



CoLibri risk manager terminal module

User's manual

Version 4.7

The Quik logo, which consists of the word "quik" in a white, lowercase, sans-serif font, centered within a solid green circle.

quik

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1. General Information

CoLibri (hereinafter referred as Module) is the additional module of QUIK Workstation intended to solve a complex of issues related to margin lending for broker's clients.

1.1 Program Functions

Module functions:

- monitor cash and depositary accounts, portfolio value, calculated parameters and client orders on QUIK Server;
- generate and send automatic notifications (Margin Call) when the client portfolio gets limit values;
- roll over margin positions of the client by REPO and NDM trades of different types;
- form and cancel orders for closing client positions;
- calculate potential values of margin parameters when client positions change.

1.2 Working Principles

1.2.1 Control over margin parameters

The Module provides automatic control under portfolio values of clients by using the Margin Call mode. If the mode is enabled, value of portfolio is periodically checked and compared with the initial, minimum and corrected margin values. If the portfolio value gets lower than one of the above parameters, notifications (Margin Call) are sent in format established in the Module settings:

1. Email.
2. Trader messages.
3. SMS-messages.
4. Messages via MarginCall2Quik.

For MLev and MLim clients the margin level is periodically compared with boundary margin level set up in QUIK Workstation.

Select the menu item **Plugins / Colibri / Margin Call mode** to activate/deactivate the Margin Call mode, or use  **Margin Call** button on the toolbar. For further details on Margin Call mode see [5.1](#).

1.2.2 Calculator of planned client position

If the amount of client's assets is not enough to meet liabilities on used margin credit, the Module offers calculating potential values of margin parameters for situations of depositing/withdrawing funds, and amount of funds that must be additionally deposited or withdrawn. For these purposes the program provides margin calculator. The function can be useful for estimating changes in

lending parameters if the client makes the planned withdrawal of funds. See detailed description of work with the calculator in [4](#).

1.2.3 Rolling over margin positions

Client positions opened with using margin funds of broker and not closed independently before the end of trading session, can be reformed (replaced to the next day) by concluding NDM and REPO trades. Function of rolling over positions can be applied to either a selected client or to all clients. Package of REPO or NDM trades displayed in Orders for positions rollover Table will be formed as the function is run. Then the user can send orders to the trading system according to criteria: 'all non-sent', 'all from the client'. For further details on positions rollover see [5.2](#). Information on working with REPO and NDM trades is given in QUIK User's manual, Section 7: Broker Operations.

1.2.4 Closing positions

The function is intended to bring client positions in correspondence with requirements set by regulator. Positions are closed for instruments of FX and stock markets. For further information on closing positions see [5.3](#).

1.3 Principal windows and menu items

Functions of the Module are available from the main menu of QUIK Workstation. If required files and rights for working the Module are configured, the program's menu displays additional menu item **Plugins / Colibri** including the following sub-sections:

- [Orders for positions rollover](#) – open Orders for positions rollover Table;
- Status changes... – open table of changing the client statuses;
- [Calculator](#) – open the margin calculator to solve direct and reverse task of changing margin parameters when changing the client position;
- [Margin Call mode](#) – open the form of configuring the Margin Call parameters;
- [Rolling over positions](#) – open the form of rolling over client positions;
- [Closing positions](#) – open the form of closing client positions;
- [Settings](#) – open the window of editing the program settings.

Additional functions are available from the shortcut menu of Client portfolio table:

- **Switching off/on sending margin call for <client code>** – enable or disable permission to send notifications for a selected client. The function is available only upon active [Margin Call mode](#);
- **Send margin call for <client code>** – forced sending of notification of the selected type to the client based on current state of a selected client. If more than one notification type has been selected (see [6.1.1](#)) the local menu to select the type of margin call to be sent will appear:

- **On portfolio valuation** – can be applied only to MD clients. The menu item is available if sending notifications is set up at least for one of [levels](#): restriction, remand or closing;
 - **On unallowable short position** – can be applied only to MD clients;
 - **On margin level** – can be applied only to MD clients, Notification is considered to be enabled if notifying at least for one of margin levels is enabled;
 - **On used global limit quota** – can be applied only to global limits.
- **Send margin call for all clients** – send margin call forcibly to all clients from the Client portfolio table meeting the condition of notification of the selected type. If more than one notification type has been selected (see [6.1.1](#)) the local menu to select the type of margin call to be sent will appears:
 - **On portfolio valuation** – can be applied only to MD clients. The menu item is available if sending notifications is set up at least for one of [levels](#): restriction, remand or closing;
 - **On unallowable short position** – can be applied only to MD clients;
 - **On margin level** – can be applied to all clients except those of MD type. The notification is considered to be enabled if notifying at least for one of margin levels is enabled;
 - **On used global limit quota** – can be applied only to global limits.
 - **Positions rollover by <client code>** – open the dialogue of [rolling over](#) positions for a selected client code;
 - **Close positions by <client code>** – open the dialogue of [closing](#) positions for a selected client.

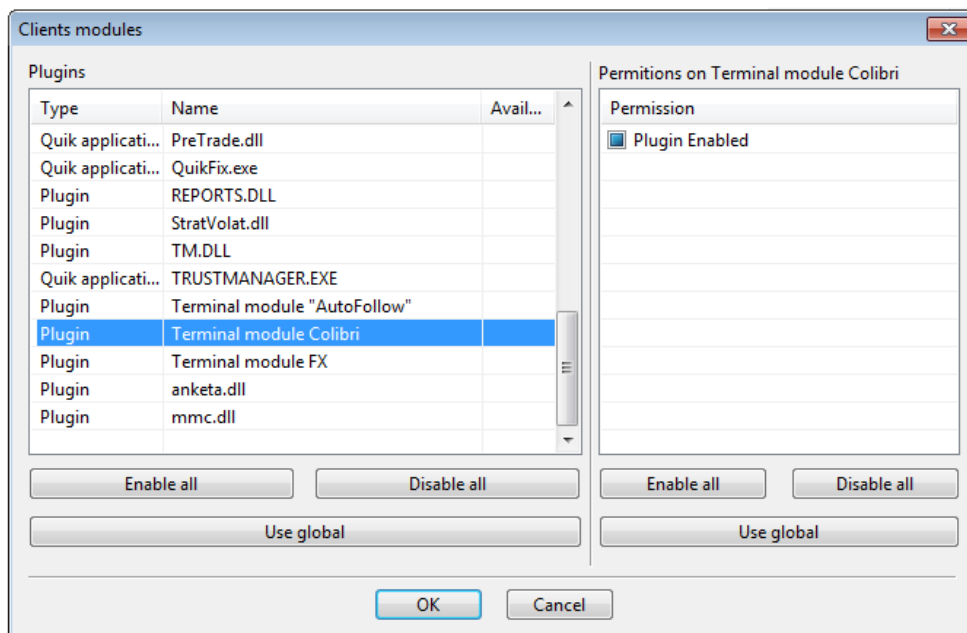
1.3.1 Toolbar

If required files and rights for working the Module are configured, the additional toolbar 'Colibri' appears including the following buttons:

Button	Description
 Margin Call	Activate/deactivate the mode of sending notifications (Margin Call)
 Calculator	Open margin calculator to calculate the planned client position
 Close positions	Open the form of closing client positions
 Position rollover	Open the form of rolling over client positions

1.4 Before Starting

1. Place **Colibri.dll**, **qmail.dll** and **ps.dll** files to the directory of QUIK Workstation. Close the QUIK Workstation before copying files to the directory.
2. Set the right for working with the Module in **QUIK Administrator** program. The right can be established either globally (menu item **Server QUIK / Client modules**) or individually in dialogue of configuration of user settings (press button **Change** on Common rights tab and set rights for Colibri PM Module in the opened window):



3. If closing currency positions (see [6.3.2](#)) make a list of classes where the currency pairs are traded (see section 6 of Administrator's manual for Limits calculation library, option 'Maintain cash positions in respect of currencies').
4. Restart QUIK Workstation to make the settings come in force.
5. To store log of sent notifications to the database, create an ODBC source as follows:

- Select **Plugins / Colibri / Settings** item in menu of QUIK Workstation;
- Select tabs **Colibri / Sending margin calls / Store margin calls in DB** in the opened window;
- Select the **Store sent margin calls** in checkbox, press button '...' and click on **ODBC Admin** button in the opened window. In the appeared Administrator of ODBC sources add the database created by SQL script as a new ODBC source.

SQL script creating a table of needed structure for server of MS SQL databases is attached to the supplied package.

- Press **Add** and select driver 'SQL Server'. Click **Done**;
- Enter the name of Colibri data source. Click **OK** to save settings. 'Colibri' record will appear in the list of data sources. Click **OK**;

- Select 'Colibri' in Change ODBC driver window. Close the window by clicking **OK**.

