



## Credit Market Infrastructure Refresh (CMIR) Program

Re-platforming of DSMatch and NCM to TradeServ,  
in collaboration with DTCC's  
Trade Information Warehouse (TIW)

January 2022

The new home of MarkitServ, Traiana, TriOptima & Reset

# Program Background

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In 2018 MarkitServ and Deriv/SERV announced they would be moving aspects of their credit derivatives businesses and processes to new emerging technologies to address certain limitations of the current post-trade process by modernizing, streamlining, and simplifying the siloed design of the financial industry infrastructure that developed over 40+ years

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Currently MarkitServ's DSMatch platform & DTCC's Trade Information Warehouse (TIW) share mainframe systems architecture that will be replaced with cloud technology to create operational efficiencies and increase development agility while adding security through virtual separation of environments

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In a highly coordinated migration, the platforms are separating, as both firms upgrade technologies

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MarkitServ will retire its DSMatch system and replace it with TradeServ, a cloud-based microservice architecture platform

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DTCC will re-platform its TIW to a cloud-based platform

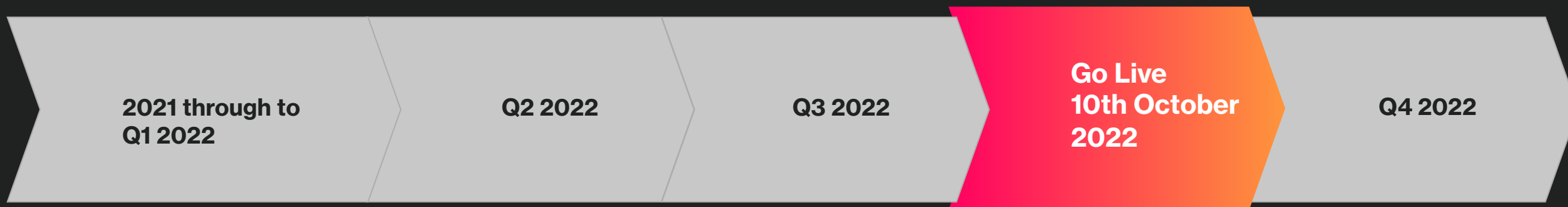
6.

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**Now part of OSTTRA, MarkitServ will continue to work with Deriv/SERV to ensure that client-facing change is limited and that connectivity between our platforms remains as seamless as possible**

# Program Plan

## Key Milestones



- OSTTRA and DTCC executed multiple cycles of Credit Market Integration Testing (CMIT) and Production Data Testing (PDT), in preparation for Industry Acceptance Testing (IAT) in 2022

- Customer outreach to communicate:
  - Key changes for customers submitting transactions via MQ
  - Key application changes for all customers via the **ebook**

- OSTTRA and DTCC opened UAT environments to facilitate IAT since **February 2022**

- Firms are able to test all TradeServ functionality, however there will be specific phases where the following integration can be tested:
  - Clearing of Novated Trades at LCH and ICE
  - ICELink Novation Consent
  - Backload to Clear process

- All firms submitting transactions via MQ to TradeServ **must have** the following in preparation for Go Live

1. Connectivity to the OSTTRA (previously IHSMarkit) Production Infrastructure
2. Schema valid FpML messages

**Please get in touch if you have any questions, contact details on last slide.**

- OSTTRA and DTCC will prepare to switch over all functionality to TradeServ and new TIW in **October 2022**

- Customer Reference Data, Transaction and Position Data will be migrated to TradeServ and the TIW ready for Go Live
- Current DSMatch and NCM Graphical User Interfaces (GUI) will **only** be available to view historical data for a limited time post Go Live

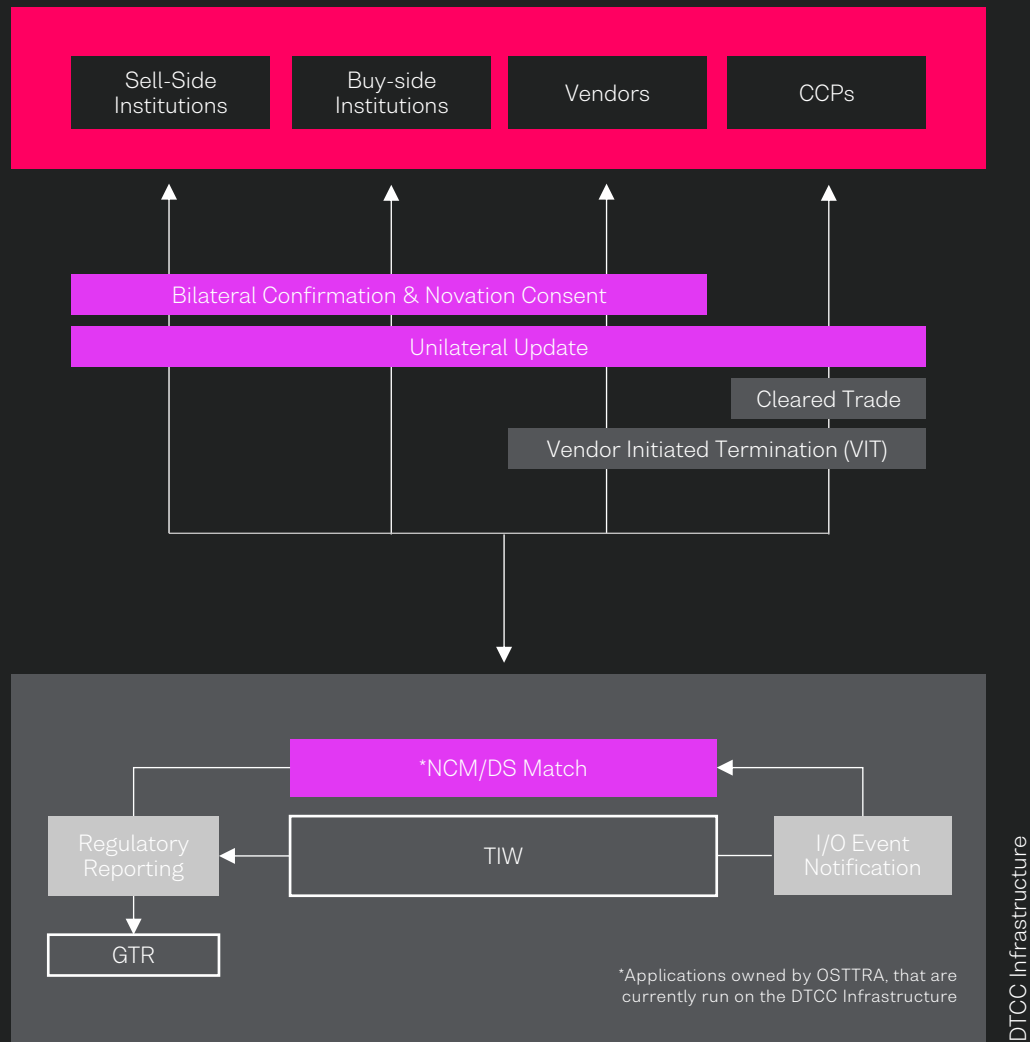
- **Legacy NCM and DSMatch applications will be fully decommissioned**

- Changes required for N.A Rewrite Compliance across CFTC, SEC and Canada that impact matching and confirmation will be implemented TradeServ.

