Agent Services/Asset Services

16.04 INVESTORS VOLUNTARY REDEMPTION AND SALES SYSTEM VIA CCF AND MDH: MDH IVP1, AND CCF IVP5 FUNCTION USER'S GUIDE

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INTRODUCTION

This document describes how participants can use the newly developed service for transmitting INVESTORS VOLUNTARY REDEMPTION AND SALE instructions to DTC.

This function is being offered over CCF and MDH. This is a combined user guide describing IVORS SYSTEM IVP1 and IVP5 for CCF and MDH.

Participants should familiarize themselves with the DTC document "INTERFACE CONTROL MANAGER CCF and MDH USER's GUIDE for Transaction Input". This ICM document describes new standards for transaction processing using DTC's automated systems. Specifics relating to the operation, error processing and recovery or CCF and MDH transmissions are addressed in the ICM document.

FUNCTION DESCRIPTION

A new service in the Computer-to-Computer Facility (CCF) and Mainframe Dual Host (MDH) has been developed to aid the participants in submitting their IVORS request to surrenders unit for value via book-entry on behalf of the UIT holder.

The function names, start and cutoff times associated with each interface are as follows:

Function Name	Start time	-	Cutoff time:
MDH - IVP1	0800	-	1600
CCF - IVP5	0800	-	1600

Holiday Processing

The following describes the processing for the various types of holidays:

1. All Closed - Banks, Exchange and DTC closed: (New Year's Day, Martin Luther King Day, Presidents Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day)

    Functions IVP1 and IVP5 will be closed.

2. Banks Closed, Exchange Open and DTC Open (Columbus Day, Veterans Day) Functions IVP1 and IVP5 will be closed.

3. Banks Open, DTC Open, Exchange Closed (Good Friday) Function IVP1 and IVP5 will be closed.

Communication Protocol Requirements

Although the DATA record formats are consistent over MDH, CCF and CCFII, each system requires additional control records to aid in processing the data records. Following is an example of what is required as input from the user and what is returned from DTC in the response file.

	INPUT	OUTPUT
MDH --	DATA Records only	See MDH User Guide
CCF --	DATA Records TRAILER Record	CCFSUM Record

Please Note:

Any DATA records in error will follow the CCFSUM record.

IVORS PARTICIPANT REQUEST FILE - LENGTH = 200 BYTES

The input record for IVP1, IVP5 is defined below. This record contains a transaction header and application detail data and has a record length of numeric length of record bytes.

Note:

For MDH a maximum of 10 records or depending on the input record length the total number of records that can fit in a 4000-byte input block.

The Transaction header is prefixed to every application record. The field layout of the 26-byte header is defined as:

Note:

STANDARD TRANSACTION HEADER FOR CCF, CCFII, AND MDH

Position	Length	Format	Field Name	Field Description
1	1	character	Feedback Indicator	Used to indicate if any errors were encountered during processing. **This field is to be left blank on input.**
2	1	character	Test/Production Indicator	Used to indicator whether the transaction is to be processed in the "Test" or "Production" environment. **This is a required field.** T = Test P = Production
3	6	characters	Record Type	*Valid values are 'IVPART'.*
9	2	numeric	Record Suffix	Used to indicate the "Record #' on single and multiple data records within a transaction. Value '01'.
11	2	numeric	Version Number	Used to indicate which version (e.g.: 'latest' or 'previous' format) the data is in. Value '01'.
13	6	character	User Reference #	Used by transmitting party to uniquely identify the transaction. **(optional)**
19	8	character	Addressee	The entity on behalf of whom the transaction is being processed. Right justified, zero filled for numeric addressee or 'Mnnnnnnn' for non-numeric addressee.

IVP1, IVP5 Detail Record

Investors Voluntary Redemption And Sales Detail Segment Of Transactions				
Position	Length	Format	Field Name	Field Description
27	8		Participant surrendering Shares of UIT	Participant number
35	12		UIT CUSIP number	Position 1 - 2 value 'US' Position 23 -11 value 'CUSIP number' Position 12 value '0'
47	14		Share Qty surrendering	9(9)v9(5) Whole share and Fractional shares.
61	1		Prevent Indicator	To have the request drop in ATP due to insufficient shares when the request is entered AND not to pend or spaces. Value 'P' to Prevent pend or spaces.
62	67		Comments	Participant comments relating to request.
129	72		Filler	For DTC use only.

