MULTI ACCOUNT MANAGER
User Guide

Table of content

SWISSQUOTE

Overview

Multi Account Manager (MAM) is designed to provide the professional trader the essential integrated software tools to quickly and conveniently allocate and manage funds under master account arrangement in live trading conditions.

MAM supports 10 allocation methods.

Allocations by Volume:
• Lot Allocation
• Percent Allocation
• Proportional by Balance Allocation
• Proportional by Equity Allocation
• Equity Percent Allocation
• Allocation by Equal Risk
• Lot Multiplier Allocation
• Lot Multiplier with Volume Fix

Allocations by P/L:
• Percent Allocation by P/L
• Proportional Allocation by P/L

The MAM software can be used by the discretionary or automated systems traders. This Help manual will form the ongoing core knowledge base of the software system.

Logon and initialization

When the MAM application is installed it is required to pass through initialization procedure in order to connect to the server. To access the server the license file is provided with the MAM Client installation package. This license file is loaded using File->Set License menu. After the license is loaded by the MAM Client application it will ask for valid master account password. The password is the same as for the MT4 Client Terminal.

When MAM Client application is loaded for the first time it is required to initialize the accounts before trading can be performed. To initialize the master account it is required to select one of the allocation methods.

To initialize the sub accounts it is required to select the sub accounts and then use Activate Selected menu item from the popup menu.
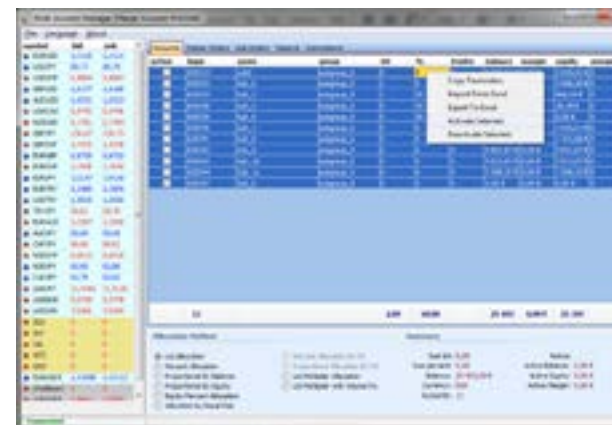
After the accounts are initialized in MAM Client application the trading can be performed on the master account through the MT4 Client Terminal or MAM Client application (depends on broker permissions).

Accounts

The Accounts tab of the MAM Client application contains information about the managed accounts (sub accounts) and MAM allocation parameters. The sub accounts table contains all available sub accounts and their properties. The properties can be changed right on the table. The next parameters of the sub accounts can be changed:

Active – this parameter is used to enable the sub account for trading. The MAM allocates trades from the master account to the Active sub accounts only. The Active property of the sub account is used for opening trades only. This parameter is ignored when trades are closed because when closing trades MAM already knows what sub accounts the trade was allocated to. So the number of Active sub accounts can be changed while positions are opened on the master account.

Lot – this parameter is used by the "Lot Allocation", "Lot Multiplier Allocation" and "Lot Multiplier with Volume Fix" methods. This parameter defines the number of lots to allocate to the sub account.

% (percent) – this parameter is used by the "Percent Allocation" and "Equity Percent Allocation" and "Percent Allocation by P/L" methods. This parameter defines the percentage amount of the master trade volume (or P/L) which will be allocated to the sub account.

It is possible to copy the same value of the parameter to more than one sub account. For this one needs to select the sub accounts to copy the parameter to. Then right click on the parameter which needs to be copied and in the popup menu select Copy Parameters option.

Allocation parameters can be exported and imported from Excel. To export sub accounts to Excel select the sub accounts that need to be exported and in the popup menu select Export to Excel option. The Excel spreadsheet can be modified and saved.

To Import sub accounts' parameters from Excel in the popup menu select Import from Excel option. The parameters of the sub accounts listed in the Excel spreadsheet will be imported and applied for the sub accounts.
The Summary tab shows the most essential parameters for allocation.

Sum Lot – the sum of Lot parameter for the active sub accounts.

