



Managing Credit Lines in a
SEF/Cleared World

CFTC Technology
Advisory Committee
Meeting

March 29, 2012

markitSERV™

A joint service from DTCC and Markit

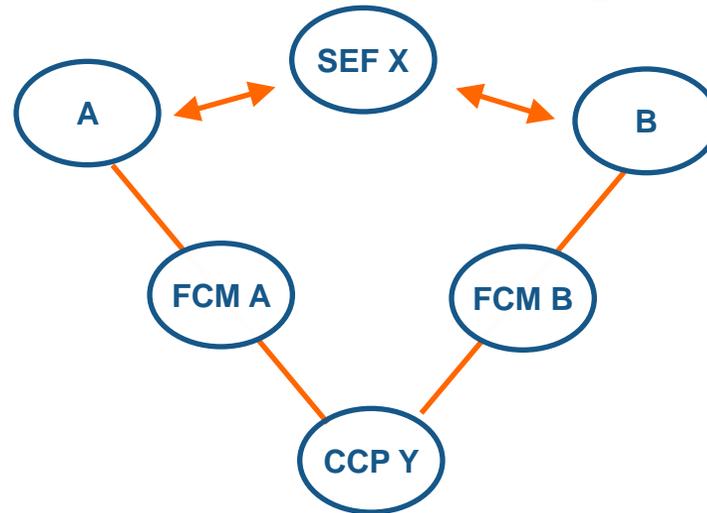
About MarkitSERV

- MarkitSERV, 50:50 owned by Markit and The Depository Trust & Clearing Corporation (DTCC), has more than 500 employees globally.
- MarkitSERV provides a single gateway for over-the-counter (OTC) derivative transaction processing globally. Our solution helps to reduce operational risk, streamline processing, and improve the safety and certainty of the OTC derivatives markets by simplifying and automating trade processing across the major asset classes, including credit, interest rate, equity and FX derivatives. We assist the industry in meeting challenging regulatory demands in a very dynamic environment.
- More than 70 dealers, 50 inter-dealer brokers and 2,500 buy-side institutions (handling over 25,000 accounts) are already connected to our service, which handled in excess of twenty million transaction processing events in 2012
- MarkitSERV also connects dealers and their clients to central clearing counterparties (CCPs), trade repositories and third-party administrators.
- This unparalleled network of participants and services positions MarkitSERV as the ultimate connection point for anyone participating in the OTC derivatives marketplace.

A credit hub

- Goal
- Potential models
- Risk methodology
- Summary

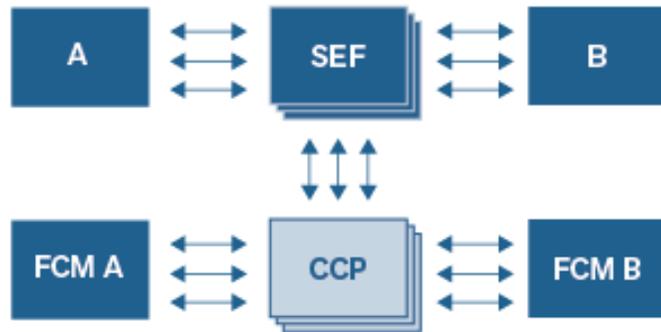
Goal: increasing cleared trade certainty at execution via pre-trade credit checks