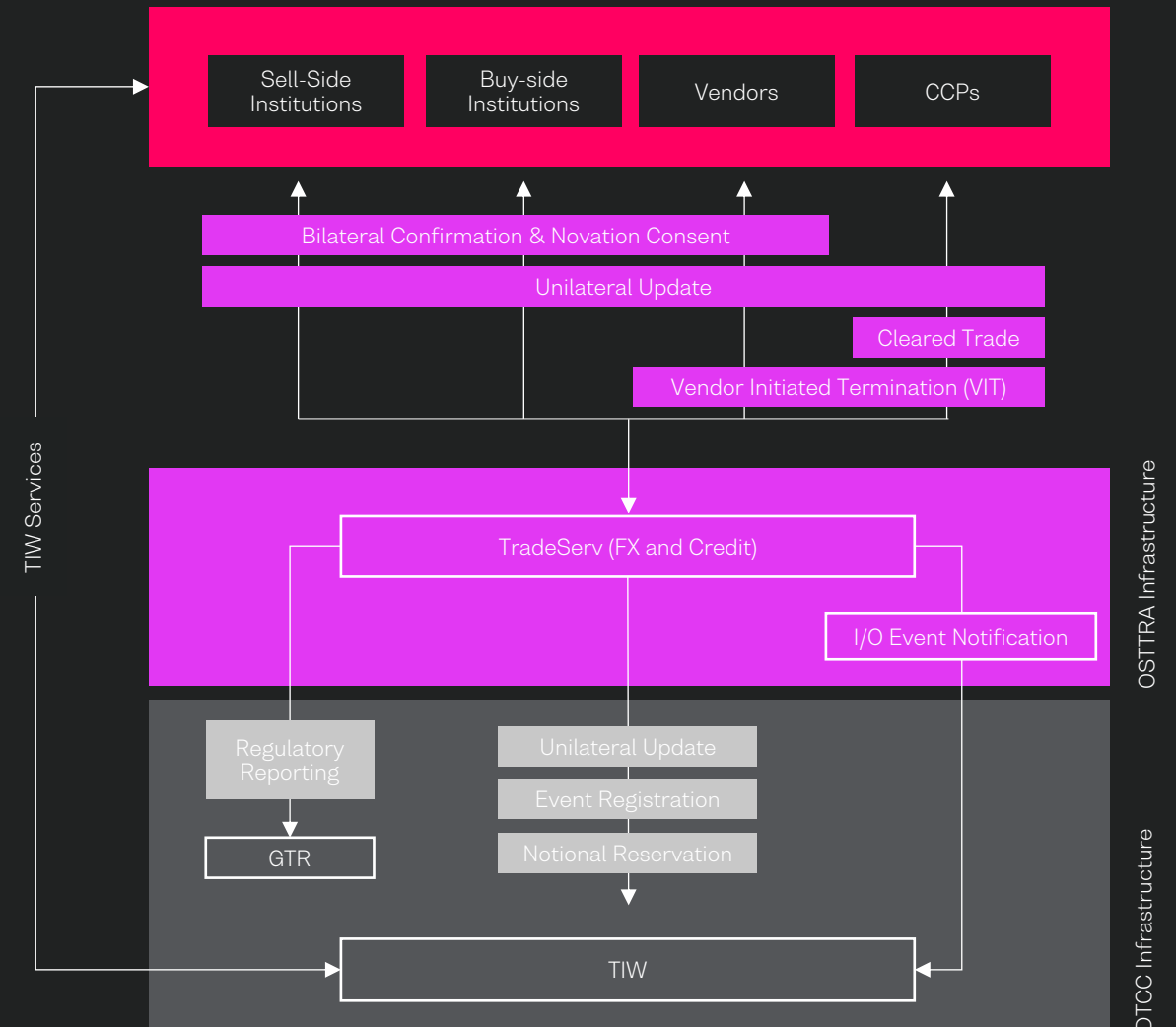
**Note: Reporting to the GTR across CFTC, SEC and Canada regimes will be decommissioned on TradeServ as of Dec 5<sup>th</sup> December 2022.**

# TradeServ to TIW Interface

## Current Platforms



## Target Platforms



# Key Platform Differences

## Current Platforms (DSMatch, NCM and TIW)

### Platform Architecture

DSMatch, NCM and the TIW applications run on the same mainframe platform sharing common transactions and positions.

### Onboarding

All application share administrative tools, customer and industry reference data and a common onboarding process.

## Target Platforms (TradeServ and new TIW)

TradeServ and the new TIW will be **separate applications and platforms**.

TradeServ will replace DSMatch and NCM and will have a new bi-directional FpML over MQ interface to the new TIW.

TradeServ will only process schema valid FpML.

Both applications will have independent administrative tools, customer and industry reference data. There will be a joint onboarding process.

# Key Platform Differences

## Current Platforms (DSMatch, NCM and TIW)

### Business Processes

NCM supports Novation Consent, DSMatch supports Matching and Confirmation, registering the position in the TIW in an atomic action. These events are then reported to the DTCC GTR.

TIW processes cleared (TriParty) trades, and vendor-initiated termination (VIT) lifecycle events, and reports TIW initiated (I/O) events to the DTCC GTR.

TIW supports Payment, Settlement, Event Processing and Adherence.

## Target Platforms (TradeServ and new TIW)

TradeServ will support Novation Consent, Matching, Confirmation and Registration of **all events** (including triparty and VITs) in the new TIW via the new FpML over MQ interface. TIW initiated events (I/O) will be submitted to TradeServ via the FpML over MQ interface.

- The TIW will notify TradeServ of updates to the Warehouse Status and provides the DTCC TRI for new positions.
- TradeServ will send a notification of the registered event (including I/O events) to the parties, enriched with the DTCC TRI and Warehouse Status.

TradeServ will additionally reserve notional in the TIW for all post trade events, which changes the Warehouse status to "Uncertain".

Regulatory Reporting to the DTCC GTR will be performed by TradeServ across **all events** and regimes. ODRF reporting is no longer supported.

The TIW continues to support Payments, Calc Flag, Settlement, Event Processing and Adherence of I/O events.

# Key Platform Differences

## Current Platforms (DSMatch, NCM and TIW)

### Customer Interfaces

DSMatch, NCM and TIW services are accessed through the same Graphical User Interface (GUI) and DTCC MQ gateway. Transaction and MIS Reports are accessed via DTCC FTP applications.

## Target Platforms (TradeServ and new TIW)

All TradeServ services will be accessed using the OSTTRA (or IHSMarkit) MQ gateway and new GUI and FTP applications.

Payments, Settlement, Calc Flag, Adherence and Triggering of TIW services will continue to be accessed using the existing DTCC MQ gateway, FTP applications and new GUI.

# Client impact



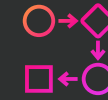
MQ  
Connectivity



Schema  
Validation



Graphical User  
Interface



Transaction  
Processing



Novation  
Consent



Regulatory  
Reporting



Transaction  
Reports



Onboarding



Data  
Migration





# MQ Connectivity

# Connectivity

- Today, MQ connectivity into both DSMatch and TIW is routed over DTCC lines
- For TradeServ, MQ connecting firms will have to submit and receive their CDS confirmation messages to a MarkitServ destination
- Most banks have a private lease line connection into MarkitServ, allowing connectivity for rates/equities on MarkitWire
- These existing private lines will provide access to TradeServ
- MarkitServ will be reaching out to firms individually who have MQ connections to provide additional information on this topic
- If your trades are submitted into DSMatch by a third-party provider, we are liaising with them directly
- TIW Connectivity to remain as currently implemented

# MQ Connectivity Changes

## Current Platforms (DSMatch, NCM and TIW)

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DSMatch, NCM and TIW are accessed through the DTCC MQ gateway.

If it's not possible to send a response over MQ then DSM adds the request to an internal dead letter queue.

Note: It's not possible to send a response over MQ if the request is badly formed or is missing information needed to identify the outbound queue and/or construct a valid response

## Target Platforms (TradeServ and new TIW)

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Direct UAT and Production connectivity to OSTTRA required via Private leased line, VPN or Web SSL to access TradeServ

Direct connectivity to DTCC required to access the TIW

TradeServ allows submitters to receive an email notification when an error response cannot be delivered over MQ.

Note: TradeServ makes every effort to send a response over MQ. If the FpML request is schema invalid or not well-formed then the soap header is parsed independently to retrieve the details needed to send an FpML response.

# Schema Validation

# Schema Validation

- The structure of the FpML messages are defined by XML schemas
- Today a small number customers submit schema invalid FpML which is accepted by DSMatch, this will need to be corrected when submitting to TradeServ
- TradeServ will validate that the FpML submitted by firms conforms to the XML Schema
- Transactions which are not schema valid will be rejected, and submitters notified via FpML message over MQ
- Where a confirmation Exception FpML message cannot be constructed, submitters can opt to receive an email notification
- MarkitServ have reached out to affected firms to assist in this process

# FpML Messaging Changes

## Current Platforms (DSMatch, NCM and TIW)

- DSMatch attempts to process requests that don't conform to the referenced FpML schema. For example, elements provided in the wrong order or incorrectly formatted dates.
- DSMatch notifications are identified as coming from "DTCC"
- The DSMatch FpML representation for Swaption trades where ISDA Matrix provisions are elected, is not schema valid
- The Message ID on notifications related to GUI/CSV submissions indicates the Input Method, Environment (UAT/Production), Submitting GUI User or O-Code.
- The DSMatch notification of registration indicates that the transaction has been both confirmed and registered with TIW. This includes the DTCC TRI and warehouse state fields.