Sum percent – the sum of percent parameter for the active sub accounts (this parameter should be 100%).


```
Summary

    Sum lot: 1,00                          Active: 1
Sum percent: 20,00              Active Balance: 994,31 €
   Balance: 25 403,35 €           Active Equity: 968,54 €
  Currency: EUR                   Active Margin: 0,00 €
  Accounts: 11
```

Balance – total balance of all the sub accounts (both active and inactive).

Currency – the deposit currency of the master account.

Accounts – total number of sub accounts.

Active – number of active sub accounts.

Active Balance – current balance of the master account (should be equal to the sum of balances of active sub accounts[*]).

Active Equity – current equity of the master account.

Active Margin – current margin of the master account.

_____

[*]To fix the balance of the master account it is required to Activate/Deactivate one of the sub accounts.

Allocation methods

At the heart of MAM is the ability for the trader or Managed Funds Manager to allocate the trades by individual sub account lots, percentage or proportional allocation to suit the overall structure to their trading or fund management style. Alongside the allocation method is the allocation parameters for quick and efficient implementation.

Lot Allocation

This allocation method is used to divide volume of the master trade to the sub accounts according to the set Lot parameter of the sub accounts. Lot Allocation allows trading with variable lot sizes on the master account. The allocation to the sub accounts will be proportional to the set lot sizes provided for each of them.

⚠️ When using Lot Allocation make sure to set Lot parameter of at least one of the active sub accounts greater than zero.

General formula of Lot Allocation method is this:

$$Vol_i = \frac{Lot_i}{\sum Lot} \cdot MVol$$

Where:

MVol – volume of the master trade

Lot$_i$ – Lot parameter of the ith sub account

$\sum$Lot – sum of Lot parameters of all active sub accounts

Vol$_i$ – volume of the sub trade

For example, consider there are two active sub accounts with Lot parameter set as 2 and 3 lots respectively.

If master account opens 10 lots then the volume of the sub orders is calculated as follows:

The volume of the first sub account is **2/5 * 10 = 4 lots**
The volume of the second sub account is **3/5 * 10 = 6 lots**

Percent Allocation

This allocation method is used to divide volume of the master trade to the sub accounts according to the set Percent (%) parameter of the sub accounts. The allocation to the sub accounts will be calculated as a percentage of the master trade volume.

⚠️ When using Percent Allocation the sum of Percent (%) parameter of all the active sub accounts must be 100%.

General formula of Percent Allocation method is this:

$$Vol_i = \frac{Pcnt_i}{100\%} \cdot MVol$$

Where:

MVol – volume of the master trade

Pcnt$_i$ – Percent(%) parameter of the ith sub account

Vol$_i$ – volume of the sub trade

For example, consider there are two active sub accounts with Lot parameter set as 30% and 70% respectively.

If master account opens 10 lots then the volume of the sub orders is calculated as follows:

The volume of the first sub account is **30%/100% * 10 = 3 lots**
The volume of the second sub account is **70%/100% * 10 = 7 lots**

Proportional by Balance Allocation

This allocation method is calculating proportion of the master trade volume according to the balances of the sub accounts. This method doesn't require additional settings. The fraction of the master trade volume is calculated automatically.

General formula of Proportional by Balance Allocation method is this:

$$Vol_i = \frac{Balance_i}{\sum Balance} \cdot MVol$$

Where:

MVol – volume of the master trade

Balance$_i$ – Balance of the ith sub account

∑Balance – sum of balances of all active sub accounts

Vol$_i$ – volume of the sub trade

For example, consider there are two active sub accounts with balances of 10,000 and 6,000 respectively.

If master account opens 10 lots then the volume of the sub orders is calculated as follows:

The volume of the first sub account is **6,000/16,000 * 10 = 3.75 lots**

The volume of the second sub account is **10,000/16,000 * 10 = 6.25 lots**

The volume of the sub accounts is rounded according to the lot step. For example, if lot step is 0.1 lot then the sub accounts will be allocated **6.3 and 3.7 lots** respectively.

Proportional by Equity Allocation

This allocation method is similar to the Proportional by Balance in a way that proportion is calculated automatically. The difference is that Equity is used instead of Balance. This method doesn't require additional settings. The fraction of the master trade volume is calculated automatically.