CCF TRAILER RECORD

The following record layout is for the CCF Trailer record which must be the last record of every CCF input transmission to DTC.

Position	Length	Format	Field Name	Field Contents
			CCF Trailer Record	
1	1	Character	Feedback Indicator	Blank on input. **?** on output, if any errors were encountered during processing.

2	1	Character	Production/Test Indicator	This is a required field.
				  P = Production.
				  T = Test.

3	6	Character	Record Type	TRAILR
9	2	Numeric	Record Suffix	Must be 01
11	2	Numeric	Version Number	Must be 01
13	6	Character	User Reference Number	This field is optional - to be used by User.
19	8	Character	Addressee	
27	7	Numeric	Total Record Count	The total number of data records in this transmission; excludes the Trailer Record and must equal the DTC-calculated total record count.
34	13	Numeric	Total Quantity Amount	The total quantity amount in all the data records in this transmission; must equal the DTC-calculated total quantity amount or zero if not applicable.
47	15	Numeric	Total Dollar Amount	The total dollar amount in all the data records in this transmission; must equal the DTC-calculated total dollar amount, or zero if not applicable.
62	?	Character	Filler	Spaces; "?" is the ending position of the data record being transmitted.

Message Types

There are two possible sources of messages:

1. The CCF Response File is returned to the user immediately upon completion of the transmission. This is also known as a "Front End Error".

2. An application reject also known as a "Back End Reject".

CCF Response File

After the end of a transmission, DTC returns a Response File containing two types of computer-readable records to the Participant. Users are responsible for appropriate processing of these computer-readable records, using them to determine which transactions have been accepted or rejected, along with other information regarding the status of the transmission.

The two record types that appear within the Response File are described below:

1. Summary Total Record: (called "CCFSUM" in the record type field of the transaction record) contains summary information regarding the entire transmission, including totals for accepted and rejected transactions. The Summary Total Record will always be the first record in the Response File.

2. Application Data Records: are returned to the user in response to any edit errors detected within the transmission. Error records, if any, will follow the Summary Total Record in the response file. This type of edit reject is also known as a "Front End Reject".

Back End Rejects

These messages will be created when an input transaction, which has been accepted by the front-end editing module is rejected later by the application processing program.

Back-end rejects will be queued back to the message queue associated with the password that was used to transmit the input transaction initially. The length and format of an output message is different for each application. However, all messages will have a ? in the first byte to distinguish a "Back End Reject".

CCF SUMMARY RECORD

The following is the record layout for the CCF Summary Record which is returned to all CCF users in the transmission response file.

Position	Length	Format	Field Name	Field Description
1	1	character	Feedback Indicator	"?" indicating an error has occurred.
2	1	character	Test/Production Indicator	Value 'T' or 'P' indicating Test or Production.
3	6	character	Record Type	Will contain the literal "CCFSUM".
9	2	numeric	Record Suffix	Will contain "01".
11	2	numeric	Version #	Will contain "01".
13	6	character	Filler	For DTC use only.
19	8	character	Filler	For DTC use only
27	7	numeric	Total Valid Records	Total number of valid (error free) records received by DTC, including the (valid) trailer record.
34	7	numeric	Total Invalid Records	Total number of invalid (erroneous) records received by DTC, including the (invalid) trailer record.
41	13	numeric	Total Valid Quantity	Total quantity for all valid transactions received.
54	13	numeric	Total Invalid Quantity	Total quantity for all invalid transactions received.
67	15	numeric	Total Valid Dollar Amount	Total dollar amount for all valid transactions received.
82	15	numeric	Total Invalid Dollar Amount	Total dollar amount for all invalid transactions received.
97	4	numeric	Transmission Number	The user assigned number identifying the transmission.
101	4	character	Function Name	Function name
105	1	Character	REPLY RESPONSE CODE	Based on the response code validations Values are set (T,P,E,X) T-->For trailer record validations P-->For Cutoff inquiry E-->For Errors X-->For Rejections
106	8	Character	REPLY DATE	SYSTEM DATE
114	8	Character	REPLY TIME	SYSTEM TIME

