
Certificate Authority	Name of the Certification Authority issued a certificate
Certificate owner	Certificate owner information
Signature algorithm	Name of an algorithm used for forming the digital signature
Cryptographic algorithm	Name of an algorithm used for data stream encryption
Email	Email
Effective date	Starting date of the certificate validity period (date of issue)
Expiration date	Ending date of the certificate validity period

   - **Select key** – select the file containing the keys.
6. **Use to sign transactions** – attribute of using the certificate key for forming of digital signature in the client's instructions.
7. **Use to encrypt data stream** – attribute of using the certificate for encrypting data to be transferred between the user and the broker's server. Before using this option, contact the QUIK system developer.
8. **Revoked** – if the checkbox is enabled the certificate will be saved to the database but will be disallowed to use.

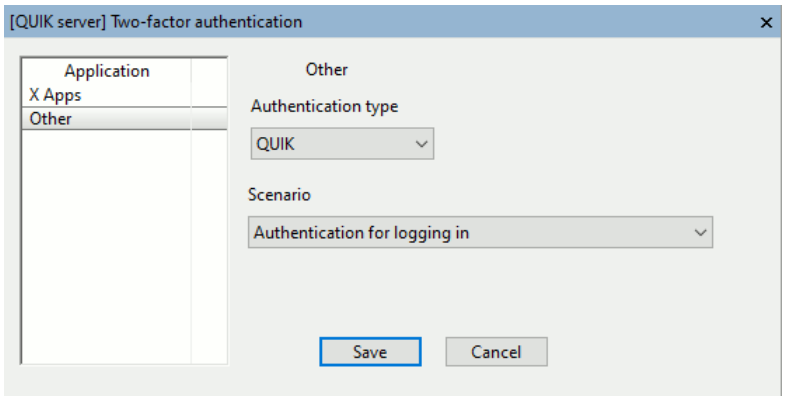
Click **Save** to save the changes. Click **Cancel** to close the certificates registration window without saving.

Filters
Filtering the keys by substring in any column of the table located in the left side of the screen.

3.3 Two-factor authentication

menu **QUIK server / Security / Two factor authentication**

This window is used to set up the authentication parameters.



The window contains the following parameters:

1. **Application** – application to which a user is authenticated.
2. **Authentication type** – the type of the two-factor authentication to be used is selected in the list. Valid values:
   - Not used;
   - RSA SecurID – authentication using RSA SecurID. For details, see 3.4;
   - QUIK – an additional password sent via predetermined communication channel is required to be entered to establish the connection with the QUIK server;
   - Active Directory – authentication using username and password stored in the network domain controller;
   - RADIUS – authentication using RADIUS protocol.
3. **Scenario** – authentication scenario to be used is selected in the list. Valid values:
   - Authentication for logging in;
   - Trading authentication.

Click **Save** to save the settings. Click **Cancel** to close the window.

3.4 Logins for another authentication system

menu **QUIK server / Security / Logins for another authorization system**

3.4.1 Purpose

The dictionary is intended to set up the correspondence between users of the QUIK system and identifiers (logins) that is used in the following cases:

- When using two-factor authentication on the RSA SecurID system's and RADIUS servers. The chosen identifier must be specified in the RSA SecurID server settings in the description of an owner whose token is assigned to user.
- When using authentication in Active Directory by domain name and password.

The left part of the window displays the dictionary in view of users. The right part contains the parameters for editing and filtering the dictionary records.

3.4.2 Table format

The dictionary contains the following parameters:

Parameter	Purpose
User ID	User identifier
User	User full name
Login	Login

The following functions are available from the shortcut menu:

1. **Add** – register a new key.
2. **Edit** – change a key.
3. **Remove** – delete a key.
4. **Export table** – export dictionary data to the XLS / XLSX / CSV format file (use commas as separators).

3.4.3 Edit

To add correspondence between a user and an identifier (login), select **Add** in the dictionary shortcut menu. The form for new login addition to another authorization system will open in the right part of the window.

Description of the window fields:

1. **User** – specify user's UID or select from it the dictionary using the **'...'** button. The full name of the user is displayed in the field on the right.

2. **Use UID** – attribute of using client's UID as the user identifier for the token code checking. Thus, a client is not required to enter any identifier (login) when authenticating using a token while connecting to the server.
3. **Login in another system** – enter a user login name. The field is not available for editing if the **Use UID** checkbox is enabled.

Click **Save** to save the changes. Click **Cancel** to close the window for registration of a new login without saving.

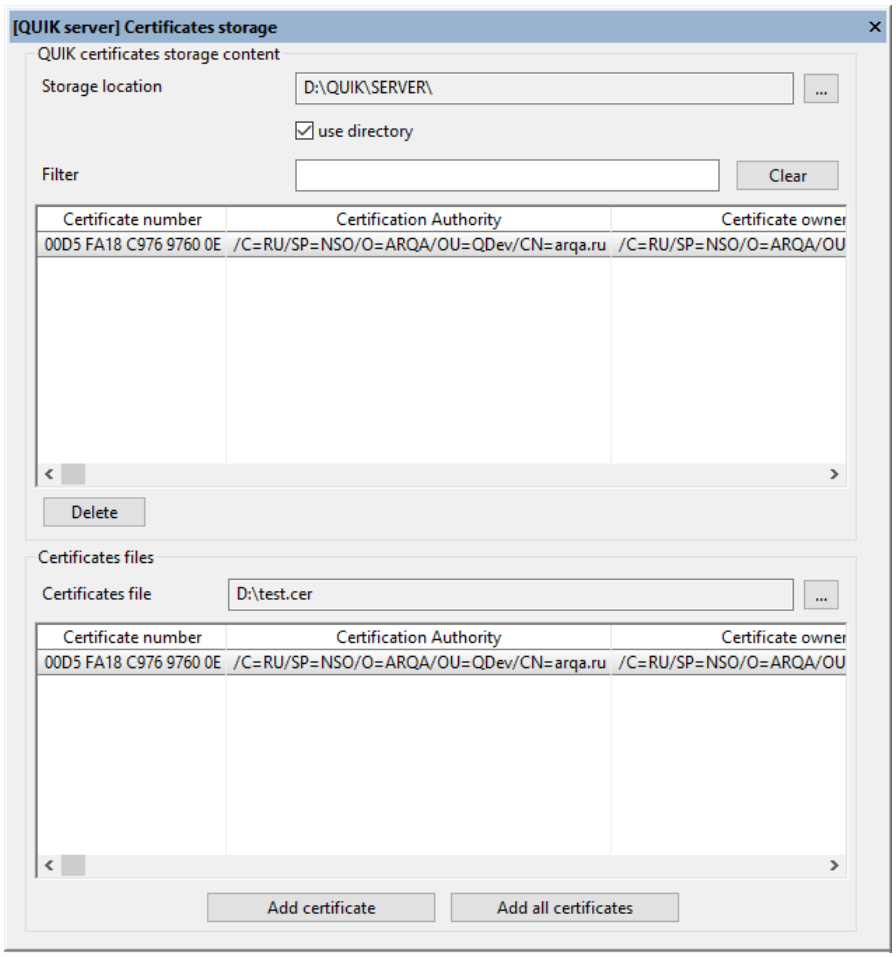
3.5 Certificate storage

menu **QUIK server/ Security / Certificates storage**

3.5.1 Purpose

The window is used to view and modify the list of certificates in the client certificate storage.

3.5.2 Configuration



Description of the window fields:

1. **QUIK certificates storage content**:

- **Storage location** – the file path to a local certificate storage with the client certificates. If the **use directory** check box is enabled, then the path to the directory with certificate files is indicated. Storage files have .sto or .cer extensions. To select a file or directory from the storage, click **"..."**.

  This box is not available when working with the certificate storage on the QUIK Administrator server.

  - **use directory** check box is the attribute for specifying a directory with client certificate files in the **Storage location** box.
- **Filter** – filtering the table records by substring in any column of the table. To clear the search string click **Clear**.
- A table with a list of certificates in the store. For each certificate, the following parameters are specified:

Parameter	Purpose
Certificate number	Serial number of a certificate
Certificate Authority	Name of the Certification Authority issued a certificate
Certificate owner	Certificate owner information
Signature algorithm	Name of an algorithm used for forming the digital signature
Cryptographic algorithm	Name of an algorithm used for data stream encryption
Email	Email of certificate owner
Effective date	Starting date of the certificate validity period (date of issue)
Expiration date	Ending date of the certificate validity period

- **Delete** – delete a selected certificate from the storage.

2. Certificates files frame displays the file with certificates what need to be added to the certificate storage.

- **Certificates file** – specify a path to the file with certificates (.sto or .cer extensions). To select a file, click **'...'**.
- A table with a list of certificates contained in the selected file. For each certificate, the following parameters are specified:

Parameter	Purpose
Certificate number	Serial number of a certificate
Certificate Authority	Name of the Certification Authority issued a certificate
Certificate owner	Certificate owner information
Signature algorithm	Name of an algorithm used for forming the digital signature

Parameter	Purpose
Cryptographic algorithm	Name of an algorithm used for data stream encryption
Email	Email of certificate owner
Effective date	Starting date of the certificate validity period (date of issue)
Expiration date	Ending date of the certificate validity period

- **Add certificate** – add the selected certificate to the storage;
- **Add all certificates** – add all certificates from the selected file to the storage.

3.5.3 Adding certificate

To add a certificate to the certificate storage:

1. In the **QUIK certificates storage content** frame, in the **Store location** box, specify the path to the certificate storage directory or file.
2. In the **Certificates files** frame:
   - specify the path to the certificate file;
   - in the table, select the certificate to be added to the storage, and click the **Add certificate** button. To add all certificates, click the **Add all certificates** button.

   The certificates will appear in the table in the **QUIK certificates storage content** frame.

3.6 Save transaction with digital signature

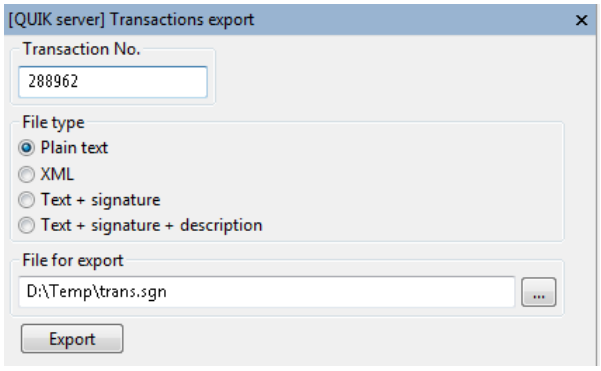
menu **QUIK server / Security / Save transaction with DS...**

3.6.1 Purpose

The window is intended to save the transaction data to a text file. The transaction saving procedure is used to check manually the transaction digital signature, for example, using any CIPF.

3.6.2 Configuration

Description of the window fields:



1. **Transaction №** – conflicting transaction number that can be received using the **Report by transactions** (see 4.1).
2. **File type** – determines the information contents to be saved:
   - **Plain text** – only transaction parameters are saved;
   - **XML** – XML text is saved. If the file's extension is not specified then .xml extension will be used;
   - **Text + signature** – transaction parameters and signature cipher are saved. If you need to check the digital signature, use this option;
   - **Text + signature + description** – two files will be saved. The .data file will contain the transaction parameters and signature cipher; the .desc file will contain the description of fields.
3. **File for export** – name of the file for saving and a disk path to it. Manually fill in the field or click **'...'**, specify the file name in the opened window and select a folder to save to.

To save the transaction click **Export**.

3.6.3 File example with fields description

The fields' description file looks like this:

```
Class=TQBR; TransName=Stop order; TransID=288962; Length=165
Field 1: Name=STOPORDERTYPE; Desc=Stop order type, Length=1, Value=1(Stop limit)
Field 2: Name=EXPIREDDATE; Desc=Expiration date, Length=8, Value=-0000001
Field 3: Name=ACCOUNT; Desc=Trade account, Length=12, Value=S01-00000F00
Field 4: Name=BUYSELL; Desc=Buy/Sell, Length=1, Value=B(Buy)
Field 5: Name=CONDITION; Desc=Condition, Length=1, Value=5(>=)
Field 6: Name=STOPPRICE; Desc=Stop price, Length=9, Value=000000900
Field 7: Name=TRANSFLAGS; Desc=Flags, Length=4, Value=0002
Field 8: Name=SECBOARD; Desc=Mode, Length=12, Value=TQBR
Field 9: Name=SECCODE; Desc=Security, Length=12, Value=RU14BALT5003
Field 10: Name=CO_SECCODE; Desc=Order security, Length=12, Value=RU14BALT5003
Field 11: Name=CO_SECBOARD; Desc=Order class, Length=12, Value=TQBR
Field 12: Name=PRICE; Desc=Price, Length=9, Value=000001000
Field 13: Name=QUANTITY; Desc=Quantity, Length=9, Value=000000001
Field 14: Name=BROKERREF; Desc=Comment, Length=20, Value=
Field 15: Name=STOP_CO_PRICE; Desc=Limit order price, Length=9, Value=000000000
Field 16: Name=OFFSET; Desc=Offset, Length=12, Value=000000000000
Field 17: Name=SPREAD; Desc=Protective spread, Length=12, Value=000000000000
Field 18: Name=ORDERNUM; Desc=Base order number, Length=9, Value=000000000
```

3.7 Revise digital signature of transaction

menu **QUIK server / Security / Revise DS transaction...**

3.7.1 Purpose

It is used to verify the digital signature correctness using CIPF. This option can be helpful in case of a conflict with the client: when he says that he didn't enter the order that was sent to the trading system on behalf of his name.

All signed user transactions are saved to the database when they are received by the server. When a conflict arises, one of the following ways can be used to identify the person who signed the transaction:

1. Check the DS on the conflicting transaction using the options of the QUIK Administrator program.
2. Receive the text of this transaction and the DS as files and provide this information along with the user's certificate to be identified to an expert organization which will check if the DS corresponds to this certificate and to the transaction data or not.

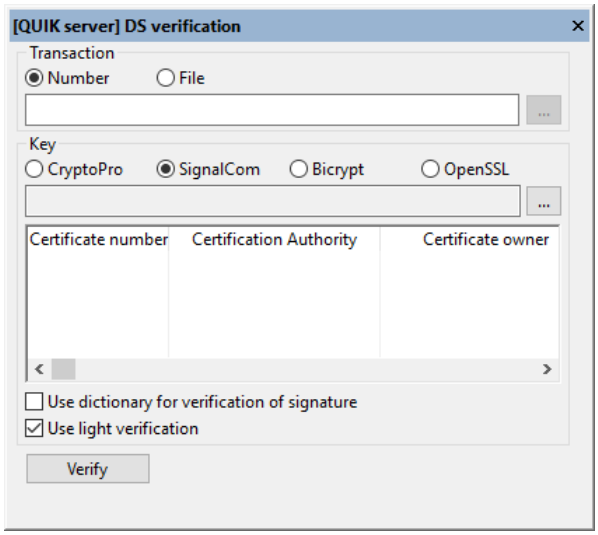
It is necessary to do the following:

- View the report on transaction for this client;
- Find the required order and remember its transaction's number;
- Save the transaction with this number to a file and check the digital signature using CIPF.

If check succeeds then the transaction is signed by the client's key and there are no reasons for this client to refuse the order.

3.7.2 Configuration

Description of the window fields:



1. **Transaction**:
   - **Number** – enter the conflicting transaction number that can be received using the Report by transactions (see 4.1);
   - **File** – enter the name of a file with the conflicting transaction. Use '…' button to select.

2. **Key** – select a type of CIPF used for signing a transaction:
   - CryptoPro;
   - SignalCom;
   - Bicrypt;
   - OpenSSL.

Use button **'...'** to specify a path to the certificate with the client's key used for signing the transaction. If the file reading succeeds the parameters of a certificate described in this file will be displayed in the table:

Parameter	Purpose
Certificate number	Serial number of a certificate
Certificate Authority	Name of the Certification Authority issued a certificate
Certificate owner	Certificate owner information
Signature algorithm	Name of an algorithm used for forming the digital signature
Cryptographic algorithm	Name of an algorithm used for data stream encryption
Email	Email
Effective date	Starting date of the certificate validity period (date of issue)
Expiration date	Ending date of the certificate validity period

3. **Use dictionary for verification of signature** – use all certificates in the specified dictionary for DS checking (store). The setting is available for SignalCom CIPF.
4. **Use light verification** – use expired certificates when checking a certificate. The setting is available for SignalCom, Bicrypt, and OpenSSL CIPFs.

Click **Verify** to start validation of the transaction's DS.

4. Reports

4.1 Report on transactions

menu **QUIK server/ Reports/ Report on transactions...** or button

4.1.1 Purpose

The report on transactions is intended to display the information about transactions executed by a specific user during a specified period.

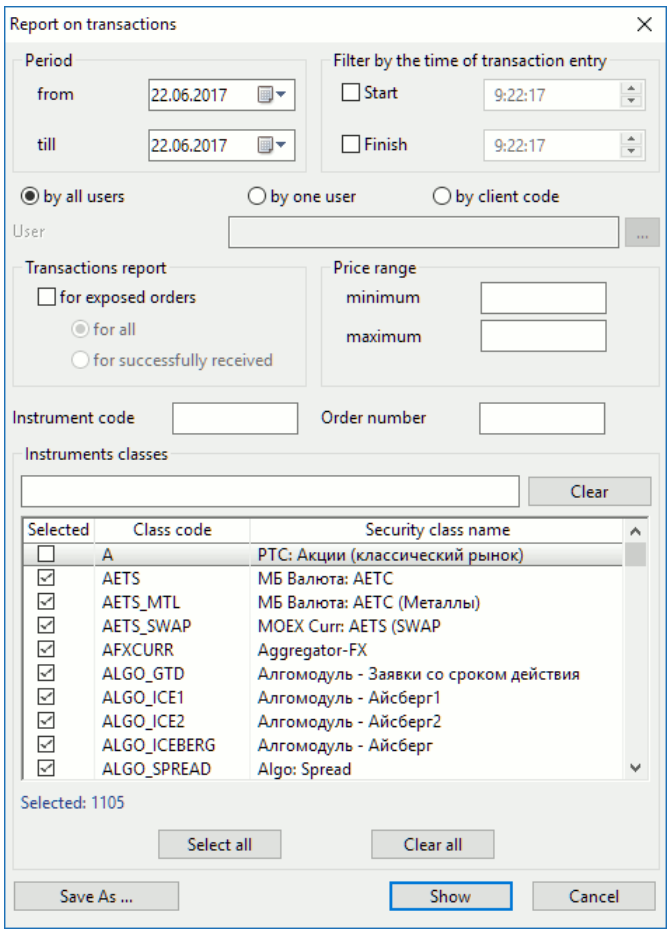
The following report formats are available:

1. By all users.
2. By one user.
3. By client code.

4.1.2 Configuration

Report configuration parameters:

1. **Period from … till …** – select the starting and ending dates for a report.
2. **Filter by the time of transaction entry** – select transaction by the time of transaction entry. To use this filter, enable the checkbox and specify the time. **Start** and **Finish** checkboxes can be used individually or together.
3. Checkboxes of the filter by user or client:
   - **By all users** – reports on operations of all users for a specified period;
   - **By one user** – report on operations of a user specified in the User field;
   - **By client code** – report on operations of users with the client code specified in the Client code field. It is possible to search by the client code mask that consists of the beginning of this code and a symbol "*".
4. **Transactions report: for exposed orders** – report contains the information on instructions for new order entry. To use the filter, enable the **for exposed orders** checkbox and select the formation type:
   - **For all** – report on all orders;
   - **For successfully received** – report on orders registered in the trading system.



5. **Price range** – filter by range boundary values of transaction prices:

   - **minimum** – filter by minimum value of a transaction price. To use the filter, enter the price boundary value;
   - **maximum** – filter by maximum value of a transaction price. To use the filter, enter the price boundary value.

   To search the transaction price in the specified range, use **minimum** and **maximum** checkboxes simultaneously.

6. **Instrument code** – filter by instrument code. To use the filter, enter a security code. If the filter is enabled, the report will contain the transactions with securities issued only by this issuer. If an instrument code is not specified in a transaction then such a transaction will not be described in this report.

7. **Order number** – filter by order number. To use the filter, enter an order number in the field. If filter is used, the report will contain the information on the order with the specified number.

8. **Instruments classes** table allows selecting of the security classes to include transactions for in the report. Check the required classes. If you want to include the securities only from one class in the report, click **Clear all** and all checkboxes will be unchecked; then, check the required class. Similarly, use **Select all** to enable all the checkboxes.