## Target Platforms (TradeServ and new TIW)

- TradeServ supports the same messaging versions i.e., FpML 4.9 with V10 and V11 wrappers, however FpML requests that fail schema validation will be rejected. Firm should ensure they can submit schema valid messages.
- TradeServ notifications to be identified as coming from "MarkitSERV"
- ISDA provisions on Swaption trades to be indicated using the contractualTermsSupplement tag
- The Message ID on notifications related to GUI/CSV submissions will only indicate the Input Method and TradeServ generated User Id
- By default, the legacy choreography is preserved by sending a notification upon successful registration of the confirmed transaction. Firms can elect to also receive a notification of confirmation, that omits the warehouse state.

Further details on [Documentation Portal](#)

# Graphical User Interface

# GUI and Login Process

- Both DSMatch and TIW share the same graphical user interface (GUI) providing users with access to confirmation, reporting, clearing, warehousing and payment information
  - A new and enhanced TradeServ GUI will replace the current DSMatch one, enabling users to better manage credit confirmation, clearing and regulatory reporting
  - The TradeServ GUI will offer users an enhanced experience, allowing for...
    - Improved navigation to quickly filter and sort transactions
    - Introduction of workspaces to save views etc.
    - Easier and quicker access to MIS reports and downloads
- [Click here to download the TradeServ User Guide](#)
- Your username for TradeServ will remain the same, but users when logging in for the first time will be requested to reset their passwords



# Login Process

## User Accounts

- All user accounts **Active** within the last 12 months will be migrated to TradeServ.
  - Multiple accounts with the same email address will be consolidated into a single account
  - Multiple accounts across different firms will be migrated as-is (for example fund admin accounts across multiple institutions/firms)
  - Users will receive an email from OSTTRA, prior to Go Live with their TradeServ user account details and new URL
  - **All users must ensure they can login in advance of Go Live to avoid any interruption of access**

## Authentication

- User authentication will be managed via IHS Markit's Secure Access Management (SAM), a shared/centralised user authentication application.
  - Users will be automatically directed to IHS Markit's SAM application to authenticate for both **UAT** and **Production** environments
  - Users will be prompted to login using their **email address rather than their username**
  - Users will be emailed an activation code by SAM in order to verify their email address, and will be prompted to set a password
    - Users' setup to use their company's Single Sign-on (SSO), will be redirected to their company SSO site/portal to authenticate
  - Once authenticated, either through a company's SSO or SAM's username/password, users will be presented with the TradeServ portal
  - Where an email address is linked to multiple user accounts, users can toggle between accounts (via username), instead of logging out and back in again
  - When a user account is toggled to, only data that the user account if permission for can be viewed

# Login Process

## Preparing to use SAM

- Some firms may need to whitelist SAM's URL  
<https://login.samexternal.net>
- Users may need to add [IHSMarkit@ihsmarkit.com](mailto:IHSMarkit@ihsmarkit.com) to their safe senders list to receive relevant emails
- IP whitelisting maybe required for SAM emails, the static IPs are as follows: **54.240.86.166** and **54.240.86.167**

## Single Sign On Users

- Users' setup to user their company's Single Sign-on (SSO) should check that the email address associated to their user in CRS matches their corporate login (e.g [user.name@megabank.com](mailto:user.name@megabank.com) vs. [user.name@mega.com](mailto:user.name@mega.com))
- CRS should be updated in case of any discrepancy
- If users have never accessed SAM before, ensure that they are added to the correct Internal Active Directory Group

## Authorisation

- Users are given access to view transaction data through Functional Groups which replace the DSMatch Ocodes, in concept
- Functional Group access will be migrated based on user access permissioned by Ocodes
- Users will have access to data across all Functional Groups in a single view, unlike DSMatch where only one Ocode can be selected at a time

# Customer Interfaces – GUI Usability Changes

The screenshot shows the TradeServ interface with the following annotations:

- 1**: Navigation between Novation Consent, Confirmation and Admin applications
- 2**: Status dashboard to filter transactions, which can be expanded or hidden
- 3**: Context specific actions
- 4**: Search counterparty directory by Institution or Legal Entity
- 5**: Schedule or download reports
- 6**: Add or remove columns
- 7**: Save workspaces
- 8**: Submit transactions via CSV upload or form capture
- 9**: Drag and drop, sort, filter or pin columns to the left. Expand or reduce column width
- 10**: Self-service user management

The interface includes a top navigation bar with 'MY APPS', 'CO CONFIRMS', 'NCM NCM', 'AD ADMIN', and user 'RIMA.PATEL UAT'. A left sidebar shows a status dashboard for '8551 TRADES' with categories like ALLEGED (720), CANCELLED (113), CONFIRMED (6772), etc. The main area is a table with columns: ACTIONS, ERROR, STATUS, BEST MATCH %, ORIGINATOR, COUNTERPARTY, TRANSACTION TYPE, PRODUCT TYPE, FLOATING RATE AMOUNT, WAREHOUSE STATUS, and DTCC TRI. A context menu is open over the 'ACTIONS' column, listing options like VIEW POSITION, VIEW MESSAGES, VIEW HISTORY, VIEW TRADE, TERMINATE, AMENDMENT, WORKFLOW UPDATE, REPORTING UPDATE, ASSIGNMENT, EXIT, TRICHANGE, and DISABLE.

# Customer Interfaces - Self-Service User Management

## Current Platforms (DSMatch, NCM and TIW)

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User and O-Code management is managed via SACs (Super Access Coordinators) and ACs (Access Coordinators) on CRS (Customer Registration System).

ACs are responsible for managing Operators. Super ACs are responsible for managing Operators, ACs and other Super ACs.

## Target Platforms (TradeServ and new TIW)

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SACs and ACs will be migrated in Production as TradeServ Admin Users. Admin is a separate Application and is accessed through the same user login process.

Once TradeServ is live, Admin Users will manage User and Functional Group Access for Confirms, NCM and Admin on TradeServ and can create new Functional Groups.

There is no distinguishable difference between the inherited permissions of a Super AC migrated as an Admin User and an AC migrated as an Admin User.

Admin Users will be migrated with the equivalent level of current access to users and entities as determined by O-Codes.

Admin workflow requires a minimum of two users (requestor>approver). Firms with only one SAC should ensure another SAC is created with the correct O-Code access and logs in to CRS prior to the migration to ensure the appropriate access is migrated on TradeServ.

For more information on Self Service please refer to [Self Service Introduction](#)

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# CSV Upload Changes – RP Assignment

Ref	Legacy	Target	Rationale
1	DS Match expects trade details for the new leg of the RP Assignment to be provided using the columns labelled “New”	TradeServ expects the trade details and workflow fields for the new leg of the RP Assignment to be provided in the same columns as for the EE Assignment.	TradeServ no longer needs to support outside events and so trade economics for the old leg don't need to be provided.
2	DS Match only requires trade details for those fields that can change between the old and new leg. For other fields DS Match carries forward values from the old position onto the new leg.	TradeServ requires all the trade details for the new leg of the RP Assignment to be provided in the same columns as for the EE Assignment.	TradeServ CSV Upload does not support enrichment based on trade state and so all economics need to be provided (as they are for FpML submission).
3	DS Match allows workflow fields to be provided for the old and new legs of the RP Assignment.	TradeServ only supports workflow fields for the new leg of the RP Assignment.	The TIW no longer supports the update of workflow fields on the old position when an Assignment is registered.

