

Problem

- EForT is short for Empowered Forex Traders, which is a web application that was created for the fictional Forex MetaBroker company.
- EForT is meant to aid clients with little to no knowledge of the Foreign Exchange Market in successfully trading like a professional. This is achieved through advanced trading algorithms, carefully crafted by our developers, which mirror proven trading strategies
- The EForT EFWE team is tasked with improving and supporting the exchange of data between the EForT database system, the Forex Servers that deploy expert advisors and trade without interruption, and the VPS servers that trade on behalf of the user of the EForT web application.

Current System

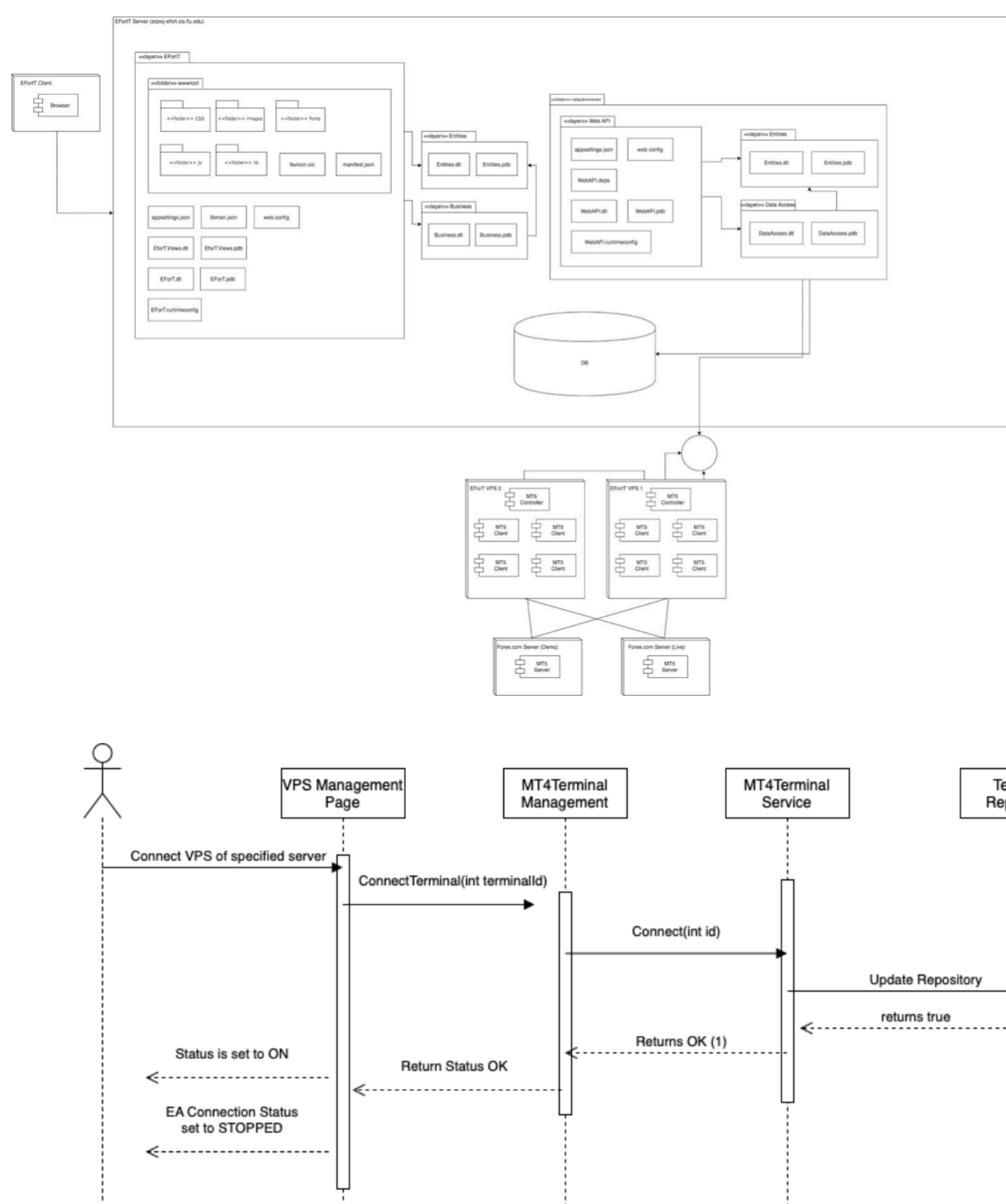
Server Name	Address	Data Folder Path	Active	Edit	Delete	Status
VPS0	http://vps0.eftor.com	C:\Users\EftorVPS\Private\MetaQuotes\Terminal\	Active			Stopped

Terminal	Username	Forex Account	Expert Advisor	Script Name	EA Connection	Manage	Status	Errors
8B71058A014646913C5C844030DC	null	null	null	N/A	EA Connection		Stopped	
8A469C93136E7373A4D09F410DF50	null	null	null	N/A	EA Connection		Stopped	
D0820977C3C73AD8F5051F9075	null	null	null	N/A	EA Connection		Stopped	
DFED8F826117784FAD6ACDCA95422	null	null	null	N/A	EA Connection		Stopped	