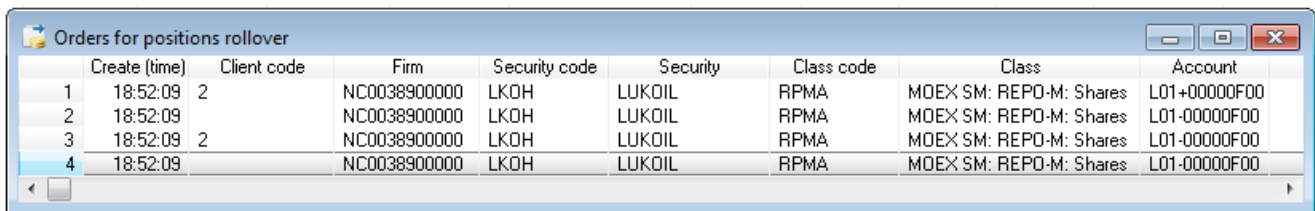
2. Orders for Positions Rollover Table

menu **Plugins / Colibri / Order on position rollover**

2.1.1 Purpose

Viewing and editing the list of formed negotiated REPO (NDM) orders for rolling over short and long client positions. Selecting orders to send to the trading system and viewing status of filling them.

2.1.2 Table format



	Create (time)	Client code	Firm	Security code	Security	Class code	Class	Account
1	18:52:09	2	NC0038900000	LKOH	LUKOIL	RPMA	MOEX SM: REPO-M: Shares	L01-00000F00
2	18:52:09		NC0038900000	LKOH	LUKOIL	RPMA	MOEX SM: REPO-M: Shares	L01-00000F00
3	18:52:09	2	NC0038900000	LKOH	LUKOIL	RPMA	MOEX SM: REPO-M: Shares	L01-00000F00
4	18:52:09		NC0038900000	LKOH	LUKOIL	RPMA	MOEX SM: REPO-M: Shares	L01-00000F00

Each table row corresponds to an individual order. Description of the table columns:

Parameter	Description
Create (time)	
Client code	Client identifier in QUIK system. For orders of donor – code of donor
Firm	Firm code
Security code	Security code in trading system
Security	Name of security
Class code	Code of the security class
Class	Name of class
Account	Depo account of the concluded trade
Qty	Number of securities in order, in lots
Price	Price for a unit of security
Discount, %	Discount value. Parameter of REPO with CCP and REPO-M orders with using the start discount
Volume	Order volume. Parameter of REPO-M orders with using price
Side	Order direction. Valid values: – B – buy; – S – sell

Parameter	Description
REPO rate (%) / Rate (%)	Rate of REPO crediting, in percent per annum
Refund rate (%)	Rate of refund in case of non-filling of the second REPO part, in percent per annum
Settlement code	Settlement code of trade
Period	REPO term, in days
Donor code	Code of client who is a donor of securities. For orders of donor – code of the initial client
Partner	Name of trading participant to which the order is addressed
Partner's org.	
Number	Order number in trading system
Status	Order status. Valid values: – <empty> – order is firmed but not sent to the trading system; – Sent – order is sent to QUIK system but response about registration in the trading system is not still received; – Rejected – order is rejected by QUIK server; – Active – order is registered in the trading system but not filled by counter order; – Killed – order is revoked from the trading system; – Filled – order is filled
Identifier	Unique order identifier used for its identification when the order is not still sent to trading system and it is not assigned by number
Commission	Total commission of broker trading system and the additional commission for rolling over positions on NDM/REPO trades (see 6.2.1)

2.1.3 Table configuration

Configuration is about changing the table name, selecting a set of columns to be displayed in the table and sequence of displaying them.

2.1.4 Available functions

Data from the table can be copied to the Clipboard, output via DDE server, or exported via ODBC.

Full list of operating buttons for all types of tables is given in Appendix to Section 2: Basic Operating Principles of QUIK User's manual.

The following actions are available from the shortcut menu:

- **Send from table** – sent all orders from the table to the trading system;

- **Send by client** – sent all orders with the same client code as in the selected order to the trading system;
- **Remove all unsent orders** – delete all unsent orders from the table;
- **Remove all sent orders** – delete all sent orders from the table;
- **Remove all** – delete all orders;
- **Remove** – delete selected order;
- **Export to file** – load orders from table to a text file (see [2.1.5](#));
- **Move to tab** – move table to another tab.

2.1.5 Form of data output to a text file

Function of saving data to a text file can be called from shortcut menu of the table. The file is a sequence of rows where each row contains comma-delimited parameters of a particular order without spaces.

Parameter	Description
Class code	
Security code	
Account	
Side	B – buy, S – sell
Partner's firm code	For orders on behalf of donor – code of donor
Client code	Client code
Comment	
Qty	
Order type	Valid values: _ M – REPO-M; _ R – REPO; _ CCP – REPO with CCP; _ RPS – NDM; _ RPS_CCP – NDM with CCP
Price	For REPO-M and REPO with CCP orders the field is not filled
Settlement code	
Refund rate (%)	For REPO with CCP, NDM, and NDM with CCP orders the field is not filled
REPO rate	For NDM, and NDM with CCP orders the field is not filled
REPO sum	For REPO, REPO with CCP, NDM, and NDM with CCP orders the field is not filled

Parameter	Description
REPO term	For REPO, NDM, and NDM with CCP orders the field is not filled
Start discount *	For REPO, NDM, and NDM with CCP orders the field is not filled
Donor code	For orders of donor – code of the initial client
Donor's trading account	
Sending status	0 – not sent, 1 – sent
Receiving status	0 – not received, 1 – received
Status	Order status expressed in a number in decimal form. Binary representation of number shows values of order parameters (number of bits from right to left: value TRUE; value FALSE): – 0: TRUE – active; FALSE – cancelled or filled; – 1: TRUE – cancelled; FALSE – filled; – 2: TRUE – buy order; FALSE – sell order; – 3: TRUE – limit order; FALSE – market; – 4: TRUE – allow executing order at different prices, FALSE – no; – 5: TRUE – attribute 'immediately or cancel'; FALSE – no; – 6: not used; – 7: not used; – 8: not used; – 9: not used; – 10: TRUE – attribute 'kill balance', FALSE – no. For example, value 25 means an active limit buy order with attribute 'allow executing at different prices', or in binary form – 11001

* – for REPO with CCP orders the field takes value 'Discount'

```
RPMA,MSNG,L01-00000F00,B,MC0075600000,E5,E5//tech1,1900,M,,Rb,1,9,10204.9,6,,E3,L01-00000F00,0,0,0
```

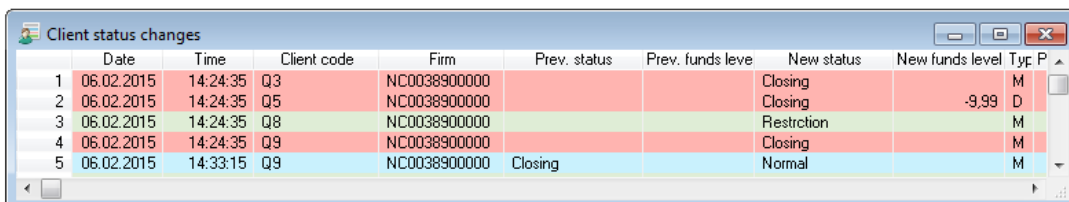
3. Changing Client Status

menu **Plugins / Colibri / Status changes**

3.1.1 Purpose

View history of changing client statuses.

3.1.2 Table format



	Date	Time	Client code	Firm	Prev. status	Prev. funds leve	New status	New funds level	Type
1	06.02.2015	14:24:35	Q3	NC0038900000			Closing		M
2	06.02.2015	14:24:35	Q5	NC0038900000			Closing	-9.99	D
3	06.02.2015	14:24:35	Q8	NC0038900000			Restrction		M
4	06.02.2015	14:24:35	Q9	NC0038900000			Closing		M
5	06.02.2015	14:33:15	Q9	NC0038900000	Closing		Normal		M

Each table row corresponds to changing of the client status. Description of the table columns:

Parameter	Description
Identifier	Unique identifier of the record
Date	Date of changing the client status
Time	Time of changing the client status
Client code	Client identifier in QUIK system
Firm	Firm code
Type	Client type: – D – for scheme with discounts (MD clients); – M – for scheme with margin levels (clients other than MD)
Prev. status	For DM clients state of the portfolio value relative to margin level before changing the client status. Client status is defined by the last limit kind. For clients different from MD type – current level of margin relative to the selected level before changing the client status. Client status is defined by T0 limit kind. For details see 7.6
New status	For DM clients state of the portfolio value relative to margin level after changing the client status. Client status is defined by the last limit kind. For clients different from MD type – current level of margin relative to the selected level before changing the client status. Client status is defined by T0 limit kind. For details see 7.6
Prev. funds level	Level of funds adequacy before changing the client status. Valid values: from ‘-9.99’ to ‘9.99’ with accuracy of two decimal places. The field is filled for only clients other than of MD type

Parameter	Description
Prev. margin level	Margin level on T0 limit kind before changing the client status. The parameter is available only for scheme with margin levels. Expressed in percent. The field is filled for only clients other than of MD type
New funds level	Level of funds adequacy after changing the client status. Valid values: from -9.99 to 9.99 with accuracy of two decimal places. The field is filled for only clients other than of MD type
New margin level	Margin level on T0 limit kind after changing the client status. The parameter is available only for scheme with margin levels. Expressed in percent. The field is filled for only clients other than of MD type

History of changing statuses is stored only for clients from the allowed clients list formed on the basis of filtration by client code in Client portfolio table. If several Client portfolio tables are opened in the Workstation, unified list of allowed clients for all tables gets formed. If the client is excluded from the list of allowed clients then history of changing their statuses is displayed in Changing client statuses table till it's cleared.