## Example Scenario:

Party 00001 confirms 5M Trade with Party 00002 then novates 1M to Party 00003

## DSMatch CSV Upload:

Activity	Transaction Type	Originator ID	Submitter Role	Floating Rate Amount	Master Document Date	New Master Document Date	Desk ID	New Desk ID	Post Trade Transaction Date	Affected Notional Amount	Post Trade Payment Amount	
New	Trade	00001		5,000,000	2004-01-01		Desk 1					
New	Trade	00002		5,000,000	2004-01-01		Desk 2					
New	Assignment	00001	OR		2016-05-04		Desk 3		2018-02-03	1,000,000	200,000	
<b>New</b>	<b>Assignment</b>	<b>00002</b>	<b>RP</b>			<b>2016-05-04</b>	<b>Desk 2</b>	<b>Desk 2B</b>	<b>2018-02-03</b>	<b>1,000,000</b>		
New	Assignment	00003	EE	1,000,000	2016-05-04		Move Desk	Remove	Move	03	1,000,000	200,000

## TradeServ CSV Upload:

Activity	Transaction Type	Originator ID	Submitter Role	Floating Rate Amount	Master Document Date	New Master Document Date	Desk ID	New Desk ID	Post Trade Transaction Date	Affected Notional Amount	Post Trade Payment Amount
New	Trade	00001		5,000,000	2004-01-01		Desk 1				
New	Trade	00002		5,000,000	2004-01-01		Desk 2				
New	Assignment	00001	OR		2016-05-04		Desk 3		2018-02-03	1,000,000	200,000
<b>New</b>	<b>Assignment</b>	<b>00002</b>	<b>RP</b>	<b>1,000,000</b>	<b>2016-05-04</b>		<b>Desk 2B</b>		<b>2018-02-03</b>	<b>1,000,000</b>	
New	Assignment	00003	EE	1,000,000	2016-05-04		Desk 3		2018-02-03	1,000,000	200,000

# Transaction Processing

# Workflows

- Only once a transaction (new or post trade event) is legally confirmed on TradeServ, will it be submitted to the TIW to be registered which differs from today's process where trades are matched, confirmed and registered in one step
- In the future state, where TradeServ needs to register the transaction at the TIW, TradeServ will introduce 2 messages
  - TradeServ will respond with a confirmation message prior to the successful insertion into the TIW (opt in)
  - TradeServ will then also update with a secondary message inclusive of DTCC TRI once registered
- For post trade events TradeServ will 'reserve' the applicable notional at the TIW until such time that transaction is confirmed
- TradeServ will be sun setting the following transaction types
  - Backloads, Increase, Outside Assignment, Outside Termination, Self Trades
- TradeServ will also introduce new error codes that state the reason for submission failure

# TradeServ to TIW Interface: Registration of Events

Registration is the means by which all trades and subsequent lifecycle events are reflected in the TIW. The following events will be registered:

## Bilateral Trade and PTEs.

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TradeServ registers transactions with the TIW once they have been legally confirmed (and not before). The registration request references the reservation created upfront to lock the position record.

## Unilateral Update

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As with Bilateral PTEs, a unilateral PTE is first reflected on TradeServ before being registered with TIW.

## Cleared Trades and VITs

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In the case of cleared trades and VITs, where a legal confirmation doesn't apply, the transactions are registered and then confirmed. This allows transactions that are rejected by TIW to be resubmitted by the Clearing House without the need to Disable the transaction on TradeServ. Since there is no delay between client submission and registration a reservation isn't created.

## TIW Initiated Events (I/O Events)

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- TIW is responsible for processing industry events on behalf of participants for bilateral and cleared positions which in turn triggers trade lifecycle events.
- TIW registers the lifecycle event and informs TradeServ which in turn reflects the transaction and sends a notification of registration to participants.
- Event processing is skipped for positions that have a Warehouse Status of Uncertain



# TradeServ to TIW Interface: Reservation of Notional

Reservations are currently **only** used to ring fence notional during Novation Consent. Reservations **will now** be leveraged for all bilateral PTEs.

1. TradeServ receives a valid PTE for confirmation
2. TradeServ submits a reservation request to the TIW for the unconfirmed bilateral PTE
3. TIW sets the warehouse status to “Uncertain,” generates a “Reservation Id” and reserves the required notional, echoing this back to TradeServ
4. Upon confirmation of the PTE, TradeServ submits a registration event for the confirmed PTE to the TIW referencing the “Reservation Id”
5. TIW will register this event, lift the reservation and revert the warehouse status to “Certain,” if no other reservations are present

## Bilateral PTEs

Reservations for match flow PTEs behave as follows:

- Amendment / Exercise / Exit reservations are mutually exclusive and as such lock the TIW position.
- Termination and Assignment reservations ring fence a portion of notional of the underlying TIW position and can co-exist for a given deal.
- A Termination / Assignment reservation can be partially lifted when the associated PTE is registered. This allows multiple unconfirmed PTEs for the same deal to share the same reservation
- A reservation expires after 30 days for Exit, and 14 days for other PTEs
- The TIW resets the expiry time whenever the reservation is modified.

## Novation Consent

The legacy behaviour is preserved for Novations consented on ICELink or OSTTRA’s MarkitSERV Novation Consent Manager.

# TradeServ to TIW Interface: Position Differences

## Current Platforms (DSMatch, NCM and TIW)

## Target Platforms (TradeServ and new TIW)

### Position Record and Status

DS Match and TIW maintain and share a sided position record. The position **can** be over terminated resulting in Warehouse Status of “Illogical Notional.”

The TIW maintains both active and inactive positions. Positions are made inactive **45 days** after a deal is fully terminated, novated or matured. A position can be reactivated for a couple of days to perform any post trade event.

TradeServ maintains sided **transactions**, whilst TradeServ and TIW maintain separate position records. The TIW holds the golden position record. The notional amount of a position cannot be less than zero in either application.

Positions will be made inactive **1 day** after a deal is fully terminated, novated, exercised or matured, if no outstanding payments remain, and immediately once exited from the TIW.

A position can be reactivated to only perform a **Fee Amendment or Disable**; however, a Termination, Amendment and Exit can be performed on I/O events initiated in the TIW.

### Notional Reservation and Expiration

Reservations are currently **only** used to ring fence notional during Novation Consent.

Reservations **will now** be leveraged for all bilateral PTEs, except for a Fee Amendment and Disable.

- Upon receipt of a reservation request from TradeServ, the TIW will set the position status to **Uncertain**.
- The TIW will expire reservation after **14 days** for bilateral PTEs and notify TradeServ. There won't be any new notifications via FpML over MQ, however these will be present in the TradeServ GUI
- Expiry of these reservations will revert affected positions to a Warehouse Status of “Certain”, and as a result, this will:
  - Prompt TIW's calculation of quarterly coupons and subsequent settlement of net payments; and
  - Make the position eligible for event processing
- Reservation for Novation Consent requests will continue to follow the Novation Consent protocol and expire on T+1 at 5pm EST.

**Note:** TradeServ and TIW will generate reservations for **Unconfirmed** bilateral PTE events that are migrated, and these reservation will expire in-line with the above duration.

# Transaction Processing Changes

	Current Usage	Target Usage	Decided By
<b>Increase</b>	An Increase event is used to raise the notional amount of a deal.	An Increase event should be submitted as an Amendment.	OSTTRA
<b>Full Termination</b>	A Full termination event is used to reduce the notional amount to 0. This functionality is now deprecated on DSMatch.	A full Termination should be submitted as a Partial Termination.	OSTTRA
<b>Backload</b>	Backload is used to convert paper confirmations to electronic confirmations. The Backload Effective Date indicates the date the electronic confirmation supersedes the paper confirmation.	Backload event will no longer be supported. Upon migration any historical trades that were backloaded will be replaced by Trade events with a Backload Effective Date.	DTCC
<b>Outside Events</b>	Outside events are used to confirm an Assignment or Termination of a deal that's off platform. The new leg of the confirmed outside Assignment is registered with TIW.	Outside Terminations and Assignments will no longer be supported. Upon migration, any historical new deals resulting from a confirmed Outside Assignment will be replaced as a new Trade.	OSTTRA
<b>Self-trade</b>	Self-trades are deals where the two parties are identified by the same account ID, examples include <ul style="list-style-type: none"> <li>Trade events where buyer and seller are the same</li> <li>Assignment events where the buyer and seller are the same on the old leg or the new leg</li> <li>Fee Amendment of Assignment where EE and OR are the same</li> </ul>	Self trades will no longer be supported. Upon migration, any historical self trades will not be supported.	DTCC
<b>Disable</b>	<ul style="list-style-type: none"> <li>Disables are agreed and actioned at set times daily or upon request to DSMatch support teams</li> <li>Termination and Assignments can be disabled in a different order to the original confirmation</li> <li>TIW initiated confirmations can be Disabled</li> </ul>	<ul style="list-style-type: none"> <li>Disables will be automatically actioned following mutual agreement between the two parties via the TradeServ GUI</li> <li>All lifecycle events must be disabled in reverse chronological order of confirmation</li> <li>Confirmed I/O Events generated by the TIW can no longer be Disabled</li> </ul>	OSTTRA and DTCC