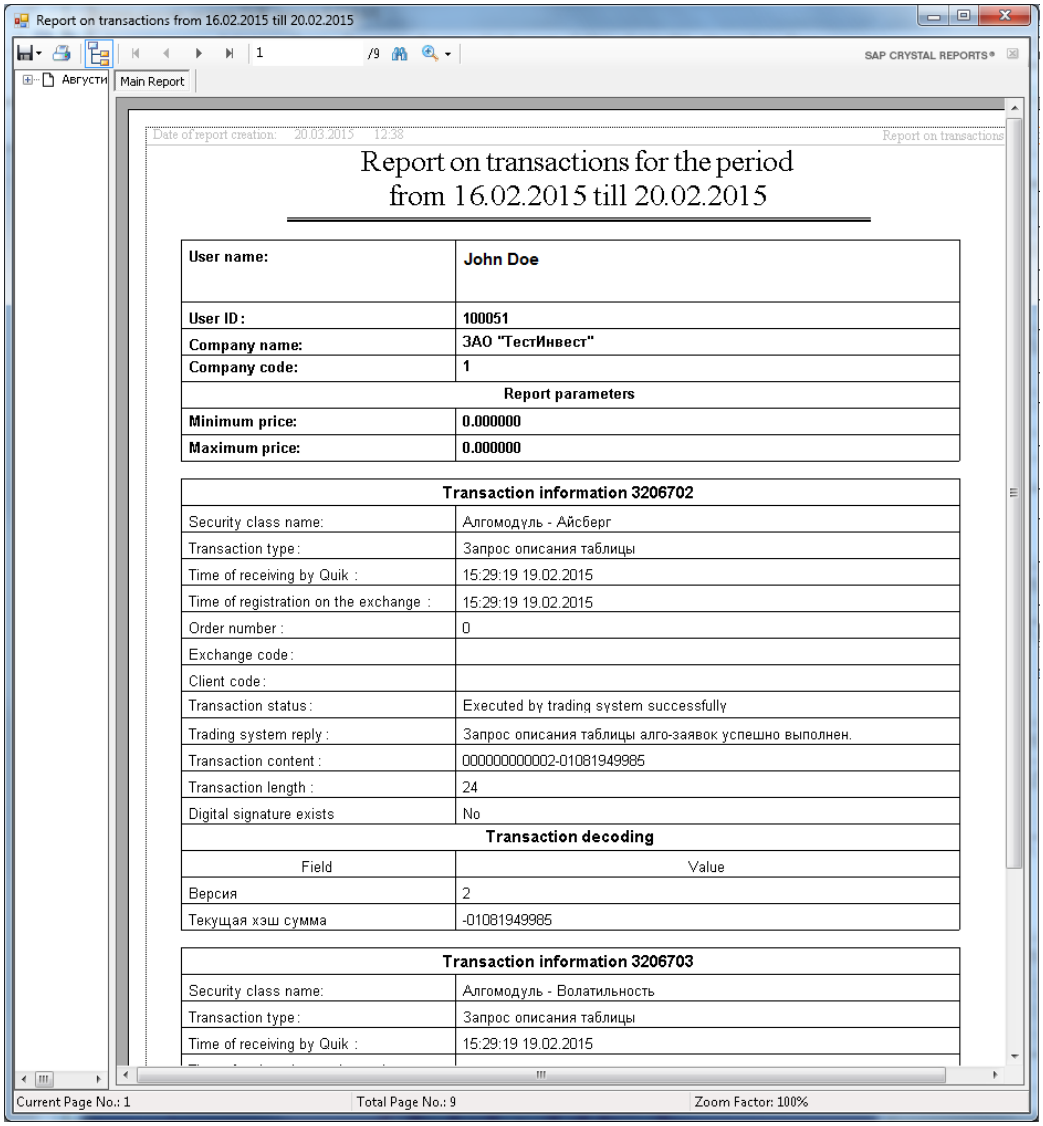
   Field above the table with list of classes is intended for filtration of the table records by substring contained in any column of the table. To clear the search string press **Clear**.

Number of the selected records is displayed on the left under the table: **Selected: <...>**.

9. **Save As ...** – report will be saved without being displayed on the screen. You can select file format – .txt or .xml. File format is described in 4.1.3.

4.1.3 Report format

The report is as follows:



The PIN code field is displayed in the report if the following conditions are met:

- The Quik two-factor authentication type is set up for the user for whom the report is created;
- In section [QuikOptions] of the server configuration file <Configuration file name>.ini the value of the PINCodesInTransReport parameter is equal to 1 (for a full description of the parameter, see the Installation manual of QUIK server, section 2.3, sub-section 6).

4.1.4 File format

When saving a report as a text file, the data on transactions are written as strings separated by a semicolon. The parameters order is determined by the first string of the file containing the names of parameters. File encoding is CP-1251 (Windows).

Example file:

```
UserID; User name; TransID; Class code; Trans type; Server time; Reply time; Trans
status; Trans reply; Trans data
162;Ivanov Ivan Ivanovich;44487;TQBR;Stop order;24.11.04 17:59:04;24.11.04
17:59:04;o; Stop-order N [9639] registred.;1-0000001L01-00000F00B50000180000002TQBR
EESR EESR TQBR 0000200000000000002E2/ 00000000000000000000000000000000000000000000
162; Ivanov Ivan Ivanovich;44488;TQBR;Withdraw stop-order;24.11.04 17:59:09;24.11.04
17:59:09;o;Stop order N [9639] is withdrawn.;000009639
162; Ivanov Ivan Ivanovich;62796;TQBR;Withdraw order ;25.11.04 18:54:32;25.11.04
18:54:32;q;Impossible to withdraw an order;000000009639
```

4.2 Statistics on transactions

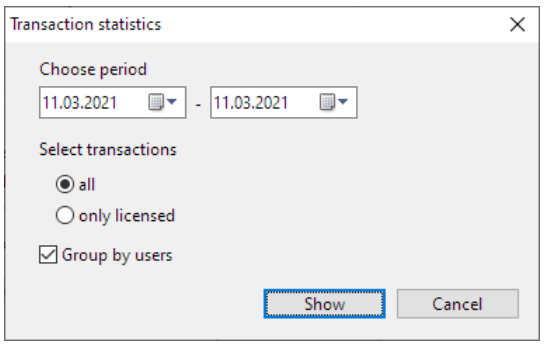
menu **QUIK server / Reports / Statistics on transactions...**

4.2.1 Purpose

This report is intended to calculate the number of transactions sent by users for the specified period.

4.2.2 Configuration

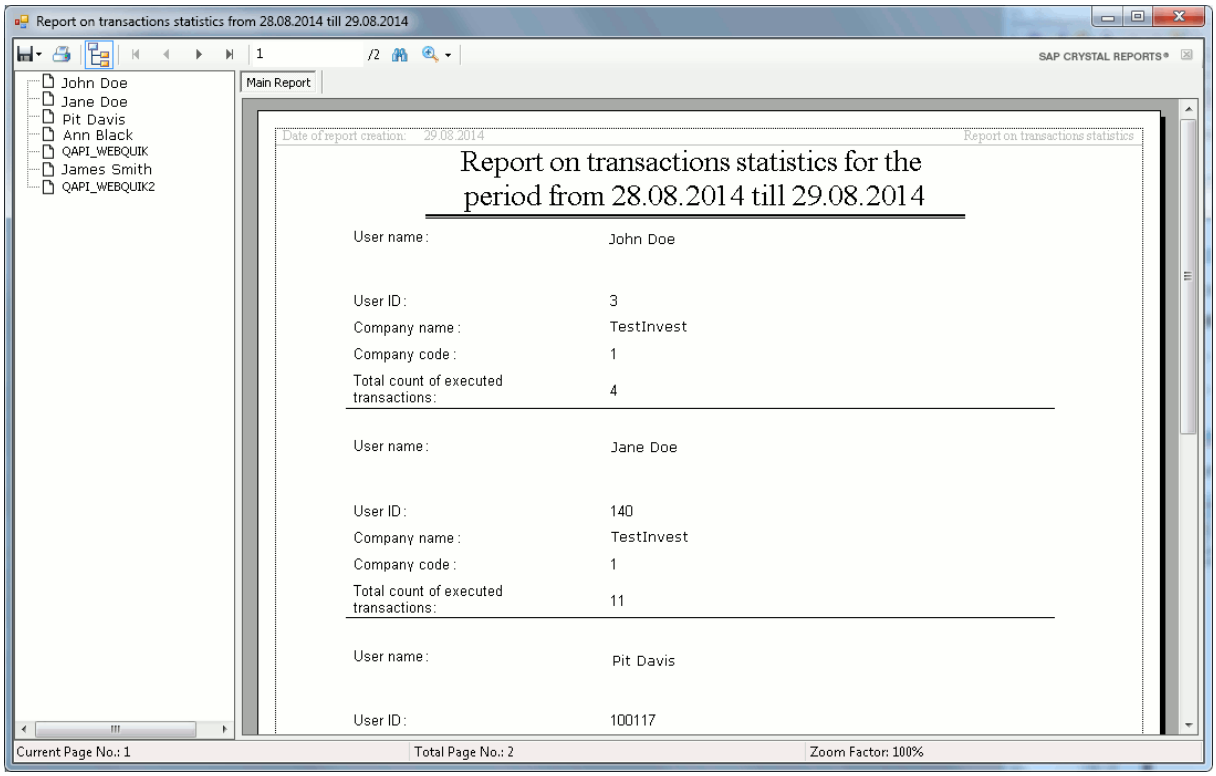
Report configuration parameters:



1. **Choose period** – select the starting and ending dates for a report.
2. **Select transactions**:
   - **all** – consider all transactions;
   - **only licensed** – consider only licensed transactions.
3. **Group by users** – group data by users.

4.2.3 Report format

The report is as follows:



4.3 Report on stop orders

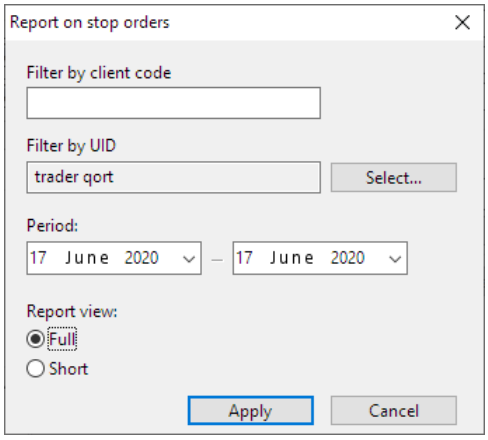
menu **QUIK server / Reports / Report on stop orders...** or button

4.3.1 Purpose

The report is intended to display the information on all stop orders sent by the users (or by one selected user) for the specified period.

4.3.2 Configuration

Report configuration parameters:



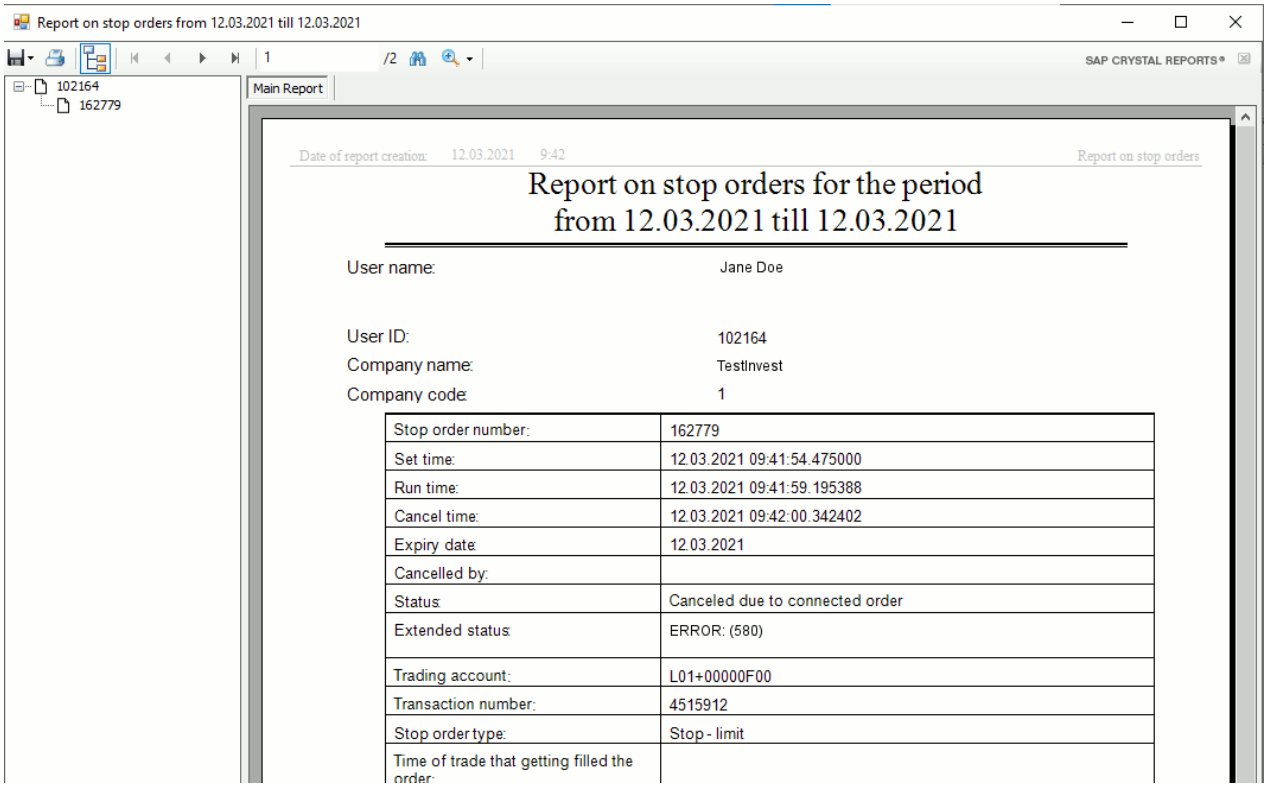
1. **Filter by client code** – user filter by client code to form a report.
2. **Filter by UID** – user filter by UID to form a report. If the box is empty, the report for all users will be generated. To select a user from the dictionary, click the **Select...** button.
3. **Period** – select the starting and ending dates for a report:
   - **from** – starting date of the analyzed period;
   - **till** – ending date of the period.
4. **Report view** – select a form of displaying a report:
   - **Full** (by default)–vertical report orientation;
   - **Short** – horizontal report orientation.

4.3.3 Report format

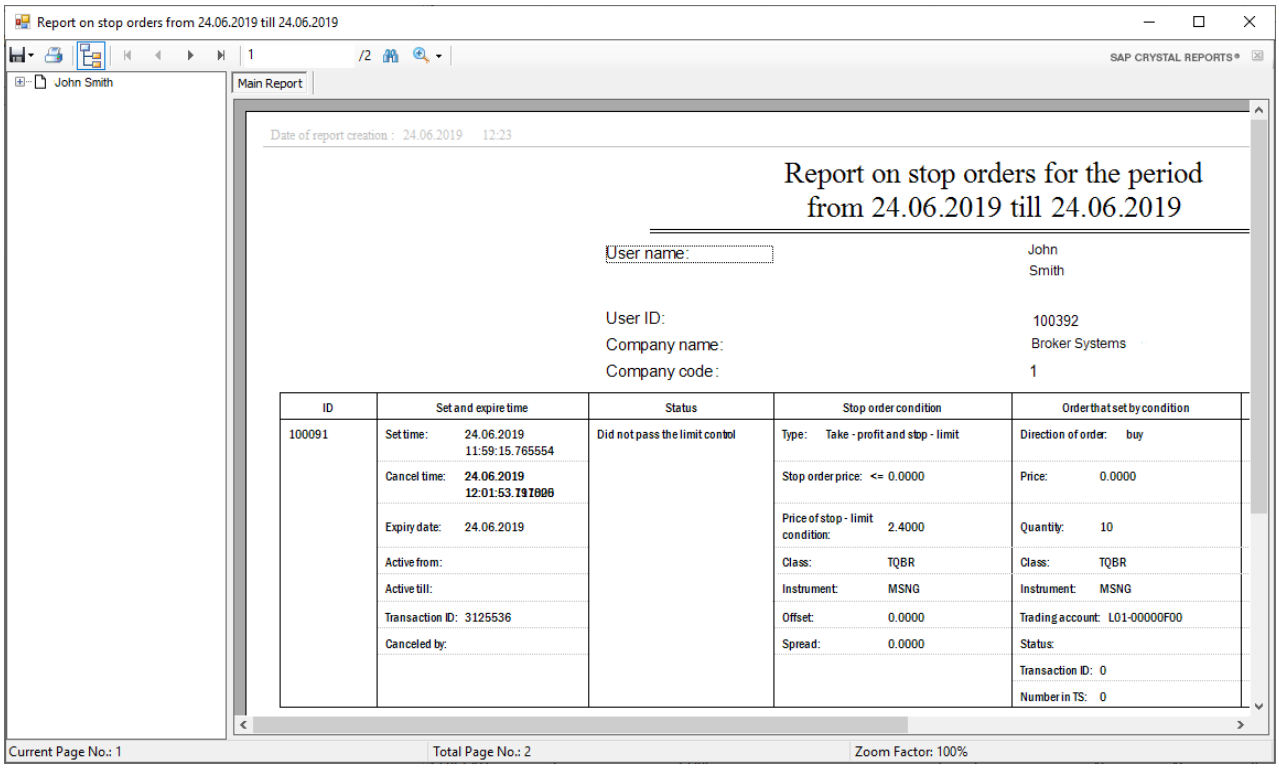
If the report is created for several users the stop orders will be grouped by each user separately.

Each stop order in the report is presented in a separate table.

Full report format



Short report format



4.4 Common rights

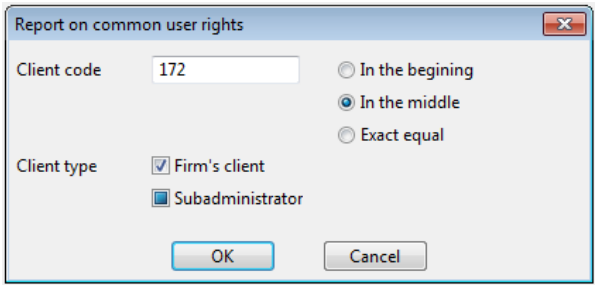
menu **QUIK server / Reports / Common rights...**

4.4.1 Purpose

The report is intended to view the user settings in view of client codes.

4.4.2 Configuration

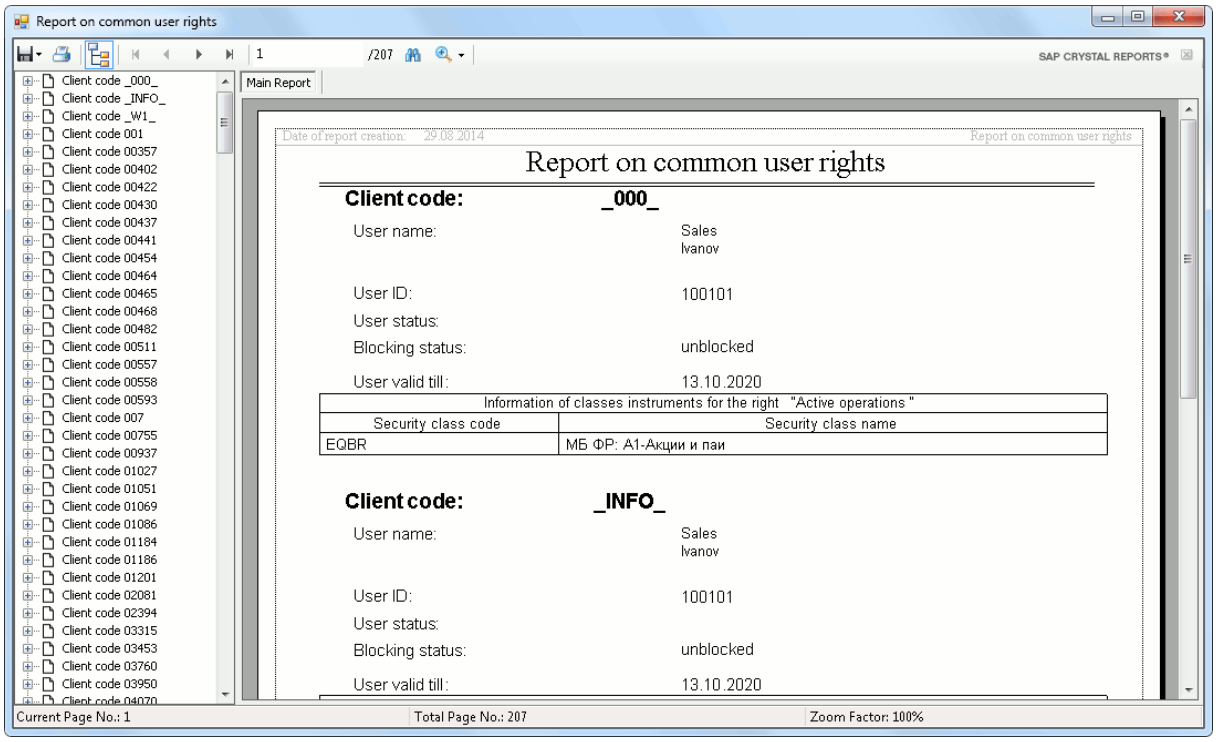
Report configuration parameters:



1. **Client code** – filter by client code. Length of value must not exceed 12 characters. Valid types of filtration:
   - **In the beginning;**
   - **In the middle;**
   - **Exact equal.**
2. **Client type** – filter by presence/absence of 'Firm's client' and/or 'Subadministrator' rights. The option button provides three positions available:
   - Selected checkbox – presence of the rights required;
   - Cleared checkbox – absence of the rights required
   - Filled box – no filtration.

4.4.3 Report format

The report is as follows:



4.5 Presence of the rights

menu **QUIK server / Reports / Presence of the rights...**

4.5.1 Purpose

The report allows selecting of users by the set of assigned rights for checked classes. For example, it is possible to display the report on all users with the assigned right of using stop orders.

