



DTC/NSCC/FICC DISASTER RECOVERY GUIDE

FEBRUARY 4, 2025

TABLE OF CONTENTS

Purpose of this Guide	4
DTCC Disaster Recovery	5
What to Expect When DTCC Activates its Disaster Recovery Plan	5
Installation and Communication Instructions for Leased Line Users	5
Leased Line Access	5
How to Ensure Connectivity to the DTCC Out-of-Region Data Center	6
How to Connect to the DTCC Web Portals When Processing Has Resumed in the DTCC Out-of-Region Data Center	on 6
DTC	7
Automated Output Files	7
DTFMTX Output	7
DTFTAP Output for Transfer Agents	7
Corporate Actions Instructions Balance Report	8
How to Access Screen-Based Monitoring Tools	8
Corporate Action Web ("CA Web")	8
Settlement Web	8
How to Access the Activity Inquiry Tool	9
How to Access the Inventory Management Service/IMS	.10
How to Access the Risk Management Controls Inquiry Function	.11
How to Access the Receiver Authorized Delivery Function	.12
How to Access the MMI Issuance Processing/MMII Function	.13
How to Access the MMI Tracking/MMIT Function	.14
How to Access the MMI IPA Decision Making Function/IPA DMA	15
How to Access the Position Inquiry Function	.16
How to Access the Participant Account Statement	.17
How to Access the Settling Bank Statements	.17
FICC	19
How to Access Fixed Income Applications	.19
FICC RTTM Web	.19

Disaster Recover	ery Guide
How to Access Fixed Income Applications Using RTTM Web	19
GSD RTTM Web	20
MBSD RTTM	23
MBSD Electronic Pool Notification ("EPN") Application	24
General Out-of-Region Recovery Advice for the EPN Application (Recovery-Restart Considerations)	25
MQ	25
NSCC	26
NSCC Clearing Dashboard Overview	26
Clearing Dashboard – Consolidated Trade Summary	27
Clearing Dashboard – Continuous Net Settlement	
CNS Position Inquiry Function	
Reconciliation	
Cash Reconciliation Statement	
Participant Instructions	30
Fully-Paid-For Instructions	30
Priority Instructions	30
Exemptions Instructions	
How to Access ETF Portfolio Files	
How to Access SMART/Track for Buy-Ins	
How to Access SMART/Track for Corporate Actions ("CNR")	
How to Access Obligation Warehouse	32
How to Access CMU RTTM	
How to Access ACATS	
Definition Of Terms	34
MYDTCC Access	35

PURPOSE OF THIS GUIDE

The purpose of this document is to provide guidance to DTC, FICC, and NSCC clients for reconciling transactions in the event of DTCC's recovery from a disaster.

DTCC considers a disaster to be a disruptive event with a significant business impact, including the possibility of data discrepancies with clients' books and records due to data loss. This guide delivers an overview of the monitoring and reconciling tools available, as well as links to the online reference materials that provide additional assistance.

For any questions regarding the content of this guide, please contact your DTCC Relationship Manager or the DTCC Client Contact Center at (888) 382-2721

DTCC DISASTER RECOVERY

What to Expect When DTCC Activates its Disaster Recovery Plan

In the event of a disaster, DTCC will undertake the following general steps:

- 1. At the time of disaster declaration, DTCC will prioritize the recovery process for its most critical services.
- 2. DTCC will advise clients when resumption is complete. At that point, clients can commence reconciling their data.
- 3. Clients can use the tools as defined in this guide to identify transactions that need resubmission due to the disaster.
- 4. DTCC will resume normal processing, which includes trade capture and recording activities for the day.

As participants of DTC, FICC, and/or NSCC (the "Clearing Agencies"), clients are required to participate in data reconciliation under the applicable Clearing Agency rules, which establish the responsibility of participants to check the accuracy of reports received from the Clearing Agencies and to report any discrepancies. See each of the Rule Books or service guides:

- NSCC Rule 5, Section 5
- GSD Rule 5, Section 5 and Rule 11, Section 12
- DTC Settlement Service Guide (page 4)
- MBSD Rule 5, Section 2, and Rule 6, Section 4

Under certain circumstances, the Market Disruption and Force Majeure Rule under each of the Clearing Agencies' rules also allow the Clearing Agencies to take certain actions following the occurrence of a "Market Disruption Event," as defined in those rules, and to require participants to take actions "appropriate to prevent, address, correct, mitigate or alleviate the event and facilitate the continuation of services as may be practicable."

For more information, see:

- DTC Rule 38
- FICC/GSD Rule 50
- FICC/MBSD Rule 40
- NSCC Rule 60

Installation and Communication Instructions for Leased Line Users

Leased Line Access

All applications are reachable via the DTCC communications infrastructure. If there is a disaster, it is possible that network configuration changes may be required to access DTCC services. This configuration can include, but is not limited to:

- Network routes
- DNS
- Firewall security
- Proxy server settings

These procedures presume that there is a working connection to DTCC.

Note

Regularly validating the ability to establish end-to-end connectivity between client sites and the DTCC out-of-region data center is the only way to ensure that appropriate communications and network security configurations are in place. This validation should be regularly tested as part of the client's business continuity plans.

How to Ensure Connectivity to the DTCC Out-of-Region Data Center

To take advantage of DTCC business continuity capabilities, the ability to interact with DTCC is required via one of the following:

- DTCC SMART network
- SFTI network
- BT Radianz infrastructure that interconnects with SMART
- ANIRA

To avoid delays accessing monitoring tools or corresponding reference materials, DTCC recommends proper maintenance of valid user IDs and passwords for access to its applications.

In addition, clients should regularly test the ability to establish end-to-end connectivity with the DTCC out-ofregion data center. This validation is the only way to ensure that appropriate communications and network security are in place. It is important that clients' business continuity exercises include a fail-over to the DTCC out-of-region data center.

Clients may be required to participate in periodic operational testing performed by the Clearing Agencies, which could include, for example, testing connectivity or data reconciliation in the event of an out-of-region failover. These testing requirements are broadly set forth in:

- DTC Rule 2
- FICC/GSD Rule 3, Section 6
- FICC/MBSD Rule 3, Section 5
- NSCC Rule 2B, Section 3

How to Connect to the DTCC Web Portals When Processing Has Resumed in the DTCC Out-of-Region Data Center

Depending upon the DTCC application and network used to connect to DTCC, clients may be required to access a different URL or IP address than normally accessed in the Production environment.

See <u>MyDTCC</u> Access for information on the different web portals and corresponding applications required to access the systems in the DTCC out-of-region data center.

The remainder of this document lays out the client tools available by Clearing Agency.

DTC

In the case of a disaster, clients will be given the opportunity to confirm their settlement -related transactions that have been received by DTC. These transactions can be from a variety of sources, such as DTCC Institutional Trade Processing ("ITP"), NSCC's Continuous Net Settlement system ("CNS"), a service provider or submitted directly by the client. These transactions may also be in various processing states, such as awaiting receiver approval in the Receiver Authorized Delivery ("RAD") function and pending for position, among others. As a result, DTC offers two ways that clients can reconcile: through output files or a variety of screen-based monitoring tools, as described in this chapter.

Automated Output Files

DTFMTX Output

In the event of a disaster, DTC will make available a machine-readable file, called the DTFMTX file, to all clients who currently receive automated outputs. The DTFMTX file will include all settlement transactions received on that business day by DTC, as well as the status of these transactions at the time the report was generated. Clients that receive DTC's DTFPART output are automatically subscribed to this file and can access it leveraging network data mover ("NDM") or file transfer protocol ("FTP") capabilities when the DTC systems become available. The information received through the DTFMTX will be in the same format as the DTFPART output.

Questions on testing with this file can be made by contacting DTCIntegration@dtcc.com.

See the <u>Disaster Recovery Settlement Participant Activity (5.11 DR) User's Guide</u>, available within the <u>Settlement: CCF Document Repository</u> on the DTCC Learning Center, for further information, including file specifications.