# Workflow Processing Changes

	Current Behaviour	Target Behaviour	Decided By
<b>Event Processing</b>	DSMatch rejects PTEs received during credit event processing or the auction phase of restructuring events.	TradeServ accepts PTEs during event processing, and the TIW will accept reservation and registration requests from TradeServ during event processing.	DTCC
<b>Registration</b>	TIW allows the notional to be over terminated resulting in a negative notional amount. In such a case the warehouse status is set to "Illogical Notional"	TIW no longer allows a position to have a negative notional amount. It rejects a reservation or registration request for a Termination or Assignment, if there is insufficient notional.	DTCC
<b>Unconfirmed Assignment</b>	Termination, Assignment or Exercise events that reference the new leg of an Unconfirmed Assignment are processed as Pending.  Workflow Updates that reference the Unconfirmed new leg are accepted.	TradeServ rejects PTEs against new leg of Unconfirmed Assignment Note: Review of legacy transactions indicates that PTEs processed as Pending are subsequently withdrawn.	OSTTRA
<b>Workflow Update</b>	The counterparty receives notifications of workflow updates against unconfirmed post trade event. Note: The legacy notification omits the TRN supplement of the underlying PTE, so it's not thought to be consumed.	The counterparty only receives notifications of workflow updates for a confirmed post trade event. Note: Above aligns with behaviour for Workflow Update of Trade.	OSTTRA
<b>RP Workflow Fields</b>	A Remaining Party (RP) can provide workflow fields for both the old and the new leg of an Assignment.	Workflow fields for the old leg of the RP Assignment will not be supported. If submitted, they will be ignored, and not migrated.	DTCC
<b>MW (ANT) New Trade Workflow</b>	Trades confirmed in MarkitWire, that are not successfully <b>cleared</b> at the Clearing House are submitted into DSMatch for bilateral confirmation.	This process will be deprecated, firms will have to re-submit bilateral trades, which fail to clear directly into TradeServ.	OSTTRA
<b>Bulk Novations and Account Swings</b>	These processes are managed as an event in conjunction with Operations teams.	Bulk Assignment and Amendment events can be performed via CSV upload with support from Operations teams, however management via an event will not be available post Go Live in 2022.	OSTTRA

# Workflow Processing Changes: Clearing Workflows

## Current Behaviour

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Unconfirmed inter-dealer bilateral trades that are subsequently cleared and submitted to the TIW by the clearing house, with the same **TRN** as the unconfirmed bilateral trade, are systematically modified upon receipt of the cleared trade by TradeServ.

Notifications of the modification are sent to the submitter and counterparty.

In the case of dealer-client bilateral trades, the unconfirmed bilateral trades are cancelled, and all notifications to the counterparty are suppressed.

## Target Behaviour

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The systematic action on the unconfirmed bilateral events, will be standardised on TradeServ across both inter-dealer or client-clearing scenarios.

Upon receipt of a cleared trade from the clearing house, if an unconfirmed bilateral trade is identified with the same TRN for the referenced participant, it will be cancelled allowing the cleared trade to be processed successfully.

This will result in a cancellation notification to the submitter and a cancel-allege notification to the counterparty for the bilateral trade.

# Business Validation

## Current Behaviour

### Error Management

- Termination with a decrease in notional of 0 is permitted.
- For non-standard MDTTs, DSMatch accepts Trade/Assignment/Amendment submissions that omit a Fixed Rate and Single/Initial Payment
- DS Match cross-checks that the MDTT is applicable to Index related to RED ID for the following MDTTs – TRX, IOS, PrimeX, PO, MBX, IBOXX
- ISDA Fixed Recovery provision is not permitted for the following MDTTs:  
StandardUSMunicipalRevenue,  
StandardUSMunicipalGeneralFund,  
StandardUSMunicipalFullFaithAndCredit
- DS Match supports certain MDTTs which are no longer needed.

## Target Behaviour

- Termination with a decrease in notional of 0 is **not** permitted.
- All Trade and Amendment submissions across all sub-products, except CDSFixedRecovery must provide either a Fixed Rate or Single/Initial Payment.
- TradeServ cross-checks that the MDTT is applicable to Index for **all** STS index MDTTs. Note: A small number of legacy deals will fail new validation when Amended.
- ISDA Fixed Recovery provision is permitted on all Matrix trades. This aligns with the ISDA Physical Settlement Matrix
- Trade / Amendment events that reference the following MDTTs are rejected:
  - TRX/TRXII, iTraxxCJ, iTraxxCJTranche, iTraxxEuropeDealer, iTraxxEuropeNonDealer. Related indices have now matured
  - NCRMBS, iTraxxSDI75Dealer, iTraxxSDI75NonDealer, SP, and CDXEmergingMarketsDiversifiedTranche. These MDTTs have never been used to confirm deals.

# Business Validation: Error Management

## Current Behaviour

### Error Management

- DSMatch returns a distinct error code that identifies the validation rule that has failed.
- DSMatch accepts in Error transactions that fail business validation and rejects submissions that fail system validation.
- Note: Transactions that are accepted in error appear in the Daily Error Report and can be viewed and corrected via the GUI.

## Target Behaviour

- TradeServ provides more general error codes and different messages to DSMatch. Firms to review error code changes if they have implemented automated resolution based on one or more error codes. **See next page.**
- Certain business errors cause the submission to fail schema validation and will therefore be rejected upfront, and as a result cannot be viewed or corrected via the GUI.

# Error Codes

Error Code	Error Message Name	Description
E001		Unable to generate or route FpML response. Email sent to address associated with inbound queue. This occurs if TradeServ is unable to retrieve basic details from request using Xpath.
E002		Schema validation errors. So long as the OTC_RM block provided within the soap header is well-formed and populated correctly, then a standard FpML error message listing the parser errors will be returned over MQ.
E003	CoreIdentifierError	One of the core platform identifiers is invalid (e.g. Trade Reference)
E005	RefDataEntitlementError	Entitlement for addressed entity or related party cannot be identified or is not active. For example, the Party Id is not entitled to submit the specified product.
E006	RefDataValidityError	The reference for the provided entity cannot be validated against entity reference data. For example, the specified Party Id is not a valid/recognised Id.
E007	BusinessWorkflowError	Requested business action or events not supported in relation to current state of trade/transaction. For example a Trade cannot be withdrawn (cancelled) once it has been confirmed
E009	TIWRegistrationRejection	Failure to register an event with the TIW. System errors returned by TIW that firms can elect to receive.
E100	DataIntegrityError	A field that appears in the FpML header and body has different values e.g Trade Reference. This supplements integrity checks enforced by schema validation.
E150	DataTypeError	Field value incompatible with field data type e.g. an alphanumeric value in a numeric field.
E200	DataValidityError	Invalid field value for example an unsupported business centre, currency or transaction type.
E250	BusinessValidationError	Field value doesn't obey conditionality rules, business rules or is inconsistent with underlying trade/transaction.
E010	TIWReservationError	Business errors encountered when reserving notional. TradeServ doesn't check whether there is sufficient notional but instead defers this validation to the TIW



# Matching

## Current Behaviour

### Match Score

DSMatch calculates the match score for a pair of candidate transactions as follows:

$$\text{Match Score \%} = 100 - (\text{Numerator} / \text{Denominator}) * 100$$

Where:

Numerator - is the sum of weights of fields that mismatch

Denominator - is the sum of weights of fields on the request

## Target Behaviour

For reasons of performance, TradeServ calculates the match score using the same equation but with a Denominator fixed as the sum of weights of fields for the sub-product.

The Match Scores generated by TradeServ are comparable to DSMatch. The highest match score continues to identify the closest match and the ranking of matching candidates by match score is the same.

### Best Match Score

The match score of the closest candidate for matching is displayed for unconfirmed transactions on the GUI search results:

- a) DSMatch displays a Best Match Score for Unconfirmed and Alleged transactions
- b) DSMatch updates the transaction record and matching candidates/scores at the same time

a) TradeServ only displays a Best Match Score for Unconfirmed transactions

b) TradeServ updates the transaction record and matching candidates/scores independently. As a consequence, they can be briefly inconsistent when viewed through the GUI

# Matching

## Current Behaviour

### Matching Candidates

DSMatch restricts matching candidates based on Product Type

### DK Action

A party can flag an alleged transaction as unexpected by submitting a DK (aka Don't Know) action.

## Target Behaviour

TradeServ further excludes Trades of disparate sub-products.

As such CDSRecoveryLock and CDSFixedRecovery trades would be considered matching candidates for a CDSSingleName Trade but CDSonABS, CDSonLoans and CDSSwaption would not.

DK actions will not be supported or migrated.

