Trading Symbol Allocation System

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TSAS Scope Document Specification

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Introduction

This proposal document describes the general software requirements and scope for the Trading Symbol Allocation System (TSAS), which will allow authorized Competitive Market Makers (CMMs) to use their allocated trading rights to select the symbols in which they want to trade on a particular trading day. This addresses a real-world problem at an options exchange where CMMs are required to make these trade selections, but the process is manual with several risks, including version control issues, user authentication issues, and lack of possible integration with surveillance processes and procedures. This is because currently a spreadsheet with selections is emailed to the exchange, and the proposed system will address these issues.

Overall Description

The Trading Symbol Allocation System (TSAS) will allow authorized CMMs to use their allocated trading rights to select the symbols in which they want to trade on a particular trading day. The system will allow users to view their allocated trading rights, symbols and the associated amount of rights needed to trade each symbol; select the symbols they wish to trade; ensure they do not select more than their allocation; and save their selections in a database. This system will service CMMs in diverse locations who need to make their selections remotely.

Goal of this Project

This project will deliver a system that will automate the allocation system and allow CMMs to select symbols in which they want to trade, but will allow them to only select a group of symbols that represent a total that is not more than what the CMM is allowed to select based on its allocation of trading rights.

Background

A CMM is allocated a certain percentage of the market it is allowed to trade at an exchange on a daily basis. The allocation of the market share depends on how many trading rights the CMM has purchased, and the selection of symbols in which a CMM trades is chosen on a company level, not an individual level. Allocation refers only to the percentage of the market a CMM can trade, and an individual symbol's volume represents a certain percentage of overall market volume. For example, if Google (GOOG) traded 100,000 contracts and market volume was 1,000,000, the market share for GOOG would be 10% (100,000/1,000,000*100). If a CMM had only a 10% trading rights allocation, it would only be allowed to select GOOG to trade. In reality, however, individual symbols represent a much smaller percentage of overall volume. Also, average volume is calculated on a quarterly basis, not a daily basis, to account for short-term fluctuations in trading activity.

Each CMM may select as many symbols as it wants, provided the sum total of that CMM's selection does not exceed its allocated total trading rights percentage. A symbol selected by one CMM is also available to other companies to encourage competition.

In addition the system must allow changes to symbol selections to be made within a certain time frame. Selections are allowed before 9:30 am Eastern Standard Time (EST) each trading day, which is when the exchange opens. Selections made after the 9:30 am EST deadline will count toward the next trading day. If no selections are made on a certain day, the last selection made will be in effect. There is no requirement to allow future selections since most CMMs trade on volatility (i.e. news and events that affect the market), and those who have long-term views are able to make a selection and allow it to stay into effect until the CMM decides to change its selections.

Concurrent access from multiple traders is allowed for business reasons (a user responsible for making selections may be on vacation, out sick, etc.). However, business rules dictate that the last update made before the 9:30 am EST deadline by anyone at the firm will be the selection of record.

In addition at least one admin account (representing the exchange administrator who approves access to the TSAS) will be needed to create user names (email addresses) and passwords, and add or remove symbols when required. The admin account will also be able to update trading rights allocations.

What is not in Scope

Once selections are made, exchanges have detailed surveillance policies and procedures supported by robust functionality. The scope of this project is to make available selections, user/CMM information, a timestamp and any other relevant information needed by way of a database to which surveillance can code, not surveillance alerts or reports.

Calculating percentages for individual symbols is also out of scope. These percentages are calculated on a quarterly basis, not a daily basis, to account for daily fluctuations, and business rules dictate that percentages be based on average daily volume for the quarter. We will also not address new issues and delisted symbols (as an FYI business rules dictate that new issues are assigned a percentage of 0% until the end of the quarter; delisted symbols are obviously removed with no effect on other symbol percentages).