Rows in the table are highlighted in color depending on client status. For further information on color settings see QUIK User's manual, Section 5: Client Operations (setting **Use color highlight for margin client's status**).

Table's data is cleared automatically under session change.

3.1.3 Table configuration

Change name of the table, select the set of columns to view in the table and sequence of displaying them.

3.1.4 Available functions

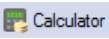
Data from the table can be copied to the Clipboard, output via DDE server, or exported via ODBC.

Full list of operating buttons for all types of tables is given in Appendix to Section 2: Basic Operating Principles of QUIK User's manual.

The following actions are available from the shortcut menu:

- **Clear** – clear history of changing client statuses;
- **Move to tab** – move table to another tab.

4. Calculator

menu **Plugins / Colibri / Calculator** or button 

4.1.1 Purpose

Margin calculator is used for:

- calculation of the potential values of margin parameters when depositing/withdrawing assets;
- calculation of assets amount to deposit/withdraw to reach the set margin values.

4.1.2 Working principle

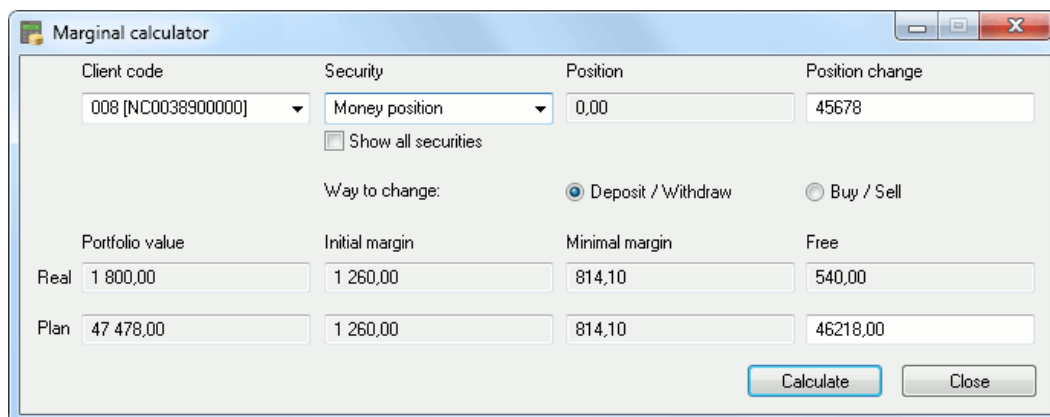
1. Calculation based on **Position change value:**

Planned margin parameters are calculated on the basis of desired value of changing position set by user (**Position change** field).

2. Calculation based on **Free (Plan) value:**

Amount of specified asses needed to be additionally deposited/withdrawn if calculated on the basis of desired **Free (Plan)** value set by user.

4.1.3 Using



The screenshot shows the 'Marginal calculator' window. It contains several input fields and a 'Calculate' button. The fields are organized as follows:

Client code		Security	Position	Position change
008 [NC0038900000]		Money position	0,00	45678
		☐ Show all securities		
		Way to change:	☒ Deposit / Withdraw	☐ Buy / Sell
Portfolio value	Initial margin	Minimal margin	Free	
Real 1 800,00	1 260,00	814,10	540,00	
Plan 47 478,00	1 260,00	814,10	46218,00	

At the bottom right, there are two buttons: 'Calculate' and 'Close'.

Description of the window fields:

- **Client code** – enter client code manually or select it from the dropdown list.
- **Security** – select security from the dropdown list. If the checkbox **Show all securities** is not selected, the list includes only assets present in limits of the selected client (as well as **Money position** value, if **Deposit / Withdraw** is selected as **Way to change**). Value by default: 'Money position' (for **Deposit / Withdraw**) or the first asset in the list (for **Buy / Sell**).
- **Show all securities** – show all instruments in **Security** list. The checkbox is cleared by default.
- **Position** – position on the last limit kind for the selected client and instrument. If the client has several positions for the asset (several limits on different trade accounts for securities or on groups for cash, sum of positions for these limits will be displayed).

- **Position change** – value of changing the selected asset (depending on depositing/withdrawing cash). The field is used for recalculation of planned margin parameters (including values of **Free (Plan)** parameter).
- Way to change:
 - **Deposit / Withdraw** – operation to deposit/withdraw assets. Selected by default;
 - **Buy / Sell** – operation to buy/sell assets. If the mode is selected, the **Security** list provides 'Money position' value available to select.

The mode last selected is stored in settings.

- **Portfolio value (Real)** – estimate the own client funds on current positions and prices, in cash.
- **Portfolio value (Plan)** – planned estimate of client funds expressed in cash.
- **Initial margin (Real)** – actual value of the initial margin.
- **Initial margin (Plan)** – planned value of the initial margin.
- **Minimal margin (Real)** – actual value of the minimum margin.
- **Minimal margin (Plan)** – planned value of the minimum margin.
- **Free (Real)** – actual value of free client assets. The value is calculated as difference between **Portfolio value** and **Initial margin**.
- **Free (Plan)** – required value of free client assets. The value is calculated as difference between **Portfolio value (Plan)** and **Initial margin (Plan)**.

To calculate planned values of parameters as a result of changing position, select the client code, security, specify the amount of changing the position and click on **Calculate** button.

To calculate a planned amount of additionally depositing/withdrawing of the asset, select the client code, security, enter the desired value of **Free (Plan)** parameter and click on **Calculate** button.

To refresh current values of margin parameters in the calculator (without changing the selected client code) just click on **Calculate** button.

If parameters Portfolio value (Real), Portfolio value (Plan), Initial margin (Real), Initial margin (Plan), Minimal margin (Real), Minimal margin (Plan), Free (Real) after calculation take values exceeding 10^{25} by module, value 'INF' will be displayed in the fields instead of numeric values.

5. Basic Program Functions

5.1 Margin Call mode

menu **Plugins / Colibri / Margin Call mode** or button 

5.1.1 Purpose

Automatic sending notifications to clients and administrators in form of messages with the set content (to emails, QUIK Workstations or to mobile phones via SMS).

For clients of MD type sending notifications occurs when the Portfolio value parameter reaches certain values, as well as notifying about a short position for non-margin security. For clients other than of MD type notifications are sent when margin level reaches different boundary values. Notifications may be sent by share of global limit use.

5.1.2 Working principle of Margin call mode

The Module creates and sends automatically notifications of the following ways:

- Restriction on trade operations – portfolio value is less than the corrected margin value;
- Warning about a low value of portfolio – portfolio value is less the initial margin value;
- Forced closing positions – portfolio value is less than the minimum margin value;
- Negative position found for non-margin security and D-type securities;
- Messages created when value of margin level overcomes the set up [levels](#) of restriction, demand and closing;
- Exceeding the share of global limit use.

Notifications can be sent by the following ways:

- Email;
- Trader messages;
- SMS-messages;
- Messages via MarginCall2Quik.

There are settings provided to avoid too frequent sending of notifications. The settings may be used simultaneously and independently. For different client types and notifications there are the following features:

- For MD clients:
 - Notifications about portfolio value compared with value of margin of different types. The notification provides setting up the minimum time between two notifications, minimum change in the controlled parameter, minimum value of changing Funds level (see [6.1](#));

- Notifications about unacceptable negative position. Notification is sent once when finding such position. Resending is possible only when finding unacceptable position of the client for one more asset.
- For MLev clients:
 - Notifications about margin level value. The notification provides setting up the minimum time between notifications, minimum change in the controlled parameter (see [6.1](#)).
- Notifications applied to global limits:
 - Notifications about the share of using global limit. The notification provides setting up the minimum time between two notifications, minimum change in the controlled parameter (see [6.1](#)).

Notifications can be sent either to [one selected client](#) or to [all clients](#).

Notifications are sent to only clients from the list of allowed clients formed on the basis filtration by client code in Client portfolio table. If several Client portfolio tables are opened in Workstation, unified list of allowed clients for all tables gets formed.

Text of notification to send is created on the basis of templates, at that it is defined which type of template (see [5.1.5](#)) must be used. For notifications of 'unacceptable negative position' and 'share of using global limit' types the template is the same. For notifications of 'margin value' and 'margin level' types each client is controlled for condition to compare the portfolio value with different types of margin ('margin value' type for MD clients) or to compare the margin level with different boundary values ('margin level' type for MLev and MLim clients).