DTFTAP Output for Transfer Agents

DTC will make available the DTFTAP output to Transfer Agents ("TAs"). The DTFTAP output reports all current business day securities processing transactions completed and pending on DTC's books and records at the time the output was generated. Specifically, the DTFTAP includes:

- DWAC requests
- DRS Profile requests
- Deposits, Withdrawals by Transfer
- Custody Transfers
- Both FAST Adds-To-Balances and Drawdowns

This output can be generated on an ad-hoc basis for TA reconciliation in a disaster scenario. To assist TAs with daily processing with DTC, this output is also available for retrieval at five different times each business day (at 9:00 ET, 11:00 ET, 13:00 ET, 15:00 ET and 18:00 ET). Each successor file is cumulative, with the final one at 18:00 ET containing the full day's activities. This output is available on-line via the new Securities Processing Application ("SPA"), where it will be retained for 5 business days and can be downloaded directly from the SPA system.

Transfer agents who want to access the file should submit request via MyDTCC (https://portal.dtcc.com). Please log on to MyDTCC and select the "Support" link on the header bar.

Questions on testing with this file can be made by contacting DTCIntegration@dtcc.com.

See <u>DTFTAP</u> Disaster Recovery Transfer Agent Activity, available within the <u>Asset Services CCF Document</u> <u>Repository</u> on the DTCC Learning Center for further information, including file specifications.

Corporate Actions Instructions Balance Report

Upon a disaster, DTC will make the Corporate Actions Instructions Balances Report available to clients. This report contains pertinent data for reconciliation of voluntary corporate actions instructions. It also lists mandatory corporate actions with options instructions that were processed by DTC at the point the report was generated. The output will be e-mailed to clients upon request. Clients can utilize this output to compare to their own internal records, locate discrepancies, and resubmit the corporate actions instructions lost by DTC due to the reset.

Clients who want to receive this output should submit request via <u>MyDTCC</u> (https://portal.dtcc.com) following a business disruption event. Please log on to <u>MyDTCC</u> and select the "Support" link on the header bar.

How to Access Screen-Based Monitoring Tools

Corporate Action Web ("CA Web")

The CA Web enables clients to manage the lifecycle of corporate action events by searching f or corporate action event announcements, submitting instructions, and viewing entitlements and allocations using various dashboard overviews.

The CA Web can be used to access notifications for:

- Distributions including cash and stock dividends, principal and interest payments, and capital gain distributions
- Redemptions including full and partial calls, final paydowns, and maturities
- Reorganizations including exchange offers, conversions, and Dutch Auctions

In data loss scenarios, where DTC needs to reprocess the CA events announcements & CA cash and securities allocations lost due to the impact, clients can utilize the CA Web to reconcile to DTC's updated books and records. In such instances, DTC will ensure that new events are re-announced with new Corporate Action Identification Numbers (CA ID), that were not utilized prior to the data loss impact. This step will prevent potential client reconciliation issues that can occur if DTC reassigns the same identification number to a different corporate actions event post the impact. DTC will provide the range of CA IDs for corporate actions event announcements that should be reviewed by clients as possible exceptions. The CA ID for events that not impacted by the data loss, will remain unchanged. Additionally, updates to existing events will be re-processed without requiring any change to the originally assigned CA ID.

See the - CA Web section on the DTCC Learning Center for more information

Settlement Web

DTC processes the transmissions it receives within various systems and monitors the processing of these transactions—or "activity"—using several activity-type Settlement monitoring tools.

The Settlement Web is DTC's primary Settlement user interface, through which clients can access the various screen-based monitoring tools. The Settlement Web Navigation Bar allows participants to select from the following categories:

- Activity
- Position
- Cash and Balances
- Transaction Submission

- Commands
- Profiles

The Navigation Bar also provides access to the Participant Browser Services ("PBS") for functions that have not yet been incorporated into the new Settlement Web.

D	TC	C «	Settlement Servic	es				Wek	ome	Log Out Change Password
Home	Activity	Position	Cash and Balances	Transaction Submission	Commands	Profiles	Help	PBS Links		Sep 15, 2020 - 10:58:36 AM EDT
Dashboi	ettlemen	nt Dashb	oard	IKHKKKK	DKIKIKO		DKO	(XXXX)		🖨 Print

Table 3.1 lists the Settlement Web functions needed for certain DTC Settlement monitoring activities. The sections that follow contain links to the relevant documentation for these functions.

Table 3.1 DTC Activity Monitoring Tools

To View DTC Settlement Activity	Use this Settlement Web Application/Function
Activity items processed or pending in ATP	Activity Inquiry Tool
Activity items received	Inventory Management Services ("IMS") application
Collateral management monitoring	Risk Management Controls Inquiry function
Delivery Orders ("DO") awaiting receiver's authorization	Receiver Authorized Delivery ("RAD") function
Payment Order ("PO")/DO Output	Participant Activity Research Tool ("PART") function
Money Market Instruments ("MMI") Issuances Processing	MMI Issuance Processing ("MMII"), Money Market Underwriting ("MMUW") functions
MMI tracking for Issuing Paying Agents ("IPA")	MMI Tracking ("MMIT") function
MMI Funding Decisions	IPA Decision Making Application (IPA DMA)
Security Positions	Security Position Inquiry function
Participant Settlement Balances	Participant Account Statement function

How to Access the Activity Inquiry Tool

The Activity Research function allows clients to view current day activity or the activity history for up to 60 business days by:

- CUSIP number
- Activity type
- Collateral group
- Transaction number

The Activity Research function is accessible through the Activity Inquiry option under the Activity menu in the Settlement Web. Clients can use this function to view:

- Collateral group's payment orders
- Pledges

- Positions
- Search by CUSIP

me Ac	tivity Position Cash and Balance	Transaction Submission	Command
<u>A</u> M	Activity Inquiry	Stock Loan/Repo Adjustments	
Settler	Journal History	IMS Transactions	×
ma > Cal	Pending Activity	Total Recap by Transaction Type	
110 > 50	RAD Transactions	ID Receiver Recap	<u></u>
A	RAD Snapshot Inquiry	ID Receiver Authorization Override	t Inquir
Part	Secondary Transaction Approval Inquiry	Transaction Authorization	
	Secondary Approval for Adjustments	Browse By Delivery Date	
	IPO Tracking Inquiry	Transaction Release	-
Activ	Settlement Transaction File Upload Inquiry		ion Coo
_	MMI Full Call Notice Inquiry		
	MMI Tracking		
Searc	Collateral Loan Services - Pledgor Inquiry		
020 The	IPA Decision Making Application		tenu
	Staging Area Pending Issuer Funding		D-17

Figure 3.1 Accessing the Activity Inquiry Tool

		settlement	aervices	Normanial de la destación	lat		lune	Internet I		- Unange Passa
Actual	Pusition	Cash and Ball	inces	Transaction Submission	Cormands	Piollos	Help	PB3 Laks	Sep 15. 2	11.12.327
ttiemen	Activity									
> Satisme	# Activity									e p
			_			_	_	-		
Activity	Inquiry 1	Collatoral Group	inquiry	Pledge Inquiry Intra-	day Short Inquiry	Search by	CUSP			
Pat ID *	CUS	101	Business Instances	Date #	Contra	Activity	251	Amount (> or -)	Status MadelDavi V	DelReciMi
		100	an invest				-			(a _ (a)
Activity Py	e Sabi	scovity	FreeWalu	ed Third Party	Reason Code	Transacti	ion ID		MANA	Reclaims
in the second se			- Connected				-	h.5.	100	
								Charles Trees 1	Course Same	Data Cost Cost

Figure 3.2 Activity Inquiry Tool

How to Access the Inventory Management Service/IMS

The Transaction Authorization function of the IMS application within the Settlement Web offers clients options to view, authorize, or exempt transactions at DTC submitted for processing. The Transaction Authorization function is accessible through the Activity menu in the Settlement Web. Clients can also access several of the options to manage the processing of transactions from the Profiles menu in the Settlement Web.

ome Ac	tivity Position Cash and Balances	s Transaction Submission				
	Activity Inquiry	Stock Loan/Repo Adjustments				
Settler	Journal History	IMS Transactions				
iome > Sel	Pending Activity	Total Recap by Transaction Type				
ionie > sei	RAD Transactions	ID Receiver Recap				
A	RAD Snapshot Inquiry	ID Receiver Authorization Override				
Part I	Secondary Transaction Approval Inquiry	Transaction Authorization				
	Secondary Approval for Adjustments	Browse By Delivery Date				
	IPO Tracking Inquiry	Transaction Release				
Activ	Settlement Transaction File Upload Inquiry					
	MMI Full Call Notice Inquiry					
	MMI Tracking					
Searc	Collateral Loan Services - Pledgor Inquiry					
0 2020 The	IPA Decision Making Application					
	Staging Area Pending Issuer Funding					