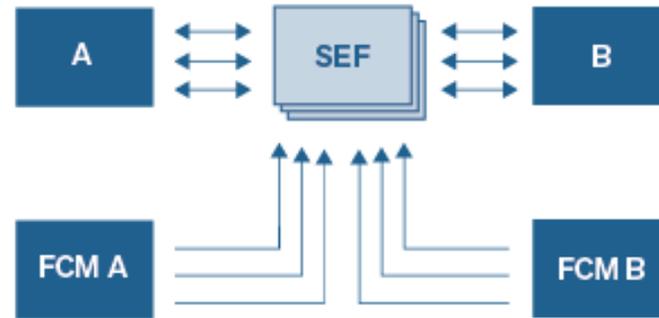
- The primary objective is **TRADE CERTAINTY** at execution - knowing at execution the trade will not be rejected for clearing after execution
- What is required?
 - Agreed clearing destinations (CCPs) by asset class when order is entered into SEF
 - A credit hub confirms the potential trade fits within the CCP's product scope
 - A credit hub confirms counterparties have access to the selected CCP via their FCM
 - A credit hub confirms Credit limit is available from FCM for trader/firm posting price

Potential models

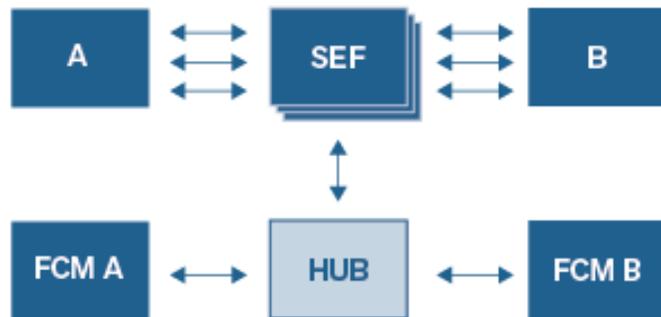
CCP Holds the limit



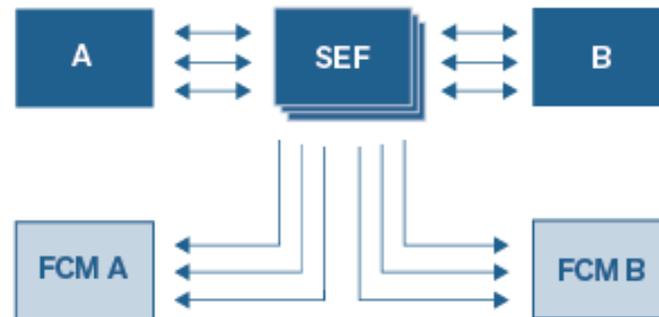
SEF holds the limit (allocated from FCM)