The report contains only records for which selected checkboxes are checked. It is not intended for filtering by disabled checkboxes.

4.5.2 Configuration

Window settings:

1. Check the required rights to be displayed in the report as enabled in the left section **Choose rights for report**.

   Field above the table intended for filtration of the table records by substring contained in any column of the table. To cancel filtration and clear the search string press **Clear**.

   Number of the selected records is displayed on the left under the table: **Selected: <...>**.

2. Check the instrument classes for which the rights will be searched in the right section **Choose classes of instruments for report**.

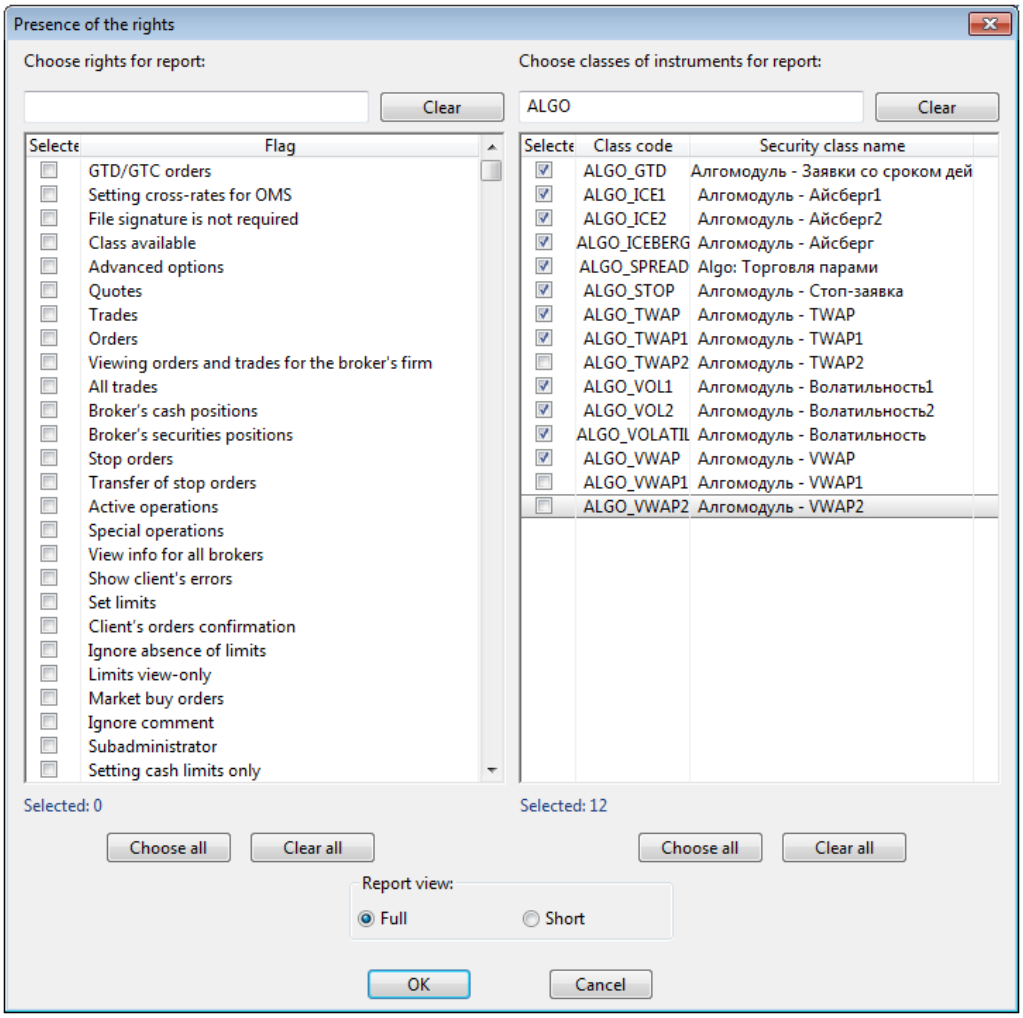
Field above the table intended for filtration of the table records by substring contained in any column of the table. To cancel filtration and clear the search string press **Clear**.

Number of the selected records is displayed on the left under the table: **Selected: <...>**.

3. To select all rights or all classes, use **Choose all** buttons located below the corresponding section. Similarly, use **Clear all** to uncheck all rights or classes.

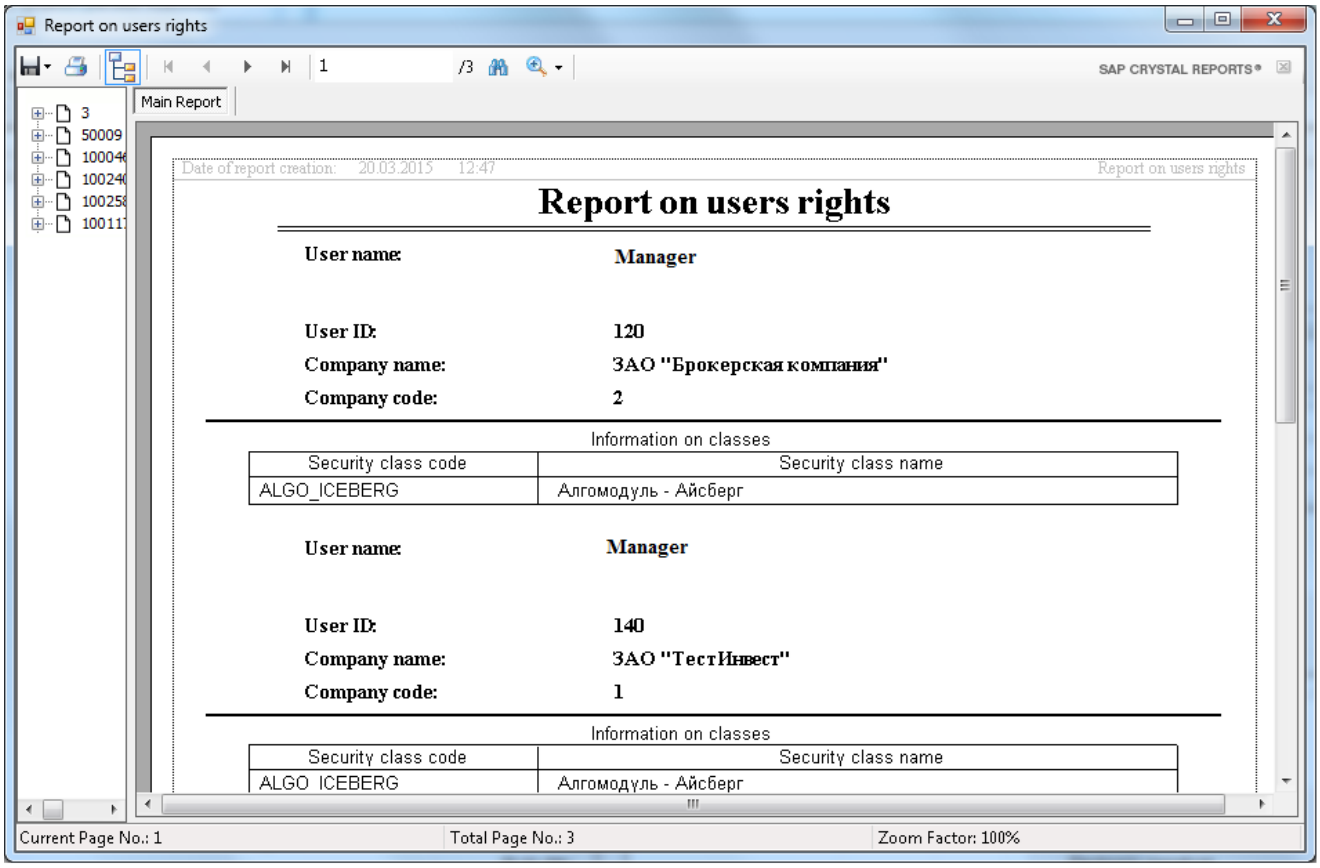
> **When using filtering values from the table by substring, buttons 'Select all' and 'Clear all' can be applied only to filtered values.**

4. **Report view** – select a form of displaying a report:
   - **Full** (by default) – report data is grouped by users. Data for each user is given in a separate table;
   - **Short** – report data is given in one common table.

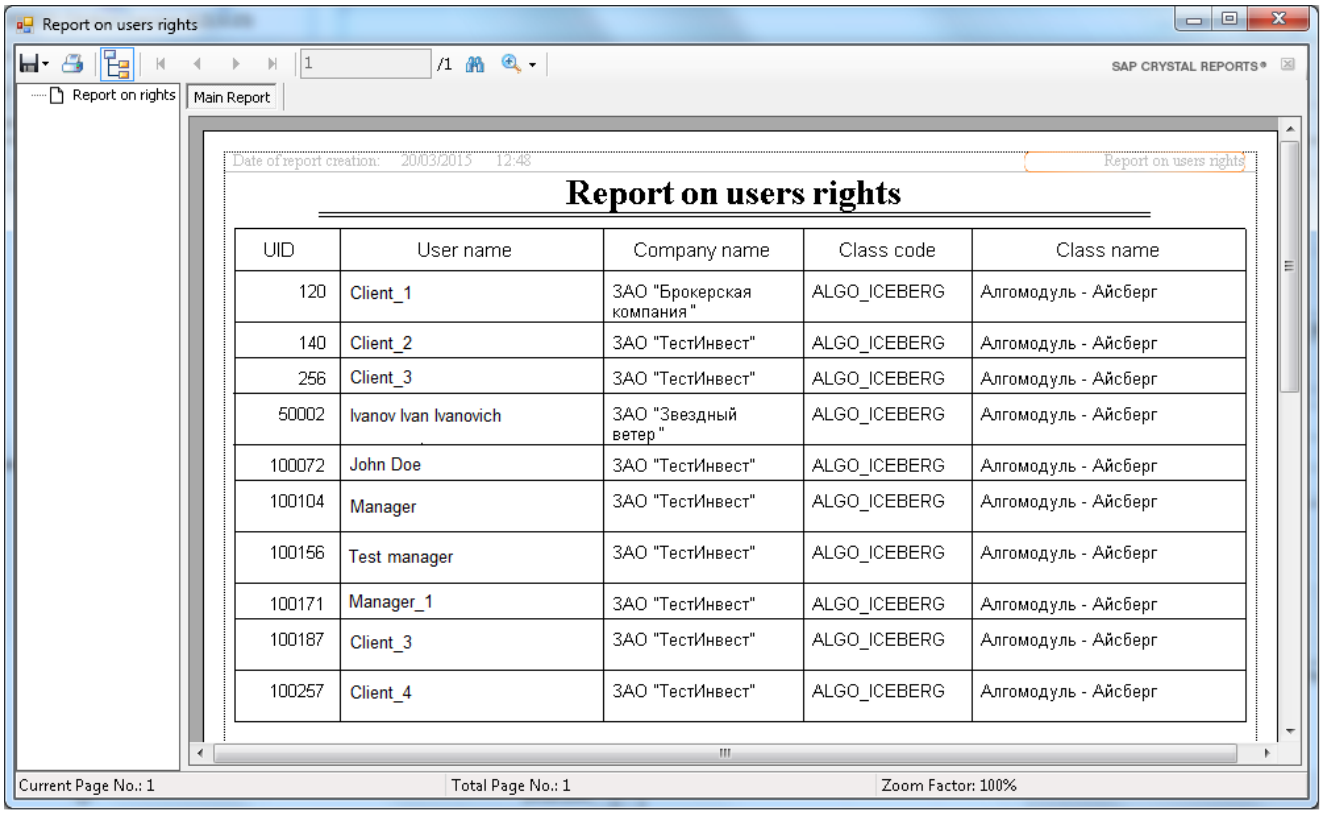


4.5.3 Report format

Full report on rights is as follows:



Short report on rights is as follows:



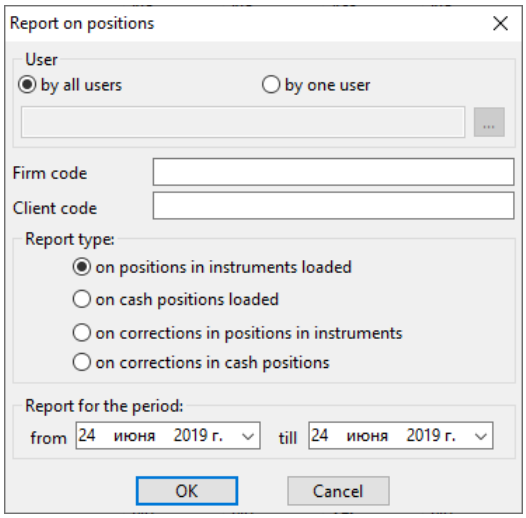
4.6 Report on positions

menu **QUIK server / Reports / Report on positions...**

4.6.1 Purpose

The report on positions allows receiving the information on loaded and corrected positions for the specified period.

4.6.2 Configuration



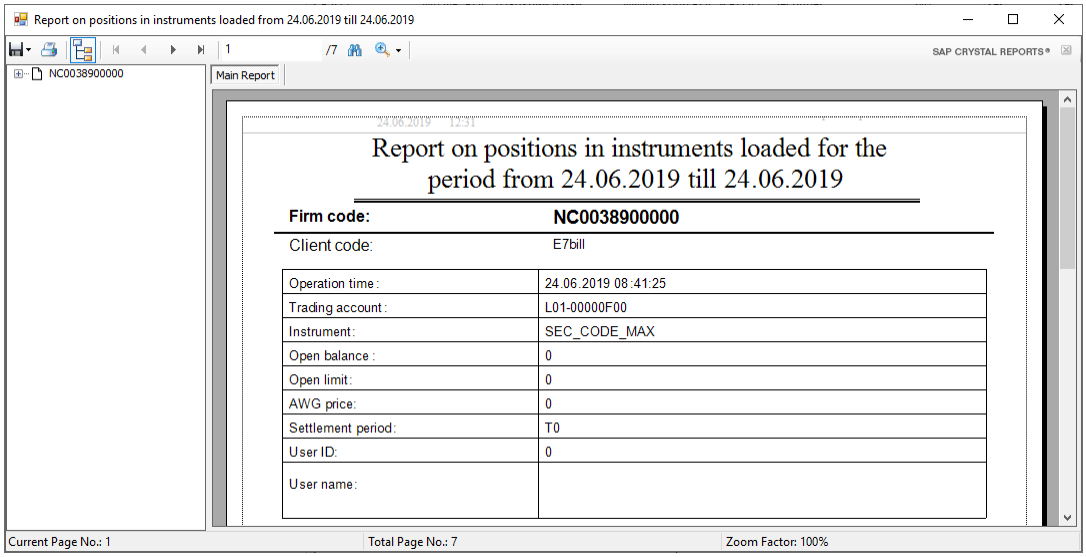
Report configuration parameters:

1. **User** * – select a user for which you want to generate a report:
   - **By all users** – generate report for all users;
   - **By one user** – generate a report for one user, click '…', and select the required record in the opened dictionary**.**
2. **Firm code** * – filter by dealer's identifier in the trading system for which positions have been set.
3. **Client code** * – filter by client code specified in positions.
4. **Report type** – select the data to be reported. Valid values:
   - **on positions in instruments loaded** – information on set and loaded positions in instruments;
   - **on cash positions loaded** – information on set and loaded cash positions;
   - **on corrections in positions in instruments** – information on dynamic corrections of the positions in instruments;
   - **on corrections in cash positions** – information on dynamic corrections of the cash positions.
5. **Report for the period** – select the range of dates for a report when the positions were loaded or changed.

> **(*) A value is not required for this field. If the field is empty then the filter is not used for this parameter.**

4.6.3 Report format

The information on positions for each user is presented in a separate table with a title containing the description of the table's fields. Client codes in a report are placed in ascending order and grouped by firm identifiers.



4.7 Report on messages

menu **QUIK server / Reports / Report on messages...** or button

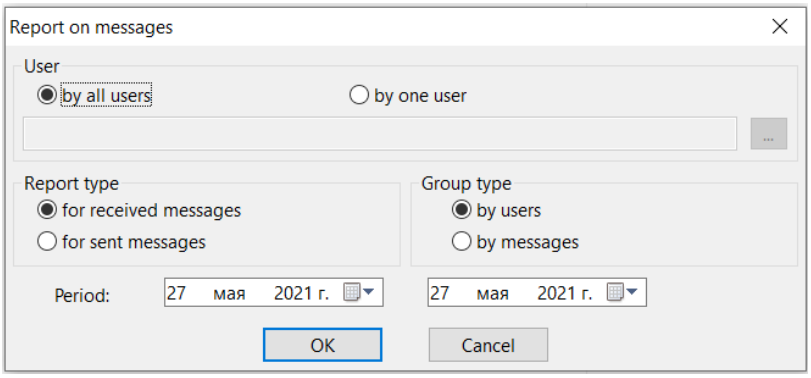
4.7.1 Purpose

The report on messages is used to view the history of correspondence (messaging) between users.

4.7.2 Configuration

To open the report configuration window, click the **Report by messages** button on the program toolbar.

Report configuration parameters:



1. **User** – select the quantity of users:
   - by all users;
   - by one user.
2. **Report type** – select the message direction:
   - **for received messages** – group by recipient;
   - **for sent messages** – group by sender.
3. **Group type** – select the report creation type:
   - **by users** – group messages sent or received – depending on the value of the **Report type** parameter – by a selected user;
   - **by messages** – group by messages depending on the value of the **Report type** parameter.
4. **Period** – select the period negotiations took place.

4.8 Report on user activity

menu **QUIK server / Reports / Report on user activity...**

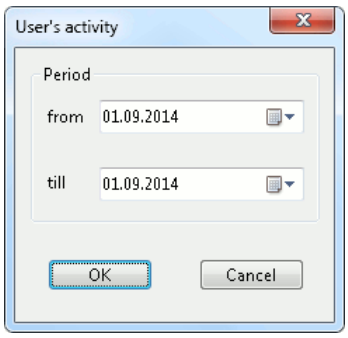
4.8.1 Purpose

The report is intended for saving the file of the report on the frequency of the QUIK system use. The report will be formed if the QUIK server's database receives the data on user activity from

UserStat.exe program. Contact the QUIK support team to receive the information about this program.

4.8.2 Configuration

Report configuration parameters:

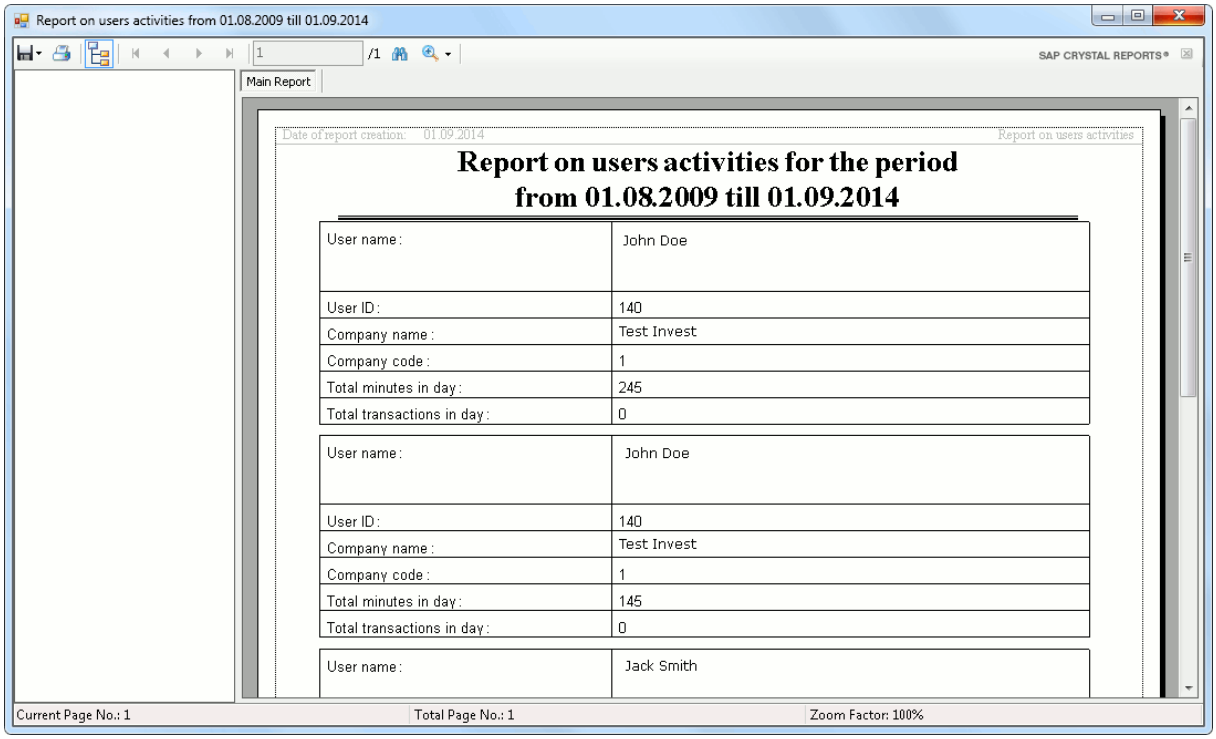


1. **Period** – select the starting and ending dates for a report:
   - **from** – starting date of the analyzed period;
   - **till** – ending date of the period.