Figure 3.3 Accessing the Transaction Authorization Function

•	TC	C	s	ettlement	Service	s						8.1 8.1	log Out Dange F	assword
Home	Activity	Post	lan	Cash and Bal	ances	Transaction Submissi	on Comman	ts Profile	e Help	PBS Links	1	iep 15, 202	0 - 11:22	3 AM EDT
Tran	nsaction	n Aut	hori	zation										
Home 1	Transact	ion Auth	oricati	lan								Q 14		Print
De	niver Auth	orizatio	n	CNS/CM ACAT	IS .									
Particip	unt ID	1	D Cor	trol Number	INS TID	Date Type Settleme	et V 99/15/2	20	•=	End Date		+-		
CUSIP		-	Recei	wer	Third Par	ty Overiliqual	S Asset Cla	95		Transacti	on Type		~	
Activity	Code	9	Inclus	de These Type	•*⊠4	Dunprocessed Chath	orized Exempt []	MS Cancelled		ected CIMS Dec	oped 🗍 neligi	tile		
Search	Res											Xisplay Typ	a: 🖲 1	la Öta
0 2011	2020 The	Deposi	iory T	rest & Clearing	Corporati	on Legal Information	Privacy Policy M	NTAJ	-	_	_	-		

Figure 3.4 Transaction Authorization Function

How to Access the Risk Management Controls Inquiry Function

The Risk Management Controls Inquiry function can be used to view the current settlement balance and Risk Management Control-related balances for a client's collateral group. The Risk Management Controls Inquiry function is accessible through the Cash and Balances menu in the Settlement Web.

•	TC	L s	ettlement Services					
Home	Activity	Position	Cash and Balances Transaction Submission	Commands	Profiles	Help	PBS Links	
NZN	ZNZNJ	ALAN/A	Risk Management Controls Inquiry	AIP				
S	ettlemer	nt Dashbo	Participant Debit Peak Inquiry	Collateral Trackin	g and Mana	gement		
			CNS ACATS Balance Inquiry					
Dashbo	ard			Collateral Exchange				
Settl	ement Ev	ents for 10/	Participant Settlement Statements					
Settle	ment Event		Participant Account Statement					
SETT	LEMENT S	TART OF DAY	Funds Transfer	LOC Bank Release				
ID NE	T CUTOFF		Settling Bank Statement					
VALU	VALUED RECYCLE CUTOFF		Settling Bank Consolidated DTC and NSCC Account Statement					
IMS F	RED/VELLO	WRECYCLE	Affiliated Bank Statement					
MATO	CHED RECL	AIM CUTOFF	FICC MBSD					
SETT	LEMENT FI	NAL FIGURES	FICC GSD					
EDEF	INCOMPTION OF	TOFF	10.15					

Figure 3.5 Accessing the Risk Management Controls Inquiry Function

	TC	C s	Settlement Servic	es					+ Li + O	og Out hange Password
Home	Activity	Position	Cash and Balances	Transaction Submission	Commands	Profiles	Help	PBS Links	Sep 15, 2020	- 11:35:15 AM EDT
Risk	Manage	ement Co	ontrols Inquiry							
Home	> Risk Ma	nagement Co	ntrols inquiry						😧 Help	Print Results
Sear	ch Crite	ria ∗=	Required Field							
Partici	pant ID *									
Sear	ch									
© 2011	- 2020 The	Depository 1	Trust & Clearing Corpora	ntion Legal Information Priva	acy Policy Menu					

Figure 3.6 Risk Management Controls Inquiry Function

How to Access the Receiver Authorized Delivery Function

The Receiver Authorized Delivery ("RAD") function can be used to review, approve, or cancel incoming deliveries before they are processed in a client's account. The following can be routed through RAD:

- Valued delivery orders
- Payment orders
- Valued pledges
- Matched Institutional Deliveries
- Money Market Instruments

Transactions subject to RAD are accessible through the RAD Transactions option under the Activity Menu in the Settlement Web. Clients have the option to inquire by Transaction Type.

me	Activity Position Cash and Balar	rces Transaction Submission	Com			
	Activity Inquiry	Stock Loan/Repo Adjustments				
Se	Journal History	IMS Transactions				
achhoa	Pending Activity	Total Recap by Transaction Type				
ISHDOA	RAD Transactions	ID Receiver Recap				
Sattle	RAD Snapshot Inquiry	ID Receiver Authorization Override				
Settlen	Secondary Transaction Approval Inquiry	Transaction Authorization	n			
SETTL	Secondary Approval for Adjustments	Browse By Delivery Date				
FORCI	IPO Tracking Inquiry	Transaction Release				
VALUE	Settlement Transaction File Upload Inquiry					
VALUE	MMI Full Call Notice Inquiry					
MATCH	MMI Tracking					
RELE/	Collateral Loan Services - Pledgor Inquiry					
FREE	IPA Decision Making Application					
FREE	Staging Area Pending Issuer Funding					

Figure 3.7 Accessing the Receiver Authorized Delivery Function

·	ΤC		Settlement Serv	ices							+ Chan	bat ge Pássword
Home	Activity	Pusition	Cash and Balances	Transaction Se	devisaion	Commands	Profiles	Help F	96 Links	Sep 1	6, 2020 - 1	1.4E.45 AM EDT
IN:S	Réceiv	er Autho	rized Delivery									
Home)	MS Rec	alver Authors	ced Delivery > Transa	tion inquiry							Thep	Piter
Searc	h Crite	ria := Re	equired Field									
Partici	part ID a	Ass	et Class 1	ransaction Side Tr Receiver V 7	ansection Status	INS TO	Þ	Control Nur	0er			
Busine 09(15)	ans Date a	CUS	ap IQ	No V	oatra							
Trans	action Typ	pe: ≠ ⊠Al	DO-MITS DO	-LMITS NDO	Do Do	VALUED	LEDGE	FREE PLE	DGE			
Secret										Display Type:	* LH	Grid O Excel
0.2011	2028 The	Depository	Trest & Clearing Corp	ration Legal Infor	nation Privacy P	Neru Moru						

Figure 3.8 Transaction Inquiry Function

How to Access the MMI Issuance Processing/MMII Function

IPAs can use the MMII function to initiate the processing of MMI Issuance transactions, specifically:

- Issuance instructions;
- Cancellation instructions; and
- Withdrawal instructions

In addition to processing, the IPAs can leverage the MMII function to perform inquiries on:

- MMI Issuance Instructions;
- MMI Issuance Control; and
- MMI Underwriting Notices, which can also be accessed using the MMUW function

The MMI Issuance Processing MMII and MMUW functions is accessible by the IPAs through DTC's PBS/Settlement Web application.



Figure 3.9 Accessing MMII and MMUW Functions

The MMI documentation is available on dtcc.com.

