

Regulatory Circular RG16-016

Date: July 21, 2016

To: Trading Privilege Holders and Vendors

From: CFE API Group

RE: CFE Vector API Test Environment and Certification

CBOE Futures Exchange, LLC (CFE) is issuing this circular to provide information regarding the application programming interface (API) test environment for CFE's new Vector trading system and the process for Trading Privilege Holders (TPHs) and vendors to test and certify API applications that they will utilize to access Vector.

Vector API Testing and Certification Process Initiation

The CFE Vector API test system will be available for TPHs and vendors to test and certify their Vector Native Interface (VNI), Vector FIX Interface (VFI), and Vector Streaming Markets (VSM) applications beginning on August 15, 2016.

TPHs and vendors should make any necessary network changes to be able to access the Vector API test system prior to commencing the testing and certification process. See the Vector API test environment details below.

Once any necessary changes have been made to access the Vector API test system, TPHs and vendors should contact the API Group to initiate the testing and certification process.

When contacted by a TPH or vendor, the API Group will provide the TPH or vendor with a script to follow during the testing and certification process.

Vector API Testing User IDs

When contacted by a TPH or Independent Software Vendor (ISV), the API Group will also issue to the TPH or ISV a User ID for testing purposes in the Vector API test environment. A TPH or ISV may also request one or more additional User IDs for the Vector API test environment if desired for testing purposes.

TPHs and ISVs will utilize these User IDs for Vector order entry and use with other pertinent Vector functionality in the Vector API test environment.

These User IDs will be tagged with a "T" on the end to differentiate them from Vector production User IDs which will be issued by the CFE Registration Department.

Vector API Testing Certification

Once a TPH or vendor has completed unassisted testing in the Vector API test environment and is ready to complete the certification of their VNI, VFI, and VSM Vector applications, the TPH or vendor should contact the API Group to schedule a time to complete the certification.

Each TPH with a direct connection to CFE's trading system is required under CFE Rule 513C to complete the Vector API testing and certification process, which includes verification by the API Group that



the TPH has successfully completed the certification tasks for the TPH's VNI, VFI, and VSM applications, as applicable.

Each TPH and vendor with a direct connection to CFE's trading system is required to complete the Vector API testing and certification process in order to participate in Vector production testing and to access Vector at the time of Vector production launch.

Vector API Test Environment Details

Below are the test environment details for VNI, VFI, and VSM:

VNI and VFI:

Host Name	Unicast IP Address	Unicast Ports
apivcfe01fig1a	170.137.254.50	8002
(VNI Firm Interface Gateway (FIG) Connection A)		
apivcfe01fig1b	170.137.254.51	8002
(VNI Firm Interface Gateway (FIG) Connection B)		
apivcfe01th1a	170.137.254.36	8000 – Orders
(VNI Trading Host (TH) Connection A)		8001 – Drop Copy
apivcfe01th1b	170.137.254.37	8000 – Orders
(VNI Trading Host (TH) Connection B)		8001 – Drop Copy
apivcfe01foag1a (VFI)	170.137.254.42	20501 thru 20511
(VFI FIX Order Access Gateway (FOAG) Connection A		
apivcfe01foag1b	170.137.254.43	20501 thru 20511
(VFI FIX Order Access Gateway (FOAG) Connection B		

VSM:

Market Data Feed	Multicast IP Address	UDP Ports
VSM L1 Incremental and Snapshot Top of Book Feed	233.65.120.252	12000/UDP
VSM Instrument Definition and EOD Summary Feed	233.65.120.253	12000/UDP
VSM L2 Incremental Order Feed	233.65.120.254	12000/UDP
VSM L2 Snapshot Order Feed	233.65.120.255	12000/UDP

Vector Production Testing

Vector production testing will occur prior to Vector launch. Production testing will also include testing with CFE's disaster recovery (DR) environment for Vector. CFE will issue a circular at a later date with further information regarding production testing.

Additional Information

The API Group may be contacted at api@cboe.com or (312) 786-7300.

Additionally, any questions regarding the CFE Vector API test environment or the API testing and certification process may be directed to the API Group.