5.1.3 Mechanism of margin call generating

For MD clients margin calls are generated when the portfolio value overcomes the set up [levels](#) of restriction, demand and closing (see [6.1.1](#) Scheme with discounts).

For clients other than of DM type margin call are generated when the margin level overcomes the set up [levels](#) of restriction, demand and closing (see [6.1.1](#) Other schemes).

5.1.4 Managing mode

To make the Margin Call mode available to be enabled, use any of the following ways:

1. Select a notification template for one or several conditions (section **Colibri / Sending margin calls** in settings of client workstation). For more information see [6.1](#).
2. Select the method of sending notifications (sections **Colibri / Sending margin calls / Sending by e-mail** and **Colibri / Sending margin calls / Sending by UID** in settings of client workstation). For more information see [6.1.2](#) and [6.1.3](#).

The mode can be activated only upon connection to QUIK Server and after getting all data required for work.

To manage the Margin Call mode, use any of the following ways:

- Select the menu item **Plugins / Colibri / Margin Call mode**;
- Press button  **Margin Call** on the toolbar;
- Select the shortcut menu item **Switching off/on sending margin call for <client code>** in Client portfolio table.

If the Margin Call mode is enabled, the button on toolbar has the view as pressed.

If the notification mode has been disabled within the session, control over margin parameters of the client gets interrupted but information on notifications sent before is saved. When rerunning the mode within the session, new notifications are sent with consideration of those sent before. If the connection is broken, notifications are resent regardless of whether they were sent before.

Parameters of sending notifications can be established in the settings dialogue. For detailed information on notification settings see [6.1](#).

5.1.5 Format of notification file

File is a document with text of notification sent to the client by email. Template of document may include the following parameters substituted to particular values by Module when sending.

Format of notification file for MD clients:

Parameter	Description
%cc	Client code
* %lk	Limit kind
%val	Portfolio value
%sm	Value of initial margin
%mm	Value of minimum margin
%cm	Value of corrected margin
* %nmsc	Code of non-margin security with a short position found
* %nmta	Trade account
* %nmsn	Name of non-margin security with a short position found
%im1	Amount of cash funds needed to be additionally deposited to make the portfolio value not less than value of the initial margin

Parameter	Description
%ct	Time of creating notification in <HH:MM:SS> format
%cd	Date of creating notification in <DD.MM.YYYY> format
%em	List of emails separated by commas used for the client
%UIDs	List of UserIDs separated by commas used for the client

* – parameters of notification about short positions found for non-margin securities

Format of notification file about margin level for client types excluding MD:

Parameter	Description
%cc	Client code
%lk	Limit kind
%m	Current margin level
%vd	Funds in securities
%vm	Current cash balance
%eq	Portfolio value
%M1	Value of margin level of forced closing for the client
%M2	Value of margin level to direct the demand for the client
%M3, %cm	Value of the boundary margin level for the client
%ct	Time of creating notification in <HH:MM:SS> format
%cd	Date of creating notification in <DD.MM.YYYY> format
%em	List of e-mails separated by commas used for the client
%UIDs	List of UserIDs separated by commas used for the client

Format of notification file by share of using global limit:

Parameter	Description
%lk	Limit kind
%val	Current value of the unused share of the global limit

Parameter	Description
%glsc	Security code (for global limit on security) or currency code (for global limit on cash)
%glsn	Name of security (for global limit on security) or currency code (for global limit on cash)
%glta	Trading account (for global limit on security) or group (for global limit on cash)
%ct	Time of creating notification in <HH:MM:SS> format
%cd	Date of creating notification in <DD.MM.YYYY> format
%em	List of e-mails separated by commas used for the client
%UIDs	List of UserIDs separated by commas used for the client

5.2 Rolling over positions

menu **Plugins / Colibri / Positions rollover** or button  Position rollover

5.2.1 Purpose

Preparation of negotiated REPO or NDM orders for trades to roll over positions of client using margin funds of broker. Hereinafter 'trades' are referred as REPO or NDM trades depending on selected type.

5.2.2 Working principle

Short positions not closed by client before the end of trading session, can be reformed by broker by negotiated trades. One part of a trade is a client with debt; the second one is a client-donor crediting with securities and cash.

When rolling over short positions, all negative client positions for securities will be rolled over. As a result, a package of counter REPO (NDM) orders is created and then transferred to the trading system for execution. After executing the second part of a trade the security from client's account is returned to client-donor. Thus, short position is rolled over for the specified period.

Long positions of client are rolled over in the similar way. The difference from rolling over short positions is that you need to select securities to be rolled over. When forming REPO (NDM) orders the Module analyses all positions of clients having negative cash balance upon positive balance in securities and generates orders in volume needed to make the cash balance value positive.

Amount of securities in orders is formed with consideration of lots multiplicity set for the instrument. When rolling over short positions the calculated amount is rounded up to the nearest integer number multiple to value of **Lot multiplicity** parameter. When rolling over long positions

only balance rounded down to the nearest integer number multiple to **Lot multiplicity** parameter but not whole positive balance is accounted for each instrument with positive balance.

Second parts of REPO (NDM) can be executed either via workstation of the trading participant or via QUIK system. For details on REPO and NDM operations see sub-sections 7.20 and 7.21 of QUIK User's manual, Section 7: Broker Operations.

- 1. When rolling over positions on classes 'NDM' and 'NDM with CCP' two negotiated trades with counter direction are formed for each position both for client and client-donor with using different settlement codes (for example, 'B0' for the first par and 'B1' for the second part). When rolling over positions on classes 'REPO', 'REPO-M' and 'REPO with CCP' only one negotiated REPO order is formed both for client and client-donor.**
- 2. If the client order was not sent to the trading system (or it was rejected to be sent), a counter order on behalf of client-donor will not be sent. At that status of the counter order remains empty.**

5.2.3 Rolling over long and short positions

To open the dialogue of rolling over positions, use any of the following ways:

- Select the menu item **Colibri / Position rollover**;
- Press button  **Position rollover** on the toolbar;
- Select the shortcut menu item **Positions rollover by <client code>** in Client portfolio table.

To roll over positions set the list of classes available for rolling over and priority of using securities in Module's settings (**Plugins / Colibri / Settings... Colibri section / Positions rollover / Classes and securities**). For more information see [6.2.1](#).

To roll over simultaneously short and long positions, select the checkbox **Enable together closing long and short positions** in dialogue of rollover positions settings.

Positions can be rolled over by REPO and NDM trades. If positions are rolled over by REPO trades, the user sets a REPO rate, when doing it by NDM trades, it is necessary to set a rate for calculating price for the second REPO trade. Hereinafter the term 'Rate' as referred as rate for REPO and NDM trades.

Algorithm of rolling over all positions:

- 1. Orders for rolling over short positions are formed. All settings affecting on correction of calculations (for example, accounting of commission) are accounted.**

To account commission when rolling over positions, enable the setting Take into account securities in NDM and REPO modes when calculating margin indicators (Trading / Client portfolio section under System / Settings / General settings...).

2. Orders for rolling over long positions are formed. All settings affecting on correction of calculations are accounted as well. As a result, the client must not have negative positions either on cash or securities (with accounting commission). If securities are not sufficient for full roll over of client positions, the positions are still rolled over, but the client received a warning on insufficiency of funds.

Orders for rolling over positions are sent to QUIK server in the following order: first all orders of the client, then counter orders of client-donor.

If rolling over positions is selected for all clients, the algorithm is applied in turn to each client displayed in table of client parameters.

If the setting **Ask for confirmation for group operations** is enabled in QUIK Workstation (menu item **Trading / Orders** section under **System / Settings / General settings...**) a request to confirm the operation is given when sending more than one prepared order for execution.

5.2.4 Parameters of rolling over positions

Rollover positions dialog provides the following parameters:

The 'Position rollover' dialog box contains the following fields and controls:

- Rollover positions with limit kind:** A dropdown menu set to 'T0'.
- Client Selection:** A checked checkbox for 'All clients' and an empty dropdown menu.
- Position Types:** Three radio buttons: 'Long positions' (unchecked), 'Short positions' (checked), and 'All positions' (unchecked).
- Security Classes:** A dropdown menu set to 'ORCB REPO' with the text 'RPMA, RPMO (2)' below it.
- Set price:** A dropdown menu set to 'Last trade'.
- Donors:** A dropdown menu set to '4/42 [NC0038900000]'.
- Trade account match:** A checked checkbox for 'Trade account match with client code'.
- Donor's trade account:** An empty dropdown menu.
- Internal closing:** An unchecked checkbox for 'Clients for internal closing'.
- Limit and Settlement:** 'Lim. REPO (days)' set to '3' and 'Settle code' set to 'Rb'.
- Rates and Discounts:** 'REPO rate, %' set to '0,0005', 'Start discount, %' (empty), and 'Compensation, %' set to '0,0000'.
- Reference:** A text field containing '123'.
- Partner:** A dropdown menu set to 'Test [NC0038900000]'.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom.