How to Access the MMI Tracking/MMIT Function

IPAs can use the MMIT function as an inquiry tool to monitor MMI transactions processed through DTC systems that affect their accounts. The MMI Tracking function is accessible through the Activity menu within the Settlement Web.

me	Activity Position Cash and Bala	nces Transaction Submission		
\mathbb{T}	Activity Inquiry	Stock Loan/Repo Adjustments		
Se	Journal History	IMS Transactions		
ehhoa	Pending Activity	Total Recap by Transaction Type		
silbua	RAD Transactions	ID Receiver Recap		
Sottle	RAD Snapshot Inquiry	ID Receiver Authorization Override		
Settlen	Secondary Transaction Approval Inquiry	Transaction Authorization		
SETTL	Secondary Approval for Adjustments	Browse By Delivery Date		
FORCI	IPO Tracking Inquiry	Transaction Release		
VALUE	Settlement Transaction File Upload Inquiry			
VALUE	MMI Full Call Notice Inquiry			
MATC	MMI Tracking			
RELE/	Collateral Loan Services - Pleogor Inquiry			
FREE	IPA Decision Making Application			
FREE	Staging Area Pending Issuer Funding			

Figure 3.10 Accessing the MMI Tracking Function

DT	CC	8	ettlement Servi	ces					Eng Out Ghange Password
time Ach	ulty I	Position	Cash and Balances	Transaction Submission	Commands	Profiles	Help	PESLINS	Sep 15, 2029 - 11:45:32 AM EDT
MMI Tra	icking	a i							
Home > MM	Truck)	ing i							
Search C	riteria	a	Required Field						
Agent		Au L	unya.	Settlement Data #	Per	daet daet		¥	Rese CUSEP
State	Reset	l.							Obrasis Officiality Obras
0 2011 2020	The D	-	and & Clearing Press	ation 1 Canal Internation 1 Private	Police I Marrie				

Figure 3.11 MMI Tracking Function

How to Access the MMI IPA Decision Making Function/IPA DMA

The IPA DMA function provides IPAs with the ability to choose whether an acronym for a maturity presentment is fully funded, partially funded, or issue a Refusal to Pay ("RTP"). For income presentments and reorganization presentments, the IPAs will have the capability to choose between fully funded or issue an RTP. The IPA DMA is accessible from the Activity menu within the Settlement Web.

	D	TCC s	ettlement Se	ervices	i -	
ŀ	lome	Activity Position	Cash and Balan	ces	Transaction Submission	
		Activity Inquiry		Stock L	oan/Repo Adjustments	
K	Se	Journal History		IMS Tran	sactions	
,	Jashboa	Pending Activity		Total Re	ecap by Transaction Type	
_	Jashbua	RAD Transactions		ID Rece	iver Recap	
	Sottle	RAD Snapshot Inquiry	,	ID Rece	iver Authorization Override	
	Settlen	Secondary Transaction Inquiry	n Approval	Transaction Authorization		
	SETTL ID NET	Secondary Approval for	or Adjustments	Browse By Delivery Date		
	FORCI	IPO Tracking Inquiry		Transaction Release		
	VALUE	Settlement Transaction	n File Upload			
	VALUE	MMI Full Call Notice In	nquiry			
	MATCH	MMI Tracking				
	RELE/	Collateral Loan Servic Inquiry	es - Pledgor			
	FREE	IPA Decision Making A	pplication			
	FREE	Staging Area Pending	Issuer Funding			

Figure 3.12 Accessing the IPA Decision Making Application

loma	Links	Breitige	Cash and Balances	Transaction Submission	Commands	Dealling	Helo	DBS Links	San	5 2020 - 11 47 47 AM ETV
PA D	ecision	Making	Application							
Su	Summary Maturity Presentment Funding		ity Presentment Funding	Income Presentment, Reorganization Payment, and Principal Payment Funding		Refusal To Pay Secon		Secondary App	roval	Internal Approval
Sear	ch Crite	eria 🛊 = F	Required Field							
Sear	ch Re	All	s F	None V	Settle 09/1	5/2020	3		Dis	play Type: 💽 List 🔵 Exc

Figure 3.13 IPA Decision Making Application

Information related to MMI is available on dtcc.com.

How to Access the Position Inquiry Function

The Position Inquiry function within the Settlement Web can be used to view snapshots of the current and historical balances for any DTC-eligible security. Clients can view historical account balances for up to two years.

Using the Participant ID, CUSIP, and business date as search criteria, the page displays position information across a series of tabs. A brief description of each tab appears below it.

The Position Inquiry is accessible from the Position menu within Settlement Web.

•)TC(L s	ettlement Serv	vices			
Home	Activity	Position	Cash and Balances	Т			
		Short Pos	ition Inquiry (EOD)				
S	ettlemen	Position I	nquiry	ЖЖ			
Dashbo	Dashboard		/alue				
Dashbu			Loan –				
Settlement Events for 08/20/2020							
Settle		-xpected					
ID NE	1	11					
EOD/	CED DAD DI		FEAT	45			

Figure 3.14 IPA Accessing the Position Inquiry Function

DTEE Settlement Services								Log Out Change Password	
fome	Activity	Position	Cash and Balances	Transaction Submission	Commands	Profiles	Help	PBS Links	Sep 16, 2020 - 1 38:26 PM EDT
Posi	tion Inc	quiry							
lome >	Position I	inquiry	2626262626						
Searc	h Crite	ria ∗ =	Required Field						
articipa	int ID 🛊	CUSIP #	Busine	ess Date					
Searc		-							
2011 -	2020 The	Depository T	rust & Clearing Corporat	ion Legal Information Priva	cy Policy Menu				

Figure 3.15 Participant Account Statement Function

How to Access the Participant Account Statement

The Participant Account Statement function on the Settlement Web can be used to view current settlement activity for the individual participant, collateral groups, or legal entity.

Clients can access options of the Participant Account Statement function through the Settlement Web, under the Cash and Balances menu tab.

ome Act	vity Position	Cash and Balances Transaction Submission	Commands Profiles Help PBS Link
8-111-		Risk Management Controls Inquiry	AIP
Settie	ment Dashod	Participant Debit Peak Inquiry	Collateral Tracking and Management
		CNS ACATS Balance Inquiry	
ashboard			Collateral Exchange
Settlemen	t Events for 10/	Participant Settlement Statements	
Settlement f	west	Participant Account Statement	
SETTLEME	NT START OF DAY	Funds Transfer	LOC Bank Release
ID NET CUT	OFF	Settling Bank Statement	
VALUED RE	CYCLE CUTOFF	Setting Bank Consolidated DTC and NSCC Account Statement	
IMS RED/YE	ELLOW RECYCLE	Affiliated Bank Statement	
VALUED RAD APPROVAL CUT MATCHED RECLAIM CUTOFF		FICC MBSD	
SETTLEMENT FINAL FIGURES RELEASE OF CONTROLS		FICC GSD	
FREE INPU	TCUTOFF	18.15	
and the second sec	ADDDOMAL CUITOR	F 18:30	

Figure 3.16 Accessing the Participant Account Statement Function

DTCC Settlement Services								Log Out Change Password	
Home	Activity	Position	Cash and Balances	Transaction Submission	Commands	Profiles	Help	PBS Links	Sep 16, 2820 - 1.43.14 PM EDT
Setti	lement	Stateme	nts: Participant A	coounts Statement					
Homes	0								😨 Hub
e - Re	squired Fie	10							
articipa	et ID 🔹	Sutt	lement Date *	Statement Type	stal group 🔿 Legi	el Entity]]	
Searc	h Re							Disp	lay Type: 🖲 Guick Search 🔘 Excel

Figure 3.17 Participant Account Statement Function

See the Settlement Web <u>online help</u> and the <u>Settlement Participant Activity (DTFPART) Function User's Guide</u>, available within the <u>Settlement: CCF Document Repository</u> on the DTCC Learning Center for more information.

How to Access the Settling Bank Statements

The Settling Bank Statement function on the Settlement Web can be used by settling banks to view their endof-day settlement balances in one centralized place. It also allows the acknowledgment of settlement balances and viewing of Bulletin Board messages from the DTC Settlement department. The Settling Bank Statement function is accessible through the Settlement Web, under the Cash and Balances menu tab.

By default, the current day's figures appear. However, settling banks can also view history for up to 60 days.

DTCC Settlement Services									
Home	Activity	Position	Cash and Balances Transaction Submission	Commands	Profiles				
VIN			Risk Management Controls Inquiry	AIP					
Se	ettlemen	t Dashbo	Participant Debit Peak Inquiry	Collateral Tracking	and Manag				
Deathba		IYIYD	CNS ACATS Balance Inquiry						
Dashbo	aro			Collateral Exchange	je				
Sattle	omont Eva	nte for 10/	Participant Settlement Statements						
Settle	ment Event	IIIIS IOF TW	Participant Account Statement						
SETT	LEMENT ST	ART OF DAY	Funds Transfer	LOC Bank Release	е				
ID NE	T CUTOFF		Settling Bank Statement						
VALU	ED RECYCL	E CUTOFF	Settling Bank Consolidated DTC and NSCC Account Statement						
IMS R	ED/YELLOW	V RECYCLE	Affiliated Bank Statement						
MATO	MATCHED RECLAIM CUTOFF		FICC MBSD	1					
SETT	LEMENT FIN	VAL FIGURES	FICC GSD						
FREE	INPUT CUT	OFF	18:15						
FREE	RAD APPR	OVAL CUTOF	F 18:30						
FREE	RECICLE	COTOPP	10:35						

Figure 3.18 Accessing the Settling Bank Statement Function

See the Settlement Web online help for more information.