4.8.3 Report format

This report reflects the information on the activity of users for a specific within a specific period.

The report is as follows:



4.9 Report on QUIK two-factor authentication parameters

menu **QUIK server / Reports / Codewords...**

4.9.1 Purpose

The report is intended for creation of the list of users asked for a two-factor authentication password. The report contains a password and a code word used to receive this password.

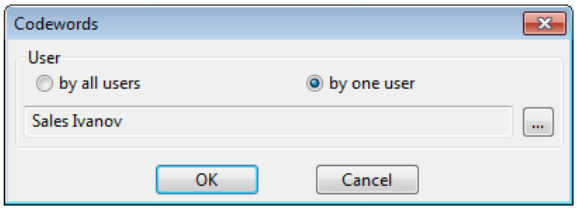
This report is used in the following way:

1. Client calls to broker and gives his initials.
2. Broker forms a report and asks client for a code word.
3. Client gives a code word and receives a two-factor authentication password.

Once the user has been authenticated the password becomes invalid and the string with the user name is removed from the report.

4.9.2 Configuration

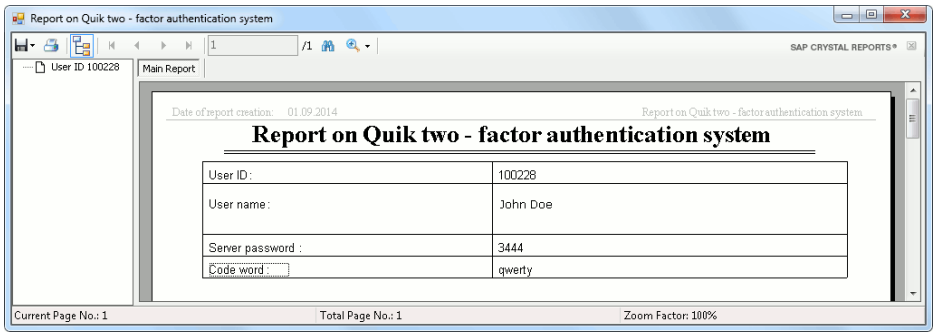
Report configuration parameters:



1. **User** – select a user for which you want to create a report:
   - **by all users** – generate a report by all users;
   - **by one user** – generate a report by one user. Click **'...'** to open the user dictionary.

4.9.3 Report format

The report is as follows:



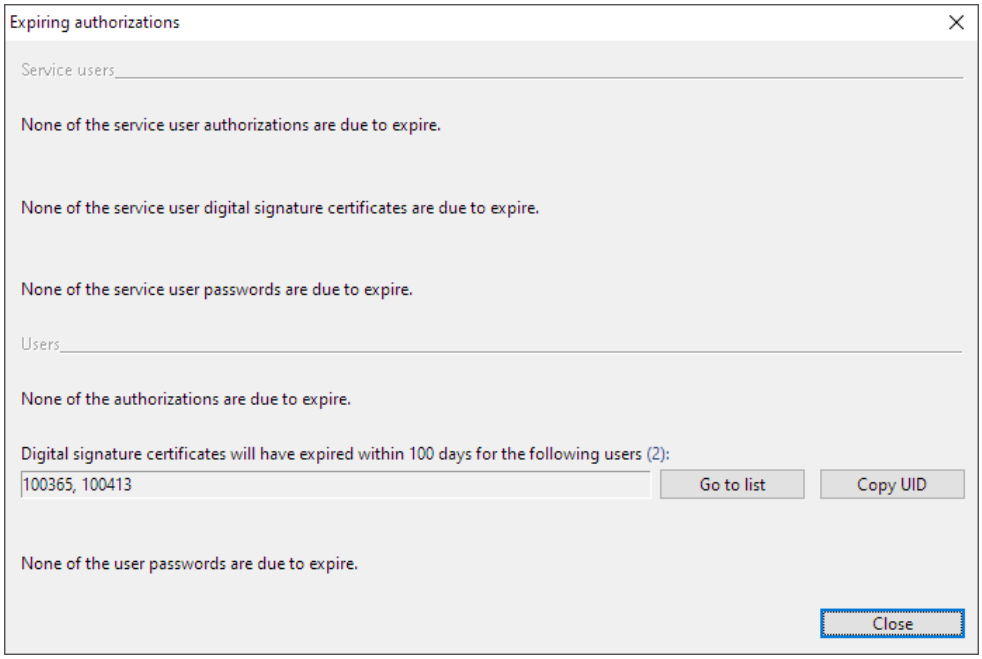
Below the headline are the user's identifier, a two-factor authentication password and a code word.

4.10 Expiring authorization

menu **QUIK server/ Reports / Expiring authorization ...** or button

Once you select this menu item the system checks if there are users / service users with authorization, digital signature certificates or password that expire within the time interval specified in the QUIK Administrator settings.

As a result of a check, the notification of the following view appears on the screen:



This notification is displayed every time you run the QUIK Administrator program.

Click **Copy UID** to copy the text of UIDs list from the corresponding block to the clipboard.

Click **Go to list** to open the **Users** dictionary with filtration by the users from the corresponding block applied.

4.11 Report on QUIK two-factor authentication

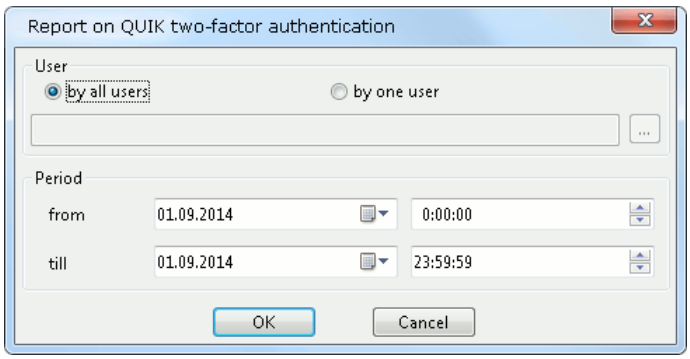
menu **QUIK server/ Reports / Report on Quik two-factor authentication**

4.11.1 Purpose

The report is used to generate data on the user connections / disconnections and two-factor authentications.

4.11.2 Configuration

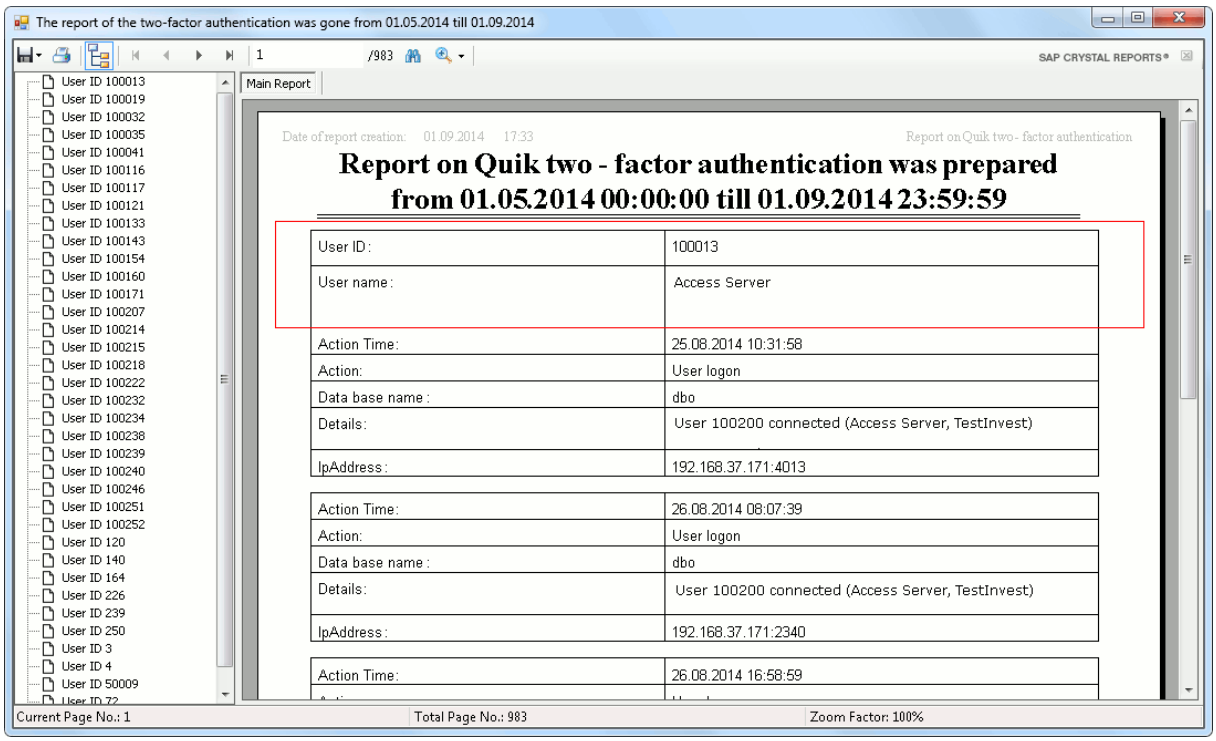
The description of the report configuration window fields:



1. **User** – select a user for which you want to create a report:
   - **by all users** – generate a report by all users;
   - **by one user** – generate a report by one user. Click **'...'** to open the user dictionary.
2. **Period** – select the starting and ending dates for a report:
   - **from** – starting date of the analyzed period. By default, it is the beginning of the day;
   - **till** – ending date of the period. By default, it is the end of the day.

4.11.3 Report format

The report is as follows:



4.12 Report of inactive users

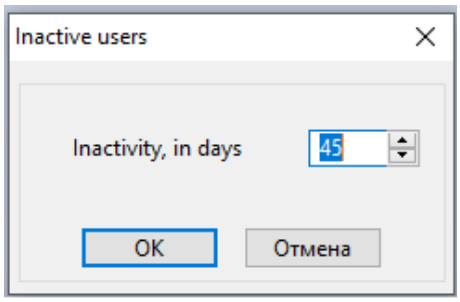
menu **QUIK server/ Reports / Inactive users**

4.12.1 Purpose

Saving to a file a report of client unused period of the QUIK system.

4.12.2Configuration

The description of the report configuration:

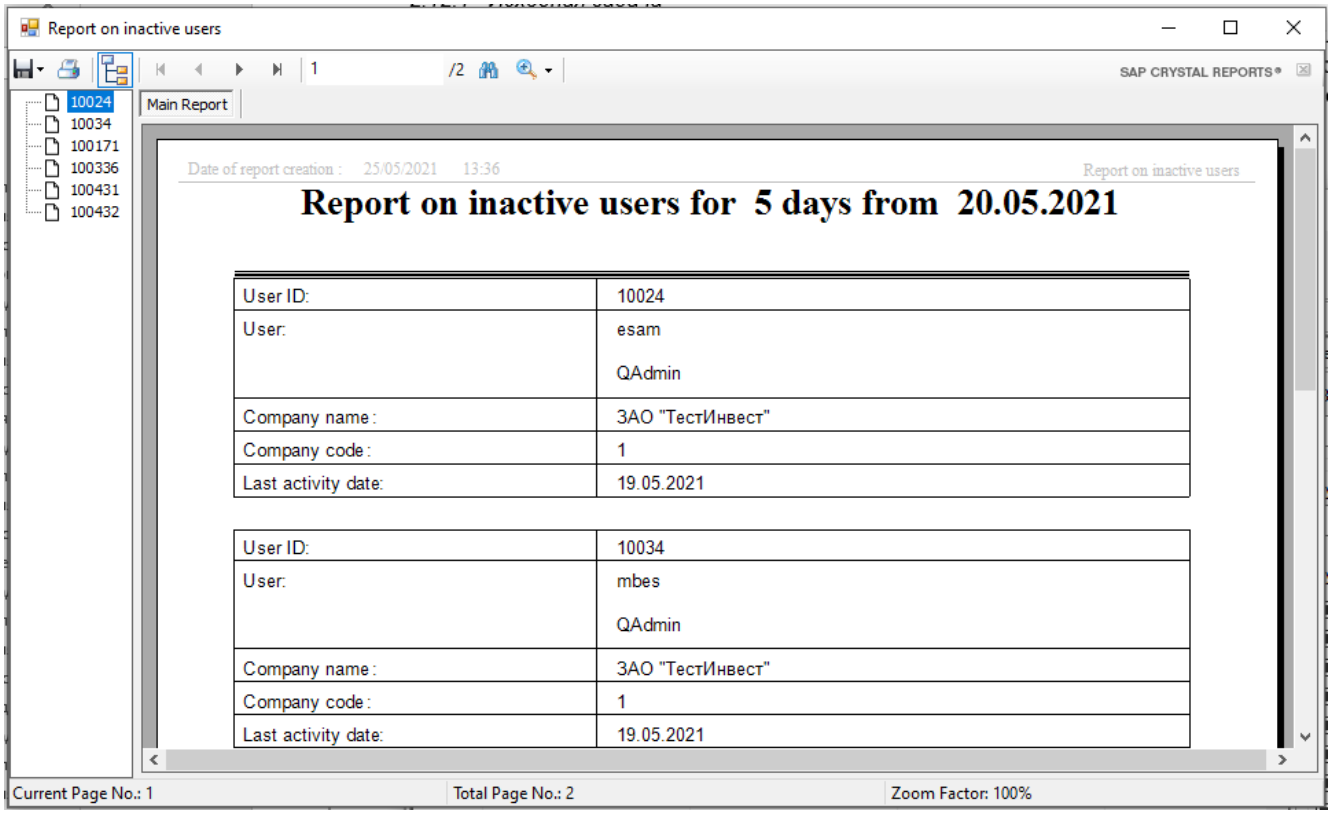


1. **Inactivity, in days** allows to enter analyzed period of user inactivity, in days. Possible values: from 1 to 365.

4.12.3Report format

The report is generated in the context of data on user inactivity for a specific trading day within the specified period.

The report is as follows:



5. Calendars

Setting up calendars to determine the transaction settlement date when keeping positions in calendar days (**Position keeping in calendar days** setting is enabled in the Limits calculation library).

5.1 Calendars

menu **QUIK server / Calendars / Calendars**

5.1.1 Purpose

The list of calendars with the dates that are exceptions to the standard calendar of settlement and non-settlement days used on the QUIK server. According to the standard calendar, settlement days are from Monday to Friday, non-settlement days are Saturday and Sunday, and exception dates set in the [settlement_date] section of the QUIK server configuration file quik.ini are considered as well.

The number of calendars with different sets of exception dates is unlimited. Calendars can be bound to classes and class groups. Currency and instrumetns to which a calendar applies can be additionally set (see 5.2).

5.1.2 Table format

The dictionary contains the following parameters:

Parameter	Description
Name	Calendar name

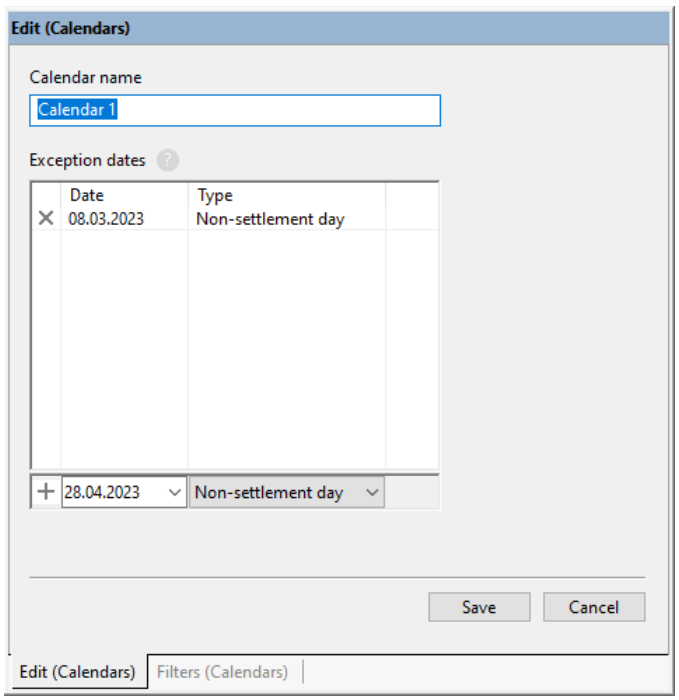
Functions available from the table shortcut menu:

1. **Add** – add a calendar.
2. **Edit** – edit parameters of a selected calendar.
3. **Remove** – delete a selected calendar.
4. **Export table** – export data from dictionary to the XLS / XLSX / CSV format file (comma-delimited).

5.1.3 Add/Edit

To add a calendar to the dictionary, select **Add** in the shortcut menu.

The calendar edit window contains the following parameters:



1. **Calendar name**. Required.
2. **Exception dates** – the list of calendars with the dates that are exceptions to the standard calendar of settlement and non-settlement days used on the QUIK server.

   To add a date to the list, specify it in the box below tha table, select the type (Settlement or Non-settlement) and click the button +. A date type can be changed in a row with a date on the list: double-click the **Type** column.

   To delete a date from the list, click the button × next to it or select **Delete** on the shortcut menu.

Click **Save** to save the settings. Click **Cancel** to cancel the changes.

5.1.4 Filters

The window contains the following parameters:

1. **By substring** – filter the dictionary records by substring in any column of the table located in the left side of the screen.
2. **By classes** – filter the dictionary records by a selected class (if the **Class** option button is selected) or class group (if the **Class group** option button is selected) considering calendar bindings to classes and groups.
3. **Clear** – reset the parameters values in the dialog.

5.2 Class groups

menu **QUIK server / Calendars / Class groups**

5.2.1 Purpose

Groups of classes to which calendars can be bound (see 5.1).

5.2.2 Table format

The dictionary contains the following parameters:

Parameter	Description
Group name	Class group name

Functions available from the table shortcut menu:

1. **Add** – add a group.
2. **Edit** – edit parameters of a selected group.
3. **Remove** – delete a selected group.
4. **Export table** – export data from dictionary to the XLS / XLSX / CSV format file (comma-delimited).

5.2.3 Add/Edit

To add a class group to the dictionary, select **Add** in the shortcut menu.

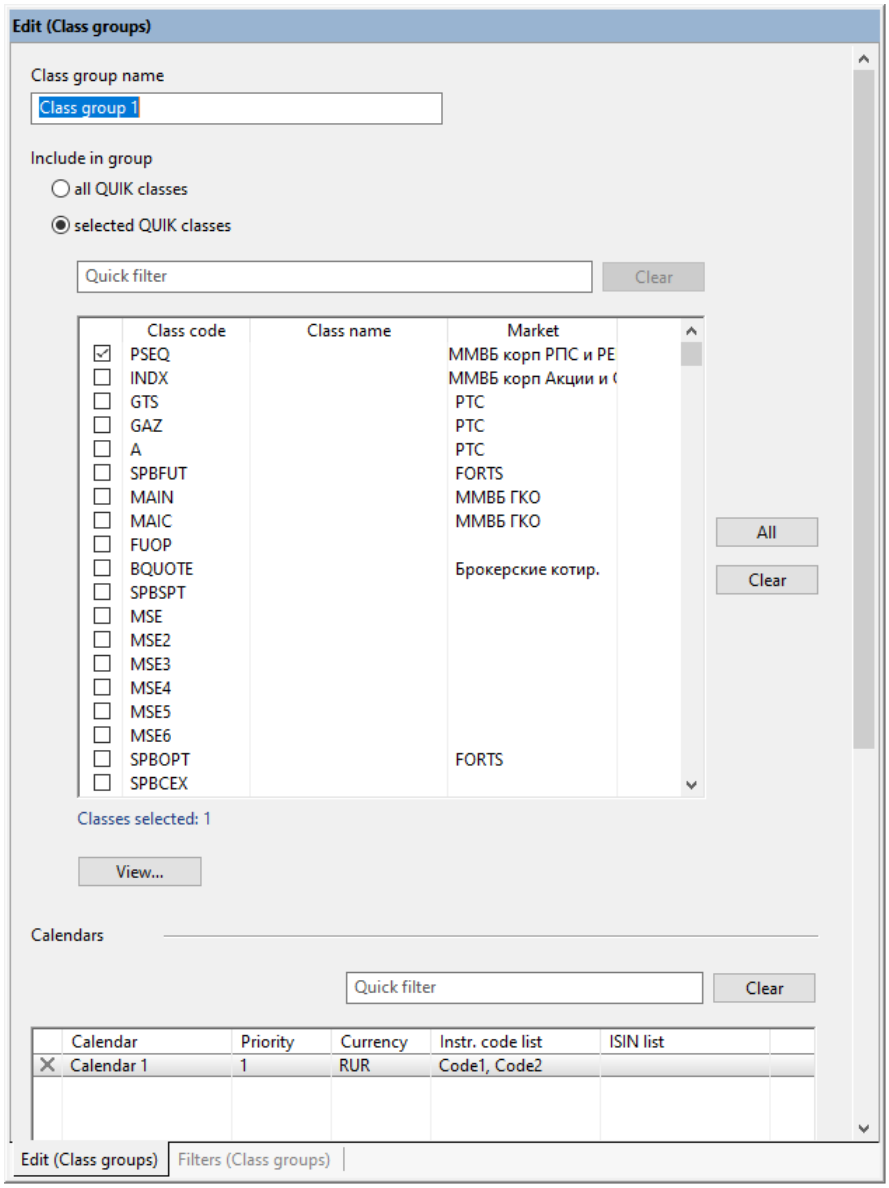
The group edit window contains the following parameters:

1. **Class group name**.
2. **Include in group**:
   - **all QUIK classes** (default) – include all classes to a group.
   - **selected QUIK classes** – include classes selected in the table to a group. For each class the table shows its code, name, and market.