# Novation Consent

# Novation Consent (NC)

- The current Novation Consent Module (NCM) that facilitates consent and conformation will also be transitioned over to TradeServ technology
- The new NCM will be launched in parallel and on the same underlying technology as TradeServ
- The new application will mirror all the current services that are available today
- Your username for the new NCM will remain the same, but users when logging in for the first time will be requested to reset their passwords

# Open Novation Consents

Novation Consents initiated on Friday October 7<sup>th</sup> within the MarkitServ Novation Consent Module (NCM) will need to be completed on the platform before **6pm EST on Friday October 7<sup>th</sup>**.

OSTTRA support staff will be actively working with participants across regions and encouraging them where possible to consent to these novation's before close of business London and New York time

Any consent that is not completed by all three parties by this time will automatically get cancelled shortly after 6pm EST on Friday October 7<sup>th</sup> and will not be migrated to the new TradeServ NCM application.

These consents will have to be agreed off-platform and the respective assignments will need to be submitted into TradeServ from Monday 10<sup>th</sup> October

- **How will OSTTRA inform parties of cancelled novation consents?**

- OSTTRA Support will be reaching out to impacted parties informing them of the novation consents that have been systematically cancelled from the platform

- **How should I consent to these novation's?**

- Firms should revert to manual email consents for these novation's

- 

- **What do firms need to do on Monday 10<sup>th</sup> October?**

- Due to the ISDA novation C=C protocol, the NCM application does not allow firms to backdate novation trade and effective dates when initiating novation's. Firms with impacted novation consents that have been cancelled by OSTTRA, should load these assignments directly into TradeServ to match off with your counterparts.

- **Does this affect consents via the ICE Link Consent Platform?**

- No, the above is only applicable for novation consents that have been initiated within OSTTRA NCM.

# Novation Consent

Identify and select confirmed trade to Novate

Capture novation details inline. Required fields highlighted to direct users.

Toggle between Novation consent and Confirmation processes

**TRANSFEROR**

REC...	TRANSFEROR REFERENCE NUMBER	NCM ID
<input type="checkbox"/>	PD_CDSIT	NCM20211124.0006813056
<input type="checkbox"/>	PB_CDSSN_24112021	NCM20211124.0006813053

**TRANSFEREE**

REC...	TRANSFEROR REFERENCE NUMBER	NCM ID
<input type="checkbox"/>	PD_CDSIT	NCM20211124.0006813056
<input type="checkbox"/>	PB_CDSSN_24112021	NCM20211124.0006813053

**SEARCH CRITERIA**

Define the details of trade to search the internal system.

Product Type: Choose

Sub Product Type: Choose

Originator Id: Type to search

Counterparty Id: Type to search

**SEARCH RESULTS**

TRADE REFERENCE NUMBER	ORIGINATOR
<input type="checkbox"/>	PD_CDSIT_CP NCM 01 Entity 03
<input checked="" type="checkbox"/>	PD_CDSIT NCM 01 Entity 01 DN
<input type="checkbox"/>	34FF0083402D47239D086357... DTCC00000831
<input type="checkbox"/>	34FF0083402D47239D086357... DTCC00000831
<input type="checkbox"/>	34FF0083402D47239D086357... DTCC00000831
<input type="checkbox"/>	34FF0083402D47239D086357... DTCC00000831
<input type="checkbox"/>	34FF0083402D47239D086357... DTCC00000831
<input type="checkbox"/>	34FF0083402D47239D086357... DTCC00000831
<input type="checkbox"/>	34FF0083402D47239D086357... DTCC00000831

Showing Page 1 of 3 | Page Size: 100

**DEFINE DETAILS**

COMMON

Originator ID: 50001111 (NCM 01 Entity 01 DN)

Counterparty ID: 50003333 (NCM 01 Entity 03)

TRADE INFORMATION

TRADE IDENTIFIERS

DTCC TRI: 20211124.6798404372

Block Reference Number

Trade Reference Number: PD\_CDSIT

Trade Reference Number Supplement

NOVATION DETAILS

Transferor: 50001111 (NCM 01 Entity 01 DN) **SELLER**

Transferee: Type to search

Remaining Party: 50003333 (NCM 01 Entity 03) **BUYER**

Old Notional Amount: 100,000.00

Old Notional Currency: USD

Full Assignment: YES NO

TIW Available Notional Amount: 100,000.00 (USD)

Novation Amount

Novation Currency: USD

Novation Trade Date: 11/24/2021

Novation Effective Date: 11/25/2021

Full First Calculation Period Applicable (Y/N): NOT APPLICABLE APPLICABLE

REQUIRED FIELD REVIEW

# Novation Consent

	Current Behaviour	Target Behaviour
<b>Functional (TRI-Rename)</b>	TRI Renames can be initiated on the completed novation in NCM	TRI Renames to be performed directly on the confirmed Assignment within the Confirmation Application.
<b>Improvement</b>	C-only novations are being sent for clearing, when a Clearing House is provided. These get rejected by Clearing House due to a missing DTCC TRI.	C-only novations will no longer be sent for clearing.
<b>FpML Message Version</b>	Messaging versions 2.4, 3.0 and 4.0 supported.	Only messaging version 4.0 (OTC_RM_NC_4-0 and OTC_Matching_NC_4-0) is supported and any previous versions will be rejected.
<b>Directory</b>	“Contact List” directory available on GUI, listing the name/institution/email/last logged in details of users who have access to NCM	“Contact list” is not supported due to GDPR restrictions.
<b>RP Dispute</b>	When an RP disputes the Clearing House value provided by EE during affirmation, the OR is required to modify the trade, to allow the EE to update the Clearing House value and resolve the CCP Dispute.	A dispute by the RP will be directly routed directly to EE for action, removing the OR from the CCP Dispute resolution. This new workflow is only available when all 3 parties are on NCM.
<b>EE Consent Timestamp</b>	EE Consent timestamp was not available on GUI/Reports.	EE Consent timestamp will now be available on GUI and Reports. A new field “EE Consent Timestamp” has been added to the report.

# Regulatory Reporting



# Regulatory Reporting

- The majority of regulatory reports sent to the DTCC Global Trade Repository (GTR) plus the additional services associated (jurisdiction determination, RCP determination USI/UTI generation) are performed by DSMatch
- For a small number of transactions, those that have been through event processing the TIW sends the applicable reports
- To ensure a common approach and no duplication of build, it has been agreed by that TradeServ will take on regulatory reporting of all transactions providing a single source to reconcile, simplifying the process for participants that utilise this service

# Workflow Processing Changes: Regulatory Reporting

## Current Behaviour

DSMatch sends regulatory reporting messages for both sides of the trade in one message.

Regulatory Reporting to the DTCC GTR is performed by DSMatch and the TIW.

Regulatory reporting support was implemented before the UTI Market Practice was created, and therefore does not validate per the market practice rules.

Reporting Update **only** allows the following change when PTEs are NOT present on the position:

- Updates to UTI/USI prefix and value across all jurisdictions
- Addition or removal of jurisdictions

Report Update ALL allows addition or removal of jurisdictions.

The Collateralised field is not defaulted on CFTC trades when the Real Time reporting flag was not applied to the trade.

## Target Behaviour

TradeServ sends separate regulatory reporting messages per side, per jurisdiction.

Regulatory Reporting to the DTCC GTR will be performed by TradeServ across **all events** and regimes, including events generated by the TIW (I/O Events).

Validation will be applied to the USI/UTI fields on New Trades, Reporting Update and Assignment New Leg. Refer to Appendix for validation rules.

Reporting Update allows the following change when PTEs are present on the position:

- Updates to UTI/USI prefix and value across all jurisdictions
- Addition or removal of jurisdictions

The Collateralisation field is defaulted across all jurisdictions using the following rule: Where no value is provided, refer to participant preference, otherwise default to "Fully."

# Validation Rules for UTI and USI Prefix and Value

TradeServ will apply the following validation to the USI/UTI fields on New Trades, Reporting Update and Assignment New Leg.

- UTI Prefix

- Up to 20 Characters
- May consist of alphanumeric and any special characters

- USI Prefix

- Must be exactly 10 characters long
- May consist only of digits 0-9 and uppercase letters A-Z only, i.e. no special characters allowed
- Must begin with 3 digits in the range 101 – 119
- Must not begin with the digit zero (0)
- Must not begin with or contain the letter O
- Must not begin with or contain the letter I

- USI/UTI Value

- Up to 32 Characters
- May consist of digits 0-9, uppercase letters A-Z and only the following special characters are permitted: colon, hyphen ('-'), period ('.'), underscore('\_')
- USI Value must not start or end with a special character
- Sequences of multiple consecutive special characters are not permitted

Note: Where TradeServ generates a UTI the prefix will be "9J6AQFWC2C". This 10-character value is generated using an algorithm on [www.UTIPrefix.org](http://www.UTIPrefix.org) using the MarkitSERV LLC LEI 549300V2LQD6SX1WIG70 as input. This follows the ISDA best practice. Where TradeServ generates a USI it will use the USI Prefix provided by the RCP, as DSMatch does today, or "1010000236" if one is not available.