FICC

In the event of a disaster, clients will be given the opportunity to ensure that all trades sent from submitters have been received and processed by FICC. These trades are submitted either directly from the client or through a third-party vendor. Clients can use a screen search and/or a report output to reconcile their transactions with FICC. "Good night" messages are provided by FICC to signal end of day processing.

How to Access Fixed Income Applications

All Fixed Income applications require a dedicated network connection through either DTCC SMART, SFTI, BT Radianz or AT&T ANIRA networks. Clients can connect to the FICC Real-Time Trade Matching ("RTTM[®]") Web or the EaSy Pool ("ESP") Web using these networks. The table below lists the access methods to the Fixed Income.

Table 4.1 Fixed Income Access Methods

Application	RTTM Web	EaSy Pool ("ESP") Web
FICC GSD RTTM Web	Yes	N/A
FICC Report Center	Yes	N/A
FICC MBSD RTTM Web (Mortgage-Backed Securities)	Yes	N/A
EPN (Electronic Pool Notification)	No	Yes

FICC RTTM Web

The FICC RTTM Web provides secure, real-time trade entry and management tools for most fixed income products. It provides search capabilities and statistical reporting to facilitate the trade reconciliation process.

After verification and establishment of communication, clients can connect to FICC RTTM Web applications at https://login.dtcc.net.

Application	FICC Web URL	Description
DTCC Portal	https://login.dtcc.net https://portal.online.dtcc.net	Generic URL to Applications
FICC GSD RTTM Web	https://gsd-ficcweb.dtcc.net	Direct FICC GSD Web Application URL
FICC MBSD RTTM Web	https://mbsd-ficcweb.dtcc.net	Direct FICC MBSD Web Application URL
FICC Report Center	https://fhrweb.dtcc.net	Direct FICC Report Center Application URL

How to Access Fixed Income Applications Using RTTM Web

- 1. Type the application URL into the browser address field.
- 2. Log into MyDTCC to access FICC GSD and FICC MBSD RTTM Web.

The FICC GSD RTTM Web tile launches the FICC GSD Dashboard. The FICC MBSD RTTM Web tile launches the FICC MBSD Dashboard.

DTCC	Icome To MyOTCC	Generation (2000 come + 19
KEARABARA		
Ay Products		Announcements
Need access to another 7 your expansion alread to another product or ser	productiservice? Want to know who your Administrators and? In this access, your Administrators (SAC & ACS) can gaint you excess car.	Access your Learning Distributed Today! The Learning Cashboard is your central location for backing your Learning Center actively From the
PICC MBSD RTTM WEB FICC MBSD RTM MDD Chang Denies	FICE GED RTTM WEB INCO GED RTTM HEB Change Byrons	My Learning Deshboard
		DED 620204 Synthesis 1 Proto Party 1 Second and

Figure 4.1 MyDTCC Welcome Screen

Notes

- Clients can launch the RTTM application for each of the Fixed Income products from this screen, provided they have the appropriate entitlements.
- For security purposes, the DTCC Portal locks the user out after three unsuccessful login attempts. If users are locked out, they can contact their access coordinators.

GSD RTTM Web

The GSD RTTM Web provides a secure, real-time trade entry and management tool for government securities.

When accessing GSD RTTM Web, clients land on the Dashboard page, which provides clients with real-time information on trade and obligation statistics for DVP activity and trade and position statistics for GCF Repo[®]/CCIT[™] activity.

*			Υ.	Current Investment Rate
				0.05
ADMODRED BELECTS	O	000575		Latest GCP MB8 Index
nd Taxan *				0.056
	Tarra	Par	Amount	Latent GCF Treasury Index
Corepared People Competition	105.369	191,483,867,800	115 205 488 594 77	
Panding Career	725	29,095,958,000	89, 118, 314, 440, 43	0.053
Carcelles	1,200	48.414.805.000	49,855,911,508,54	Current When Issued Securities
Broythet Forward Marting	204,347	1,242,134,158,600	1.235.171.499.306.54	
Rapo Territ	58,450	2,755,736,637,400	2,828,013,106,269.12	er28101548 9128000503
Appropriate GC Trades Multibert and Novalier		89	0.00	artitisocv1
Sponsored GC Trades Matched and Not Noveled	. 0	0	0.00	9528106V1

Figure 4.2 GSD RTTM Web (DVP Dashboard Section)

DTCC	GSD RTTM Web		
Dashboard Tr	ates • Obigators But	altdors • Toob • Re	arts
OCF			
	-		101100 B B
O UNEMLANCED	O CANCEL REGILETS	O BROKEN IN POSITION	O REARCTS
Trade Statistics			
ALCORPS -	14		
£	Rems	Start Money	Final Money
Attimed	D	0.00	0.00
Pending Affirm	0	0.00	0.00
Pending Cancel	0	0.00	0.00
Canceled	0	0.00	0.00
Forward & Term	702	349.430.000.000.00	349.533.134.224.98

Figure 4.3 GSD RTTM Web (GCF Dashboard Section)

The Trade Search Engine (within the 'Trades' tab) gives clients the ability to search for specific trades or groups of trades within the DVP or GCF/CCIT products, using various filters (Submission Date, Trade Type, etc.) to help manage their trade and settlement activity.



Figure 4.4 Trade Search Menu

ADVANCED SEARCH		Recet
Trade Details		
Member ID*	TID / Xref / Broker Xref	Business Date Range*
an address from the latter of	то +	×
Product"	CUSIP	Settlement Date Range
O GCF / CCIF	۹	MINED/YYYY X
Trade Active or Trade History"	Par	Trade Date Range
Active C History	• •	MNICOTYTY ×
Transaction Type'	Settlement Amount	Submission Date Range
Repo Revr Buy Sell		MMCDYYYY X
Trade State / Advisories	Contra ID	Comparison Date Range
All Trade States	*	MMC0/YYYY ¥
Netting Eligible		
RepoRevr		
Repo Start Date Range	Repo Start Money	
MM00111111 H	1 -	

Figure 4.5 DVP Trade Query

ADVANCED SEARCH		Reset
Trade Details		
Member ID*	TID / Xref / Broker Xref	Business Date Range*
	* TID *	×
Product*	CUSIP	Settlement Date Range
O DVP GCF / CCIT		* MM/DD/YYYY X
Trade Active or Trade History*	Start Money	Trade Date Range
Active History	[= *]	MWDD/YYYY X
Transaction Type*	Final Money	Submission Date Range
Repo Revr	= *	NWIDD/YYYY X
Trade State / Advisories	Contra ID	Comparison Date Range
All Trade States	*	* MMCD/YYYY X
Repo Secondary Xref	Repo Rate (%)	Repo Start Date Range
		MM/DD/YYYY X

Figure 4.6 GCF/CCIT Trade Query

DTCC	GSD	RTTM Web			
Dashboard	Trades -	Obligations	Substitutions -	Tools	Reports

Figure 4.7 GSD Members can also access GSD Reports via the main tool bar.

MBSD RTTM

The MBSD RTTM Web provides secure, real-time trade entry and management tool for mortgage-backed securities ("MBS").

Clicking on FICC MBSD Web link directs clients to the MBS Home Statistics page, which provides counts of partially matched and uncompared trades, as well as advisories, cancels, and don't know ("DK") requests. In addition, the dashboard provides comparison percentages, TBA pair off potential, the SIFMA calendar, and the status of MBS system events.



