



#41456

TO: ALL CLEARING MEMBERS

DATE: July 7, 2017

SUBJECT: 2017 BC/DR Industry Test Scripts

The 2017 RegSCI BC/DR Industry test will be coordinated in conjunction with the SIFMA and FIA BC/DR Industry tests scheduled for Saturday, October 14, 2017. The scope of this test will simulate a standard business day from market open through position finalization. OCC will support all inbound and outbound communication protocols and make the ENCORE clearing system available within our DR environment. All data received will be processed and distributed to registered participants according to their registration specifications and confirmed test strategies.

Test Objectives:

- Test round trip processing with Members and Exchanges including trades, post trades, position finalization, outbound data distribution and end of day reports. All other activity is deemed out of scope for this testing effort.
- Test the ability to conduct critical business functions (trade processing through position finalization) from alternate/back-up/DR facilities simultaneously.

Test Details:

Position Inventory

- Position Inventory for the test will be a snapshot of the production inventory as of "Market Open" Thursday, October 12, 2017.
- All transactions received during the test will be applied against this starting inventory.

Product/Contract Inventory

- Product and Contract inventory for the test will be a snapshot of the production inventory as of "Market Open" Thursday, October 12, 2017.

Symbols

- OCC will support all production symbols.

Trade Date

- Trade date for the OCC ENCORE System will be Thursday, October 12, 2017.
- Trade date within Exchange Systems will be Saturday, October 14, 2017.

Trade Date Processing Note:

OCC's ENCORE business date will be set to Thursday, 10/12/2017. OCC will accept inbound trades and post trades with a trade date of 10/12/2017 or 10/14/2017. Inbound transactions received with a trade date of 10/14/2017 will be flipped to 10/12/2017 for processing. All outbound data received from OCC will have a trade date of 10/12/2017.

Test Scripts:

OCC will **not be publishing detailed transactional test scripts** for execution during the test. Instead OCC will work with each registered participant to develop a test strategy that is tailored to the participant's business model. Test strategies will be based on the following testing guidelines.

Exchange Industry Testing Guidelines

- Submit matched trades generated throughout the Mock Trading Cycle to OCC in real-time.
- Submit balance sets and balance trades with OCC at close of Mock Trading Cycle.
- Submit batch trade backup file at close of Mock Trading Cycle.
- Receive Real-time DDS (pending/rejected trades) if applicable.
- Receive ORSA file.
- Purge all test data from systems prior to market open for Monday, October 16, 2017.

Clearing Member Industry Testing Guidelines

- OCC encourages all participants to not only participate with OCC but to participate to their fullest extent with the Options Exchanges from an order execution perspective. Orders filled on the exchange during the Industry Test will be submitted to OCC for processing.
- OCC encourages testing participants to submit a representative sampling of the types of post trade transactions that are normally executed by the participating firm on a daily basis (i.e. CMTA Transfers, Position Transfers, Adjustments, Exercise, etc.).
 - For each type of post trade transaction, ensure the following criteria is met:
 - ✓ Transactions cover approved product eligibility (equity, index, etc.)
 - ✓ Transactions for approved product eligibility are submitted for weekly series, standard/near term expirations and long term expirations
 - ✓ Transactions are submitted utilizing the communication protocols supported in the participants selected Industry Testing environment (SFTP, NDM, MQ)
- **Participants will be required to log on and access the Encore environment via the GUI interface.**
- Receive outbound DDS via the communication protocols supported in the participant's selected Industry Testing environment (SFTP, NDM, MQ).
- Purge all test data from systems prior to market open for Monday, October 16, 2017.

General OCC 2017 Test Information:

Description	Details
Test Registration Required	Yes – OCC RegSCI Registration
Environment Used For Test	DR Environment
Advanced Planning Contacts	Karen Glad (Primary) kglad@theocc.com 312-322-2041 occDRtest@theocc.com
IT/Connectivity Contacts	Karen Glad (Primary) kglad@theocc.com 312-322-2041 occDRtest@theocc.com
Test Day Contacts	Member Services Help Desk 800-621-6072 option 1 Support will be available for the duration of the test
Availability of Test Day Conference Bridge	No
Completion of Test Acknowledgement Protocol	Complete Email Template and send to occDRtest@theocc.com
Systems Supported	Encore, DDS
Client Connectivity Configurations	IP and Leased Lines (includes NDM, SFTP & MQ)
Production Systems Reset and Test Data Purged	Yes, Prior to Monday opening. Firms are responsible for purging test data from their systems
Special Registration Requirements	Advanced Registration Required – No Test Day Registration Accepted
Special Instructions	OCC will require all firms testing on October 14, 2017 to pre-test connectivity on one of the designated connectivity test dates in July, August or September.