     The list can be filtered by substring: enter the value in the search string above the table. To clear the search string, click **Clear**.

     To select a class, select the check box next to it. To select all classes, click the button **All**. To clear the check boxes, click **Clear**.

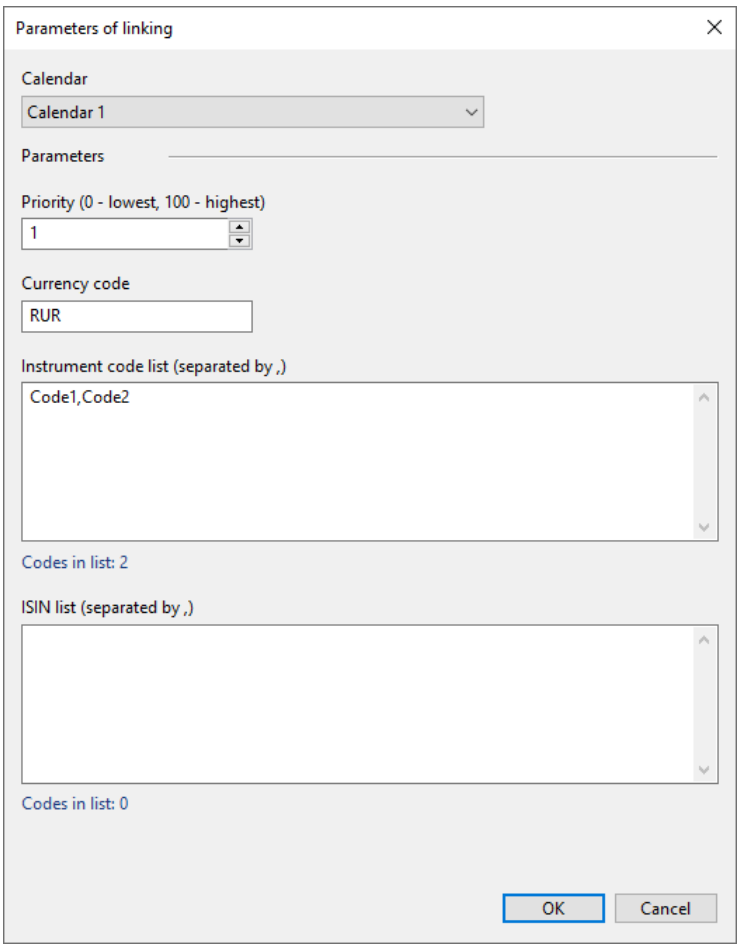
     To view the list of selected classes, click the **View** button. The list in the window that opens can be selected and copied using the **Copy** command under the shortcut menu (or Ctrl+C).



3. **Calendars** – the list of calendars bound to a group of classes. For each calendar the table shows its priority, currency, instrument codes list, and ISIN codes list (if set).

   The list can be filtered by substring: enter the value in the search string above the table. To clear the search string, click **Clear**.

   To bind a calendar to a class group, click the button **Add**. In the window that opens the following parameters are available:



- **Calendar** – a calendar from the Calendars dictionary (see 5.1).
- **Parameters** – parameters of a linked calendar:
  - **Priority** (0 – lowest, 100 – highest) – priority of using a calendar. The priority is considered if the date is set in different calendars with different day types (settlement or non-settlement). Value by default: 0.
  - **Currency code**. For FX market classes – any of currency pair currencies: underlying or quote. For other classes – settlement currency.
  - **Instrument code list (separated by ,)** – the list of instrument codes separated by commas.
  - **ISIN list (separated by ,)** – the list of ISIN codes separated by commas. A code can be specified as a prefix with "*".

  These parameters are optional.

To change the selected binding parameters, click **Edit**. To delete a binding, click the button ✕ next to it.

Click **Save** to save the settings. Click **Cancel** to cancel the changes.

5.2.4 Filters

Filtering the dictionary records by substring in any column of the table located in the left side of the screen.

6. Dictionaries

6.1 Classes

menu **QUIK server / Security classes**

6.1.1 Purpose

The dictionary is intended to edit the list of securities classes (trading modes) used in the QUIK system and to set up these classes.

This dictionary is used for setting new security classes.

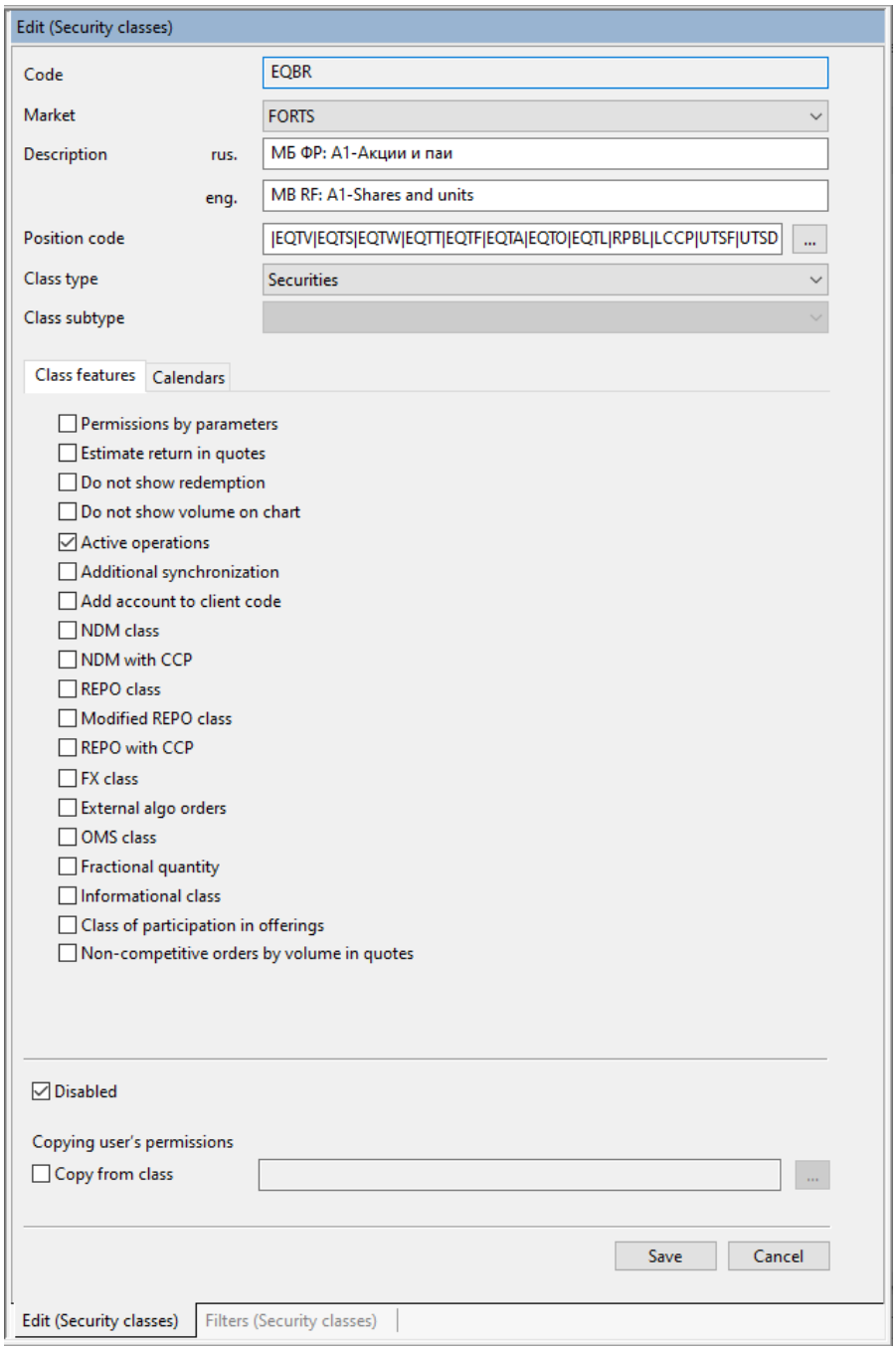
The right part of the window contains the parameters for editing and filtering the dictionary records. The left part displays the list of classes.

Functions available from the table shortcut menu:

1. **Add** – A new class;
2. **Edit** – edit a selected class;
3. **Export table** – export data from dictionary to the XLS / XLSX / CSV format file (comma-delimited).

6.1.2 Edit

Description of the class parameters:



1. **Code** – symbol code of a class. For exchange trading systems this code must coincide with the value of the class identifier in the trading system.
2. **Market** – specify what market this class belongs to.
3. **Description*** – class name.
   - rus. – enter the class name in Russian;
   - eng. – enter the class name in English.

Text fields are available regardless of the selected language.

> **(*) Names in current language selected in QUIK Administrator must be used in all dictionaries and dialogs. If a class name is not available in the selected language, name of the class is displayed in another language.**

4. **Position code** – list of cash positions codes separated by '|' symbol. List of identifiers must come in accordance with the settings of gateway transmitting cash positions on the class, as well as with settings of Limits Calculation Library keeping client positions on operations in the class. For example: |EQTV|EQTS|.

> **Before changing values in the list, it is strongly recommended to consult with the technical support of QUIK.**

5. **Class type** – select the type of class from the list:
   - Securities – securities class which includes instruments not listed in other classes. For example, shares;
   - Bonds – bonds class;
   - Futures – class of futures;
   - Options – options class;
   - Currency – classes of instruments, in which swap instruments and common currency pairs are traded at the same time;
   - Autofollow – instrument class for Autofollow Module;
   - Autochartist – instrument class for Autochartist system;
   - Algorithmic orders – instrument class for algorithmic orders;
   - OTC trades – OTC class of instruments;
   - Precious metals – precious metals class;
   - Indices – indices class;
   - Currency cross rates – class used for determining the exchange rates for currency conversion. It is used for changing the displayed currency of cost indicators;
   - Reports – instrument class for the Report Generation Module;
   - Instructions – class of non-trading instructions;
   - Swaps – class of SWAP instruments. If the class contains both SWAP instruments and currency pairs, then you must select the **Currency** class type;
   - Spreads – spread class;
   - Strategies –class of strategies;
   - OTC market – class of OTC market instruments;
   - OMS orders – instrument class of OMS orders;
   - SMS messages – instrument class for SMS messages;
   - Deposits – class of deposits;

- Investment units – class of investments units;
- Messaging – class of instruments for Messaging interface;
- QDealing system – class of the QDealing system;
- REPO basket — class of the QUIK REPO Module;
- QUIK Service Data.

6. **Class subtype** – select the subtype of class from the list. List of available subtypes of a class depends on type of this class. The subtype of class can be selected only for Swaps, Spreads and Algorithmic orders, Messaging and QUIK Service Data class types:
   - Values for **Algorithmic orders** class type:
     - Iceberg;
     - Volatility;
     - TWAP;
     - VWAP;
     - GTD/GTC orders;
     - Stop order;
     - Spread.
   - Values for **Swaps** class type:
     - Standard currency SWAP;
     - Short currency SWAP (one day);
     - Forward currency SWAP.
   - Values for **Spreads** class type:
     - Stock spread;
     - Bond spreads;
     - Futures spread;
     - Options spread;
     - Currency spread.
   - Values for **Messaging** class type:
     - Broadcast channels;
     - Support service;
     - Support group members;
     - Direct chat,
     - Inter-broker chats.
   - Values for **QUIK Service Data** class type:
     - Investment recommendations – subtype of class for the Investment recommendations module;
     - Information about clients – subtype of class for transmission data about client in the KYCStorage module;
     - Dictionaries – subtype of class for the Directory storage and distribution module;
     - Global settings storage – subtype of class for the System Settings Module;
     - FX conversion – subtype of the class to name the technological class of the FX Convertor Module.
7. **Class features** tab – setting attributes of a selected instrument class.

> **Before changing the class features, contact the QUIK support service.**

Attribute	Purpose
Permissions by parameters	Enables checking of the rights for viewing and changing parameters for this class. The option is not used
Estimate return in quotes	Calculation of return in the Level II Quotes table. It is calculated as **Best bid / offer total**. The option is not used
Do not show redemption	Turns off **Expiration date** and **Time to maturity** parameters display for these classes. Used for instruments without a maturity date, for example –shares
Do not show volume on chart	Disable default plotting of volume chart. If the attribute is enabled then price chart is plotted by default. If the attribute is disabled then price and volume chart is plotted by default
Active operations	Allows transactions for this class
Additional synchronization	Enables special procedure of the gateway's and QUIK server's data synchronization. Used only for PLAZA1 gateway
Account to client code	Client code for this class is filled by a value of the client's trading account
* NDM class	Attribute of instrument class for Negotiated deals mode. When disabling the check box, the NDM with CCP check box will be disabled
* NDM with CCP	Attribute of instrument class for Negotiated deals mode with the Central counterparty. If the check box is enabled, the NDM class attribute switches on
* REPO class	Attribute of instrument class for REPO operations
* Bonds	Bonds class attribute
* Modified REPO class	Attribute of instruments class for modified REPO operations
* REPO with CCP	Attribute of instrument class for operations in the REPO with a CCP mode
* FX class	Attribute of instrument class for FX operations
External algo orders	Attribute of instrument class for operations with algo orders
OMS class	OMS class attribute
Fractional quantity	A parameter of support for operations with fractional value of quantity. Stop orders for classes with set parameter are not available. Limitations of the option: _ Fractional quantity applies only to instruments of the stock and currency markets;

Attribute	Purpose
	_ In the Limits calculation library settings, the **Estimate positions in lots** checkbox (General library settings, Part 3) must be disabled
Informational class	Informational class attribute
Class of participation in offerings	Attribute of the class of participation in offerings
Non-competitive orders by volume in quotes	Attibute of showing non-competitive orders by volume in the Level II Quotes table

* – attributes affecting the server and Client's Workstation while working with the instruments of this class.

_ **Special class features** – setting additional attributes of a selected instrument class:

_ **Amount in the currency** – show quantity in order/trade not in lots but in currency of the trade. The attribute is used for Currency, Deposits and Precious metals classes.

8. **Calendars** tab – the list of calendars bound to a class. For each calendar the table shows its priority, currency, instrument codes list, and ISIN codes list (if set).

   The list can be filtered by substring: enter the value in the search string above the table. To clear the search string, click **Clear**.

   To bind a calendar to a class, click the button **Add** (for the window parameters, see 5.2.3). To change the selected binding parameters, click **Edit**. To delete a binding, click the button ✕ next to it.

9. **Disabled** – if enabled, the class is not displayed in the common list but not deleted from the database as well as all related information. A class is deleted from a group of classes (see 5.2); if a class is the only one within a group, this group is also deleted. This setting can be applied only to classes which are not transmitted via a gateway.

10. **Copying user's permissions** – copy the user rights from the one specified instrument class to another (see 6.1.3).

6.1.3 Copying user rights

The dictionary of classes has a special function to copy user settings for operations with one class to another. During this operation the rights of all users are copied from one specified instrument class to another one.

To copy the settings, follow these steps:

1. Select a string describing the class in the dictionary the rights will be copied to.
2. In the class edit window, enable the **Copy from class** checkbox in the **Copying user's permissions** section.

3. Select a string describing the class from which the settings will be copied (for fast searching use the search string). Click **OK**. If you want to reselect an instrument class, click "**...**".

6.1.4 Filters

The window contains the following parameters:

1. **By substring** – filter the dictionary records by substring in any column of the table located in the left side of the screen.
2. **By market** – filter the dictionary records by market selected from the list.
3. **Clear** – reset the parameters values in the dialog.

6.2 Markets

menu **QUIK server/ Markets**

6.2.1 Purpose

The dictionary is used for changing of the "markets" list. A "market" is a group of instrument classes used for simultaneous setting of user rights for classes included to this group.

This dictionary is used for adding a new group of classes.

6.2.2 Operating principle

Brokers that trade simultaneously on several trading venues can set user rights not only for classes but also for "markets". In this case, a market means a set of security classes traded on the same trading venue. The term "market" can also be used to describe a set of the corporate market classes of the Moscow Exchange excluding NDM and REPO classes.

After any market has been created in this dictionary the **Markets** mode becomes available in the user rights settings window and all connected operations for a selected market are displayed as the rights for all security classes included to the market. For further information about user rights settings, see 2.2.

6.2.3 Table format

Parameter	Purpose
Market name	Market name
Identifier in TS	Market identifier in the trading system

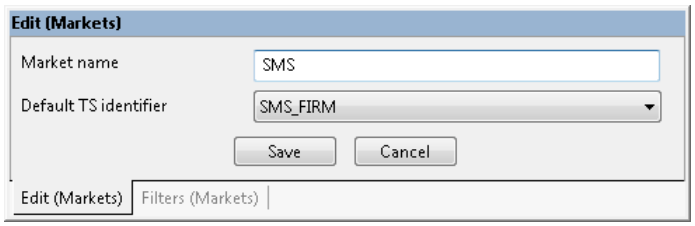
Functions available from the table shortcut menu:

1. **Add** – A new market.
2. **Edit** – edit a selected market.
3. **Remove** – delete a selected market from the dictionary.

4. **Export table** – export data from dictionary to the XLS / XLSX / CSV format file (comma-delimited).

6.2.4 Edit

The market description contains the following parameters:



1. **Market name** – name displayed in the QUIK Administrator program interface.
2. **Default TS identifier** – code (identifier) of a dealer in the exchange's trading system in a section (market) whose security classes will form a "market". For example, if you want to set up a market containing the instruments classes of the Moscow Exchange RTS Stock Exchange market shares exchange market then specify the dealer's identifier in the Moscow Exchange RTS trading system. When editing the user's rights using "markets" mode, this value is copied to the **Identifier in TS** field excluding the cases when another firm in other class that refers to the current market is selected.

6.2.5 Filters

Filtering the dictionary records by substring in any column of the table located in the left side of the screen.

6.3 Organizations

menu **QUIK server/ Organizations**

6.3.1 Purpose

The dictionary contains the list of organizations to which users or trade roles belong. The dictionary is used for setting the trade roles (see 2.5) and messaging rights (see 2.6).

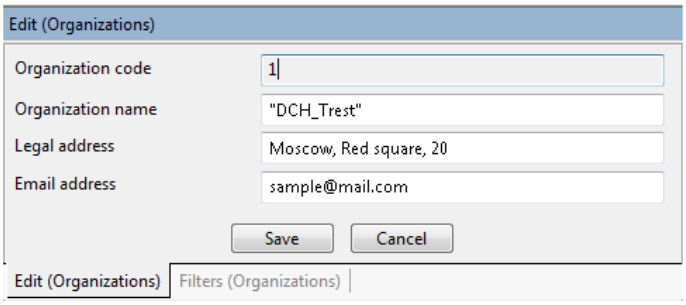
This dictionary is used for registration of new users.

The left part of the window contains the list of organizations. Functions available from the table shortcut menu:

1. **Add** – A new organization.
2. **Edit** – edit a selected organization.
3. **Remove** – delete a selected organization from the dictionary.
4. **Export table** – export data from dictionary to the XLS / XLSX / CSV format file (comma-delimited).

6.3.2 Edit

The organization description contains the following parameters:



1. **Organization code*** – unique organization code, manually filled in. A value is required for this field.
2. **Organization name** – organization name. A value is required for this field.
3. **Legal address** – organization legal address.
4. **Postal address – organization postal address**.

> **(*) Connection of users to the server and access servers can be restricted by the code of organization in rights of those users. For that configure the following parameters in section [usend_module] of QUIK server configuration file quik.ini:**

- allowed_orgcodes – list of organization codes users are allowed to connect to the server. Value by default: blank;
- disallowed_orgcodes – list of organization codes users are prohibited to connect to the server. Value by default: blank;
- <UID of access server>_allowed_orgcodes – list of organization codes users are allowed to connect to the access server. Value by default: blank;
- <UID of access server>_disallowed_orgcodes – list of organization codes users are prohibited to connect to the access server. Value by default: blank.

Blank or default value for the above settings means that the connection is permitted for all users.

Example:

```
[usend_module]
disallowed_orgcodes =1,2,3
allowed_orgcodes=3,4,5
```

If the organization code is included both to permitted and prohibited lists, the connection is ignored. Thus, restriction triggers if found the first in the settings.

If the list of permitted organizations is not empty and the organization is not included to it (for example, organization 6), the connection is prohibited.

6.3.3 Filters

Filtering the dictionary records by substring in any column of the table located in the left side of the screen.

6.4 News Agencies

menu **QUIK server/ News agencies**

6.4.1 Purpose

The dictionary contains the list of the news sources. It is used to set up the user rights for receiving news from different information agencies.