Figure 4.7 MBSD RTTM Web

The MBS Trade Search Engine (within the 'Trades' tab) provides clients the ability to search for specific trades or groups of trades using various filters (for example, Submission Date, and Trade type) to help reconcile systems.

entoent	Teller C.	Per resta		Porters in 1	Sade	a Meriniana a 🗸 🕖	89 B	ots installation a		in the second design of the second	
1 Lookus	Sart I Repo	•									
0.000	and the second second			-	EV. BEAU						
-	oning Belly In	•							increases faits	Bastren ben	
0	0	0		0	0	0	0	0	0.05%	08/31/2021	
									8400		
Table South	-					Teley's Compare	or Penantage		Tere	the second s	
Sac.	C Inverto	12 mm	5 1PT	diama.					Syno ages	Exemplanticity (\$15.5.5	
									factor.	Recomplicity of Association and an	
1544					the second				TAAPT	for synthetical is see looks	
									58784	the completed proc. If sported and in the	
log i									Dependent for the	Reliabetaid is or toba	
	100				100				Divisioner.	Residenties in or teles	
Totar 2	· · · · ·								Millionia	the complete part Copachie and an Edges	
									TOT THE OC	Bar scheduled is an inclu-	
Trans 2							1000		Types has Debien	he protection Constellation	
									- the second sec	Recordination of Association and artist	
Trans 2						Compariso	Percent	6.00°L			
						1008.00	prelities -	0	Crimer		
Incode States	and all a				1.00				100	and the second se	
- C						Patential Pair GR	Penamage		< .	August 2021	
Panalog Ior	niners.				1.00				10.000		1.00
-									1000 C		-
lainin.									4	· · · · · · · · · · · · · · · · · · ·	

Figure 4.8 MBS Trade Search Menu

< ADVANCED SEARCH									
								Seat.	
Janier Isam Dataits									
Account ID*	Toole Type		Dennes	-		. Bartin	ter Debr		
Man within	They had	- A.S	Frank	inter .		10hp	Acres		
HER - TET SEALS Take Autive of Take History"	Transaction Type"		Ne.			Tisle			
Albe Cirksley				*	Plase Crie	1.14	-	bib GOVINY	
TBR CLEP (" + Missani)	Cores ID		Price			letter	wei die	Contractory of the State	
Peace Disc	Press labor	-			Paulo Delle	1.16	-	AREDOVINY	
Pool Number (* = Weissen)	Prod CEDIP (" - Pelocard)		Pice Ma	w.		hater			
Page 198	Passa Drie				Place Print	1.18		MINISOTTY	
Option Type	Sprine Represent Sale		Dampari						
Line Dies	a - unacconviv	+ 0		. •	#2000/****				

Figure 4.9 MBS Trade Search Query

MBSD Electronic Pool Notification ("EPN") Application

The MBSD EPN application is a real-time, store and forward message switch that provides an electronic communication network that is located in FICC MBSD RTTM Web. EPN can transmit MBS pool allocation information quickly, efficiently, and reliably through this network.

The EaSy Pool (ESP) is a communication front-end to the EPN application. Clients can access the ESP application through MyDTCC. Select the FICC MBSD RTTM Web tile, which launches the FICC the MBSD Dashboard.



Figure 4.10 DTCC Portal

Select the EPN menu option to view the EPN/EaSy Pool Dashboard.

	J EPN / EPN Dash	board		EPH Outboard	
				bart Literariet	
10	- 10.000	MEXX-TE	TACODURT 1	Page Sol (PE Mexing)	
	Message Type	Messages	Messages Seed	- Pandrey Mercegan	
		Received		and the second second	
	ON	0	0	0	
	CR.	0			
	00	0	0	0	
	Totals	0	0	0	
	PN Recent Inbound I	Message			
	· There is no data?	to displays			

Figure 4.11 EPN/EaSyPool Dashboard

General Out-of-Region Recovery Advice for the EPN Application (Recovery-Restart Considerations)

MQ

1. Start of Day (SOD) TX (Text) messages will be sent to all MQ-configured clients.

The body of the SOD TX message will include the following:

- START OF BUSINESS DAY message
- Current Business Date

Sample Message:

TX0000010020105110522START OF BUSINESS DAY 08082022

NSCC

NSCC utilizes automated balancing controls to ensure that all trades sent from submitters have been received and processed. These controls include gap checking in NSCC's FIX engine (the system which processes exchange trades); gap sequencing in NSCC's Universal Trade Capture application ("UTC"), which is NSCC's core trade processing application; and end-of-day balancing through "good night" messages. In the case of a disaster, clients can leverage the UTC Reporting to reconcile trades submitted and processed by NSCC before and after the disaster event. UTC validates and reports clearance activity to clients throughout the day, which members may elect to receive via FIX or MQ message, or a unified output file. This reporting includes the trade ID and the order ID submitted by the executing markets to support reconciliation.

From a trade processing perspective, subsequent to transaction receipt and reporting, transactions are included in NSCC's Consolidated Trade Summary ("CTS") to identify netting disposition. CTS reporting will result in processing in the Continuous Net Settlement ("CNS") or Obligation Warehouse ("OW") systems. In addition to the trade processing and reporting, NSCC offers Exchange Traded Funds ("ETF") portfolio composition reporting, Corporate, Municipal and UITs ("CMU") Real-Time-Trade-Matching ("RTTM") service and Automated Customer Accounts Transfer Service ("ACATS"). The systems supporting these services include input and reporting structures, and tools to support client reconciliation.

In general, application reporting can be re-sent to customers for certain time period that depends on the reporting type and application settings. Customers can contact the <u>DTCC Client Center</u> to request a replay of the output if they believe data was not sent or received.

NSCC Clearing Dashboard Overview

The Clearing Dashboard ("CLD") is a landing page that hosts several NSCC web-based products. The CLD is available from the DTCC Web Portal (https://portal.dtcc.com).

The CLD supports customer reconciliation in the Consolidated Trade Summary ("CLD"), Continuous Net Settlement ("CNS"), and Exchange Traded Funds ("ETF") sections.



Figure 5.1 Consolidated Trade Summary ("CTS") Totals Page

Clearing Dashboard – Consolidated Trade Summary

NSCC participants can use the CTS screens located under the Clearing Dashboard to view and query CTS information for both current and historical trading activities, by settlement date. The CTS web tool provides Settlement Date Totals as well as customizable query capabilities for CTS transactions, based on search filters. The CTS web is updated with new feeds from the Universal Trade Capture application following the Same Day Settlement cutoff (11:30 AM EST), completion of the 9:00 PM EST Trade Capture Reporting Cycle, and at the Close-of-Business (after Midnight EST).

Figure 5.2 displays the CTS Totals screen, which can be used to compare against known amounts for various aggregations (such as Market).



Figure 5.2 Consolidated Trade Summary (CTS) Totals Page

Figure 5.3 displays the CTS Inquiry screen, which can be used to search for transactions using various criteria (such as the Settlement Date).

	Consellidat	d Testa Comment (OTC)						Disport Certad	Us DRDC.cm
	Consolidati	ed trade Summary (CTS)							LOGON
and the second second									
CTS Inquiry									
Settlement Date Ra	ngs *	CTS Report Date and Cycle	0	iS/No	n-CNS			BD Control Number	
01/01/0017		HINDONYYY 🚔 (AL)	1.8	All	() CNS	- E Non	CNIS		
Participant	Contra	US/Voreign	8	RW1				RO/DO	
000000322	Participant	(€Al) ⊖05 ⊖Tonign	×	All	<u>⊜</u> R₩	13W	<u>⊜</u> \$7	19.L	
Security ID		Market	SI	och/8	bee			Auto Delivery Indicator	
104 + 3	194	ALL		All	() Sici	is () Bos	ds	.44	
Record ID		Net Reason Code	A	of				Cash Adjustment Code	
3200000	300000	40.		All.	0.5	05	ii)T	1413.	
	roe Code	Netting Type	St	ep In/	Out			Cash Adjustment Debits	Indit
Trade Settlement 7					and a	10.2	10.8		

Figure 5.3 CTS Inquiry Page

See the <u>Equities Clearing - Consolidated Trade Summary</u> section on the DTCC Learning Center for more information.

Clearing Dashboard – Continuous Net Settlement

NSCC Participants can use the CNS Positions, Reconciliation and Participant Instructions tabs on the Continuous Net Settlement ("CNS") web application, which is located on the Clearing Dashboard, for monitoring of their activities and reconciliation of their positions. The applicable functions within these tabs are listed below.

