



The Depository Trust &
Clearing Corporation

Trade Warehousing for OTC Derivatives

March 13, 2008

Key Features of Credit Derivatives Market

- **Rapid, multi-dimensional growth on a global scale**
 - ✓ *Trading volumes (including highly active secondary market)*
 - ✓ *New products;*
 - ✓ *New market participants*
- **Rapid spread of automated trade confirmation**
 - ✓ *Over 90% of all trading worldwide is now confirmed on an automated basis – both inter-dealer and dealer-to-customer*

Trends create both concern around trade administration and opportunity to mitigate the concern

Problems with Bilateral Administration

Parties must constantly “sync up” during contract life

- *Payments, events, margining, etc.*
- *Many manual and duplicative reconciliation/resolution processes (internal and between firms)*

Each party is hostage to its counterparties’ processing

- *You’re only as good as your counterparty – your records may be right, but if your counterparty disagrees or doesn’t know, you have a problem*
- *Operating models vary across firms: different processes for different counterparties*



Central Trade Information Warehouse Solution

Two primary components:

- A comprehensive, centralized trade database with the most up-to-date record of each contract
- A central processing capability to standardize and automate “downstream” processing of payments and other post-confirm processes
 - ✓ Processing flows automatically from the electronic confirmation environment



Model for Warehouse

- Central asset servicing through central securities depositories or listed derivative clearing houses

But

- ✓ NO book-entry DVP services and
- ✓ NO central counterparty (CCP) credit intermediation

Need to balance efficiencies of “exchange infrastructure” with flexibility required of OTC derivatives - demanded a multitude of unique and innovative servicing solutions.