# Transaction Reports

# Transaction Reports

- The current DTCC Full Position Reconciliation Report (FPRR) contains both confirmed, unconfirmed and allege transactions
- In the future state with the TIW not knowing of a transaction until it has been legally confirmed on TradeServ the FPRR will only include confirmed transactions
- TradeServ will be creating its own position report that will contain all trades or PTEs that are unconfirmed, alleged, or confirmed
- If firms wanted continue to use the DTCC FPRR they will need to combine it with the unconfirmed/allege transaction report produced by TradeServ
- As per the current reporting functionality available on DSMatch, TradeServ will allow participants be to download or have sent to them reports containing unconfirmed and alleged transactions

# Transaction and Position Reports

DSMatch Report Name	TradeServ Report Name	Purpose	Accessible Via	Deviation from DSMatch
Deriv/SERV Position Recon. Report	Full Position Report	Captures all active positions, and inactive positions for 5 business days. Reflects the latest transaction on the position irrespective of status. (Also captures alleges for new trade, inclusive of the RP vs. EE trade of an Assignment).	GUI and FTP Delivery	<b>Refer to Appendix for field changes.</b> <b>Report format for sFTP (spaces excluded):</b> <Report Name>_<first 8 chars of Institution Name>_<Markit Institution ID>_<Timestamp in the format DDMONYYYY>_<P to reflect Prod or T to reflect UAT> for example: . FullPositionReport_TESTFIRM_mXXXXXXXXXXXXX_01Jan2022_P
Unconfirmed Transaction Report	Unconfirmed Transaction Report	Captures unconfirmed transactions	GUI Only	None
Alleged Transaction Report	Alleged Transaction Report	Captures alleged transactions	GUI Only	None
Novation Consent Step-Out Recon Report	Novation Consent Step-Out Recon Report	Captures consents initiated over a 5 business day period when accessed via the GUI	GUI and FTP Delivery	FTP report which only captures new consents will be generated daily vs. every two hours
Credit Daily Activity Report	Credit Daily Activity Report	Captures all transaction as of extraction date and time	GUI only	None
D/S Overwritten Report	TradeServ Overwritten Report	Captures data that is overwritten on a receipt of a transaction, where applicable	GUI only	None

# Full Position Recon Report – Field Name Changes

Column	DSMatch	Trade Serv	Rationale
GR	JFSA Branch BIC	Branch BIC	Initially these fields were utilised for ESMA only, and subsequently utilised for FCA, CFTC and other jurisdictions.
GV	ESMA Beneficiary Prefix	Beneficiary Prefix	
GW	ESMA Beneficiary Party To The Trade	Beneficiary Party To The Trade	As a result of the above, a decision was taken to remove the ESMA prefix to allow reuse across jurisdictions, as applicable.
GX	ESMA Collateral Portfolio Code	Collateral Portfolio Code	
GY	ESMA Compression	Compression	
GZ	ESMA Commercial Activity/Treasury Financing	Commercial Activity/Treasury Financing	
HA	ESMA Intragroup	Intragroup	
HB	ESMA Trading Capacity	Trading Capacity	
HC	ESMA Branch Location Country Code	Branch Location Country Code	
HU	Canada Inter Affiliate	Inter Affiliate	
IC	ESMA CFI Code	CFI Code	
ID	ESMA Instrument ID	Instrument ID	
IE	ESMA MIC Code	MIC Code	
IF	ESMA Counterparty LEI ID	Counterparty LEI ID	
IG	ESMA Counterparty Country Code	Counterparty Country Code	
IJ	CFTC PLI Code	Counterparty Non-Disclosure Id	

# Full Position Recon Report – Field Value Changes

Column	Reporting Field	Trade Serv Format	DSMatch Format
P	Warehouse Current State Notional Amount	Display up to 5 decimal places. No padding of 0s	Padding of 0s present
BL	Attachment Point	Up to 2 decimal pts	5 dps with padding of 0s
BM	Exhaustion Point	Up to 2 decimal pts	5 dps with padding of 0s
CL	Reference Price	Up to 7 dps. No padding with 0s	5 dps with padding of 0s. Default to 0
CV	Original Principal Amount	Up to 7 dps. No padding with 0s	Default to 0 when blank. 5 dps with padding
CW	Initial Factor	Up to 9 dps. No padding with 0s	Default to 0 when blank. 9 dps with padding
DW	Strike Price	Up to 7 dps, no padding of 0	5 dps. Padding of 0s present. Default to 0 for Non-Swaption
EC	Recovery Price	No default to 0	Default to 0
EE	Sub-Product	Follows Trade Serv GUI Sub-product Types	OPTIONS, ELCDS, FRCDS etc.
HK	Floating rate for initial calculation period	Up to 5 dps. No Padding with 0s.	Padding of 0s and Default to 0 where not applicable
HM	Initial fixing amount	Up to 4 dps. No Padding with 0s.	Padding of 0s and Default to 0 where not applicable
CD	Push Status	Map to Blank	Represents the way in which the transaction was pushed to the warehouse e.g., manual or automatic applicable only for Backloaded trades.
CI	Unconfirmed notional	Up to 5 decimal places. No padding with 0 and default to zero	Fixed 5 decimal places, includes padding with 0
DG	Calc Flag	Field mapped to blank	Represents the way in which the transaction was pushed to the warehouse e.g., Y / N - manual or automatic applicable only for Backloaded trades
DH	Current Factor	Field mapped to blank	Represents the ratio of the outstanding principal to original face value displayed with up to 5 decimal places
EL	Mid-Market Price - Type	Enumeration: Price, Percentage, Level	Additional field BasisPoints present in DSMatch
EM	Mid-Market Price - Value	Up to 8 decimal places. No default to zero and padding with zero	Default to zero present. Padding with zero i.e., 123.00000000
EO	Counter Mid-Market Price – Type	Enumeration: Price, Percentage, Level	Additional field BasisPoints present in DS Match
EP	Counter Mid-Market Price - Value	Up to 8 decimal places. No default to zero and padding with zero	Default to zero present. Padding with zero i.e., 123.00000000