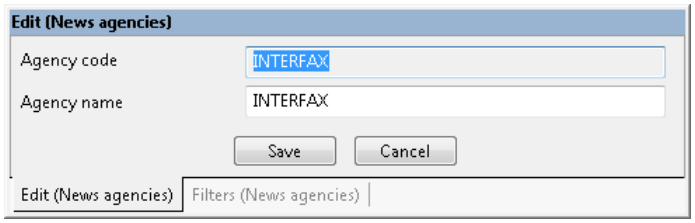
This dictionary contains a source code that must be specified in the news gateway's settings.

The left part of the window contains the list of news agencies. Functions available from the table shortcut menu:

1. **Add** – A new agency.
2. **Edit** – edit a selected agency.
3. **Remove** – delete a selected agency from the dictionary.
4. **Export table** – export data from dictionary to the XLS / XLSX / CSV format file (comma-delimited).

6.4.2 Edit

The news agency description contains the following parameters:



1. **Agency code** – news source identifier used to configure the gateway.
2. **Agency name** – news source name displayed to users.

Values by default:

Agency	Code	Name
MFD-InfoCenter	MFD	MFD
Prime-TASS	PTASS	Prime-TASS
Interfax	INTERFAX	Interfax

6.4.3 Filters

Filtering the dictionary records by substring in any column of the table located in the left side of the screen.

6.5 Active users

menu **QUIK server/ Active users**

6.5.1 Purpose

Viewing the list of users currently connected to QUIK Administrator.

The ability to disable users is available for users with the QAdmin administrator rights.

6.5.2 Table format

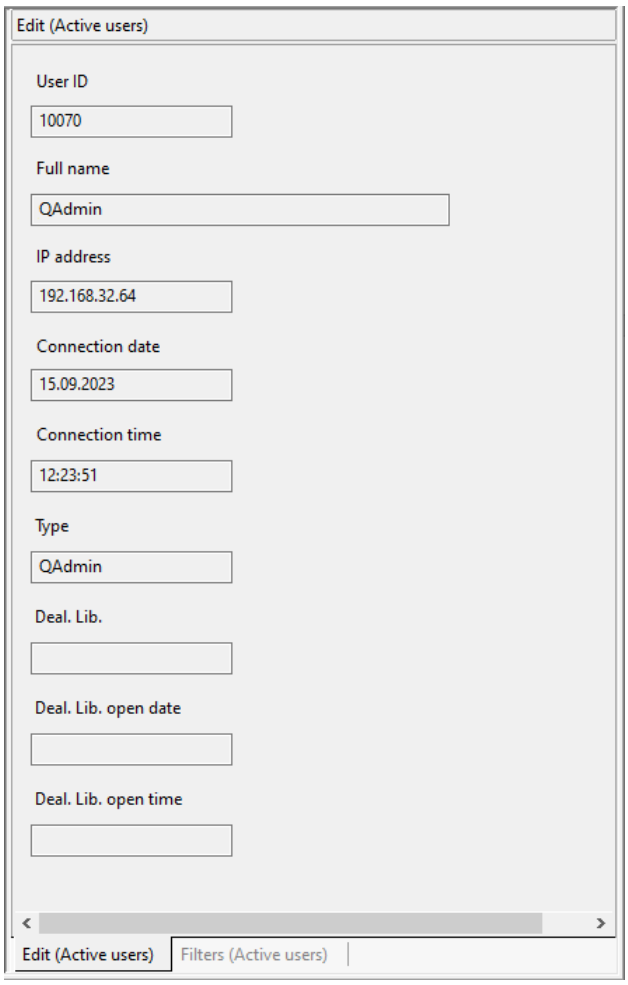
Parameter	Purpose
User ID	User identifier
Last name	User last name
First name	User first name
Middle name	User middle name
IP-address	IP address of current connection
Date and time of connection	Date and time of user connection by server time
Type	Type of user connection. Possible values: _ QAdmin – user connect through QAdmin client; _ QDealerAPI – user connect through QDealerAPI interface
Deal. Lib.	Identifier of user in the trading system who opened the Limits calculation library
Deal. Lib. open date and time	Date and time of the server when the Limits calculation library was opened

Functions available from the table shortcut menu:

1. **Disconnect** – forced disconnection of the user from the QAdmin server. The forced disconnected user record is removed from the table. Function is not available for the current user.

6.5.3 Edit

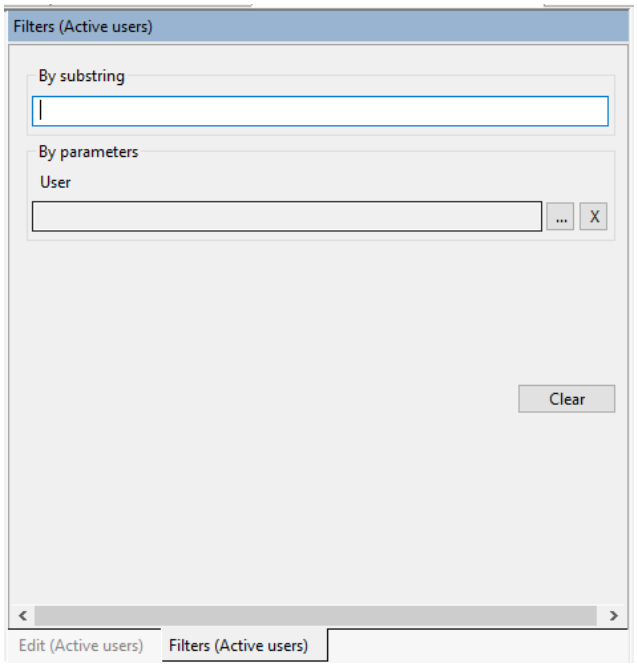
The edit dialog box contains the following parameters:



For the parameter descriptions see 6.5.2.

6.5.4 Filters

The Filters tab contains boxes for filtering the list of users in the dictionary:



1. **By substring** – filter the dictionary records by substring in any column of the table located in the left side of the screen.
2. **By parameters**:
   - **User** — data on the selected user, click the "..." button to open the **List of users** dictionary to select any QUIK server user who has administrative access to QUIK Administrator (not only in this dictionary). Users who have trade access in QUIK Administrator are not displayed in the list. The field is unavailable for editing. The X button clears the line and resets the filter by user.
3. **Clear** – reset selected values of the filter.

7. Rights on QUIK modules

> **The settings of an individual user (see 2.3.6) take precedence over the global settings.**

7.1 Client modules

menu **QUIK server/ Client modules**

7.1.1 Purpose

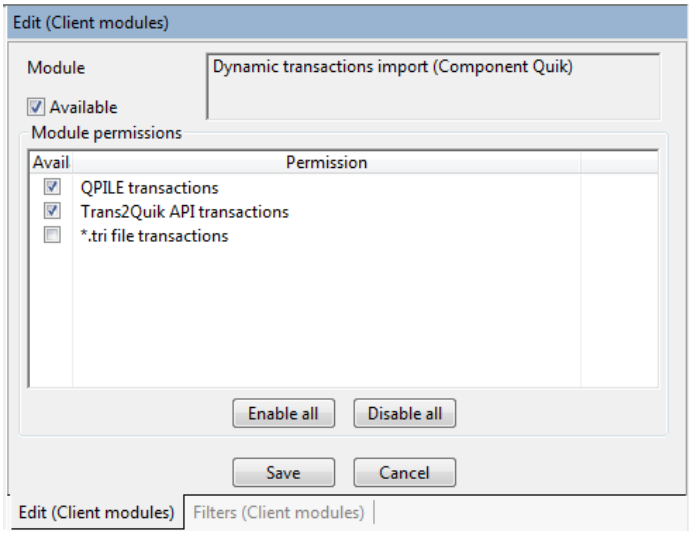
This option is used for setting the rights on modules (QUIK system's plugins and applications) for all users of the QUIK system.

The left part of the window displays the list of modules and their availability for users of the QUIK system. Functions available from the table shortcut menu:

1. **Edit** – edit the rights on a module.
2. **Enable all** – make all modules from the list available to all users of the QUIK system.
3. **Disable all** – make all modules from the list unavailable to all users of the QUIK system.

The right part contains the parameters for editing and filtering the dictionary records.

7.1.2 Edit



Description of the window fields:

1. **Module** – module name. The module type is given in parentheses.
2. **Available** – attribute of module availability for users of the QUIK system.
3. **Module permissions** – contains the list of special rights and settings to be translated by a selected module and allows granting the QUIK system users permissions to use them. The rights are selected using checkboxes.

   This table describes special rights and settings of modules:

Module	Right	*Description
TrustManager (QUIK application)	Disable checking orders for TrustManager's restrictions	The check of orders submitted using QUIK workstation for compliance with the restrictions set in TrustManager is disabled
	Allow orders that will improve partially violated restrictions	If a restriction is violated, an order can be placed if its execution improves the state of a violated restriction
PocketQUIK (QUIK application)	'Active operations' for Android mobile terminals	Sending of orders using the QUIK terminals on the devices under Android operating system is allowed
Non-trade instructions module (plugin)	Disallow viewing of state of the signatures	Non-trade instructions table does not contain the columns showing the authorized employees' signatures
Dynamic transactions import (Component QUIK)	QPILE transactions	Use of transaction import from modules and files is allowed
	Trans2QuikAPI transactions	
	*.tri file transactions	

* — This is a description of the Module operation when the check box is enabled.

When clicking **Enable all / Disable all** all modules from the list become available / unavailable for all users accordingly.

Click **Save** to save the changes. Click **Cancel** to close this window without saving changes.

7.1.3 Filters

Filtering the access servers by substring in any column of the table located in the left side of the screen.

7.2 Technological modules

menu **QUIK server/ Technological modules**

7.2.1 Purpose

This option is used for setting the rights on technological applications for all users of the QUIK system.

The left part of the window displays the list of applications and their availability for users of the QUIK system. Functions available from the table shortcut menu:

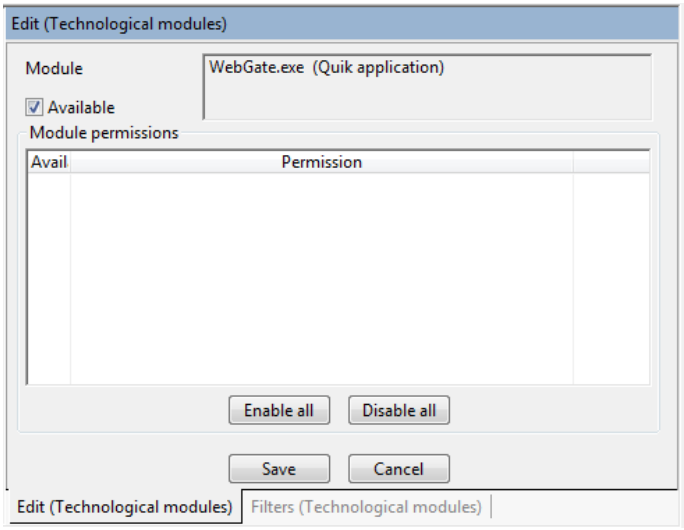
1. **Edit** – edit the rights on an application.
2. **Enable all** – make all applications from the list available to all users of the QUIK system.
3. **Disable all** – make all applications from the list unavailable to all users of the QUIK system.

The right part contains the parameters for editing and filtering the dictionary records.

7.2.2 Edit

Description of the window fields:

1. **Module** – application name. The application type is given in parentheses.
2. **Available** – attribute of application availability for users of the QUIK system.
3. **Module permissions** – contains the list of special rights and settings to be translated by a selected application and allows granting the QUIK system users permissions to use them. The rights are selected using checkboxes.



When clicking **Enable all / Disable all** all applications from the list become available / unavailable for all users accordingly.

Click **Save** to save the changes. Click **Cancel** to close this window without saving changes.

7.2.3 Filters

Filtering the access servers by substring in any column of the table located in the left side of the screen.

8. Limits on the number of connections

8.1 Limit on access server connections

menu **QUIK server/ Access server connections limit**

8.1.1 Purpose

This option is used to set a limit to the maximum number of concurrent user connections to a specific access server.

The maximum number of users using simultaneously the same access server can be limited for each access server that is connected to the main QUIK server. If the number of user connections to the access server exceeds a specified value then the user will receive a notification 'Access locked by administrator'.

A limitation can be set and changed during a server operation. It is used to restrict heavy load on the access server.

The left part of the window shows the list of access servers as a table. The right part of the window shows the parameters for editing and filtering the table rows.

8.1.2 Table format

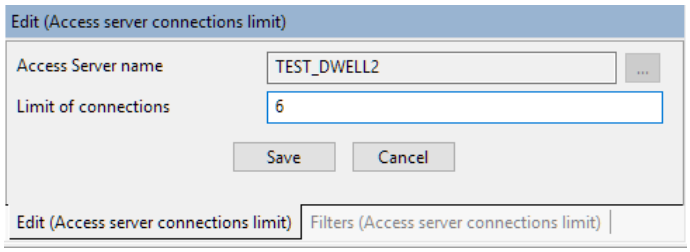
The table columns display the following information:

Parameter	Description
Access Server ID	Access Server identifier
Access Server name	Name of the user who is an Access Server
Limit connections	Maximum number of concurrent user connections to this access server

Functions available from the table shortcut menu:

1. **Add** – A new access server.
2. **Edit** – edit the restrictions.
3. **Remove** – delete the restrictions.
4. **Export table** – export data from dictionary to the XLS / XLSX / CSV format file (comma-delimited).

8.1.3 Edit



Restriction parameters:

1. **Access Server name** – access server name in the list of users. Cannot be edited. Click **'...'** and select the access server from the list.
2. **Limit of connections** – maximum number of concurrent user connections to this access server.

8.1.4 Filters

Filtering the access servers by substring in any column of the table located in the left side of the screen.

8.2 Limit on organizations connections

menu **QUIK server / Organizations connections limit**

8.2.1 Purpose

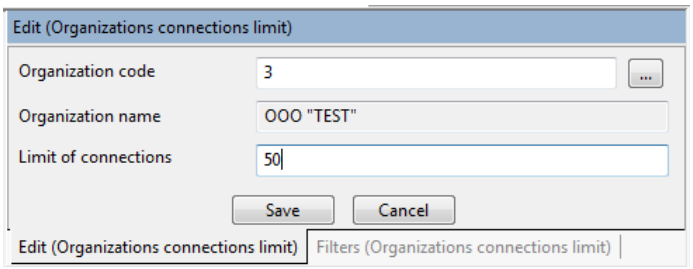
This option is used to set a limit to the maximum number of concurrent connections of users from the same organization to the QUIK server. It is used to manage the use of available connections by sub brokers.

This restriction is similar to a simple restriction on users but in this case the QUIK server checks the number of users from the same organization (from the **Organizations** dictionary) connected to the main server as well as to access servers and cannot connect new users when a preset number of connections is reached. If the limit is exceeded then the user will receive a notification 'Access locked by administrator'. A limitation can be set and changed during a server operation.

The left part of the window contains the list of organizations. Functions available from the table shortcut menu:

1. **Add** – A new organization.
2. **Edit** – edit the restrictions.
3. **Remove** – delete the restrictions.
4. **Export table** – export data from dictionary to the XLS / XLSX / CSV format file (comma-delimited).

8.2.2 Edit



Restriction parameters:

1. **Organization code** – unique organization code that is selected from the dictionary. A value is required for this field. Can be edited when adding a new restriction.
2. **Organization name** – organization name. The field is populated automatically when selecting the organization code from the dictionary. A value is required for this field. Cannot be edited.
3. **Limit of connections** – maximum number of concurrent connections of users from this organization to the QUIK server. This value includes the connections to the access servers.

8.2.3 Filters

Filtering the organizations by substring in any column of the table located in the left side of the screen.

9. Data export

9.1 Export of correspondences between client codes and user identifiers

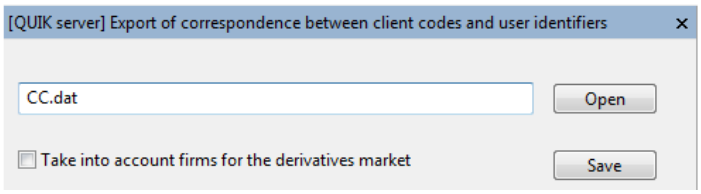
menu **QUIK server / Export/Import/ Save UIDs and client codes**

9.1.1 Purpose

This option is used to export correspondence between client codes and user identifiers (UID). Text files containing UID are used by CoLibri program to send notifications to the QUIK system users.

9.1.2 Configuration

Specify the path and name of the file for data storing. The file must have .dat extension. The field can be manually filled; otherwise, click **Open**, type the file name in the opened window and select a folder to save to.



Default file name is .\CC.dat.

The file is formed by match strings **Client code = UID_1, ... , UID_n**.

If the **Take into account firms of the derivatives market** checkbox is checked, unique **Client code, Firm code = UID_1, ... , UID_n** pairs will be exported for accounts of the derivatives market. If the checkbox is unchecked, a firm code will be ignored when searching for matches.

Click **Save** to save the data to a file.

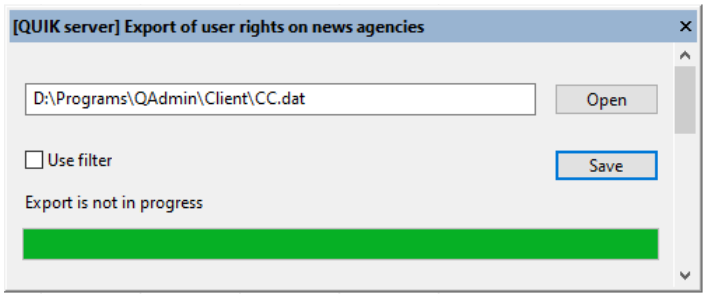
9.2 Export of user rights on news agencies

menu **QUIK server / Export/Import / Save rights on news agencies**

9.2.1 Purpose

This option is used to export the user rights on news agencies to a text file.

9.2.2 Configuration



Specify the path and name of the file for data storing. The file must have .dat extension. The field can be manually filled; otherwise, click **Open**, type the file name in the opened window and select a folder to save to.

Default file name is .\NA.dat.

The file is formed by match strings **Client code = NA_1, ... , NA_n**, where NA if a news agency.

If the **Use filter** checkbox is checked, the news agencies for which you want to view the information in the report are available for selection. The news agencies are selected by enabling the required checkboxes. If the **Use filter** checkbox is unchecked, the report will be formed for all news agencies.

Click **Save** to save the data to a file.

10.Data import

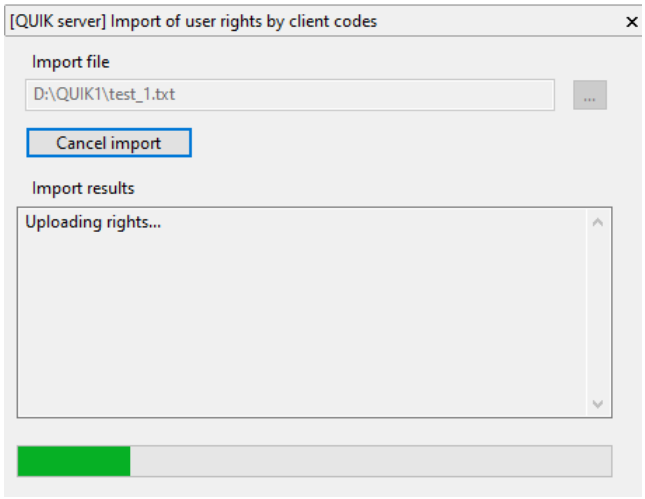
The data import is used to automatically set up the rights of users whose rights were formed by another program and transmitted as a text file. This functionality can be used in the following cases:

- Import of user rights by client codes – loading correspondences between user identifiers (UID) and client codes. This is equivalent to setting the **Code dealer** field in the **Users** dictionary for a selected instrument class;
- Import of user rights on news agencies – loading correspondences between user identifiers (UID) and news agencies codes. This is equivalent to clicking the **Agencies...** button in the **Users** dictionary.

10.1 Import of user rights by client codes

menu **QUIK server / Export/Import / Load UIDs and client codes**

10.1.1 Configuration



Specify a path to the file being downloaded in the **Import file** box. The field can be manually filled; otherwise, click **'...'** to select the file.

When clicking **Start import** the data is loaded from the specified file. To cancel import, click **Cancel import**.

When import is completed, the number of successfully and unsuccessfully processed codes is shown in the **Import results** box. If there are unsuccessfully processed codes, the Import results window opens in which the number of successfully processed codes as well as the number of unsuccessfully processed codes and their list are shown.

Multiple users cannot import rights simultaneously on the same server.

10.1.2 File format

File being imported must have the following structure:

```
[Add]
6_TQBR=1287, 1288/1, 1288/2
6_TQBS=100,101,102,103
[Remove]
6=1200
6_TQBR=1201
```

The client codes to be added are specified in the [Add] section (separated by commas); the ones to be deleted are specified in the [Remove] section.

If the file contains [Update] section then all previously specified correspondences between user identifiers (UID) and client codes will be deleted and substituted by those specified in this section.

```
[Update]
```

```
6_TQBR=1234, 1234/1, 1234/2
6_TQBS=200,202,203,205
```

If the import file contains sections of different types then the commands will be executed in the following order: [Remove], [Update], [Add].

File line has the following view:

```
“user_UID”_”Class code”=”list of client codes separated by commas”
```

When specifying client codes that contain literals, consider using exact casing.