Hub Holds the limit



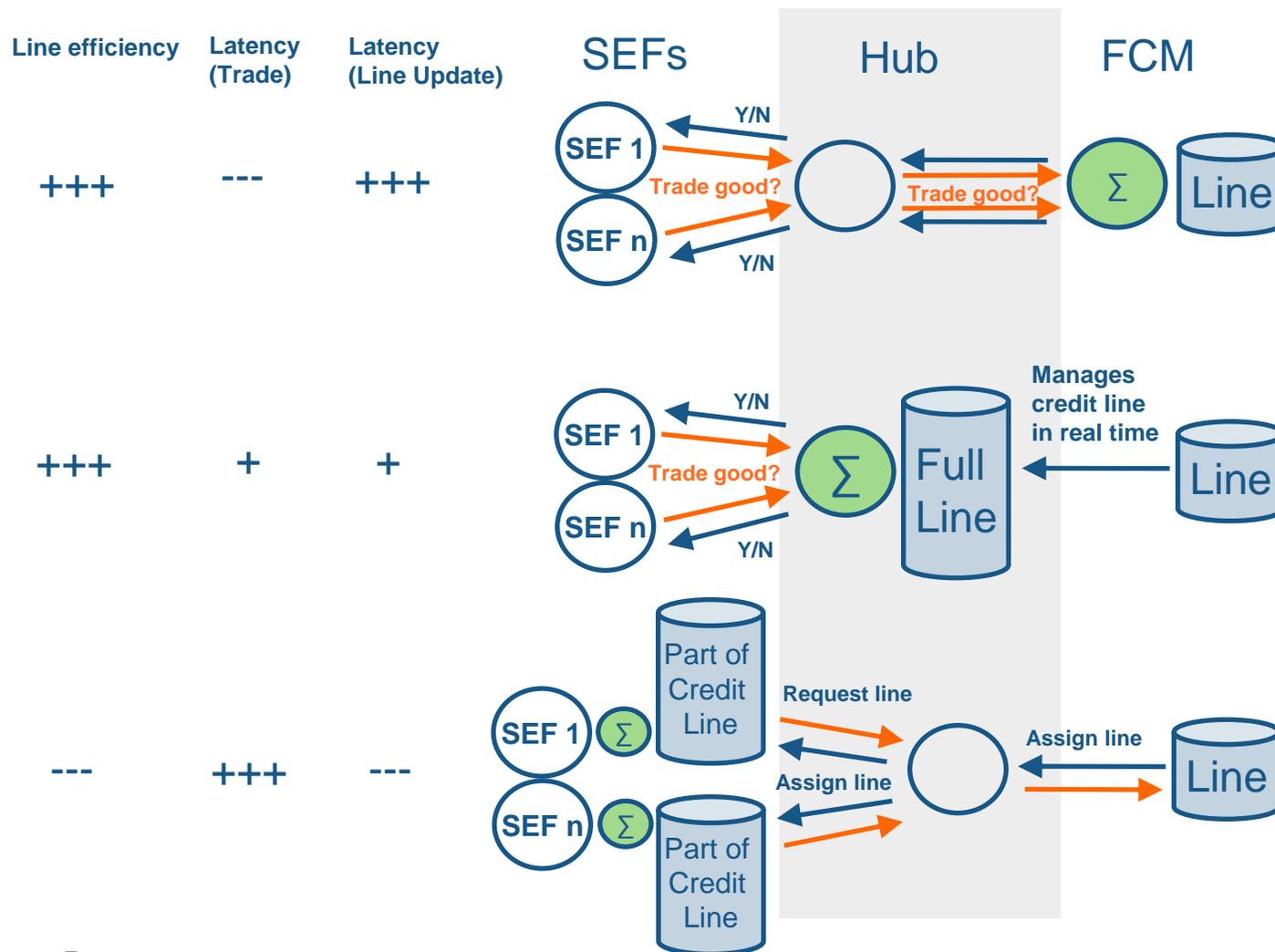
FCM holds credit limit (per trade query)



Potential models

- CCP holds available risk based on information on each trading firm from their FCM
 - Current **post-trade** model for energy markets
 - Methodology for “Ping” based solution
 - Clients may go over their FCM allocated credit line before additional trading is halted
- FCMs allocate risk across to each SEF independently for each trading firm
 - SEFs know all limits assigned to each clients by each FCM
 - **Not scalable** – each FCM must write to each SEFs API
 - Very inefficient model - Credit lines are highly fragmented as they are allocated regardless of order volume
- FCMs inform Credit Hub of limits and they are then allocated across SEFs
 - Inefficient use of capital as lines will be allocated to SEFs without liquidity at given point in time
- FCMs inform Credit Hub of limits and Credit Hub calculates required amount of risk (margin) for each order entered into any SEF by each trading firm
 - Only scalable solution.
 - Centralized “kill switch” for FCMs and CCPs
 - MarkitSERV (or others) informs CCP, SDR and FCM in real time of trades
 - **Best balance between latency and complexity.**

Issues of risk measures / credit line usage



FCM Calculates

- + Access to full portfolio maximizes efficiency
- + No race conditions
- Added hop to FCM adds latency

Hub Calculates

- + Centralized calculation, easy for SEFs
- + Single hop – lower latency
- + Each FCM, SEF or CCP needs only write to a single API
- + Confidential credit line storage
- Hub can only assess trades standalone (no portfolio)

SEF Calculates

- + SEFs highly autonomous
- Race conditions/risks
- Inefficient line allocation

Credit hub - when is line reserved against?