1. **Rollover positions with limit kind** – select a limit kind from the list to roll over position.

- For classes 'REPO-M', 'NDM', 'NDM with CCP' and 'REPO with CCP' the list includes values 'T0' and 'T1';
 - For REPO classes the list includes only 'T0' value.
- 2. All clients** – if the checkbox is selected, positions are rolled over for all clients. If the checkbox is cleared, positions are rolled over for the client selected in dropdown list or for clients set in filter by clients using '...' button. The list excludes first clients absent in list of allowed clients formed on the basis of filtration by client code in Client portfolio table (if several Client portfolio tables have been opened, the unified list for all table will be formed), then those prohibited to roll over positions by settings.
- 3. Option button to select the type of rolled over position:**
 - Long positions;
 - Short positions;
 - All positions – available upon the enabled **Enable together closing long and short positions** program setting.
- 4. Use security classes** – select a class type used in rolling over positions (REPO, Modified REPO, REPO with CCP, NDM, NDM with CCP).
- 5. Set price** – select a method of defining order price. Valid values:
 - **Last trade** – set order price based on the last trade price. Available for all classes, except for REPO with CCP;
 - **Previous close price** – set order price based on closing price of the previous day. Available for all classes, except for REPO with CCP;
 - **Manually** – set order price manually. Available for all classes, except for REPO with CCP;
 - **Via discount** – set order price based on value of the start discount. Available only for REPO with CCP classes;
 - **Via start discount** – set order price based on value of the start discount. Available only for Modified REPO classes.
- 6. Donors** – specify code of client supplying securities.
 Use button '...' to select several client codes (sequence considered). In this case positions are rolled over taking to account funds of specified clients-donors, that is funds of donor №1 are used first (till exhausting) when closing positions, then funds of donor №2 etc.
 The default value is that specified in settings of positions rollover.
- 7. Trade account match with client code** – if the checkbox is selected, trade account coinciding with client code is used for each client-donor. At that the field **Donors trade account** becomes unavailable. The attribute is available if at least one code of client-donor is selected.
- 8. Donors trade account** – select trade account of client-donor from the list. The field is obligatory for filling.

9. Clients for internal closing – if the checkbox is selected, clients for internal closing may be selected. The attribute is available if at least one code of client-donor is selected and **Enable internal closing** checkbox is selected in the program settings.

10.Lim.REPO (days) / Lim. (days) – for REPO classes select the execution term for the second REPO part, in days / for NDM, NDM with CCP classes specify number of calendar days between a current date and the execution date for the second NDM trades (refund). Value must not exceed '90'.

11.Settle code – select the settlement code for the trade from dropdown list. Valid values:

- _ For NDM classes:
 - _ T0, B0 – for T0 positions;
 - _ B01 – for T1 positions.
- _ For NDM with CCP classes:
 - _ Y0 – for T0 positions;
 - _ Y1 – for T1 positions.
- _ For REPO classes:
 - _ R<REPO term>.
- _ For REPO-M classes:
 - _ Rb – for T0 positions;
 - _ S01 – for T1 positions.
- _ For REPO with CCP classes:
 - _ T0, Y0 – for T0 positions;
 - _ Y1 – for T1 positions.

If the only value of settlement code is available for the position, this value is displayed by default without possibility to edit.

12.REPO rate, % / Rate, % – specify value of crediting rate, in percent. If the mode **Auto select REPO rate sign** is activated, the rate is entered in form of its absolute value, an appropriate sign ('plus' for rolling over long positions and 'minus' for short ones) is selected automatically when sending orders. The field is obligatory for filling.

If the Rate value is changed (compared with the previous value) and the list of clients with individual rate for rolling over positions is not empty, a warning like 'Default REPO rate has been changed. Apply it to all clients?' will be given. Under positive response the selected value of Rate is applied to all clients including those with an individual Rate value assigned. Otherwise the selected value of Rate is applied to only clients without individually set Rate.

13.Start discount, %» / Discount, % – REPO trade condition explicitly set in order for concluding a REPO trade or directly defined from the order's conditions. Available for REPO-M classes if **Via start discount** is selected as method of defining the order price. Available also for REPO with CCP classes.

14.Compensation, % – specify refund rate under non-filling the second REPO part, in percent. Available only for REPO and REPO-M classes. The field is obligatory for filling.

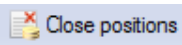
15.Reference – text link for REPO trades.

16.Partner – select code of trading participant who is a partner in REPO trade. The field is obligatory for filling.

Press button **Yes** to create orders. Use **Cancel** to close the window without sending orders. If selecting order price is set as manually, window for entering the price value will appear on the screen.

If Orders for closing short positions table includes at least one record for a selected client code, the program requires confirmation of re-creating orders. At that new orders will be added to the table with saving the previous ones. To avoid confusion, delete all unsent orders before re-creating a package of orders.

5.3 Closing positions

menu **Plugins / Colibri / Close positions** or button 

5.3.1 Purpose

Procedure of closing positions is used if the client reaches such condition when the broker or regulator may require to close positions (or a part of them) to reach the acceptable state.

Algorithm of closing depends on client type:

- Closing positions by discounts is used for MD clients. As a result of closing a part (or all) of client positions, margin status of the client changes so that their portfolio value would exceed value of the initial margin by amount defined by broker.
- Closing positions by level of margin is used for clients different from MD. Current level of client's margin is brought to that established by broker. If the current level of client's margin is greater or equal to the set up level, positions of this client are not closed. If the checkbox **Consider qualified clients** is selected in QUIK Workstation settings (**Trading / Client portfolio** section under **System / Settings / General settings...**), client type (common or qualified) is accounted by the Module when defining the selected margin level.

5.3.2 Operating principle

1. Establishing rules to create orders in the Workstation settings (menu item **Plugins / Colibri / Settings / Colibri / Closing positions**) (see [6.3](#)).
2. Creating orders in Close positions dialog that can be opened in any of the following ways:
 - _ Select the menu item **Plugins / Colibri / Close positions**;
 - _ Use  **Close positions** button on the toolbar;
 - _ Select the shortcut menu item **Close positions by <client code>** in Client portfolio table.

In the opened dialog select the list of clients to close positions for. Rule of closing set by default can be applied to a current position.

3. Forming the list of securities on which the positions must be closed for the selected clients.
 - _ When closing positions by discounts;

Orders for closing short positions on non-margin instruments or D-type instruments are formed for clients. Orders for closing long and short positions on all margin instruments are formed for clients without short positions on non-margin securities. Permission for closing long positions on non-margin securities can be set by activating **Close long positions by nonmargin instruments** attribute (see [6.3.2](#)).

Trading mode of closing is defined for each security. Positions on limit kinds different from that corresponding to the trading mode are ignored.
 - _ When closing positions by margin level:

Orders for closing long and short positions are formed on securities of 'M' and 'MA' types. Permission for closing long positions on non-margin securities is established by activation of the attribute **Enable closing long positions by nonmargin instruments** (see [6.3.2](#)).

Trading mode of closing is defined for each security with checking for limit kind corresponding to this mode. Positions on limit kinds different from T0 are ignored.
4. Sorting the list of securities in accordance with one of the following algorithms:
 - _ Proportionally to the position – all positions are reduced by the same proportion expressed in cash.
 - _ Securities sequence – sequence of securities is considered in the list of securities for closing positions on. If processing all securities from the list is not enough to reach the established margin values, securities allowed for closing but not included to the list of securities selected in the closing rule will be processed.

5. Calculation of orders for closing positions.

Quantity of instruments in orders is defined taking to the account the lot's multiplicity set for the instrument. If the position size is not multiple to the lot size, the mode of using partial lots can be used.

Price of an order for closing position is defined as follows:

- _ Offer price is used when closing short positions;

- Bid price is used when closing long positions.

Price of the last trade or closing price (in decreasing order of priority) is used in absence of offer/bid price.

Orders in the list are available to be deleted or edited before they are sent to the trading system.

Use the **Execute** button to send the orders to the trading system of exchange. If the setting **Ask for confirmation for group operations** is enabled in QUIK Workstation (menu item **Trading / Orders** section under **System / Settings / General settings...**) a request to confirm the operation is given when sending more than one prepared order for execution.

5.3.3 Parameters of closing positions

Dialog of closing positions contains the following parameters:

Close positions

Closing positions for

☒ Clients with codes Q5 [NC0038900000] ...

☐ Clients with funds level greater and less

☐ Clients with margin level greater and less

Rule for close positions: <Default> ... Default

☒ Close long positions by nonmargin instruments

	Client code	Class code	Security code	Account	Operation	Price	Qty	Comission
1	Q5	BQUOTE	RTKM	L01-00000F00	Buy	50.00	100	0.00

Update Execute Cancel

1. Close positions for clients:

- **with client codes** – select client codes for closing positions, separated by commas;
- **with funds level greater than ... and less than ...** – select clients for closing positions with consideration of minimum and maximum funds levels. Values specified in fields of the setting must not exceed '1'. The filter is available for only clients of MD type. The field is active in closing positions by discounts is allowed by settings (see [6.3.2](#));
- **Clients with margin level greater than ... and less than ...** – select clients for closing positions with consideration of minimum and maximum margin levels. Values specified in fields of the setting are expressed in percent and must not exceed '100'. The filter is available for all types of clients except those of MD type. The field is active in closing positions by margin level is allowed by settings (see [6.3.2](#)).