When deleting a client code, a class code can be omitted. For example, the line:

```
6=1200
```

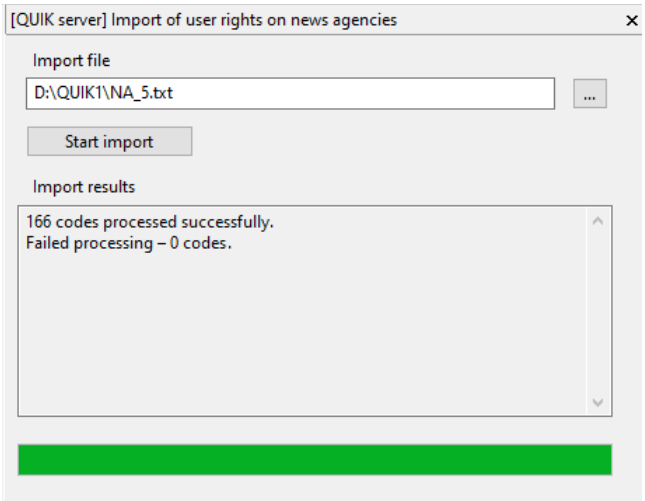
means that the client code 1200 will be deleted for all instrument classes for the user with UID=6.

> **For each link of “user_UID”_”Class code” only one list of client codes can be specified. All repeats are ignored.**

10.2 Import of user rights on news agencies

menu **QUIK server / Export/Import / Load rights on news agencies**

10.2.1 Configuration



Specify a path to the file being downloaded in the **Import file** box. The field can be manually filled; otherwise, click **'...'** to select the file.

When clicking **Start import** the data is loaded from the specified file. To cancel import, click **Cancel import**.

When import is completed, the number of successfully and unsuccessfully processed codes is shown in the **Import results** box. If there are unsuccessfully processed codes, the Import results window opens in which the number of successfully processed codes as well as the number of unsuccessfully processed codes and their list are shown.

Multiple users cannot import rights simultaneously on the same server.

10.2.2File format

File being imported must have the following structure:

```
[General]
AutoAddViewNews=1
[Add]
40=MFD
[Remove]
65=PTASS,RBC
```

Setting AutoAddViewNews of [General] section is intended to set up the attribute of automatic assigning users by the right of viewing news. If the attribute is enabled (value '1'), all users with established rights to any news agencies are automatically assigned by rights to view news. The attribute is disabled by default (value '0').

The rights for viewing news to be granted are specified in the [Add] section; the rights to be revoked are specified in the [Remove] section. File line has the following view:

```
"user_UID"="list of news agencies separated by commas"
```

11.Audit log

menu **Audit / Log**

11.1 Purpose

The Audit log is intended for:

- Viewing the event log;
- Searching and selecting values by a condition;

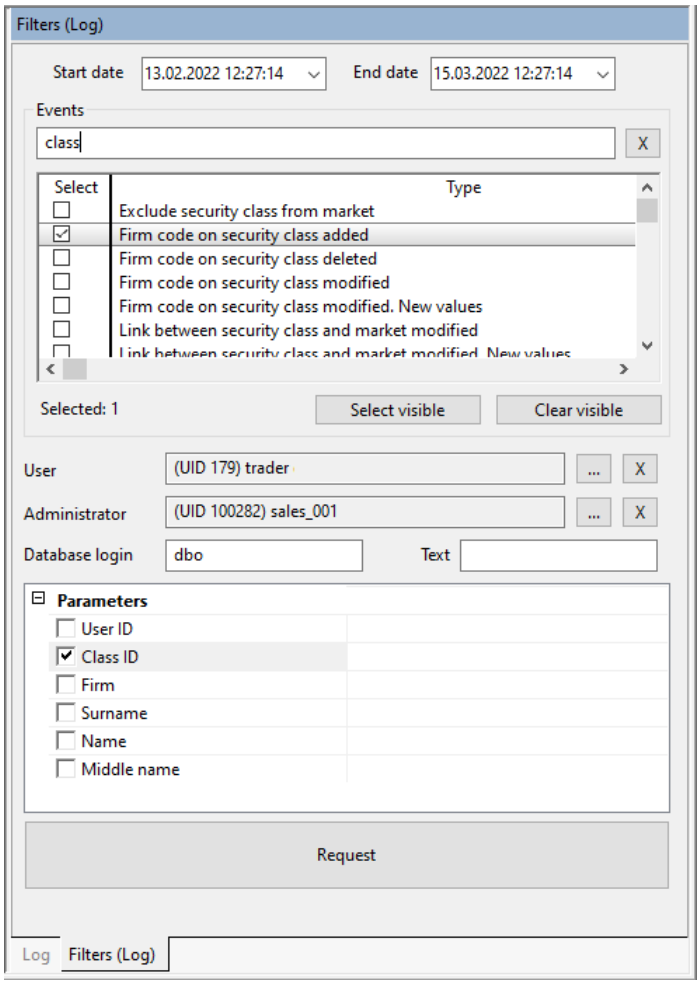
- Viewing the results of an operation;
- Saving request results to file.

The table displays the list of audit events. The Log tab displays the parameters of the selected event and audit log filter. The log is created as result of event request in the Filter (Log) tab.

11.2 Request parameters

The set of conditions for selecting data in the event log is specified on the Filter (Log) tab.

The following parameters can be specified in the filter:



1. **Start date, End date** – filter the events to be displayed by their registration date and time. The date and time of period start and date are to be specified. By default a month before the current date is selected. To change the date, select a field by the cursor (for example, the month number) and type a new value.
2. **Events** – select the event types to be displayed in the log. To select an event type set a checkbox in the **Select** column.

   The list of event types available for selection can be filtered by a substring. The value is entered in the search box above the event types table. To clear the search box click X.

To select all the event types displayed in the table considering the substring filter click on the **Select visible** button. To cancel the selection click on the **Clear visible** button.

The number of records selected is displayed under the table on the left side: Selected:<…>.

To create the log at least one event type must be selected.

For the full list of event types with their parameters see APPENDIX 1.

3. **User** – full name and ID of the user, to which the event refers. To clear the box click X.
4. **Administrator** – full name and ID of the administrator, who made the data base modification or other operation in the QUIK Administrator or QDealerAPI programs. To clear the box click X.
5. **Database login** – login of MS SQL server database user, on behalf of which the record in the event log was made.
6. **Text** – the box is intended for entering a text string, which the needed event message contains.
7. **Parameters** – the values of additional string event parameters. The parameters are available, when only one event type is selected. Mark the checkboxes of parameters to be included into search and enter the search value.

Click **Request** to launch the log event searching according to the parameters specified.

11.3 View request results

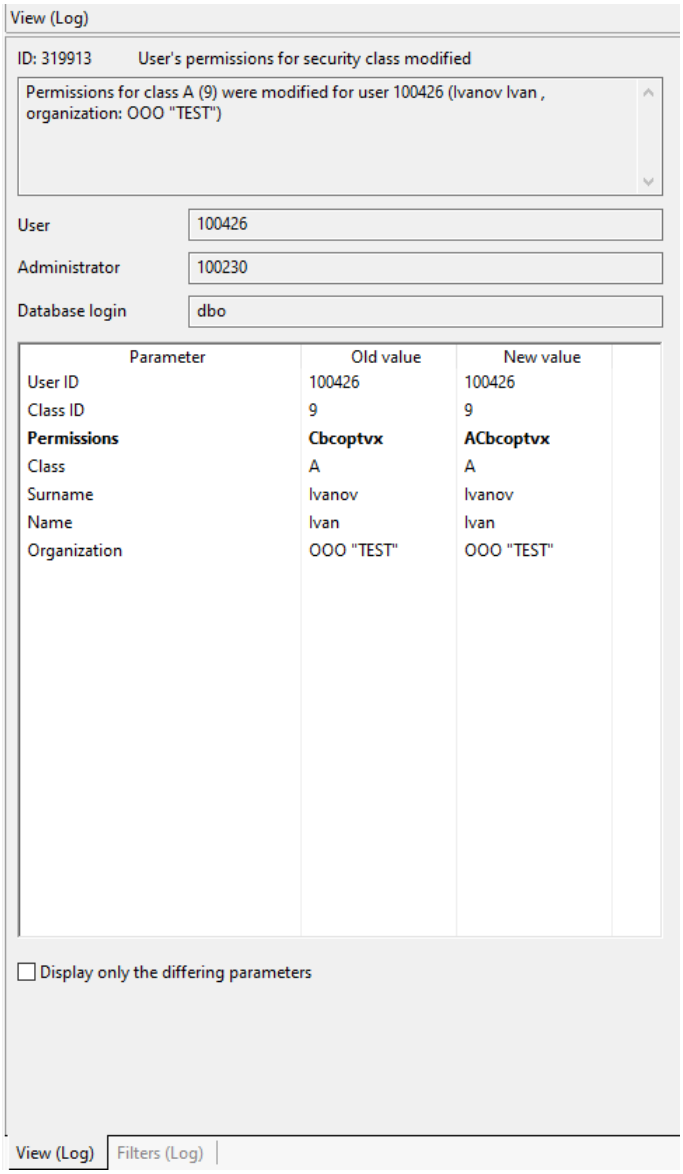
The request result is displayed in the table. The following parameters are displayed in the table columns:

1. <Event number> – the sequence number of the event in the table;
2. **ID** – event identifier in the audit log;
3. **Date/time** – event registration date and time;
4. **Administrator** – ID of administrator, who made the modification;
5. **User** – ID of the user, to which the event refers;
6. **Message** – event text description.

Under the table's shortcut menu the following events are available:

- **Copy** – copy the data of the selected string;
- **Export table** – export log data to an XML file.

Data on the selected event is displayed on the **Log** tab:



1. Event type;
2. Event text description;
3. **User** – ID of the user, to which the event refers;
4. **Administrator** – ID of administrator, who made the modification;
5. **Database login** – login of MS SQL server database user, on behalf of which the record in the event log was made;
6. The table of the parameter values of the selected event:
   - Parameter – the parameter name;
   - New value – the value of the current event parameter, specified when adding a record.

If a parameter modification was made as a result of the event (for example, user settings were modified), then the following column is additionally displayed:

- Old value – the parameter value before its modification.

Parameters that have been modified are shown in bold type.

7. The **Display only the differing parameters** checkbox – if the checkbox is selected, only parameters that have been changed are displayed in the parameter values table for the event. If the parameter values have not been changed, the checkbox cannot be edited.
8. The **Compare** button is available for the **Settings of Limits calculation library modified** event type and opens a window for the event selected in the event table, to view the contents of the Limit calculation library settings file at the time of its opening and after saving the changes. The changed strings are highlighted in color:
   - Green – added strings;
   - Yellow – edited strings;
   - Red – deleted strings.
9. The **Preview** button opens a window for viewing the contents of the settings file of the Limit calculation library for the event selected in the table:
   - For the **Limits Calculation Library settings opened for editing** event type, the content of the file is displayed at the time of its opening;
   - For the **Settings of Limits calculation library modified** event type, the content of the file is displayed after saving the changes.

APPENDIX 1. Audit event types

The program processes the following audit event types:

Event type	Event description	Parameters
User blocked	Blocked attribute was enabled (QUIK Administrator program, menu QUIK server / Users)	User ID – user identifier; Surname – user surname; Name – user name; Middle name – user middle name; Individual ID – individual identifier; Organization – firm name
Two-factor authentication	User passed two-factor authentication	User ID – user identifier; IP address – IP address; Authentication type – identifier; Result – authentication result; Application – digital application code; Application type – application type; OS – operational system type; Browser version – browser version used; Authentication – authentication type:

Event type	Event description	Parameters
		_ RADIUS; _ Active Directory; _ QUIK; _ RSA. If there is no need in authentication, then No value is displayed; Scenario – scenario of authentication used; Additional information – scratch card identifier and codes
Access server administrator added	A user with Access server management permissions was added (QUIK Administrator program, menu QUIK Server / Server management)	Access server ID – list of access server identifiers; User ID – user identifier; Surname – user surname; Name – user name; Middle name – user middle name; Server name – list of access server names
User record added	A new user record was added (QUIK Administrator program, menu QUIK Server / Users)	User ID – user identifier; Individual ID – individual identifier; Permissions – the set of user permission attributes; Attorney begin time – attorney start date; Attorney end time – attorney end date; Authentication type – authentication type used; Authentication ID – authentication type identifier: _ 1 – RSA SecurID; _ 2 – QUIK; _ 3 – Active Directory; _ 4 – RADIUS. Surname – user surname; Name – user name; Middle name – user middle name; Organization – firm name
Security class added	A new class was added (QUIK Administrator program, menu QUIK server / Security classes)	Class ID – class identifier; Code – class code; Flags – parameter is not used; Description – class description; Settlement code – the list of settlement tags; Description eng. – class name in English;

Event type	Event description	Parameters
		Subtype – class subtype; Marks – the set of class attributes; Extended marks – the set of special class attributes
Client added	A client was added to the firm messages distribution list (QUIK Administrator program, menu QUIK server / Users, Common rights tab, Send messages attribute)	User ID – user identifier; Organization ID – organization identifier; Surname – user surname; Name – user name; Middle name – user middle name; Broker – firm name
Verba key added	A new Verba key was added (menu QUIK Server / Security / Verba OW keys)	User ID – user identifier; Key ID – key identifier; "Revoked" mark – status of the Revoked attribute (n – cleared; y – checked); Surname – user surname; Name – user name; Middle name – user middle name
RSA key added	A new RSA key was added (menu QUIK Server / Security / QUIK keys)	Key ID – key identifier; Individual ID – user identifier; Key ID – key serial number; "Secret" mark – the parameter is not used; Key length – key size in bits; Key creation time – key creation date; "Revoked" mark – status of the Revoked attribute (n – cleared; y – checked); Surname – user surname; Name – user name; Middle name – user middle name
Crypto Pro key added	A new Crypto Pro key was added (menu QUIK Server / Security / CryptoPro keys)	User ID – user identifier; "Revoked" mark – status of the Revoked attribute (n – cleared; y – checked); Certificate serial number – serial number of the certificate assigned to user; Certificate issuer – certification authority, which issued the certificate; Certificate owner – certificate owner; Cipher – attribute, which indicates that the key is used to encrypt data transmitted between user and broker's server; Checksum – key checksum; Type – key type:

Event type	Event description	Parameters
		_ verba; _ KA; _ signalcom; _ cspsspi; _ eusicex; _ cryptopro; _ bicrypt
Client code on the dealer's side added	A value was added to the **Client code on the dealer's side (separated by ,)** field (QUIK Administrator program, menu QUIK server / Users, Classes permissions tab)	User ID – user identifier; Class ID – class identifier; Client code – client code on the dealer's side; Surname – user surname; Name – user name; Middle name – user middle name
Firm code on security class added	A value was added to the **Firm code** field (QUIK Administrator program, menu QUIK server / Users, Classes permissions tab)	User ID – user identifier; Class ID – class identifier; Firm – firm code; Surname – user surname; Name – user name; Middle name – user middle name
Two-factor authentication settings added to application	Viewing two-factor authentication settings for application (QUIK Administrator program, menu QUIK server / Security / Two-factor authentication)	Application ID – application identifier; Authentication type – authentication type identifier; Authentication scenario – authentication scenario
Two-factor authentication settings added to user	Two-factor authentication settings were added to user (QUIK Administrator program, menu QUIK server / Users, Security tab, Two-factor authentication settings frame)	User ID – user identifier; Application – application, to which user authenticates; Authentication type – authentication type identifier; Authentication scenario – authentication scenario; User full name – user full name
New QAdmin administrator added	QAdmin Administrator attribute was enabled for a user (QUIK Administrator program, menu QUIK server / Server management)	User ID – user identifier
News agency added	A new news agency was added (QUIK Administrator program, menu QUIK server / News agencies)	Code – agency code; Agency ID – agency identifier

Event type	Event description	Parameters
Letter of attorney on market was added to user	An authorization on market was added to user (QUIK Administrator program, menu QUIK server / Users, By markets and codes setting)	User ID – user identifier; Market ID – market identifier; Attorney begin time – attorney start date; Attorney end time – attorney end date; Surname – user surname; Name – user name; Middle name – user middle name; Market – market name
User added to QAdmin user's role	A user was added to QAdmin user's role (QUIK Administrator program, menu System / Options / Settings, Administrative roles, Users tab)	Role ID – role identifier; Role – role name; User full name – user full name; User ID – user identifier
Permission for module added to QAdmin user's role	Permission for module was added to QAdmin user's role (QUIK Administrator program, menu System / Options / Administrative roles, Modules tab)	Role – role name; Role ID – role identifier; Module – module / setting name: _ Deny all; _ Allow accessing; _ Allow modifying
Permission for class added to QAdmin user's role	Permission for class / setting was added to QAdmin user's role (QUIK Administrator program, menu System / Options / Administrative roles, Classes permissions tab)	Role ID – role identifier; Role – role name; Class – class name; Class code – class code
Permission for permission assigning for security class added	The event is not used	
User's permission for security class added	User's permission for security class was added (QUIK Administrator program, menu QUIK server / Users, Classes permissions tab)	User ID – user identifier; Class ID – class identifier; Permissions – the set of user permission attributes; Class – class code; Surname – user surname; Name – user name; Middle name – user middle name; Organization – organization name
QAdmin user's role added	A user's role was added (QUIK Administrator program, menu System / Options / Settings, Administrative roles)	Role ID – role identifier; Role – role name

Event type	Event description	Parameters
Market added	A new market was added (QUIK Administrator program, menu QUIK server / Markets)	Market ID – market identifier; Name – market name; Default broker identifier – default broker identifier in the trading system
Correspondence between user and broker added	The event is not used	
Correspondence between user and RSA key owner added	A record was added to the **Logins for another authorization system** table (QUIK Administrator program, menu QUIK server / Security / Logins for another authorization system) or assignment of access by login and QUIK or webQUIK password (QUIK Administrator program, menu QUIK server / Users, Security tab, Access to QUIK and Access to webQUIK attributes)	User ID – user identifier; Key owner – login; Surname – user surname; Name – user name; Middle name – user middle name
Individual added	A new record of individual was added (QUIK Administrator program, menu QUIK server / Users)	Individual ID – individual identifier; Organization ID – organization identifier; Name – user name; Middle name – user middle name; Surname – user surname; Phone – phone number; Address – address; Email – email address; Note – text comment; Organization – organization name
Record of legal entity added	A new organization was added (QUIK Administrator program, QUIK server / Organizations)	Legal entity ID – organization identifier; Code – organization code; Name – organization name; Legal address – organization legal address; Email – organization email address
User domain authentication	User passed domain authentication	User ID – user identifier; IP address – IP address; Login – authentication login; Result – authentication result
Password delivery method (two-factor authentication) set up	A new method of password for two-factor authentication delivery method was set up (QUIK Administrator program, menu QUIK server / Users, Security tab,	User ID – user identifier; Delivery method ID – password delivery method identifier: _ 1 – get password by email;

Event type	Event description	Parameters
	Authentication by login and password frame, **Custom** button)	_ 2 – get password by SMS; _ 3 – request password from broker by phone with code word; Email – email address, to which the password is sent; Phone – phone number, to which the SMS with password is sent; Code word – the code word that identifies a client, when he requests additional password from broker by phone; Surname – user surname; Name – user name; Middle name – user middle name
Connection from IP address prohibited	Delete an IP address from the list of allowed IP addresses (QUIK Administrator program, menu QUIK server / Users, Security tab, IP addresses box)	User ID – user identifier; IP address – IP address; Surname – user surname; Name – user name; Middle name – user middle name
Nonexistent key requested	The connection under the QUIK keys, which are not registered on the server or revoked, was requested	Key ID – key identifier
*Access server administrator record modified	Parameters of the user with Access server management permissions were modified (QUIK Administrator program, menu QUIK server / Server management)	Access server ID – list of access server identifiers; User ID – user identifier; Surname – user surname; Name – user name; Middle name – user middle name; Server name – list of access server names
*Settings of QUIK two-factor authentication modified	Settings of two-factor authentication were modified (QUIK Administrator program, menu QUIK server / Users, Security tab, Authentication by login and password frame, **Custom** button)	User ID – user identifier; Validity – the number of days, during which additional password will not be requested for two-factor authentication, if a user does not change connection settings; Surname – user surname; Name – user name; Middle name – user middle name

Event type	Event description	Parameters
*User's letter of attorney on market modified	Parameters of authorization on market were modified (QUIK Administrator program, Edit (Users) dialog box, By markets and codes attribute)	User ID – user identifier; Market ID – market identifier; Attorney begin time – attorney start date; Attorney end time – attorney end date; Surname – user surname; Name – user name; Middle name – user middle name; Market – market name
*User record modified	User parameters were modified (QUIK Administrator program, menu QUIK server / Users)	User ID – user identifier; Individual ID – individual identifier; Permissions – the set of user permission attributes; Attorney begin time – attorney start date; Attorney end time – attorney end date; Organization ID – organization identifier; “Two-factor authentication” mark – attribute of authentication usage; Surname – user surname; Name – user name; Middle name – user middle name; Organization – firm name
*Record of individual modified	Record of individual was modified (QUIK Administrator program, menu QUIK server / Users)	Individual ID – individual identifier; Organization ID – organization identifier; Name – user name; Middle name – user middle name; Surname – user surname; Phone – phone number; Address – address; Email – email address; Note – text comment; Organization – organization name
*Record of legal entity modified	Record of organization was modified (QUIK Administrator program, QUIK server / Organizations)	Organization code; Organization name; Legal address – organization legal address; Email – organization email address
*Security class modified	Security class parameters were modified (QUIK Administrator program, menu QUIK server / Classes)	Class ID – class identifier; Code – class code; Flags – parameter is not used; Description – class description;