DTCC	Continuous Net Settlement (CNS)	Search Search Strict and Data
The Del Factories	Carl Second States	Contraction and a second se
Long Say to Biref Day to		Frank seinerten Europien heinelien

Figure 5.4 CNS Positions Inquiry Page

CNS Position Inquiry Function

The Position Inquiry function under the CNS Positions tab can be used to view snapshots of the current and historical balances for any DTC-eligible security. Clients can view historical account balances for up to two years.

Using the Participant ID, CUSIP, and business date as search criteria, the page displays position information across a series of tabs. A brief description of each tab appears below it.

Figure 5.4 and Figure 5.6 display the CNS Positions section, which allows customers to search for specific CNS positions and view search results.

Averal 2017-00 v Ref ats V
APRIX 301-011 M the Scillered State Scillered State Scillered State
eta v ostesent Date
sellioment Dale eta V 04/65/2017 V MARCH
the second

Figure 5.5 CNS Positions Inquiry Page

CNS Fos	tions - Reconciliation -	Partici	ant instructions + Informal +				
Pesities Inqu	úry						
Palaget3	Scotty 0		Separate of Specials	w.,	Software Ca		
icanch Besults						(1961)a	Y Alusti
Bernit a		Teleport D	. Antiquitant	[COLUMN 1	detaile a	
-	AiAi Gar	146	101 account Foresant 10 + 6-50871	•	-	.04.52	
-	44,45 M	145	101 eccent transitio (2+ a 2-047			1.00.00	
United and an	Antonio	14	1001 ALCOHO FORMAND 10 P & LODPI			612	K.
	400-10 FC 100-174 (10)	141	1021 00030001 00000001 10.0 4 3-0027		1.1		49
Linkson and	And an American American	16	1011-0011-0011-0010-0011-000000	÷.			
	1.001.000	112		× .		(1998)	
laisenine.	Actual and the second second	100	1991 were odd o same 15 f & 5 (1997		1000	1010-00	
	A(Presit: 40) (all (011)) (140	1011 eccises (colours (11.1 &)-01.1		1961	1.10.00000000	
-	Additional standards	100	1011 0010101 element 15.0 \$ 2.000	4		1514.50	
	$\sum_{i=1}^{n} A_i _{i=1}^{n} A_i _{i=1}^{n} $	140	3(1) 00(100) 0(00000) 11 1 2 1 0(0)	*		-10.17	
10 A	2 2 4 5 4 1	Deploying	i le kolenda				Deneral Managers

Figure 5.6 CNS Position Inquiry – Search Results

Reconciliation

Cash Reconciliation Statement

The Cash Reconciliation Statement screen can be used to view the various cash balance values for a given Settlement Date.

See the <u>CNS Documentation</u> on the DTCC Learning Center for more information.

Figure 5.7 and Figure 5.8 display the CNS Reconciliation Section, which provides a CNS position summary.

рт	CC Conti	nuous N	et Settlement (CNS)					Connect Units UTOC core John Dee
CNS Pos	tions - Reconciliation -	Particip	ast instructions + Informal +					
Position Imp	úry							
Publication	Scotty 0		Selamat of Scheroselly		Software Car (animate)		-	
Search Breath						(184.1p.)		Y Atur
Iness in		Teleport D	Participal Name		COST values	dense 3		
(Approximation)	ANDORF	246	1011 addited Foreganis 10 P & 50877	•				
	44,45 M	145	1011 0000xe1 (result) (0.7 a 2.0e7)			1.00.00		
United	Antonia and a second	100	1011 address Filmpania 10 P & COSPI	4		612		6
		141	1011000000110000011011410000		1.4			44
-	Antan Antanyuma Acista	100	1011 and add instantia 11114-0.0011	4	14			
	1.001.000	110	Test account formation (in Fall-later)			(196)		
	Actual and a second second	100	1991 were owned to manager 19-19-5-5-1997	4	1000	1010-00		
	APRIL 10-141 (10-1)	140	2011 account Fellowers 10.7 & 2-087	6	1963	(100000)		
	Address of the Alloca	10	1911 4000 kHz stational 15.4 8 2 2011			1224.94		
	$\sum_{i=1}^{n} A_i _{i=1}^{n-1} A_i _{i=1}^{n-1$	110	301 000000 0000000000000000000000000000	*				
100	2 2 4 5 4 10	Digitizing 1	e Kowste					Danana Than sop
rcc							-	a Property Secolution

Figure 5.7 Cash Reconciliation Statement

Continuous Net Settlement (CNS)		John Doe		
tation - Resectution - Participant Instructions -				
New Address / Tall Records of Statement	apel 30 201 So dat			
Cash Recosciliation Statement				
Parkapant D Tellisment Ode				
ECE SHEEDY Y GAVA				
learch Rexults				
		Give Altert		
Menny Georg	Dela	Center		
1. Seenaday's Diverse Municipal Municipal Adverse		131.01.01.00		
E Searchers (100 Monay Gardienier)	0.56556-00			
1. Soly: Lating Television Congaried Teals Bornaux		AL/10/09 20 100		
4 Tradic Last Distants				
t Mantanan Jung Salas				
8 Transitivo Cherry Deport				
C Trendy's Chantry Departs				
8. Torigin Linuxy Remay Remay Remain		ALCOLUMN TRUNC		
Carryot Mathet Notes Recap	Long Market Value	Short Mailed Value		
In Industry Version of Proceeding Processing	SULTINAT SULTIN	1.04.09.09.09		
15 Malein Value of Todays Delling Today	FRUSH STO	61.08.273.01.020		
13. Materialist of Todays Book Stationey	24734.400			
12 Mader Mile of Tomy's Manderena dam Etrile				
15. Net Yolke Over & Sollie Toolie (Seller Sollie) and Antonio Adulty - Gran E. 15, 75, 15		31,211,204,091,089		
14. Marter Volue of Last High's Deliveryon	CTNAME DD	42,104,001,000		
18. Inst reason of Postman (10) Equivalence Cognition Section and		12.01.06 0.010		
Selferment Reconciliation	Long History Volum	Door Market Ville		
H. Toray's Charge Internet France (In The II)		101010-0010-000		
11 year bet teau of type Provinced two (see 15)		N.SUR HUD		
11. Savet New Julian Office Sylve Selector: Lin 11 March 10 17		-		
1). For East to Your Depine Selecting Field Receptor Deposity - Union as (AH or Selected Analy Report				
21. Fast Dait In Your Degime Receipti(251) Endowed in Departury: Stream in 2007 on Daitherest Unity Recoil				
11. Fine Only interpretation of June 18, 18, 18		KLAD LODG IN UND		

Figure 5.8 Cash Reconciliation Statement -Search Results per Selected Search Values

Participant Instructions

Fully-Paid-For Instructions

The Fully-Paid-For Instructions screen can be used to search/add/update/delete Fully-Paid-For Instructions.



Figure 5.9 Fully-Paid-For Instructions Page

Priority Instructions

The Priority Instructions screen can be used to search/add/update/delete Priority Instructions.

DTCC	John Dee mooren		
KS Pastians - Record	Ration - Participant Ins	traction - The operation of the second second	
			And all these states and the
Patricent Subjections / Print	ti indradore		ANY 13, 2017 - ORIO ANY
Priority Instructio	is industries AS		Agai 13, 3811 - Oko6 Aga

Figure 5.10 Fully-Paid-For Instructions Page

Exemptions Instructions

The Exemption Instructions screen can be used to search/add/update/delete Exemption Instructions.

DTCC	Nagoot Cannot un CTCC can John Doa anantit Qu Locater		
VS Postore - Deces	fation - Perioquel los	inclues -	April 13, 2017 - 58106-68
Participant IC	tions Incarty (C)	Selarane Dan	

Figure 5.11 Exemptions Instructions Page

See the <u>CNS Documentation</u> on the DTCC Learning Center for more information.

How to Access ETF Portfolio Files

Following the completion of the ETF Portfolio Composition File ("PCF") Primary Cycle, PCF transmissions can be verified by accessing the ETF web application within the DTCC Portal and searching for PCFs by trade date. Supplemental ETFs can be verified at any time via the ETF web screen.



Figure 5.12 Access to the ETF Portfolio Files

See the Equities Clearing - Exchange Traded Fund section of the DTCC Learning Center for more information.

