

Risk Control Detail



Please find a detailed description of our risk control system for the TradingMotion system platform. Given our platform's PRE and POST trade risk control, we believe setting up the accounts on this platform at 20% margin will allow us to operate within the constraints of FCM's pre trade margin check (margin charged on offsetting orders and open orders).

RCM Alternatives TradingMotion platform:

- Client chooses one or more automated trading systems to be run on his account
- All systems come from a hand picked list of 16 trusted developer partners.
- All systems are vetted, analyzed, then backtested on our own servers to calculate our own data on its risk profile.
- All systems are required to have stop orders.
- Not all systems submitted make it on the platform
- System performance is analyzed via a backtest, a real time (forward test), and then with real money fills in actual accounts.
- The platform runs the trading system code on its servers (the same servers with the order entry connection to reduce latency), and upon a trading signal, places that order in each account for which that system is set as 'active' for their accounts
- The trading system code may be as simple as issuing a buy signal on a moving average cross over to complex algorithms analyzing multiple market factors.
- This is not High Frequency Trading - the average systems trades 12 times per month.
- The platform is running live in Spain with 150 customers and thousands of orders, activations, and deactivations happening each month.

PRE – Trade Risk

- Each automate trading system has a 'required minimum' which is calculated by taking the worst historical session in 10 years (note that is the worst total loss in a day, not the worst trade) and multiplying it by a factor of 1.5 if the system has less than 5 years of history, and by 1.25 if more than 5 years of history. A correlation factor can also increase the risk amount if the system has a low correlation between its actual fills and backtested performance.

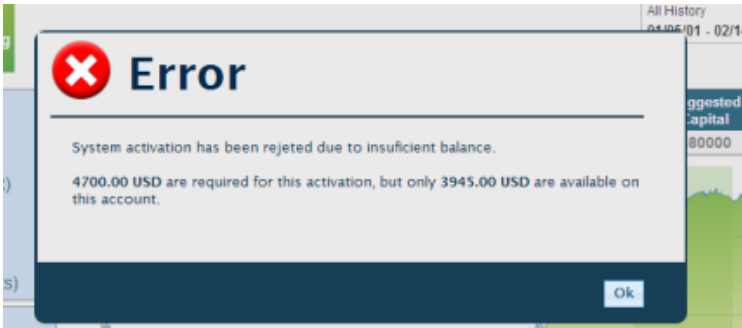
- Required Minimums range from \$1,500 for a EuroStoxx system to \$50,000 for a Dax trading system.
- The platform's risk control checks the account balance versus this required minimum (multiplied by the number of contracts to be traded on each signal) on any user's attempt to set a system live for his account (activate a system) or change the number of contracts to be traded.



- If the client balance > required minimum * # of contracts, then the platform allows activation.



- If the client balance < required minimum * # of contracts, the activation is not allowed.



- For multiple system activations – the amount of required minimum for each system is ‘held’ against the account by the platform, in effect reducing the amount of ‘cash’ the account has to activate more systems.

Saldo	+39787.08 €
Retenido	-19100.00 €
Disponibile	+20687.08 €



Saldo = Account Balance, Retenido = “Held” Balance, Disponible = “Available Balance”

- Checking balances upon activation is a step above PRE-Trade risk control, because the account is never even attempting to place a ‘trade’. The platform’s risk control system must approve the account to have trading signals generated for it, and only upon that approval will trades be sent for an account per that system.
- This pre-activation risk control also assumes all resulting positions and losses by the systems activated will have a correlation of 1.00, ignoring the possibility of offsetting positions signaled by different systems, and different markets moving in different directions.
- The pre-activation risk control assumes all systems active for an account will *each* lose more than their worst ever loss, at the same time, and makes sure that amount is in the account.

Post-Trade Risk

- Before each daily trading session, every morning at 12:00 AM time CST - the platform checks each account which has activated systems to insure the accounts remain above the required minimum for each system. We do it at 12:00 AM CST in order to be able to get SPAN margin parameters from all exchanges before running the process, including European exchanges that open at 1AM CST.

- Upon an account's balance falling below the sum of all active system's required minimums * the number of contracts selected, the platform will automatically de-activate systems until the total required minimum falls below the account balance, starting with the system or additional contract most recently added, then the next most recently added, and so on.
- If the account balance remains greater than the sum of all required minimums * the number of contracts, the account remains active on those systems and trading signals will be sent for the account.

Example:

The platform connects to CQG and sees FCM account T4DNF575 has \$25,471 in cash in account coming into the day, and logs that pre-session balance into the server.

When the client clicks to activate the Mu31 Dax system on the platform, trading 2 contracts - they see that they must have the required minimum of $\$4,200 * 2 = \$8,400$ in the account in order to activate the system.

They have that amount, and proceed to click on the 'activate' link to set the system live for their account, and upon that click the platform sends a server request to check the account balance versus the required minimum, with the simple logic saying if client balance [25,471] > required minimum*# of contracts [\$8,400], then allow activation.

If the client balance < required minimum * # of contracts, the activation is not allowed.

Once the account is set as active, and trading signals generated by the Mu31 Dax system will be sent to the exchange for that account as soon as market prices trigger a signal. In most cases, at the same time or shortly after an entry signal is sent, accompanying stop and profit target orders are sent.

No matter whether the Mu31 system trades during the day or not, any subsequent system activations FCM account T4DNF575 attempts on the platform will go through the same risk control, but with a reduced balance reflecting the Mu31 system is active.

So, if the account then attempts to activate the Lambda Bund system with 1 contract, they will see that they must have the required minimum of $\$6,000 * 1 = \$6,000$ in the account in order to activate the system. Note that the Lambda Bund system is a swing trading system which can hold positions over night, so the required minimum is greater than the margin required for that contract [~\$2,500].

Upon the user clicking 'activate', the platform sends a server request to check the account balance (as adjusted to reflect the 'held' amounts for other active systems) versus the required minimum, with the simple logic saying if client balance [25,471 - \$8,400 held = \$17,071] > required minimum*# of contracts [\$6,000], then allow activation.

Finally, say the user loses \$5,000 on the first day, and \$7,500 on the second day - bringing the balance down to \$12,971. The platform will run through all accounts before the next session open, comparing their current balance with the required minimum. Once it sees that FCM account T4DNF575 has a balance of \$12,971, less than the total required minimum of \$14,400, the risk control system will automatically DE-ACTIVATE the Lambda Bund system.

Suggested Capital

We suggest an account balance 5 to 20 times higher than the required minimum outlined above in order for clients to endure losing periods. The required minimum is designed to cover the worst possible loss in any one day, where the suggested minimum is designed to cover any extended losing periods. Using our examples above, the Mu31 system has a required minimum of \$4,200 and suggested minimum of \$35,000, while the Lambda system has a required minimum of \$6,000 and suggested minimum of \$25,000.

Other firms utilizing the TradingMotion technology:

Interdin:

<https://www.interdin.com/Productos.aspx#sistemas>

Banco Inversis:

https://www.inversis.com/inversion/productos/sistemasautomaticosdetrading&pathMenu=2_6_5_0

RCM Alternatives

<http://attain.tradingmotion.com/>

It is also worth noting that the same backend runs the www.ibroker.com platform for mobile futures trading, which is currently connected to Open eCry and dozens of other FCMs via a connection to the CQG API.