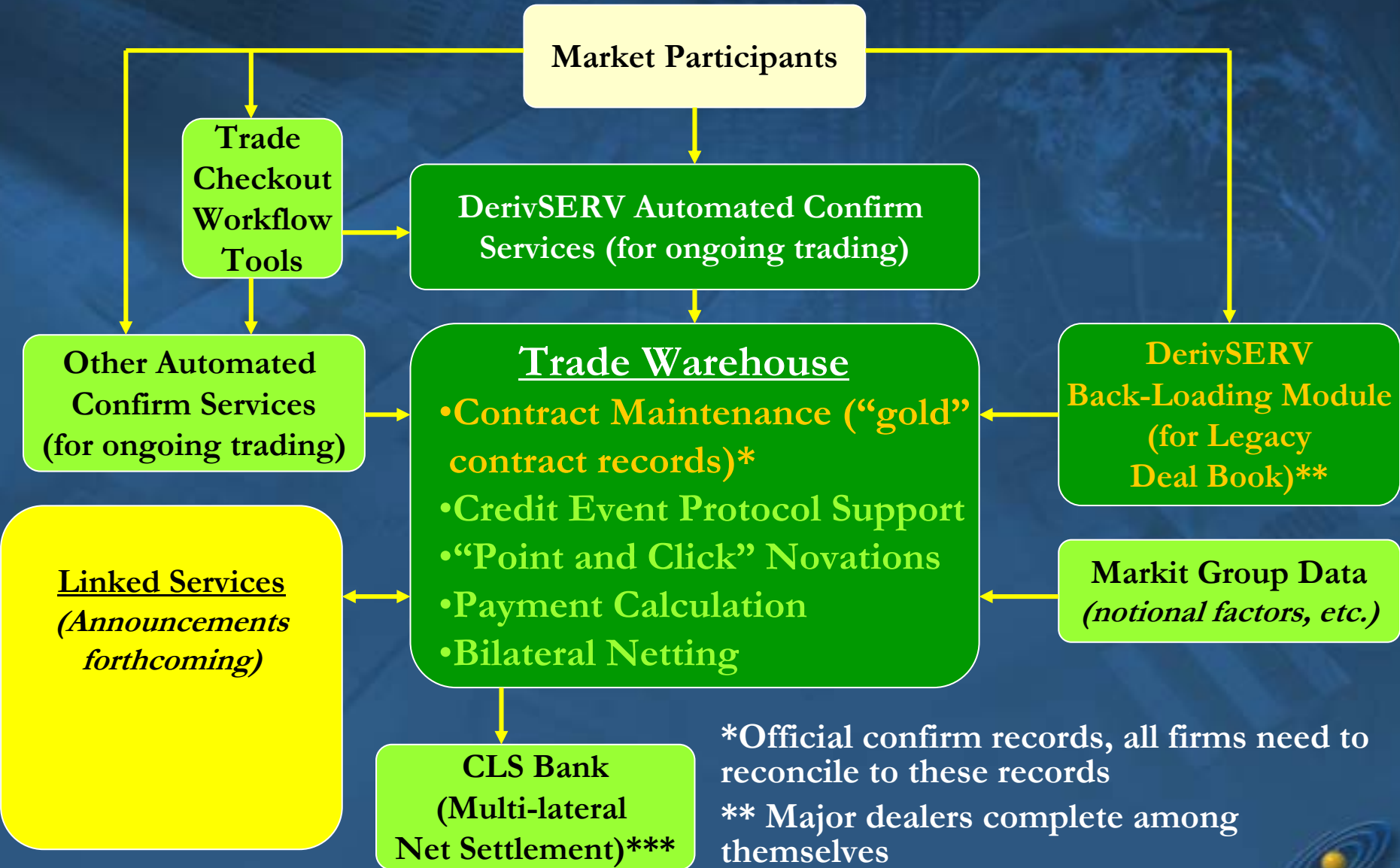
User Oversight

Global Derivatives Operations Management Group (OMG) *(formerly known as SOG)*

- **Established by OTC Derivatives Operations & Planning Committee of DTCC Board**
- **Dealers – Senior personnel from all major global dealers**
 - ✓ Including all 18 who committed to their European and North American regulators to support this project and undertake other actions regarding reducing operational risk in the credit derivatives market
- **Buy-Side – Senior personnel nominated by trade organizations to represent a broader constituency**



Warehouse Drill Down – 2007 (Orange Items Went Live in 2006)



* Official confirm records, all firms need to reconcile to these records

** Major dealers complete among themselves

*** Limited inter-dealer go live in 2007

Selected Warehouse Facts (as of today)

- Warehouse maintains contracts for all major dealers and 1,100+ investment managers (and their clients)
- Over 5 million contract positions maintained in Warehouse
- Calculating ongoing payments on 90% of these
- Central settlement through CLS bank in production since November
- Support for ISDA Credit Event Protocols is live, processed Quebecor successfully
- Pilot for “point and click” novations is starting



Credit Warehouse Prioritization for 2008 – Per OMG

- **Implement fully automated position management suite: all successor events, account swing over for mergers, etc.**
- **Provide for all payments to flow to CLS for settlement – Including items not calculated through Warehouse, but rather matched on DTCC Payment Reconciliation Service**
- **Begin building out buy-side/custodian settlement (and other) interfaces**

Also prioritized are improved BAU confirm, maintenance, reconciliation functions – inc. better GUI, messaging communications, workflows



Credit Warehouse -2008 (per OMG)



Warehouse Extension

Additional Products

- *A core warehouse design principle is extensibility to other OTC derivatives, including rates, equities, FX and commodities*
- *Warehouse will be extended to at least one additional product in 2008*
- *Integrated Payment Reconciliation will be extended beyond credit derivatives in 2008*

Additional Functions

- *The warehouse design also contemplates future use by market participants, both directly and through links with other providers, to achieve significant efficiencies in portfolio management, bilateral margining, and other “downstream” processes*



Participant Cost Savings

Processes eliminated:

- Verbal or ad hoc trade checkouts
- Portfolio substantiation/tie-outs
- Bilateral cash flow reconciliation
- Assignment e-mail processes
- Margin disputes, delays
- Investigation of breaks with respect to the above

Overhead reduced:

- Reduced nostro fees; nostro breaks eliminated
- Efficient collateral processing; reduced disputes/investigations
- Standardized, automated processing for credit (and other) events
- More efficient portfolio management (tear-ups, position netting, etc.)



Participant Risk Reduction

Correct balance sheet:

Achieves immediate contract transparency

Reduces risk in:

- Reporting (corporate, regulatory, etc.)
- Market risk management
- Counterparty credit risk management

Other risk reduction:

- Credit event management (especially multiple credit event scenarios)
 - ✓ *Ad hoc reconciliation eliminated*
 - ✓ *Fully transparent data set*
 - ✓ *ISDA Protocol centrally supported*
- Similar for other events
- Payments always correct and complete
- Collateral always correct and complete