Testing Pre-requisites:

Registration Process:

- Participants must register in advance for participation in the Industry Test. Registration can occur via SIFMA registration portal, the FIA registration portal or the OCC RegSCI registration portal located at the following link: [OCC RegSCI Registration](#)
- OCC Industry Test Registration website will require the following information:
 - External Party Type (Bank, Clearing Member, Trade Source or Non-Clearing Organization)
 - Firm Name
 - Clearing Member Number(s)
 - Contact Name
 - Contact Email
 - Contact Phone Number
- Once registered OCC will contact registered participant to provide an overview of testing scope and distribute the 2017 DR Technical Specification forms, which must be filled out and returned to OCC.
- Members can choose to test from their Production/Back-up or DR site and must disclose to OCC which site is being used for the test.
- Participants must complete the 2017 OCC Tech Spec - DR Information prior to participating in any testing.

Connectivity Testing Dates:

Test participants are required to participate in at least one pre-connectivity test prior to the October 14, 2017 Industry Test.

Day/Date	Time (Eastern Time)	Connectivity Pre-Registration	2016 Tech Spec Form DR Information
Saturday, July 29, 2017	9:00 a.m. – 2:00 p.m.	Required	Required
Saturday, August 5, 2017	9:00 a.m. – 2:00 p.m.	Required	Required
Saturday, September 9, 2017	9:00 a.m. – 2:00 p.m.	Required	Required

Connectivity Testing Expectations:

The goal of connectivity testing is to ensure that connectivity details provided by external parties are accurate and those participants are able to send and receive messages as required to facilitate end-to-end testing in October. The connectivity testing requirements are broken down by connectivity type.

Websphere MQ

- Participants should send a simple Inbound message (to OCC) via MQ – example “Test Message”.
- Upon receipt of the inbound message, OCC will send a simple Outbound message (to Participant) via MQ – example “Test Message from OCC”.

Connect:Direct / NDM

- Participants should attempt to push a test file to their specific input directory – example “test.txt”.
- OCC will push an agreed upon test file dataset name to the Participant as required.

Secure File Transfer Protocol – SFTP

- Participants should send a test file to their respective /input directory at OCC – example “test.txt”.
- OCC will place a “test.txt” file in the /data directory for Participants to pull.

Evaluation Criteria

OCC’s overall test strategy is a through-put processing strategy designed to validated connectivity and inbound/outbound data processing capabilities between OCC and the testing participant. The evaluation criteria will look at a participant’s ability to connect to OCC and send and receive data as documented in the participant’s test strategy.

The evaluation scale will be:

- **Passed** - fulfilled connectivity and data expectations without encountering any issues.
- **Passed with Non-Material Issues** – encountered minimal issues regarding connectivity or data.
- **Failure** – mandated or registered participant that does not participate in the test or cannot complete the test successfully.

OCC SIFMA/FIA Industry Test Schedule & Scope

Test Date – Saturday, October 14, 2017

Exchange Trade Date	ENCORE Trade Date	Time (Eastern Time)	Activity	Inputs To OCC / Outputs From OCC	Description		
Saturday 10/14/2017	Thursday 10/12/2017	8:30 – 9:15 a.m.	Pre-Market Open Connectivity	N/A	- Resolution of connectivity and start-up issues		
		9:30 a.m. – 1:00 p.m.	Exchange Mock Trading Cycle	Inputs	- Exchange Trades		
				Outputs	- Real-time Trade DDS – Pends/Rejects (Exchanges)		
			Encore Daily Activity	Inputs	- Real-time FIXML Post Trades (Members) - Batch FIXML Post Trades (Members) - External Encore Post Trades (Members)		
				Outputs	- Real-time DDS (Members)		
		1:00 p.m.	MARKET CLOSE				
		1:00 p.m. – 2:00 p.m.	Post Trade Activity	Inputs	- Trade Balancing (Exchanges) - Backup Batch Trade Files (Exchanges) - Exchange Price File (Exchanges) - Real-time FIXML Post Trades (Members) - Batch FIXML Post Trades (Members) - External Encore Post Trades (Members)		
		Outputs		- Real-time DDS (Members)			
		2:00 p.m. – 4:30 p.m.	Positions Finalization/ End of Day	Outputs	- ORSA DDS (Exchanges) - Real-time DDS (Members) - Batch DDS (Members) - External Encore Reports (Members) <ul style="list-style-type: none"> • Position Activity • Position Summary 		