How to Access SMART/Track for Buy-Ins

SMART/Track for Buy-ins is a Web-based system that enables automated communication and tracking of NSCC CNS and non-CNS (for example, NYSE, AMEX, NASD, and NSCC Non-CNS) buy-in notices as well as Municipal Securities Rulemaking Board ("MSRB") closeouts. Through the system, participants can easily create, send, process and track notices throughout its lifecycles. For reconciliation purposes, all notices are stored and available to view the most recent action.

SMART/Track is used to add Buy-in intents, Buy-in orders, Buy-in executions, and Re-transmittals for CNS and non-CNS failing obligations

SMART/Track for Buy-ins is accessible from MyDTCC at https://portal.dtcc.org/wpsnew/portal/mainpage.do.

How to Access SMART/Track for Corporate Actions ("CNR")

SMART/Track for Corporate Action Liability Notification is a Web-based system that provides automated communication and tracking of corporate action liability notices for securities undergoing a voluntary corporate action event. Participants can easily create, send, process and track broker-to-broker/bank and CNS liability notices through the service. For reconciliation purposes, all notices are stored and available to view the most recent action.

SMART/Track is used to submit instructions on CNS long fails for Voluntary Reorg expirations and elections on CNS long fails on the record date for Optional Dividends.

SMART/Track for Corporate Actions is accessible from MyDTCC at https://portal.dtcc.org/wpsnew/portal/mainpage.do .

How to Access Obligation Warehouse

The Obligation Warehouse service facilitates the matching of broker-to-broker ex-clearing trades. The Obligation Warehouse Search Engine page provides a utility to allow clients to search for obligations or groups of obligations using various filters (Obligation Status, Submission Date, and so on) to help with reconciliation.

Obligation Warehouse web functionality is available from MyDTCC (https://portal.dtcc.com).

and the second s	CONTRACTOR OF A	CONTRACTOR OF STREET, STREET, ST. CONTRACTOR OF STREET, ST. CONTRACTOR OF STREET, ST. CONTRACTOR OF ST	
		inequality in the	(management)
CONT Bank	100	-	8085
	Corners Supervise States	Manufacture Continues	
And Address of the Owner of States			
Obligation Warehouse	Ball Bergins for	MMITTAN IN	
Obligation Warehouse Web Application	Stating Selectionships	Balline Contractor	Neurinean official

Figure 5.13 Access to the Obligation Warehouse

See the Equities Clearing - Obligation Warehouse section of the DTCC Learning Center for more information.

How to Access CMU RTTM

Clients can utilize the options available under the Home Statistics page of the CMU RTTM web to reconcile CMU trades. The Morning Report tab under the Home Statistics page of the CMU RTTM Web provides clients counts of trades submitted, matched and sent to settlement for the current business day. The Trade Search Engine option allows clients to search for specific or groups of trades using various filters (for example, Submission Date and Trade Type).

Home Page Statistics	Morning Re	port					Participant ID		
Exception Stats	Estaia	Corp. Bluei		urt		ALL			
Marning Raport						- 1	Current Day O Previous Day		
 Quisk Links 	Submitted				Matched				
Enter Municipal Trade									
Enter Corp/UIT Trade	Туре	Items	Quantity	Amount	Туре	Itens	Quantity	Алоз	
Trade Search Engine	Bi-Lateral	124,780	30.925,372,778	31,129,242,523.00	Bi-lateral	117,894	25.607.066.322	25.778,503.809.8	
Exception Recep	QSR	0	0	0	OSR	0	0		
Participant Contact List	Syndicate	410	181.990.000	188.010.150.95	Syndicate	350	163.910.000	150.000.737.1	
Susiness Date: 01/15/2019	Comparison Pl				Trades Sent	to Settlement			
	Туря	ест			Туре	Heres	Quantity	Amount	
	Bi-Lateral	80%			Bi-Lateral	115.076	23,828,787,322	23,910,390,874,68	
	QSR	NA			QSR	0	0	c	
	Syndicate	85%			Syndicate	0	0		
					T 1 100				
	Trades Purgec				Traces WI				
	Trades Purger	liens	Quantity	Amount	Type	liens	Quantity	Amount	
	Trades Purgec Type Bi-Lateral	Rens	Quantity	Amount 0 0	Type Di-Lateral	Heavs 15,022	Quartity 7,204,835,000	Amount 8,017,803,183.85	
	Trades Purger	Nems C	Quantity	Amount 0 0	Type Di-Lateral QSR	Heavs 18.023 0	Quantity 7,204,038,000 0	Amcunt 8,017,803,183.80	

Figure 5.14 CMU RTTM

CMU RTTM is accessible from MyDTCC at https://portal.dtcc.org/wpsnew/portal/mainpage.do.

See the <u>CMU RTTM®</u> section of the DTCC Learning Center for more information.

How to Access ACATS

The ACATS system automates and standardizes procedures for the transfer of assets in a customer account f rom one brokerage f irm and/or bank to another. In the ACATS portal, customers can search and view ACATS transactions to reconcile with internal records.

ACATS is accessible from MyDTCC at https://portal.dtcc.org/wpsnew/portal/mainpage.do.

See the <u>ACATS</u> section of the DTCC Learning Center for more information..

DEFINITION OF TERMS

Table 6.1 provides a definition of terms.

Table 6.1 Definition of Terms

Term	Definition
AutoRoute	Output software used by DTCC to transmit files externally.
Clearing Dashboard	DTCC web portal product that provides Members with a centralized location to access various clearance web screens, including CNS and CTS.
DataTrak	Input software used by DTCC for receiving data from external sources.
File Transfer Protocol ("FTP")	A TCP/IP application utility for transferring computer data files across networks. Using FTP, you log in to another network site and then either send or receive files.
MQ	The IBM messaging software product, WebSphere MQ Series.
Network Data Mover ("NDM")/Connect: Direct	A family of data-transfer software products that distributes information and manages production activities among multiple mainframes, minicomputers, and personal computers in diverse operating system environments.
Participant Browser Service ("PBS")	A browser-based interface that provides functionality comparable to DTCC Participant Terminal System ("PTS").
Settlement Web	Primary settlement interface (browser-based)

MYDTCC ACCESS

Table 7.1 MyDTCC Access

Production Portals	Portal Access in a LOR	Applications Available
portal.dtcc.com Internet Accessibility	portalr6.dtcc.com	 ACATS ACATS Transaction Inquiry Autoroute and Datatrak Utilities Common Data Transfer Service (CDTS) Continuous Net Settlement (CNS) Clearing Fund Management (CFM) Client Identifier Cross- Reference Consolidated Trade Summary Consolidated Trade Summary Correspondent Clearing Cost Basis DTCC Limit Monitoring Direct Clearing System Easy Pool Equity Commission Billing (ECB) European Pre-Issuance Messaging (EPIM) Exchange Traded Funds (ETF) Interactive Billing (IBIL) Margin Transit Utility Obligation Warehouse Recaps Risk FICC Customer Reporting SMART/Track for Buy-Ins SMART/Track for CNS Corporate Actions Self-Service Customer Confirmation Self-Service for Trading Relationships Universal Trade Capture (UTC)
login.dtcc.net SMART: 207.45.47.40 SFTI: 167.188.134.40 BT: 167.188.47.40	loginr6.dtcc.net SMART: 207.45.47.74 SFTI: 167.188.134.74 BT: 167.188.47.172	 Clearing Fund Management CMU Easy Pool NUWS FICC GSD RTTM Web FICC MBSD RTTM Web

© 2023 DTCC. All rights reserved. DTCC, DTCC (Stylized), ADVANCING FINANCIAL MARKETS. TOGETHER, and the Interlocker graphic are registered and unregistered trademarks of The Depository Trust & Clearing Corporation.

The services described herein are provided under the "DTCC" brand name by certain affiliates of The Depository Trust & Clearing Corporation ("DTCC"). DTCC itself does not provide such services. Each of these affiliates is a separate legal entity, subject to the laws and regulations of the particular country or countries in which such entity operates. Please see www.dtcc.com for more information on DTCC, its affiliates and the services they offer.

Doc Date: January 2025 Publication Code: CP200 Service: DTC/NSCC/FICC Title: Disaster Recovery Guide

For More Information

Email DTCC Learning at: DTCCLearning@dtcc.com

or visit us on the web at: www.dtcclearning.com