Filtration can be applied only to clients displayed in Client portfolio table in accordance with filter by client code. If several Client portfolio tables are opened in the Workstation, unified list of available clients for all such tables will be formed.

- 2. Rule for close positions** – change rule of closing positions set by default, for the current operation of closing.

Press button ‘...’ to open dialog ‘Edit closing position rule’ analogical to one called from the program’s settings (see [6.3.1](#)). Editing settings does not change parameters of closing set in the program’s settings. To return the default settings use the **Default** button.

- 3. Close long positions by nonmargin instruments** – enabled attribute allows using positive positions for non-margin securities in the current operation of closing. Editing settings does not change parameters of closing set in the program’s settings. The checkbox is cleared by default.

- 4. Table of orders for closing positions** contains the following parameters:

- Client code;
- Class code;
- Security code;
- Account;
- Operation;
- Price;
- Qty;
- Commission.

Operations available from the shortcut menu of the table:

- **Change** – change parameters of the order. The item is available in columns ‘Price’ and ‘Qty’. Values of ‘Price’ and ‘Qty’ can be any positive number.

Use Enter or Tab keys to save values. Editing mode can be enabled by double clicking on the order.

- **Remove** – delete order from the list. To update the list of orders press **Update** (at that changes in orders parameters will not be saved). Press **Execute** to send orders to QUIK server. Press **Cancel** to close the window without sending orders.

6. Program Settings

To open the dialogue of the Module settings, select the menu item **Plugins / Colibri / Settings**. Parameters of the Module settings are available in section 'Colibri' and grouped into tabs.

6.1 Sending margin calls

- **Switch margin call mode automatically** – enable sending notifications. The checkbox is selected by default.
 - **Switch at connected at server QUIK** – enable sending notifications when connected to QUIK server. The option button is selected by default;
 - **Switch in time interval ... From... to** – enable sending notifications for the set period of time.
- * **Min. time interval for sending (sec.)** – minimum time in seconds between two serial notifications of the same type for the same client. Value by default: " (empty) (parameter is not set).
- * **Min. change threshold for sending ... Units / %** – minimum value of changing (lowering) the portfolio value between two serial notifications of the same type for the same client type in currency units or percent. Mode of setting the parameter in currency units is selected by default. Value by default: " (empty) (parameter is not set).
- * **Min. change threshold for LLA** – minimum value of changing in Funds level between two serial notifications of the same type to MD clients. Value by default: " (empty) (parameter is not set).
- * **Disable sending margin call after temporary improvement of parameters of portfolio** – if the attribute is selected, sending notifications is available only if the current value of portfolio is worse than at the moment of sending the previous notification. Checkbox is cleared by default.

(*) The settings allow restricting frequency of sending notifications.

- **Notify about sending margin calls** – mode of notification alerts:
 - **System message** – message about sending a notification is added to System messages table of QUIK Workstation at the moment of sending each notification. If a notification is sent by several methods at the same time and/or to several addresses, message on its sending is once formed;
 - **Play sound** – assign a sound signal to notifications. Use the **From file** button to select a sound signal from a file. Selected sound signal can be listened by pressing the  button. Use the '...' button to select other file.
- **Don't send margin calls to** – disable sending notifications to client selected from the dropdown list. Button '...' calls dialog of viewing and changing the list of clients. If several clients have been selected, the dropdown list shows the total number of the selected clients.

- **Clear at trade session change** – mode of clearing the list of selected clients at the beginning of trading session of QUIK Server. The mode is disabled by default. The modal dialog appears when editing client codes with the disabled of sending notifications.

6.1.1 Types of notifications

Discounts schema

Notifications for clients of MD type.

- **Notify about status change** – enable sending notifications when meeting the following conditions:
 - **Restriction (less than corrected margin)** – portfolio value is less than the corrected margin and greater or equal to the initial margin;
 - **Demand (less than initial margin)** – portfolio value is less than the initial margin and greater or equal to the minimum margin;
 - **Closing (less than minimal margin)** – portfolio value is less than the minimum margin.
- **Notify template** – select a file to load template of notifications for each condition. Use the ‘...’ button to select a file. Format of the loaded file is described in [5.1.5](#).
- **Notify about situation** – enable sending notifications when the following situation occurs:
 - **Unallowable short position** – negative position for securities unavailable to buy for the credit funds (non-margin securities and ‘D’ type securities).
- **Notify template** – select a file for loading the template of notification about a negative position. Press ‘...’ to select a file. Format of loaded file is described in [5.1.5](#).

Other schemas

Notifications for clients of all types other than MD.

- **Notify about status change** – enable sending notifications when meeting the following conditions:
 - * **Restriction margin level** – margin level is greater or equal to margin level of unsecured demand but less than the boundary level of margin;
 - * **Demand margin level** – margin level is greater or equal to margin level of forced closing but less than margin level for unsecured demand;
 - * **Force closing margin level** – margin level is less than margin level of forced closing.

(*) The dictionary displays the boundary values of margin levels (in percent) for common and qualified clients. Client qualification is accounted by the Module only at selected checkbox ‘Consider qualified clients’. Boundary values and the attribute of client qualification are defined by QUIK Workstation settings (Trading / Client portfolio section under System / Settings / General settings...).

- **Notify template** – select a file to load template of notifications for each condition. Use the ‘...’ button to select a file. Format of the loaded file is described in [5.1.5](#).
- **Notify about situation** – enable sending notifications when the following situation occurs:
 - **Unused global limit quota less than ... %** – set up the limit share of unused global limit. If the actual share is less than the critical share of unused global limit defined by settings, the notification is created.
- **Notify template** – select a file to load template of notifications about a share of unused global limit. Use the ‘...’ button to select a file. Format of the loaded file is described in [5.1.5](#).

6.1.2 Sending by e-mail

- **Send e-mail** – enable sending notifications by email. The checkbox is selected by default. If the attribute is enabled, the following settings are available:
 - **SMTP-server address** – address and port of SMTP-server of sending notifications;
 - **Sender address** – return address of email sender for response messages;
- **SMTP-server authentication** – enable user authentication on SMTP-server.
 - **Login** – use name;
 - **Change password** – use the button to open the dialog of entering the user password. Fill the **New password** and **Confirm password** fields. Select the **Encode password** checkbox to save the password in encrypted form.

Password must not begin with \$ and # symbols. If transferring the Program to another computer, reinstalling the operational system or running under another Windows user, encrypted passwords become unavailable to be unencrypted. In this situation the appropriate must be reestablished.

- **Template for e-mail subject** – subject template for emails with notifications.
- **File pairs of code and e-mail** – name of file with correspondence between client codes and their emails. Specify it manually or select using ‘...’ button. File format is given in [7.1](#).
- **Send copy of e-mail to (via ‘,’)** – send copies of all messages to a certain set of addresses. Addresses in the list are separated by commas.
- **Send if individual address missed** – set up sending notification to clients by e-mail even if the client does not have an individual e-mail address. Notifications are sent only to addresses specified in setting **Send copy e-mails to (via ‘,’)**, setting **As hidden copy** in this situation is ignored. The logic of notifying is not changed if the client specified an individual e-mail address.

- **As hidden copy** – if the attribute is enabled, notifications to addresses from setting **Send copy e-mails to (via ‘,’)** are sent as a hidden copy. The checkbox is cleared by default.
- **Send individual e-mail** – under the selected attribute when sending a notification to several addresses, several messages having the only address each are formed. The checkbox is cleared by default.

6.1.3 Sending by UID

- **Send by traders messages** – enable sending notifications by trader messages. The checkbox is cleared by default;
- **Send by MC2Q** – enable sending notifications via MC2Q utility;
- **Send e-mail to addresses (via ‘,’)** – list of e-mails separated by comma to send messages for MC2Q. The field is not filled by default. The setting is available upon the enabled **Send by MC2Q** attribute;
- **Send by SMS *** – enable sending notifications via SMS (SMS gateway required). The checkbox is cleared by default.

(*) To use this function, set the correspondence between client codes and UIDs, establish manager rights on ‘SMS’ class (‘Set limits’ checkbox must be selected) in accordance with SMS Module manual.

- **File pairs of code and UID** – file name and correspondence between client codes and UIDs. Specify it manually or select using ‘...’ button. File format is given in [7.2](#). The setting is available under the selected **Send by traders messages** and / or **Send by MC2Q** and / or **Send by SMS** attributes. The field is obligatory for filling;
- **Folders for MC2Q (via ‘,’)** – list of catalog names separated by ‘;’ (semicolon) to be used for notification by **MC2Q**. The field is not filled by default. The setting is available upon the enabled **Send by MC2Q** checkbox.