- Matched order or client /dealer price streaming -> line reserved when initial order placed at the SEF
 - Intention to trade occurs when trader submits a tradable price
 - Intention to trade must have line reserved against it – pre-execution
 - Credit reservation stays with order as price is modified
- RFQ and dealer price streaming -> line reserved when posted price or before results from request for quote acted upon
 - Client's intention to trade is known only at point of execution, but reservation can be made upon issuing RFQ to dealers
 - Client and dealer line reservation occurs pre-execution as dealer and RFQ requester will not know each other in anonymous market

Other considerations

- How is limit calculated? Potentially different measures:
 - Initial margin using CCP model, per standalone trade
 - Simple matrix (e.g. notional by product / maturity / futures equivalent)
 - Risk based measure (e.g. DV01) as calculated via standard Markit methodologies
- What is acceptable latency
 - Speed of transmission vs speed of calculation vs time savings via single hop
 - Co-locating hub near SEFS more important than distance to FCMs
- Line at asset manager or allocation (individual fund) level?
 - If by fund, all trades must be allocated pre-execution, - work flow change from today for some fund managers
 - If by asset manager, FCM's must be prepared to act as IBs, and accept any allocation not given up to another FCM
 - What about trades which end up allocated to multiple CCP's?
- Confidentiality
 - FCM's Clients want to know who is asking about their line
 - Restrictions on which SEFs have access to which credit lines
 - No SEF knows an FCMs complete line to any trading firm
- Failure modes
 - What happens when if there is e.g. a comms line failure?
 - E.g. Limit reduced to zero if line is not refreshed every n minutes?
 - Screen / GUI fallback for API issues?
 - Live help desk / operations center?

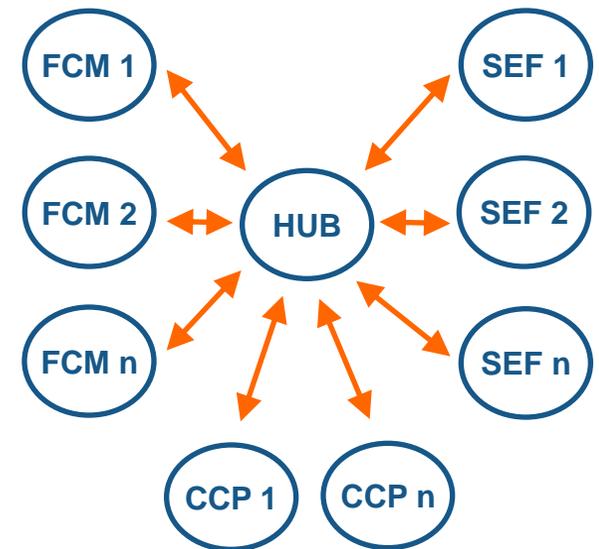
Summary - Pros/cons of a central credit hub

■ Pros

- Standard messaging protocol – faster time to market
 - Standard API and identification of instruments, CCPs, FCMs, investors
- Cost (build/maintain) is much less than of each SEF writing to each FCM and CCP
- Standard data quality tests/error messaging
 - Increased efficiencies for adding new SEFs or asset classes
 - Does the specified clearer actually clear the specified instrument?
- Standard security
 - Single log-In/passwords, IP checking
- Standard monitoring
 - Is a SEF checking across FCMs the credit quality of a market participant (e.g. Lehman or MF) without doing trades?
 - Does the investor have transparency into what information is being communicated about them to all SEFs?
- Standard risk management tools
 - **“Kill Switch”**: A FCM could centrally cut off credit availability to a particular Investor across all SEFs. Or, a CCP can remove an FCM.
- Real time updates
 - FCMs can adjust credit lines in real time across entire market and SEFs can check for executability of submitted bids/offers in real time
- Independent
 - Not affiliated with any SEF, FCM or CCP

■ Cons

- Latency:
 - FCMs connecting directly to SEFs may be faster (but less efficient)



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