Event type	Event description	Parameters
		Settlement code – the list of settlement codes; Description eng. – class name in English; Subtype – class subtype; Marks – the set of class attributes; Extended marks – the set of special class attributes
*Client record modified	User permissions for message distribution in organization were modified (QUIK Administrator program, menu QUIK server / Users, Common rights tab, Send rights… button)	User ID – user identifier; Organization ID – organization identifier; Surname – user surname; Name – user name; Middle name – user middle name; Broker – firm name
*Verba key modified	Verba key parameters were modified (menu QUIK server / Security/ Verba OW keys)	User ID – user identifier; Key ID – key identifier; «Revoked” mark – status of the Revoked attribute (n – cleared; y – checked); Surname – user surname; Name – user name; Middle name – user middle name
*RSA key modified	RSA key parameters were modified (menu QUIK server / Security/ QUIK keys)	Key ID – key identifier; Individual ID – user identifier; Key ID – key serial number; “Secret” mark – parameter is not used; Key length – key length in bits; Key creation time – key creation date; “Revoked” mark – status of the Revoked attribute (n – cleared; y – checked); Surname – user surname; Name – user name; Middle name – user middle name
*Crypto Pro key modified	Crypto Pro key parameters were modified (menu QUIK server / Security/ CryptoPro keys)	User ID – user identifier; “Revoked” mark – status of the Revoked attribute (n – cleared; y – checked); Certificate serial number – serial number of certificate assigned to user; Certificate issuer – certification authority, which issued the certificate; Certificate owner – certificate owner; Cipher – attribute, which indicates that the key is used to encrypt data transmitted between user and broker’s server;

Event type	Event description	Parameters
		Checksum – key checksum; Type – key type: _ verba; _ KA; _ signalcom; _ cspsspi; _ eusicex; _ cryptopro; _ bicrypt
*Client code on the dealer's side modified	The value of the **Client code on the dealer's side (separated by ,)** field was modified (QUIK Administrator program, menu QUIK server / Users, Classes permissions tab)	User ID – user identifier; Class ID – class identifier; Client code – client code on the dealer's side; Surname – user surname; Name – user name; Middle name – user middle name
*Firm code on security class modified	The value of the **Firm code** field was modified (QUIK Administrator program, menu QUIK server / Users, Classes permissions tab)	User ID – user identifier; Class ID – class identifier; Firm – firm code; Surname – user surname; Name – user name; Middle name – user middle name
Settings of Limits calculation library modified	Settings of Limits calculation library were modified (QUIK Administrator program, menu QUIK server / Limits calculation libraries...)	IP address – IP address; User ID – user identifier; Exchange ID – firm code; Connection ID – internal number of connection to the Qadmin server
Two-factor authentication settings modified for application	Two-factor authentication settings were modified for application (QUIK Administrator program, menu QUIK server / Security/ Two-factor authentication)	Application ID – application identifier; Authentication type – authentication type identifier; Authentication scenario – authentication scenario
Two-factor authentication settings modified for user	Two-factor authentication settings were modified for user (QUIK Administrator program, QUIK server / Users, Security tab, Two-factor authentication settings frame)	User ID – user identifier; Application – application, to which user authenticates; Authentication type – authentication type identifier; Authentication scenario – authentication scenario; User full name – user full name

Event type	Event description	Parameters
*News agency modified	News agency parameters were modified (QUIK Administrator program, menu QUIK server / News agencies)	Code – agency code; Agency ID – agency identifier
*Password modified	Password for login and password authentication was modified	User ID – user identifier; Surname – user surname; Name – user name; Middle name – user middle name; Login – login for authentication
*Permissions for module modified for QAdmin user's role	Permissions for module were modified for user's role (QUIK Administrator program, menu System / Options / Settings / Administrative roles, Modules tab)	Role – role name; Role ID – role identifier; Module – module / setting name; Permission – permission for module / setting: _ Deny all; _ Allow accessing; _ Allow modifying
*User's permissions for security class modified	User's permissions for security class were modified (QUIK Administrator program, menu QUIK server / Users, Classes permissions tab)	User ID – user identifier; Class ID – class identifier; Permissions – the set of user permission attributes; Class – class code; Surname – user surname; Name – user name; Middle name – user middle name; Organization – organization name
*Permission for connection from IP address modified	IP address in the list of allowed IP addresses was modified (QUIK Administrator program, menu QUIK server / Users, Security tab, IP addresses box)	User ID – user identifier; IP address – IP address; Surname – user surname; Name – user name; Middle name – user middle name
*QAdmin user's role modified	User’s role was modified (QUIK Administrator program, menu System / Options / Settings / Administrative roles)	Role ID – role identifier; Role – role name
*Market modified	Market parameters were modified (QUIK Administrator program, QUIK server / Markets)	Market ID – market identifier; Name – market name; Default broker identifier – default broker identifier in the trading system
*Link between security class and market modified	The event is not used	

Event type	Event description	Parameters
*Correspondence between user and broker modified	The event is not used	
*Correspondence between user and RSA key owner modified	Record in the **Logins for another authorization system** table was modified (QUIK Administrator program, menu QUIK server / Security/ Logins for another authorization system) or access by login and QUIK or webQUIK password was modified (QUIK Administrator program, menu QUIK server / Users, Security tab, Access to QUIK and Access to webQUIK attributes)	User ID – user identifier; Key owner – key owner name; Surname – user surname; Name – user name; Middle name – user middle name
*Password delivery method (two-factor authentication) modified	Password delivery method was modified (QUIK Administrator program, menu QUIK server / Users, Security tab, Authentication by login and password frame, **Custom** button)	User ID – user identifier; Delivery method ID – password delivery method identifier: _ 1 – get password by email; _ 2 – get password by SMS; _ 3 – request password from broker by phone with code word. Email – email address, to which the password is sent; Phone – phone number, to which the SMS with password is sent; Code word – the code word that identifies a client, when he requests additional password from broker by phone; Surname – user surname; Name – user name; Middle name – user middle name
User information	The event is generated after user logins	User ID – user identifier; Connect ID – identifier of connection to the QUIK server; Computer SID – user's computer SID; MAC address – MAC address of user's device
Security class excluded from market	The **Market** parameter for class was modified (QUIK Administrator program, menu QUIK server / Classes)	Market ID – market identifier; Class ID – class identifier; Market – market name; Class – class code

Event type	Event description	Parameters
QUIK server stopped	Planned QUIK server stop	
QAdmin administrator permission revoked	The QAdmin administrator attribute was enabled for a user (QUIK Administrator program, menu QUIK server / Server management)	User ID – user identifier
QUIK Administrator disconnected	QUIK Administrator was disconnected	IP address – IP address; User ID – user identifier; Connection ID – internal number of connection to the Qadmin server
User disconnected	User was disconnected from the QUIK server	Full name – user full name; Organization – organization name; User ID – user identifier; IP address – IP address; Rights mask – rights mask; Connect ID – identifier of connection to the QUIK server; Disconnect status – disconnect status: _ normal – disconnect notifying server; _ abnormal – disconnect not notifying server
QMonitor user disconnected	Planned or disruptive QMonitor user disconnection	Full name – user full name; Organization – organization name; User ID – user identifier
User transaction backout	Manager cancelled transaction of a user, which operates with confirmations	User ID – user identifier; Connect ID – identifier of connection to the QUIK server; Manager – manager full name; Transaction – transaction number (corresponds to the number in the transaction report); Transaction registering time on server – time of server receiving transaction; Transaction cancellation time – time of transaction cancellation
User authorization error	Error of user authorization at the QUIK server	IP address – IP address; Error code – error code: _ 1 – “You are already working in the system”; _ 2 – “Access denied”; _ 3 – “License expired”;

Event type	Event description	Parameters
		_ 4 – "Access blocked by administrator"; _ 5, 6, 7 – "Incorrect protocol"; _ 17 – "Old front". User ID – user identifier
QUIK Administrator connected	QUIK Administrator connected	IP address – IP address; Version – QUIK Administrator version; User ID – user identifier; Connection ID – internal number of connection to the Qadmin server
User connected	User connected to the QUIK server	Full name – user full name; Organization – organization name; User ID – user identifier; IP address – IP address; Rights mask – permissions from the Common rights tab; Connect ID – identifier of connection to the QUIK server; Access server connect ID – access server connection identifier; Authentication type – authentication type; Key ID – possible values: QUIK key identifier; User login; Certificate hash; KA key hash
QMonitor user connected	QMonitor user connected	Full name – user full name; Organization – organization name; User ID – user identifier; IP address – IP address; Connect ID – identifier of connection to the QUIK server
User transaction confirmed	Manager confirmed transaction of a user, which operates with confirmations	User ID – user identifier; Connect ID – identifier of connection to the QUIK server; Manager – manager full name; Transaction – transaction number (corresponds to the number in the transaction report); Transaction registering time on server – time of server receiving transaction;

Event type	Event description	Parameters
		Transaction accept time – transaction accept time
User unblocked	The **Blocked** attribute was disabled (QUIK Administrator program, menu QUIK server / Users)	User ID – user identifier; Surname – user surname; Name – user name; Middle name – user middle name; Individual ID – individual identifier; Organization – firm name
User record restored (SQL query)	User record was restored with the help of SQL query	User ID – user identifier; Surname – user surname; Name – user name; Middle name – user middle name; Individual ID – individual identifier; Organization – firm name
Connection from IP address allowed	IP address was added to the list of allowed IP addresses (QUIK Administrator program, menu QUIK server / Users, Security tab, IP addresses box)	User ID – user identifier; IP address – IP address; Surname – user surname; Name – user name; Middle name – user middle name
QMonitor failed	Error of QMonitor connection and operation	Full name – user full name; Organization – organization name; User ID – user identifier; IP address – IP address; Connect ID – identifier of connection to the QUIK server
Security class linked to market	**Market** parameter was modified for a class (QUIK Administrator program, menu QUIK server / Classes)	Market ID – market identifier; Class ID – class identifier; Market – market name; Class – class code
User transaction cancelled	Cancellation of order execution request by a user, which operates with confirmations	User ID – user identifier; Connect ID – identifier of connection to the QUIK server; Transaction – transaction number (corresponds to the number in the transaction report); Transaction registering time on server – time of server receiving transaction; Transaction kill time –transaction cancellation time
QUIK server started	QUIK server started	Executable file – full path to quik.exe; Version – server QUIK version number

Event type	Event description	Parameters
Access server administrator deleted	User with permissions for Access server management was deleted (QUIK Administrator program, menu QUIK server / Server management)	Access server ID – list of access server identifiers; User ID – user identifier; Surname – user surname; Name – user name; Middle name – user middle name; Server name – list of access server names
User's letter of attorney for market deleted	Authorization for market was deleted (QUIK Administrator program, Edit (Users) dialog box, By markets and codes attribute)	User ID – user identifier; Market ID – market identifier; Attorney begin time – attorney start date; Attorney end time – attorney end date; Surname – user surname; Name – user name; Middle name – user middle name; Market – market name
User record deleted (SQL query)	User was deleted from the QUIK server with the help of SQL query	User ID – user identifier; Surname – user surname; Name – user name; Middle name – user middle name; Individual ID – individual identifier; Organization – organization name
Record of individual deleted	Record of individual was deleted (QUIK Administrator program, QUIK server / Users)	Individual ID – individual identifier; Organization ID – organization identifier; Name – user name; Middle name – user middle name; Surname – user surname; Phone – phone number; Address – address; Email – email address; Note – text comment; Organization – organization name
Record of legal entity deleted	Record of organization was deleted (QUIK Administrator program, menu QUIK server / Organizations)	Organization code; Organization name; Legal address – organization legal address; Email – organization email address
Security class deleted	Security class was (QUIK Administrator program, menu QUIK server / Classes)	Class ID – class identifier; Code – class code; Flags – parameter is not used; Description – class description;

Event type	Event description	Parameters
		Settlement code – the list of settlement tags; Description eng. – class name in English; Subtype – class subtype; Marks – the set of class attributes; Extended marks – the set of special class attributes
Client deleted	User was deleted from the message distribution list at the organization (QUIK Administrator program, menu QUIK server / Users, Common rights tab, Send messages attribute)	User ID – user identifier; Organization ID – organization identifier; Surname – user surname; Name – user name; Middle name – user middle name; Broker – firm name
Verba key deleted	Verba key was deleted (menu QUIK server / Security/ Verba OW keys)	User ID – user identifier; Key ID – key identifier; "Revoked" mark – status of the Revoked attribute (n – cleared; y – checked); Surname – user surname; Name – user name; Middle name – user middle name
RSA key deleted	RSA key was deleted (menu QUIK server / Security/ QUIK keys)	Key ID – key identifier; Individual ID – user identifier; Key ID – key serial number; «Secret» mark – parameter is not used; Key length – key length in bits; Key creation time – key creation date; "Revoked" mark – status of the Revoked attribute (n – cleared; y – checked); Surname – user surname; Name – user name; Middle name – user middle name
Crypto Pro key deleted	Crypto Pro key was deleted (menu QUIK server / Security/ CryptoPro keys)	User ID – user identifier; "Revoked" mark – status of the Revoked attribute (n – cleared; y – checked); Certificate serial number – serial number of certificate assigned to user; Certificate issuer – certification authority, which issued the certificate; Certificate owner – certificate owner; Cipher – attribute, which indicates that the key is used to encrypt data transmitted between user and broker's server;

Event type	Event description	Parameters
		Checksum – key checksum; Type – key type: _ verba; _ KA; _ signalcom; _ cspsspi; _ eusicex; _ cryptopro; _ bicrypt
Client code on the dealer's side deleted	A value was deleted from the **Client code on the dealer's side (separated by ,)** field (QUIK Administrator program, menu QUIK server / Users, Classes permissions tab)	User ID – user identifier; Class ID – class identifier; Client code – client code on the dealer's side; Surname – user surname; Name – user name; Middle name – user middle name
Firm code on security class deleted	A value was deleted from the **Firm code** field (QUIK Administrator program, menu QUIK server / Users, Classes permissions tab)	User ID – user identifier; Class ID – class identifier; Firm – firm code; Surname – user surname; Name – user name; Middle name – user middle name
Two-factor authentication settings deleted for application	Two-factor authentication settings were deleted for application (QUIK Administrator program, menu QUIK server / Security/ Two-factor authentication)	Application ID – application identifier; Authentication type – authentication type identifier; Authentication scenario – authentication scenario
Two-factor authentication settings deleted for user	Two-factor authentication settings were deleted for user (QUIK Administrator program, menu QUIK server / Users, Security tab, Two-factor authentication settings frame)	User ID – user identifier; Application – application, to which user authenticates; Authentication type – authentication type identifier; Authentication scenario – authentication scenario; User full name – user full name
News agency deleted	A news agency was deleted (QUIK Administrator program, menu QUIK server / News agencies)	Code – agency code; Agency ID – agency identifier
User record deleted	User record was deleted (QUIK Administrator program, menu QUIK server / Users)	User ID – user identifier; Individual ID – individual identifier; Permissions – the set of user permission attributes;

Event type	Event description	Parameters
		Attorney begin time – attorney start date; Attorney end time – attorney end date; Organization ID – organization identifier; Authentication type – authentication type used; Authentication ID – authentication type identifier: _ 1 – RSA SecurID; _ 2 – QUIK; _ 3 – Active Directory; _ 4 – RADIUS. Surname – user surname; Name – user name; Middle name – user middle name; Organization – firm name
User deleted from QAdmin user's role	User was deleted from user's role (QUIK Administrator program, menu System / Option / Settings / Administrative roles, Users tab)	Role ID – role identifier; Role – role name; User full name – user full name; User ID – user identifier
Permissions for class deleted for QAdmin user's role	Permissions for class were deleted for user's role (QUIK Administrator program, menu System / Options / Administrative roles, Classes permissions tab)	Role ID – role identifier; Role – role name; Class – class name; Class code – class code
Permissions for module deleted for QAdmin user's role	Permissions for module were deleted for user's role (QUIK Administrator program, menu System / Options / Administrative roles, Modules tab)	Role – role name; Role ID – role identifier; Module – module / setting name; Permission – permission for module / setting: _ Deny all; _ Allow accessing; _ Allow modifying
Permission for setting permissions deleted for security class	The event is not used	
User's permissions for security class deleted	Permissions for security class were deleted (QUIK Administrator program, menu QUIK server / Users, Classes permissions tab)	User ID – user identifier; Class ID – class identifier; Permissions – the set of user permission attributes; Class – class code; Surname – user surname; Name – user name;

Event type	Event description	Parameters
		Middle name – user middle name; Organization – organization name
QAdmin user's role deleted	A user's role was deleted (QUIK Administrator program, menu System / Option / Settings / Administrative roles)	Role ID – role identifier; Role – role name
Market deleted	A market was deleted (QUIK Administrator program, QUIK server / Markets)	Market ID – market identifier; Name – market name; Default broker identifier – default broker identifier in the trading system
Correspondence between user and broker deleted	The event is not used	
Correspondence between user and RSA key owner deleted	A record was deleted from the Logins for another authorization system table (QUIK Administrator program, menu QUIK server / Security/ Logins for another authorization system) or access by login and QUIK or webQUIK password was cancelled (QUIK Administrator program, menu QUIK server / Users, Security tab, Access to QUIK and Access to webQUIK attributes)	User ID – user identifier; Key owner – login; Surname – user surname; Name – user name; Middle name – user middle name
Password delivery method (two-factor authentication) deleted	Two-factor authentication password delivery method was deleted (QUIK Administrator program, menu QUIK server / Users, Security tab, Additional parameters for two-factor authentication and password recovery setting, Edit button to the right from the Set parameters field)	User ID – user identifier; Delivery method ID – password delivery method identifier: _ 1 – get password by email; _ 2 – get password by SMS; _ 3 – request password from broker by phone with code word. Email – email address, to which the password is sent; Phone – phone number, to which the SMS with password is sent; Code word – the code word that identifies a client, when he requests additional password from broker by phone; Surname – user surname; Name – user name; Middle name – user middle name

Event type	Event description	Parameters
Request for password recovery		IP address; Connection ID; Computer SID
Data receiving error while password recovery		IP address; Connection ID; Computer SID; User ID (UID); Reply timeout in seconds; Error text (if any)
Wrong confirmation code while password recovery		User ID (UID); IP address; Connection ID; Computer SID; Confirmation code entered by the user
Parameters of the user who requested password		Login entered by the user; E-mail entered by the user; IP address; Connection ID; Computer SID; User ID (UID); Attempt number for the current user (if known); Unknown user (user with the login entered is not found): _ 0 – yes; _ 1 – no; _ NULL – the attribute cannot be applied. Invalid user (the user was deleted, blocked or does not have valid authorization): _ 0 – yes; _ 1 – no; _ NULL – the attribute cannot be applied. Invalid e-mail (the e-mail entered by the user does not coincide with the one specified in the two-factor authentication settings for the current user): _ 0 – yes; _ 1 – no; _ NULL – the attribute cannot be applied.

Event type	Event description	Parameters
		Invalid authentication type (for the current user two-factor authentication of the supported QUIK RADIUS type is not enabled): _ 0 – yes; _ 1 – no; _ NULL – the attribute cannot be applied. No authentication parameters (for the current user a required two-factor authentication parameter is not specified: phone number for QUIK, e-mail for QUIK and RADUIS): _ 0 – yes; _ 1 – no; _ NULL – the attribute cannot be applied. Unavailable module (the module of sending the second factor is unavailable: Alert dispatch module for the QUIK type, RADIUS for the RADIUS type): _ 0 – yes; _ 1 – no; _ NULL – the attribute cannot be applied. Unavailable SMTP server: _ 0 – yes; _ 1 – no; _ NULL – the attribute cannot be applied
Confirmation code was sent to the user		User ID (UID); IP address; Connection ID; Computer SID; Sending type (type of sending confirmation code: SMS or RADIUS); Phone number to which the code was sent (for SMS type only)
Temporary password was sent to the user		User ID (UID); Connect ID; IP address; Computer SID; Send Type; E-mail to which the temporary password was sent;

Event type	Event description	Parameters
		Phone
Unsuccessful login attepmt	User entered incorrect password	Login; User ID; Connection ID; IP address; Computer SID; Number of attempt to sign in / change password
Unsuccessful attempt to change password	User entered incorrect old password	Login; User ID; Connection ID; IP address; Computer SID; Number of attempt to sign in / change password
The number of attempts to sign in were exhausted	The number of attempts to sign in were exhausted	Login; User ID; Connection ID; IP address; Computer SID; Number of attempt to sign in / change password; Action; Expires on
Temporary blocking of the user was removed	Administrator removed temporary blocking of the user	Login; User ID; Administrator ID
Temporary blocking of the user expired	Temporary blocking of the user expired	Login; User ID; Connection ID; IP address; Computer SID; Blocking expiration time

* – an <Event type>. New values event has the same parameters, the Value column displays a new parameter value (after its change).