6.1.4 Store margin calls in DB

- **Store sent margin calls in** – if the attribute is selected, information on the sent notifications is stored in database. The checkbox is cleared by default. The following parameters are available upon the enabled setting:
 - **ODBC data source name** – select an ODBC source. For further details on creating an ODBC source see [1.4](#);
 - **Login** – user name;
 - **Password** – user password;
 - **New password** – value of password;
 - **Confirm password** – repeat the password entered in **New password** field;

- **Encode password** – select the checkbox to save the password in encrypted form.

Password must not begin with \$ and # symbols. If transferring the Program to another computer, reinstalling the operational system or running under another Windows user, encrypted passwords become unavailable to be unencrypted. In this situation the appropriate must be reestablished.

- **Table name** – name of table for storing notifications. Value by default: 'MCalls'. Numeric values must not be used in table name. Format of database table for storing the sent notifications is given in [7.5](#).

6.2 Position rollover

- **Apply position rollover for clients:**
 - **Only from list** – select a file with list of clients to roll over positions. File format is given in [7.3](#);
 - **Only marginal clients** – rolling over positions is available only for margin clients;
 - **Only with a positive money positions (for short positions)** – rolling over positions is available only for clients having a positive cash position;
 - **Enable subclients** – allow rolling over subclient positions. The attribute is selected by default.
- **Modified REPO** is to account features of sending orders on this class of securities when an order has the minimum size of 1 ruble:
 - **Always rollover long positions** – if the attribute is enabled, orders for rolling over long positions are formed in any case, even if a negative balance of securities is less than 1 ruble; if the attribute is disabled, REPO orders are formed only if a negative client positions in cash is higher than 1 ruble;
 - **Rollover short positions with valuation less one rub.** – if the attribute is enabled, orders for rolling over short positions are formed for each security with a negative balance, even if its estimate is less than 1 ruble; if the attribute is disabled, REPO orders are formed only if a negative client positions in cash is higher than 1 ruble.
- **Rollover long positions:**
 - **Max. trade volume** – set the maximum order volume for rolling over long position. Orders of exceeding volume are divided into several orders of volume each that does not exceed the maximum, the last order is formed for the resting volume;
 - **Minimize count of trades** – if the attribute is enabled, positions for securities with the highest estimated value are rolled over first. The checkbox is cleared by default;
 - **Rollover only marginal security positions** – if the attribute is enabled, all non-margin securities are ignored and do not participate in rolling over positions. The checkbox is cleared by default;

- **Withdraw donor position by currency ... on group ...** – set parameters of withdrawing cash funds from client-donor's account when rolling over positions. The setting allows to specify a currency code and a group. Currency value by default – 'SUR', group value is 'EQTV'.
- **Check assets for single donor** – enable checking for funds adequacy when selecting the only client-donor.
- **Enable together closing long and short positions** – enable permission to roll over long and short positions simultaneously. The checkbox is cleared by default.
- **Use REPO rate templates** – enable using templates of REPO rates from the selected file. If templates of REPO rates are selected, 'REPO rate' parameter (or 'Rate' for NDM and NDM with CCP) may depend on volume of orders for rolling over positions for the client when forming such orders. Use button '...' to select a file. File format is given in [7.4](#).
- **Consider value long and short pos. summary** – summary volume of all orders for rolling over short and long positions for the client is used to define 'REPO rate' (or 'Rate' for NDM and NDM with CCP) in mode of rolling over all positions.
- **Default donors** – set a list of clients-donors separated by ';' (comma) used by default in rolling over positions.

6.2.1 Additional parameters

The parameters are configured if broker intends to impose the additional commission for trades of rolling over positions compared with commission for such trades without rolling over positions.

- **Additional commission for rollover orders** – set the additional commission for rolling over positions on NDM/REPO trades:
 - **Long rollover trade** – value of the additional commission for rolling a long position, in rubles. Value by default: '0';
 - **Short rollover trade** – value of the additional commission for rolling a short position, in rubles. Value by default: '0'.

Value of the additional commission is not written off by QUIK Server but reserved for this commission.

6.2.2 Classes and securities

- **Position rollover classes (per ',')** – set a list of classes available for rolling over positions.
- **Security order on position rollover** – set a sequence of running over securities to prepare orders with their positions.

6.2.3 REPO orders parameters

- **Default rollover long parameters** – set default values of parameters for sending orders to roll over long positions:
 - **Compensation, %** – value of refund rate, in percent;
 - **REPO rate, % / Rate, %** – rate value, in percent;
 - **Comment** – text comment given each REPO rate. When exporting trades to back-office, they are exported with the comment is exported so that it is possible to separate similar orders.
- **Default rollover short parameters** – set default values of parameters for sending orders to roll over short positions:
 - **Compensation, %** – value of refund rate, in percent;
 - **REPO rate, % / Rate, %** – rate value, in percent;
 - **Comment** – text comment given each REPO rate. When exporting trades to back-office, they are exported with the comment is exported so that it is possible to separate similar orders.
- **Individual position rollover parameters** – list of individual settings is given as a table. Each row of the table contains information on settings for a particular client code. Table's columns show the following parameters:

Parameter	Description
Client code	Client code
Rate, % (long)	REPO rate for long positions, in percent
Term (long)	REPO rate for short positions
Rate, % (short)	REPO rate for short positions, in percent
Term (short)	REPO term for short positions

- **Add** – add settings for a new client code;
 - **Edit** – edit settings for the selected client code;
 - **Remove** – delete the selected client code from the list;
 - **Clear** – delete all client codes from the list.
- **Auto select REPO rate sign** – if the checkbox is selected, REPO rate is entered as its absolute value. Then, for rolling over short positions the rate is taken as negative, for long positions it is taken as positive (but displayed always as a positive value). The checkbox is cleared by default.

6.2.4 Internal closing

- **Enable internal closing** – enable the mode of ‘internal closing positions’ when rolling over positions by REPO trades.
- **Setting of using part assets of donor** – list of settings is given as a table. Each row of the table contains information on setting for a particular client code. Table’s columns display client code and their asset share in percent. The following functions are available for records of the table:
 - _ **Add** – add settings for a new client code;
 - _ **Edit** – edit settings for the selected client code;
 - _ **Remove** – delete the selected client code from the list;
 - _ **Clear** – delete all client codes from the list.

6.3 Closing positions

- **Apply position closing for clients** – set up a list of clients to close positions for:
 - _ **Only from list** – select a file with a list of clients to close positions for. The file format is described in [7.3](#).
- **Rules for client with code** – filtering by client code used for quick searching information. Rules of closing positions are established for each client in a separate dialog. List of rules in the context of client codes is given as a table. Table’s columns display the following parameters:
 - _ Client code;
 - _ Type:
 - _ D – close by discounts;
 - _ M – close by margin level.
 - _ Reserve, % (filled only to close positions by discounts);
 - _ Margin level, % (filled only to close positions by margin level);
 - _ Qual. clients, % (filled only to close positions by margin level);
 - _ Close prior.;
 - _ Sec. prior.

Description of the table’s parameters see in [6.3.1](#).

- _ **Add** – add settings for a new client code;
- _ **Delete** – delete the selected client code from the list;
- _ **Edit** – edit settings for the selected client code.

Rules of closing positions by default are displayed in the first two rows of the list – with 'All clients' code. The first row is settings of closing by discounts (D-type), the second one is settings of closing by margin level (M-type). Rows cannot be deleted from the table but available for editing. When using the 'Rules for client with code' filter (independent on its value) 'All clients' row is not displayed in the table.

If the only method of closing positions (by discounts or by margin level) is selected by settings, the table displays a record only for that method, including 'All clients' record.

6.3.1 Editing rule of closing positions

The following parameters are displayed in the window:

- **Client code;**
- **Closing type** – used type of closing positions:
 - **By discounts** – close by discounts;
 - **By margin level** – close by margin level
- **Reserve** – percent of exceeding the initial margin. Positive number. The field is available only upon selected **By discounts** closing type.
- **Margin level** – value of margin level expressed in percent. Positive value up to two digits after the decimal separator. The field is available only upon selected **By margin level** closing type.
- **Qualified clients** – value of margin level for qualified clients. Positive value up to two digits after the decimal separator. If the field is not filled, value of margin level for the qualified clients coincides with value in **Margin level** fields. The field is available only upon the following conditions:
 - selected **By margin level** closing type;
 - checkbox **Consider qualified clients** is selected in QUIK Workstation settings (**Trading / Client portfolio** section under **System / Settings / General settings...**).
- **Close order** – rule of closing positions. Valid values:
 - Long first;
 - Short first;
 - All.

- **Security order (comma separated)** – sequence of creating orders for closing. Set a list of instruments (securities, currency) separated by comma in accordance with sequence of securities. The field is not available upon the selected **Pro rata position** checkbox.
- **Pro rata position** – close positions for all securities proportionally to value of positions to close. The checkbox is selected by default.