General formula of Proportional by Equity Allocation method is this:

$$Vol_i = \frac{Equity_i}{\sum Equity} \cdot MVol$$

Where:

MVol – volume of the master trade

Equity$_i$ – Equity of the ith sub account

∑Equity – sum of equities of all active sub accounts

Vol$_i$ – volume of the sub trade

Equity Percent Allocation

Equity Percentage allocation is used when the user requires allocating to sub accounts on a percentage basis of each individual sub account. The idea of this allocation method is to make it possible to define the risk for each

individual sub account. For example, if the risk percentage of the sub account is set to 30% it means that 30% of the sub account equity will be traded at any time. The volume traded on the master account is calculated as a sum of volumes of the sub accounts.

This allocation method is using Percent (%) parameter of the sub accounts to define the percentage of the sub account equity which will be traded in every trade.

⚠️ When using Equity Percent Allocation the volume of the master trade is changed to reflect the sum of volumes of the sub trades. No matter what volume is put in the initial trade request the volume of the opened trade will be different.

General formula of Equity Percent Allocation method is this:

$$Vol_i = \frac{Pcnt_i \cdot Leverage}{100\% \cdot cs \cdot conv} \cdot Equity_i$$

$$MVol = \sum Vol_i$$

Where:

MVol – volume of the master trade

Equity$_i$ – Equity of the ith sub account

Vol$_i$ – volume of the sub trade

$\sum$ Vol$_i$ – sum of volumes of the sub orders

Pcnt$_i$ – Percent(%) parameter of the ith sub account

Leverage – leverage of the sub account

cs – Contract Size for the symbol

conv – conversion rate for the symbol

For example, consider there are two active sub accounts with Percent(%) parameter set to 10% and 20% respectively.

Then the sub orders will be opened with the volumes as follows:

And the master trade volume will be calculated as the sum of sub trade volumes

Allocation by Equal Risk

Allocation by Equal Risk is introduced to address the problem of margin control on the sub accounts. Sometimes the sub accounts are stopped out because of the low margin level. No other allocation method is taking into consideration the margin level of the individual sub accounts. But with the Allocation by Equal Risk it is possible to set minimal Margin % level for each of the sub accounts. If the minimal Margin % limit is reached there will be no allocation to such sub account.

$$V_i = \frac{E_i^{\,s}}{E^m} \sum_{j=1}^{K} V_j^{\,m} - \sum_{j=1}^{N} V_j^{\,s}$$

Where:

N - Number of trades allocated to the ith sub account

K - Number of trades allocated to the master account

V$_i$ - Number of lots to be allocated to ith subaccount

V$_j^s$ - Number of lots already allocated to ith subaccount on jth trade

V_j^m - Number of lots already allocated to master account on jth trade

E_i^s - Equity of ith subaccount,

E^m - Equity of the master account

For example, consider there are two active sub accounts with one opened trade on the master account. This trade is allocated to the sub accounts and current margin level of the sub accounts is significantly different (1008.16% on the first sub account and 498.79% on the second sub account).

If we leave it as that then there is a possibility that one of the sub accounts can reach margin call level earlier. Now if we switch to the Allocation by Equal Risk and open another position on the master account this volume will be redistributed to the sub accounts so that to make their Margin % as much the same as possible. So for example, we open 10 lots on the master account.

On the sub accounts we can see this distribution of volumes

And now we can see that the new margin % of the sub accounts is almost the same.

This is still more than 100% (which is set by the Percent(%) parameter). If the margin % was less than 100 then the trade could not be opened on the sub account thus preventing it from the risk of margin call.

Lot Multiplier Allocation

This allocation method is used to copy trades from the master account to the sub accounts. This is simple implementation of the trade copier. The Lot parameter of the sub account is used as a multiplier factor for the master trade. The volume of the master trade remains unchanged.

⚠️ When using the Lot Multiplier Allocation method the volume of the master trade will always be different from the sum of volumes of the sub trades.

General formula of Lot Multiplier Allocation method is this:

$$Vol_i = Lot_i \cdot MVol$$

Where:

MVol – volume of the initial master trade request

Lot$_i$ – Lot paremter of the ith sub account

Vol$_i$ – volume of the sub trade

For example, consider there are two active sub accounts with set Lot paremter of 1.3 and 2.5 respectively.

