

**Managing Data from OTC Derivatives Clearing Reports: Why Fragmentation is a Risk & How to address it?**

As more derivatives are centrally cleared CCPs are rapidly becoming key distributors of trade and position information but the variety of the reports, formats used and data distributed is complicating the management of these inbound clearing reports for market participants. DerivSource speaks to Message Automation's Hugh Daly about how firms can take control of this fragmented post-trade process to streamline CCP reporting and improve management of derivatives trade data.

Q. What is the operational problem with the current management of clearing reports and why is it a problem now?

A. With the move to mandatory central counterparty (CCP) clearing of OTC derivatives, the clearing houses are disseminating more trade related data including margins, valuations, cashflows and risk information. This is happening more frequently and for a greater variety of product types including: rates, credit, and FX derivatives. Market participants are adjusting to the greater volume of trades being cleared and thus the volume of reports received, however, the crux of this operational problem is the fragmented and diverse nature of both the data and the reports sent from CCPs to clearing members and onwards to their clients. These reports, which are delivered in various formats depending on the underlying asset class or business type (house or client cleared transactions), are delivered via csv, proprietary text files, or xml documents. Also, the CCPs each use their own reporting formats, and in fact the same CCP may use different reporting formats and protocols for different asset classes (e.g. rates vs. credit), which creates even more complexity for firms trying to manage the reports received.

The fragmented nature of the data delivered and the variety of the formats of reports received by the various parties is already cause for concern for most operational managers. With cleared derivatives volumes on the rise, and more clearing houses entering the market offering a greater breadth of clearable products and services, the data management and reporting processes will only become more onerous.

For instance, market participants may work with more than one CCP or broker across more than one asset class which multiplies the number of clearing trade reports and data sets to deal with. When you consider that a single clearing house may publish 60+ reports for one asset class, for those firms who clear multiple asset classes and across multiple clearing houses and brokers, the volume of the reports received is substantial. This is especially true for some large Tier 1 banks who offer client clearing services in addition to managing their own in-house clearing needs; these firms may have up to nine CCP relationships in the OTC derivatives market alone.

CCPs also frequently modify or add data items to their reports for various products, so firms also must manage these changes thus creating ongoing maintenance, which is an added operational burden.

**Q. What market players are most affected by fragmented CCP data?**

**A.** The market players affected are any firms with cleared derivatives trades or those who intend to start clearing as the mandatory central clearing of derivatives expands to include more products. Specifically, the large sell-side institutions clearing in-house trades and who supply clearing services for their clients will require CCP data; as well the third party administrators/asset servicing firms who receive data on behalf of their clients directly through clearing or from the client's clearing brokers. Also, buy-side firms and end users who are receiving multiple reports from their brokers, across different asset classes and originating from different clearing houses will receive various sets of data using different reporting formats. So, the underlying CCP data is being transmitted and received all the way up and down the food chain impacting all participants active in any OTC derivatives subject to central clearing.

**Q. Who are the consumers of this trade information?**

**A.** There are multiple internal consumers of this information; treasury who must manage the cash impact; risk managers to monitor the CCP and credit risks involved; collateral managers optimizing their use of inventory; information about the trades also needs to be conveyed to operations and many organisations have a central team to receive and reconcile trade data; to comply with OTC trade reporting obligations under European Market Infrastructure Regulation (EMIR) those reporting must know the current valuations from the clearing house; those offering client clearing services want to know their trade valuations and margins so this can be presented back to the end client. Finally, each of these consumers requires a different sub set of the reported data.

**Q. How have firms dealt with fragmented cleared derivatives trade data and CCP reports so far?**

**A.** Typically firms have attempted to fix the problem of fragmented clearing data and reporting through the adjustment of existing systems or ad hoc add-ons, however, the problem with this tactic is that the solutions adopted can be disjointed as they address only the specific requirements of a single external source or a single internal consumer. Often they rely on the creation of specific spreadsheets to plug gaps and in many cases, these tactical approaches are operationally inefficient.

For example, a common scenario may be a firm dealing with six CCPs (or asset classes within CCPs) that will need to pass data to five or six downstream systems, which equates to a total of 30 interfacing projects.

Such an approach certainly won't be sustainable in the future as it will not be able to meet the greater volume and variation of reports expected when cleared derivatives volumes rise as this new space evolves. Firms need to scale up their processes to manage greater volumes and number of parties (brokers and CCPs) but they also need a process with some flexibility because CCPs are constantly changing reporting format and structures so the burden will only grow over time.

**Q. So, what is the answer to this problem if the current internal fixes aren't good enough for the long run?**

**A.** The answer is to have a strategic approach built around a single data management model to centralise, validate and distribute all of the CCP trade and position information. This is where Message Automation has been working to help our existing clients and other firms

with this data issue. We provide a cross asset class and cross-departmental reporting solution, installed on site, which gives the various data consumers within the firm access to clearing report data , already deconstructed using our extensive library covering all major OTC asset classes and global markets.