# Full Position Recon Report – New Fields

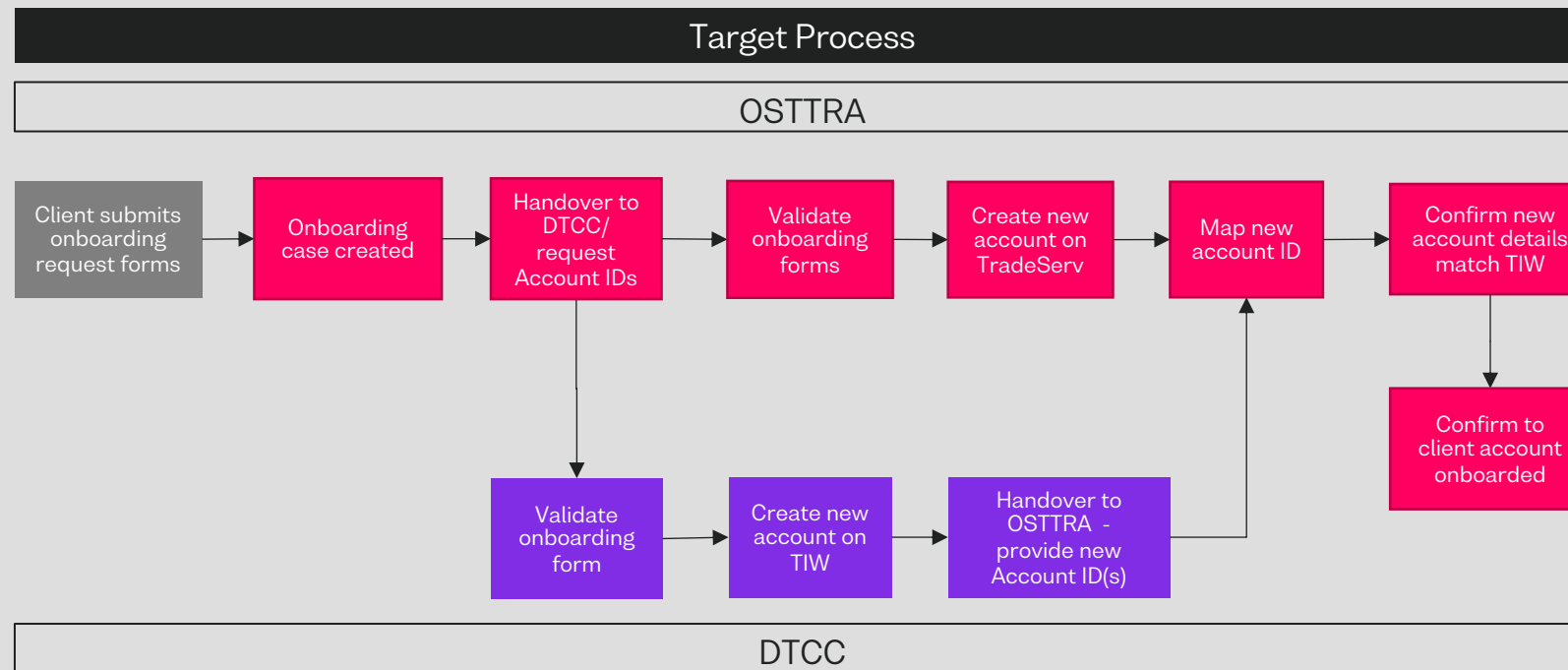
Column	Reporting Field	Description
IO	FCA UTI Prefix	Separate value for FCA post Brexit
IP	FCA UTI ID	Separate value for FCA post Brexit
IU	Active Status	Indicates if a position is Active or Inactive
IV	Inactive Reason	Indicates the reason that resulted in the change of status from Active to Inactive, for example Terminated, Exited or Exercised
IW	TIW Registration Status	Indicated the status of the registration at the DTCC TIW, for example will contain ' <b>Registered</b> ' for a confirmed event or ' <b>Reserved</b> ' for an Unconfirmed event

# Onboarding

# Onboarding

- Current onboarding to both DSMatch and TIW is administered and performed by MarkitServ on behalf of both institutions
- MarkitServ and Deriv/SERV have new processes in place to onboard clients to the new TradeServ platform and the new TIW separately
- Both organisations are committed to develop operational and technical guidelines to ensure that onboarding steps are performed as seamlessly as possible
  - Onboarding requests will be initiated to MarkitServ and the two operations teams will have clearly defined handover steps to ensure cases are processed in a timely fashion and that all account details are aligned on TradeServ and the TIW
  - Account data will be reconciled between the parties on a daily basis to ensure that both systems are kept in sync

# Onboarding

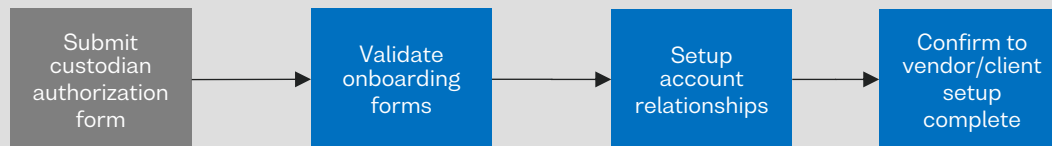
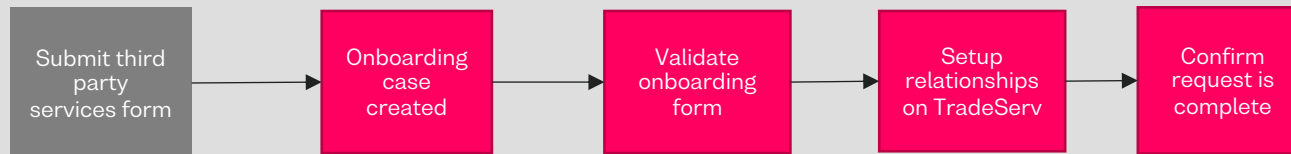


- With the separation of technology, firms must onboard and maintain accounts with both TradeServ (OSTTRA) and TIW (DTCC). A daily reconciliation process will be implemented to ensure accounts are aligned across both platforms.
- Requests for onboarding new entities and updates to existing accounts should be directed as today to TradeServ Implementation team who will handover to TIW Onboarding.
- Firms will need to complete necessary onboarding forms for both OSTTRA and DTCC and should provide both to TradeServ Implementation when initiating a request to streamline the process.
- Updated onboarding forms will be available on the OSTTRA Doc Portal and DTCC Portal.
- TIW team will setup accounts and handover new Account IDs to TradeServ Implementation team to complete account mapping before confirming setup is complete. Account updates will be coordinated by both teams to ensure the platforms are kept in sync.

# Onboarding

## Target Process

### OSTTRA



### DTCC

- Service Provider/Vendor Onboarding processes for TradeServ and TIW will be independent
- Vendors/clients will continue to request onboarding to OSTTRA through Third Party Services Form
- ICE/LCH/TriOptima will need to submit custodian authorization forms to TIW onboarding to setup reporting
- Relationship configuration on TradeServ will be visible through the Admin App providing increased transparency

# Data Migration

# Data Migration

In a coordinated effort both organisations will be migrating production data into their new respective environments

## Customer Reference Data

### In Scope for Migration

- All **Active** Users within last 12 months and their application permissions will be migrated from CRS to the TradeServ Admin Application. CRS will **ONLY** be used to manage users for the TIW.
- All Institutional data such as entities/accounts, MQ details and associated meta data e.g., regulatory reference data will be migrated from DTCC's DSO application to the TradeServ Admin Application

### Out of Scope for Migration

- Customer Reference Data in the UAT/PSE environments
- **Deactivated** Accounts
- Production Customer Reference Data audit history
- Production FTP configuration for receipt of reports

Historic transaction data for Credit will be stored in an 'offline database' in order to satisfy the 7yr data retention requirement

Customer access to historical data to facilitate adhoc queries by regulators and auditors, to be requested via the TradeServ Operations team.

## Transaction and Position Data

- All **Active** positions and their related transactions, with some exceptions, as outlined below
- All **Inactive** positions 1yr prior to Go Live and their related transactions

- Transaction and Position Data in the UAT/PSE environments
- Fully terminated cleared trades
- Active or Inactive positions with a warehouse status reason set to **illogical notional**, and related transactions
- Active or Inactive positions facing Lehman, Bear Stearns a de-activated or unrecognised account
- Unconfirmed transactions which are in an error state (i.e., transactions rejected due to business/workflow validation)
- Cancelled unconfirmed transactions and related history
- Inflight Novation Consents from the OSTTRA NCM platform
- Consented Novations and their associated history
- Historical regulatory reports submitted to the GTR
- Bronze records, unilateral DKs and CreditDerivativeTieOut transactions
- Self-trades and associated lifecycle events (e.g., fee Amendments to the same participant)
- Unconfirmed, Pending or Cancelled PTEs events without a DTCC TRI

# Data Migration

The following transactions will no longer be supported in TradeServ, however they will be converted during the migration process if they are eligible for the in-scope population

Transaction Type	Migration Rule
Increase	An Increase is used to raise the notional amount of a deal. <b>Increase events will be migrated as an Amendment.</b>
Backload	Backload is used to convert paper confirmations to electronic confirmations. The Backload Effective Date indicates the date the electronic confirmation supersedes the paper confirmation. <b>Backload events will be migrated as a Trade with a Backload Effective Date.</b>
Outside Events	Outside events are used to confirm an Assignment or Termination of a deal that's off platform. The new leg of the confirmed outside Assignment is registered with TIW.  Outside Terminations and Assignments will no longer be supported.  <b>New deals resulting from a confirmed Outside Assignment will be migrated as a new Trade.</b>
Bulk Novations and Account Swings	Migrated as Assignment or Amendment with the associated Event Process Type (e.g., Account Swing) and Event Id



# Position Maintenance

## Positions which **require firms to take action** to facilitate migration

- Confirmed events resulting in an 'illogical notional' reason (e.g. duplicate termination events)
- 'Aged' Unconfirmed events (e.g. unconfirmed for more than 14 days from current date) which are unlikely to be confirmed
- Unconfirmed events on matured, fully terminated, novated or exercised positions
- Positions with invalid unconfirmed events (e.g. transactions rejected due to a business validation error)
- Positions with unconfirmed disables

*OSTTRA and DTCC Operations teams will continue to reach out to customers to facilitated the above until Go Live*

# OSTTRA

## Get in contact

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