If master account opens 1 lot then the volume of the sub orders is calculated as follows:

The volume of the first sub account is **1.3 * 1 = 1.3 lots**
The volume of the second sub account is **2.5 * 1 = 2.5 lots**
The master trade volume remains 1 lot.

Lot Multiplier with Volume Fix

This allocation method is used to copy trades from the master account to the sub accounts. This allocation is much similar to the Lot Multiplier allocation. The Lot parameter of the sub account is used as a multiplier factor for the master trade. But the only difference is that the volume of the master trade is changed to reflect the sum of volumes of the sub accounts.

⚠️ When using the Lot Multiplier with Volume Fix method the volume of the master trade will be different from the trade request volume. The volume will reflect the sum of volumes of the sub trades.

General formula of Lot Multiplier with Volume Fix method is this:

$$Vol_i = Lot_i \cdot MVol$$

$$MVol^t = \sum Vol_i$$

Where:

MVol – volume of the initial master trade request

MVol^t – volume of the master trade

Lot$_i$ – Lot paremter of the ith sub account

Vol$_i$ – volume of the sub trade

Percent Allocation by P/L

This is one of the two allocation methods by profit/loss. The allocation by P/L is made without opening positions on the sub accounts. But when the master position is closed the allocation to the sub accounts is made with

deposit/withdrawal transaction. The allocation methods by P/L are more precise in general. Their precision is always one cent regardless of the minimal volume settings. These methods are also working differently with the allocation parameters. The allocation parameters are read and allocations are calculated when the trade is closed on the master account.

Percent Allocation by P/L is used when the user requires allocation to the sub accounts on a percentage basis according to the set Percent(%) parameter similar to the Percent Allocation method.

⚠️ Switching from P/L based allocation method to the volume based allocation method is restricted if there are opened trades on the master account.

Proportional Allocation by P/L

The allocation method is similar to the Percent Allocation by P/L in a way that no trades are opened on the sub accounts. The deposit/withdrawal is made to the sub accounts when master trade is closed.

Proportional Allocation by P/L is used when the user requires allocating to sub accounts proportionally to their balances (see Proportional by Balance Allocation for more details).

Master Orders

This tab displays the master orders and the sub orders. When master order is selected the list of sub orders is shown for it.

Each individual sub order can be closed by the MAM Client application*. Whenever the sub order is closed the master order is closed partially by the volume of the closed sub order. To close the sub order it is required to double click on it. The Order Execution window will be opened. Then press Close Order button.
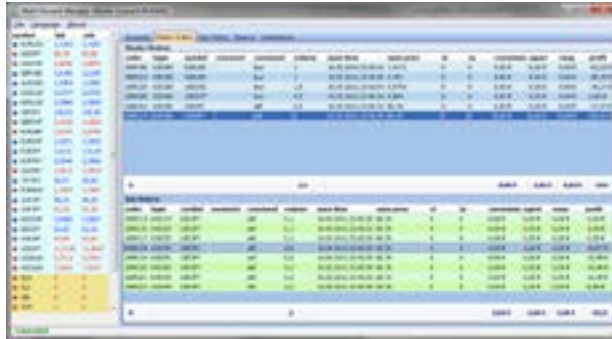
The master trades can be closed the same way. Double click on the master order to open Order Execution window and close the master order.

⚠️ Sub orders cannot be closed partially. Master orders can be closed partially.


Trades can also be opened on the master account from the MAM Client application if broker permits this option. To open new trade on the master account from MAM Client application double click on the Symbol from the market watch window. The Order Execution window will be opened. Set all required parameters of the trade in the Order Execution window and press Buy/Sell button.

_____
* If broker enables closing of the sub orders with the MAM Client application

Sub Orders

The sub orders tab is used to track all the sub orders. Sometimes there can be unallocated trades on the sub accounts (due to that the sub accounts were trading separately from the master account for example). This screen is showing all the trades on the sub accounts regardless of their allocation status. The sub orders table allows flexible visualization mechanism by means of columns grouping. Grouping can be made by any column. By default the grouping is made by master order. When expanding the grouped row the sub orders will be shown for particular master order.

