

What is the optimal way of handling MT-accounts when scaling?



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Introduction

Automated trading models have become an increasingly popular method of investment. However, as these models scale, certain questions arise. One example of this is, how do multiple MetaTrader (MT) accounts scale? Since we have little experience with MetaTrader, we tried to find the optimal way to handle MT accounts when scaling. To achieve this, we used various research methods, including brainstorming, expert interviews, and literature studies. This document summarizes the findings and outlines possible ways of handling MT accounts when scaling, as well as the most suitable solution for our project, the Automated Trading Model.

Research methods

We used various DOT-Framework research methods to find the answers to the sub questions below. For the question “What are the possible ways of handling MT-account when scaling?” we used the following methods:

- Brainstorming
- Expert interview
- Literature study

For the question “Which one suits the needs for our project Automated Trading Model?” we used the methods:

- Prototyping
- Literature study

What are the possible ways of handling MT-account when scaling?

Our company (Stockbrood) has little to no knowledge with these financial technologies. So, we thought we could start with a brainstorming session with the group to come up with some possible ways to scale MT-accounts.

After brainstorming session, we concluded that there are two ways to scale MT-accounts:

- One account multiple instances.
- Multiple instances one account.

As we are inexperienced in financial technology, we also considered an expert to help us. We asked Erik van Schriek and he told us that it is possible to run MetaTrader test without an account. This is a way we had not foreseen.

Conclusion

Summary of possible ways to handle MT-accounts:

- One account multiple test instances.
- Multiple test instances multiple accounts.
- Account-less testing.

Which one suits the needs for our project Automated Trading Model?

One account multiple test instances.

One account and multiple test instances would be one of the best solutions, because then we can use one major account that handles multiple tests.

Unfortunately, it is not possible to run multiple instances of the same MetaTrader account simultaneously. Each MetaTrader account is linked to a unique login ID and password, and the platform only allows one instance of an account to be open at a time.

If you want to run multiple instances of MetaTrader, you will need to open multiple accounts with your broker and log in to each account separately. Alternatively, you can use a Virtual Private Server (VPS) to run multiple instances of MetaTrader on different virtual machines.

The following error is when attempting to login into other instance with the same account:

'1387590': authorization on AMPGlobalEU-Demo failed (Invalid account)

Multiple test instances multiple accounts.

As stated previously this solution will work, but it does not suit the needs for our project. Since we are planning to run multiple instances of the platform to ensure high speed results for the client/stakeholder. This will mean that we have to create and maintain hundreds or not thousands of MetaTrader accounts programmatically. This is not doable.

Account-less testing.

At last, we have Account-less testing this solution allows us to have an infinite number of instances running without any problems. The reason that you need to login is for several reasons, but only one reason for testing. You need historical test data. By logging in you actually log in to the broker's account, this broker will give historical data to run test.

Now to avoid logging in you can provide your own historical data. Now you don't need any accounts to run a test. It will also be a lot faster since you are not reliant on internet / download speed to download the historical data.

Conclusion

Unfortunately, it is not possible to have one account and multiple MT instances, that will give you authentication error. We can use multiple accounts but, we don't want to maintain a bulk load of accounts. Finally, when using account-less testing we can use an infinite number of MT instances without any troubles, account-less testing is the best solution.

Conclusion

In conclusion, we identified several possible ways of handling MT-accounts when scaling, including one account with multiple test instances, multiple test instances with multiple accounts, and account-less testing.

After considering the advantages and disadvantages of each option, we have determined that account-less testing is the optimal way to handle MT-accounts when scaling. This solution allows for an infinite number of instances to run without any issues (provided we import our own exchange data) and does not require the maintenance of any accounts.