6.3.2 Order parameters

- **Enable closing by discounts** – allow closing positions by discounts. Checkbox is selected by default.
- **Enable closing by margin level** – allow closing positions by level of margin. Checkbox is cleared by default.
- **Enable closing long positions by nonmargin instruments** – allow closing positive positions for non-margin instruments (securities, currency). Checkbox is cleared by default.
- **Enable closing currency positions** – select the checkbox to allow closing currency positions. The setting is used when maintaining cash positions in the context of currencies for clients using 'by discounts' lending scheme (MD clients). The checkbox is cleared by default;
- **Enable closing by partial lots mode** – allow closing positions with using the mode of partial lots. Checkbox is cleared by default.
 - **Partial lots mode security class** – class code for the mode of partial lots. The parameter is available upon enabled **Enable closing by partial lots mode** checkbox and obligatory for filling. Value by default: 'SMAL';
- **Spread, %** – additional (leading) deviation between closing price and the current market price. Closing price gets higher by value set in buy orders, in sell orders it gets lower. Value by default: '0'.
- **Order comment** – text of comment in orders for closing positions. The setting can be used for authentication of orders for closing positions when integrating with the internal systems of broker.

6.3.3 Currency market parameters

- **Instruments for closing positions on currency market** – list of instruments for closing positions on FX market.

List of instruments is presented as a table. Table columns display the following parameters:

- **Currency** – currency code;
- **Pair** – code of instrument used for closing position. One instrument must be set for each currency (currency pair with calculation T0, T1 or T2).

1. **If no instrument available to close the position is specified for the instrument, the position is not closed.**
2. **Currency of calculations on clients' positions is not displayed in table.**

Table contains by default the following currency codes and instruments to buy the specified currencies for rubles in T1:

Currency	Pair
EUR	EUR_RUB__TOM
GBP	GBPRUB_TOM
USD	USD000UTSTOM

Available functions:

- **Add** – add a new currency;
 - **Edit** – edit the selected currency;
 - **Remove** – delete the selected currency from list;
 - **Clear** – delete all records from list.
 - **Reset** – delete all records from list except values by default. If the default values were edited the changes get cancelled.
- **Class for closing currencies position** – dropdown list to select an instrument class to close currency positions. Value by default: CETS.

7. APPENDIX

7.1 Format of file with correspondences between client codes and emails

The file is to define correspondences between client codes and their emails. Each row has the following view:

```
<Client code_1>=<e-mail_1>, <e-mail_2>
```

or,

```
<Client code_2>, <Firm>=<e-mail_1>, <e-mail_2>
```

For example:

```
E2=user1@arqa.ru, user2@arqa.ru  
E3, NC0038900000=user3@arqa.ru
```

That is, client with code E2 must receive messages to emails user1@arqa.ru and user2@arqa.ru. Client with code E3 in firm NC0038900000 receives messages to user3@arqa.ru. If a firm is not set, list of emails is taken set for all firms.

7.2 Format of file with correspondences between client codes and UIDs

The file is to define correspondences between client codes and their identifiers in QUIK system. Each row has the following view:

```
<Client code_2>=<UID_1>, <UID_2>, <UID_3>
```

or,

```
<Client code_1>, <Firm>=<UID_1>, <UID_2>, <UID_3>
```

For example:

```
E2=5, 7, 85  
E3, NC0038900000=34, 127
```

That is, client with code E2 must receive messages to terminals working under users with UID=5, UID=7 and UID=85. Client with code E3 in firm NC0038900000 receives messages to terminals working under users with UID=34 and UID=127. If a firm is not set, the list of UIDs is taken set for all firms.

7.3 Format of clients list for rolling over/closing positions

File is in the text format. Section [Filter] includes the following parameters:

- IncludeClients – list of clients (separated by commas) to roll over /closing positions ('white list');
- ExcludeClients – list of clients (separated by commas) to exclude from rolling over/closing positions ('black list').

Setting IncludeClients has higher priority relative to setting ExcludeClients.

Format:

```
[Filter]  
IncludeClients=Client1, Client2, Client3
```

7.4 Format of file with templates of REPO rates

Each template is described in file in form of section named [RepoTemplate_<Template code>].

Section includes rows to define value of REPO rate:

- for short positions, row as follows: <Turnover as integer number>=<REPO rate in %>. This REPO rate is used when estimating value of short position (by absolute value) greater or equal to the specified one;
- for long positions, row as follows: Long_<Turnover as integer number>=<REPO rate in %>. This REPO rate is used when estimating value of long position greater or equal to the specified one. If a separate scale is not set for the long position, the same rates scale as for short positions will be applied to long positions.

For example:

```
[RepoTemplate_T1]
0=5
1000=4
10000=3
100000=2
Long_0=7
Long_2000=6
Long_20000=5
Long_200000=4

[RepoTemplate_T2]
0=5.1
1000=4.2
10000=3.3
100000=2
Long_0=7
Long_2000=6
Long_20000=5.1
Long_200000=4.2

[RepoTemplate_T3]
0=5.2
1000=4.3
10000=5.5
Long_0=6
Long_2000=6.4
```

Section [Clients] of templates file defines linkage between clients and templates used by them by a row as follows: <Client code>=<Template code>. Thus, client with specified code must use the set template of REPO rates.

For example:

```
[Clients]
E2=T1
E3=T2
__TEMPLATE__=T3
```

To set global scale of commission at REPO rates for clients without individually established commission, set a row as follows in [Clients] section:

```
__TEMPLATE__=<Template name>
```

At that a template for global scale of commission must be set in the same way as for individual commission scale.

When using commission scales at REPO rates, individual scale has higher priority. If individual scale is not set, global one will be used. If global commission scale is neither set, REPO rate established in Module settings will be used. Different scales of commission to roll over long and short positions can be set as well as in individual commission scale setting.

If necessary to set a REPO rate independent on volume, set a row as follows:

```
0=<REPO rate>
```

7.5 Format of database table for storing sent notifications

Data on sent notifications is stored in MCalls* table. Table must include the following fields:

(*) Default name of the table. Table name can be changed by user (see [6.1.4](#)).

Field name	Data type	Description
ID	int, autoincrement	Number of record in table. Field is filled automatically
MCType	int, NULL	Type of notification (Margin call). Valid values: – NULL or 0 – common notifications on stock market (old scheme of margin lending); – 1-7 – different types of notifications used in CoLibri FM; – 8 – notifications (new scheme of margin lending 'by discounts')
MCType	int	Subtype of notification, only for margin calls of 'by discounts' (MCType=8) and 'by margin level' (MCType=0) types. Valid values: – 1 – level of restriction; – 2 – level of demand; – 3 level of closing Selected level corresponds the type of notification to be sent
TDate	integer	Date of forming notification in <YYYYMMDD> format

Field name	Data type	Description
MCTime	integer	Time of forming notification in <HHMMSS> format
MCLevel	integer	Margin level that has been reduced. Valid values: – 0 – for notifications of 0 type; – Value depends on type – for notifications of 1-7 types; – 0 – for notifications of 8 type
Equity	decimal(19,4)	Portfolio value
Margin	decimal(19,4)	Initial margin
CorrMargin	decimal(19,4)	Corrected margin. Used only for margin calls of 'by discounts' type
MinMargin	decimal(19,4)	Minimum margin. The parameter is for notifications about the portfolio value (MD clients). Level of forced closing of position for the client. The parameter is for notifications about the margin level (clients other than MD).
LimitMargin	decimal(19,4)	Boundary level of margin for the client
TargetMargin	decimal(19,4)	Level of margin to direct the demand for the client
DepoValue	decimal(19,4)	Funds in securities
MoneyValue	decimal(19,4)	Current cash balance
CCode	varchar(12)	Client code
FirmID	varchar(12), NULL	Firm code
MsgText	varchar(255), NULL	Text of notification (fragments by 256 bytes; reminder is ignored)
MsgText2	varchar(255), NULL	
MsgText3	varchar(255), NULL	
MsgText4	varchar(255), NULL	
MsgText5	varchar(255), NULL	
SubjText	varchar(255), NULL	Text of message heading when sending email
EMails	varchar(255), NULL	First 250 characters of emails list to send notifications

Notifications about presence of a short position for non-margin security and those about a share of using the global limit are not stored in Module's database.

7.6 Defining client statuses

The following statuses are defined for clients of MD type:

- **Normal** – value of portfolio is greater or equal to the corrected margin;
- **Restriction** – value of portfolio is less than the corrected margin and greater or equal to the initial margin;
- **Demand** – value of portfolio is less than the initial margin and greater or equal to the minimum margin;
- **Closing** – value of portfolio is less than the minimum margin.

The following statuses are defined for clients different of MD type:

- **Normal** – level of margin is greater or equal to the boundary level of margin;
- **Restriction** – margin level is greater or equal to margin level of unsecured demand but less than the boundary level of margin;
- **Demand** – margin level is greater or equal to margin level of forced closing but less than margin level for unsecured demand;
- **Closing** – margin level is less than margin level of forced closing.