Through the cross consumer approach to our reporting solution, each of the internal consumers can access the data in a consistent fashion and we deliver the external deconstruction of reports from multiple CCPs easily and to suit specific requirements. Once connected to the report database the client can either extract information from that data model or use our **insidetrack** dashboard technology to access data. Also, because the solution is essentially a harmonised data layer, the firm only needs a single interface per internal system rather than multiple interfaces for each system. Hence the initial set up is straight forward and adding further CCPs or brokers becomes relatively painless.

The reporting solution is live and we have successfully onboarded formats from a number of CCPs onto the data model. To date, we have deconstructed 240 different reports from six CCPs for a couple of Tier 1 institutions and we cover global institutions and US, European and Asian CCPs.

**Q. Can you explain in more detail the benefits achieved?**

**A.** Clients already using our reporting solution have been able to substantially reduce the number of existing CCP reporting related projects and also reduce the operational risk inherent as a result of the use of a single framework for information handling and the greater control and transparency this delivers to the firm over the entire process.

Just to give you an example, one bank required 50-100 people globally on a series of work streams to manage inbound CCP reporting and dissemination of the data internally. Once they are fully migrated to use our technology they believe that they will be able to reduce this headcount by half, which is a significant cost saving itself but also the entire process is now completed in half the time.

We have a library of CCPs so new clients are immediately able to 'plug and play' and we are on boarding new CCPs regularly, and doing so in weeks rather than months so the breadth of the offering is keeping up with the pace of the market. As mentioned, we have already automated in excess of 200 incoming reports with up to 60 reports per asset class and per CCP. While for a non-clearing members using a clearing broker the number will be lower it will still be significant.

As buy-side firms start to centrally clear and receive the data and varying reports from different brokers and CCPs, they are acknowledging that data fragmentation is also a problem for them and one that they lack the resources to manage so these firms are starting to get more vocal about the problem too.

**Q. Is data fragmentation a problem limited to OTC derivatives?**

**A.** This problem is not only limited to OTC derivatives but also problematic for exchange traded derivatives (ETDs) as well because banks are merging some of their OTC and ETD infrastructure and procedures together to have information in a single place. Combining the product lines to produce a single derivatives infrastructure is challenging but necessary to support cross-product functions and client services such as cross margining across both ETD and OTC asset classes.

For those firms only active in listed derivatives, data fragmentation isn't so urgent though operational cohesion needs to be addressed. As a result, our initial focus at Message Automation has been to fix OTC trade data. As our clients move from multiple siloed solutions

to our strategic solution it is normal for them to want us to address fragmentation among ETDs as well as OTCs.

**Q. Is this just a European issue?**

**A.** CCP data fragmentation is very current and topical in Europe due to EMIR clearing regulations coming into force in the second half of next year. Some market participants think they will get away with not clearing, however, this is unlikely either because CCP clearing will become mandatory or the capital charges on non-cleared derivatives will make it uneconomical to trade bilaterally. Though an issue in Europe this problem will impact Asia where regional regulation is also pushing towards central clearing of derivatives. Ironically Asia might move ahead of Europe and other jurisdictions such as South Africa, Canada and Australia as these countries are still in the throes of finalising regulation. Despite the variations regionally, data fragmentation is an important issue now for firms with global businesses.

**Q. There is the Clearing Connectivity Standard (CCS) which aims to help standardise the transmission of clearing information. What are your views on this developing standard?**

**A.** CCS is a good standard and we hope it will be adopted widely in the future, but for our clients and us, data fragmentation is a problem that is here now and needs to be addressed urgently. Banks can't base their strategy on the potential future adoption of a standard because they need to take control of this diversity of derivatives trade and margin data themselves and now.

The establishment of market standards, as indicated with other industry standards, can take years to gain the adoption needed to truly impact the industry; so waiting for the CCS to gather traction is not a feasible plan for most firms. CCS is a good initiative but it is proving difficult to get many industry participants to agree to it and currently it does not cover a full set of data. Our solution can support CCS as an output from our database, so firms will still be covered in the future but they can gain control over their cleared derivatives trade data and CCP reports now.

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**About Us**

**message**AUTOMATION is a specialist company completely focused on assisting organisations improve the efficiency of their OTC derivatives processing. The company's clients include several of the leading global institutions in banking and investment management.

Founded in 2003, we were an early evangelist of new XML-based message standards and in 2006, acquired Systemwire, a spin-out from University College London (UCL), which provided us with broader product coverage of derivatives processing requirements. We continue to work closely with University College, London on the development of our underlying technology, which is patent protected. These links with one of the world's top ten universities allow us to deliver innovative solutions to our customers. Professor Anthony Finkelstein, Dean of Engineering Sciences at UCL, is Non-Executive Chairman of **message**AUTOMATION.