To export sub orders to excel select the sub orders and then right click on the sub orders table. Use **Export Sub Orders** option from the popup menu.
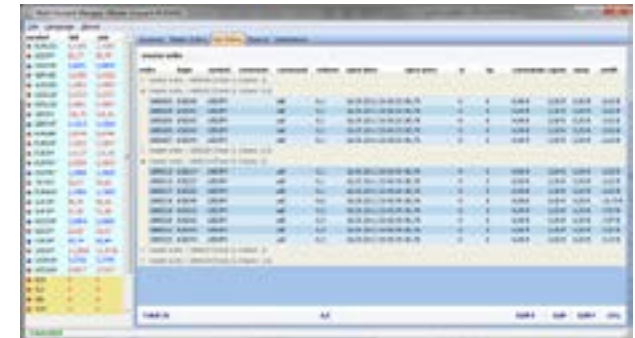
Reports

This tab is showing the history of trades on the master account and its corresponding sub trades in a master-detail format. To request history report select **From** and **To** dates. Then press **Request** button.

Expanding the master trade record will display the sub orders allocated

for it (the sub orders are lit green).

Select any number of trades and right click on the table. This will bring the popup menu from which you may choose to **Export to Excel** or **Export to HTML**.

Commissions

This tab is used to calculate commissions of the fund manager. Commissions can be calculated based on the **High Watermark** (HW) algorithm or as a **Volume Based** fee.

The High HW algorithm is calculating commissions based on the amount earned by the sub account which is higher than the amount earned for the previous period. The high-water mark ensures that the manager does not get paid large sums for poor performance. So if the manager loses money over a period, he or she must get the fund above the high watermark before receiving a performance bonus. For example, say after reaching its peak a fund loses $100,000 in year one, and then makes $250,000 in year two. The manager therefore not only reached the high-water mark but exceeded it by $150,000 ($250,000 - $100,000), which is the amount on which the manager gets paid the bonus.

The Volume based fee is charged for volume traded on the sub account. So for example, if volume traded on the sub account since the last charge period is 1000 lots and Per Lot fee is $0.5 then the Volume Based fee for the sub account will be $500.

The first table of the Commissions tab is showing all the sub accounts and their parameters. The second table shows the history of trades on the selected sub account.

It is required to pass though some steps to get correct commissions information.

1. In the Settings menu select the **From** and **To** date to retrieve the history of trades. Click on the **Get History for Sub** button and select **Get History for All** option. The history of trades for all the sub accounts will be retrieved.

2. Select the sub account from the top table and find the last withdrawal transaction from the bottom table. Select the withdrawal transaction and right click on it. In the popup menu select **Set as Last Withdrawal** option. This will let the system know when the last commission was charged. After the withdrawal transaction is picked up it will be lit red and the information for the sub account will be updated. The P/L will be calculated for the sub account since the last withdrawal transaction.

3. An alternative way to define last withdrawal transaction for all the sub accounts at once is to find it by the trade transaction comments. If commission withdrawal transaction has a comment string which is the same for all such transactions then it is possible to define the comment string in the edit box on top of the **Find Last Withdrawal** button. Use regular expressions where * sign substitutes any portion of the string. Then press Find Last Withdrawal button.
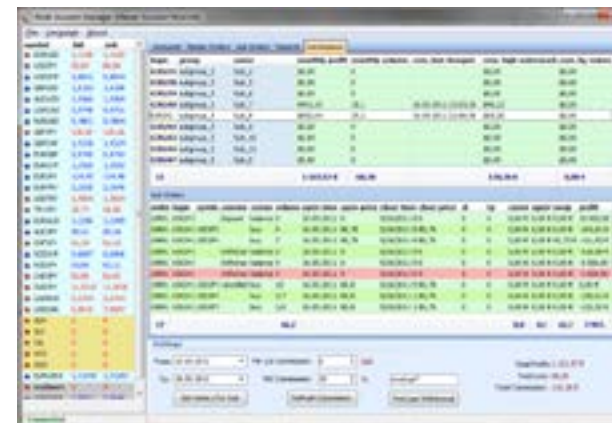
4. In the Settings menu set the HW Commission and/or Per Lot Commission and press Refresh Commission button.

5. The commissions will be calculated for all the sub accounts. The total commission to be charged will be output in the Settings area. The commission to be charged per sub account will be displayed for each sub account.

6. It is possible to export the commission information to the Excel. Then give an order to the broker to charge commissions for the sub accounts.