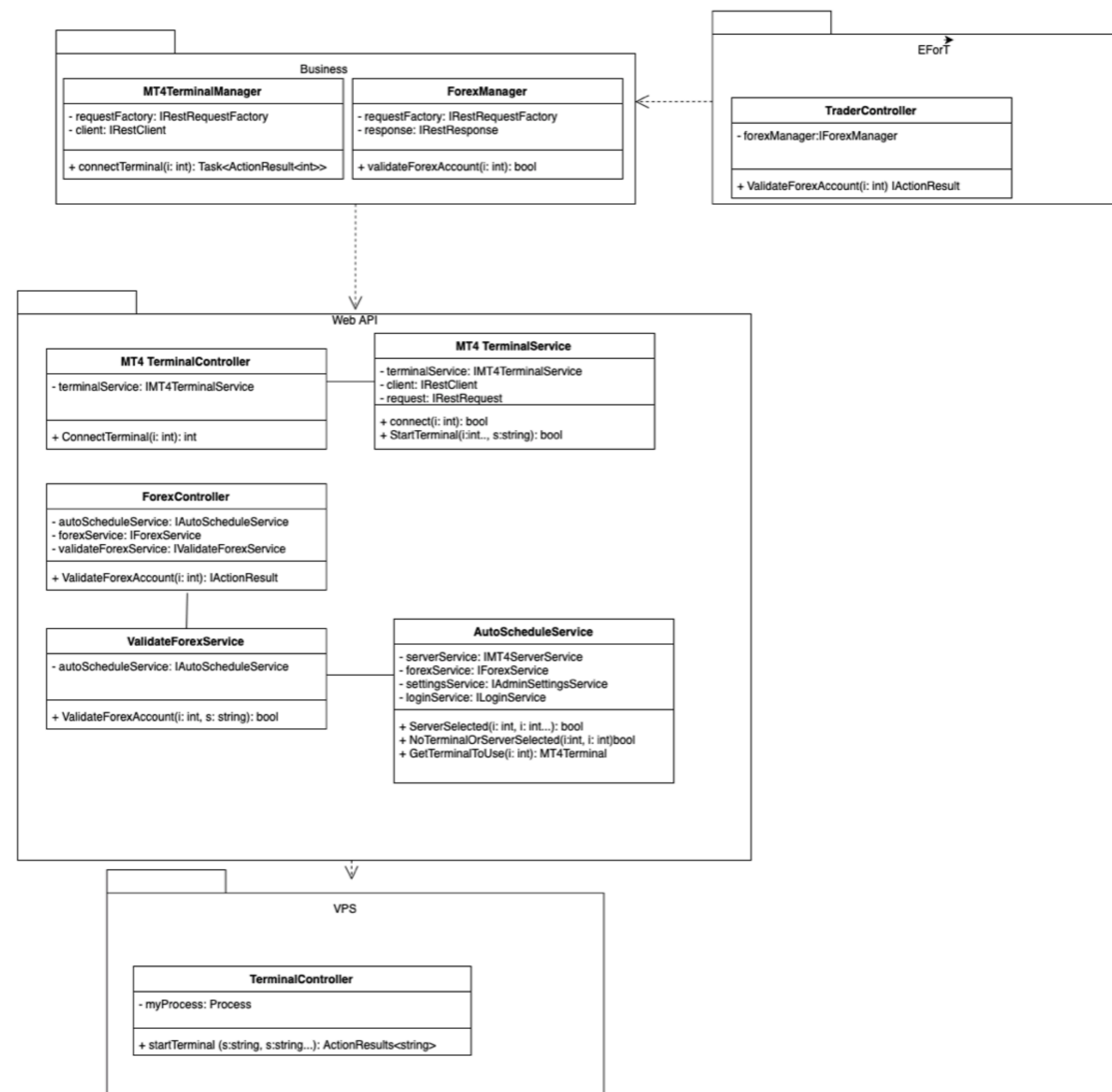
Requirements

- The administrator user should be able to connect the terminal status and the EA connection status should be set to stopped.
- The EForT website EA connection status for when a terminal is connected should be able to be paused, resumed and stopped at any point by administrator user through the VPS management page where all terminals are present.
- The trader user should be able to see all of their FOREX accounts and validate or invalidate each account through my forex accounts page.
- When a trader is validating an account, an auto scheduler should find an empty terminal that will run the validation script, this will be reflected via the VPS management page.

System Design



Object Design



Implementation

- Edited existing functions in EForT Web API to fix start terminal so that the connection status is set to stopped when VPS server is connected
- Edited existing functions in EForT Web API to correct autoscheduler so that the correct Script and EA Advisor are passed to the terminal.
- Edited start terminal function in the EForT VPS API so that the MetaTrader application starts correctly with the right credentials when called.

Verification

- Postman was used to test the functionalities of the API functions.
- To test updates to the StartTerminal, we manipulated the servers and the terminals to make sure they behaved properly and verified the behavior in the database
- To test updates to AutoScheduler, we used both local server as well as the VPS0 to verify that the terminals were being selected properly.
- To test updates to the Forex Validation, we executed validation with both correct credentials and incorrect credentials and then checked the logs for the exit codes.

Summary

- Our project was divided into three main sections. The first section consisted of testing the functionality of the API in the Web App and VPS that were already implemented to ensure that they function as they should. Any negative functionality that did not meet acceptance criteria were edited and then retested.
- The second section focused around the feature of Validating a forex account on EForT. We implemented changes to the Web App and VPS api that corresponded to this feature in order to achieve the result of having the Validation reflected to the user under Forex Accounts.
- The third section consisted of fixing the functions of the expert advisor that is responsible for logging into the MetaTrader terminal with account credentials passed by the VPS API. When an account is logged into properly the meta trader terminal closes with an exit code of 0 which is a valid account. If the account is not valid the terminal closes with an exit of 55. This exit code determines the validation.

Acknowledgement

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