LIST OF ERROR CODES FOR ICM INPUT FUNCTION

Error Code	Description
101	DTC APPLICATION ERROR: CONTACT DTC
103	INVALID SIGNON ID
104	USER ALREADY LOGGED ON
105	INVALID PASSWORD
107	INVALID FUNCTION - NOT CCF FUNCTION
108	USER NOT ELIGIBLE FOR CCF FUNCTION
109	FUNCTION NOT AVAILABLE, PAST CUTOFF TIME
110	CCF FUNCTION TEMPORARY UNAVAILABLE - QUIESCED
111	DUPLICATE TRANID
112	INVALID RECORD LENGTH USED FOR FUNCTION REQUESTED
113	FUNCTION UNAVAILABLE - FILES MAY BE UNAVAILABLE
121	FUNCTION UNAVAILABLE - CCFUSER MAY BE UNAVAILABLE
123	SYNTAX ERROR IN THE REQUEST
124	LOGICAL ERROR IN THE REQUEST
224	PARTID DOES NOT MATCH SIGNON IN THE PASSWORD R
720	INPUT FILE INCOMPATIBLE FOR RJE INPUT
820	INPUT FILE EMPTY
900	DTC INTERNAL ERROR - CONTACT DTC
902	ERROR WITH CALL TO CCFUSER - CONTACT DTC
903	CCFII REBLOCK PROBLEM FOR RJE USERS
904	OUTPUT FILE INCOMPATIBLE FOR RJE USERS

Error Conditions

If any errors occur during processing, the following occurs:

CCF/CCFII users receive their input record with 40 bytes of errors appended to the end of the record

MDH users receive a 40-byte area for errors in their '06' return block.

The following describes the errors that can be received during the edit of a IVP1 *AND IVP5* transaction. This error list describes both the Field Identifier and the Error Code. These codes are defined in the DTF files:

ICMFLD for Field Identifiers

ICMERR for Error Codes

Note:

Refer to the Interface Control Management document for specifics relating to the way errors are returned to your system. The following table lists the application errors which were detected by DTC.

Field Identifier	Error identifier	Error Description
	AAAN	System error call STS
JAAA	9AAL	Paste Cutoff Time
GAAA	9AAA	CUSIP has not been set up for IVORS processing by the Transfer Agent
	IABZ	Database was busy try again
	IACA	System error call STS
CAAY	9AAA	Participant number is invalid
	I2E4	System error call STS
EAB7	9AAA	Prevent Pend Indicator is invalid
IVCC	9ACP	CUSIP has insufficient shares to cover fractional request
GAAA	9AAA	Not a fractional CUSIP
	I2E5	System error call STS
AAA9	9ACP	CUSIP has insufficient share to cover whole share request
	I2E3	System error call STS

CCF TAPE BACKUP PROCEDURE

If for any reason a user is unable to submit a transmission via CCF the following steps should be taken:

1. Contact DTC's Network Operation Department (212) 240-1569. Notify them that you are unable to transmit your data and that you will be sending an ICM backup tape containing your data.

2. The user should prepare a magnetic tape containing his/her transactions. This magnetic tape must be in the format specified in this function user guide. <u>CCF Users must add a CCF-II Password to the input dataset for processing</u>.

3. Each tape must arrive at DTC with the CCF Backup Procedure form (see next page) attached with all information supplied.

4. The user should send this tape to DTC's Production Control Department at 55 Water Street, on the second sub-level (2SL). DTC will submit the transaction from the magnetic tape and return the tape containing

Participants that, in an emergency, will not be able to deliver a magnetic tape to DTC before the appropriate Cutoff Time are responsible for making other arrangements for backup in case of modem or telephone equipment failures.

Participants should realize that when using CCF-II to submit transactions to DTC, they are bound by computer and data communications equipment availability at their site. DTC cannot afford to delay its entire processing cycle in order to accommodate equipment failures at any participant site. It is strongly suggested that all users maintain redundant CCF-II equipment (computers, communication controllers, modems, telephone lines, etc.).

IN NO EVENT will DTC accept ANY responsibility for a participant's inability to submit transactions.

CCF Backup Procedure Form

CCF Backup Procedure job = CCFICMB1

Date: _____

Participant/Sign-on Number _____

Participant/User Name _____

Participant Contact _____

Phone Number: (   ) _____

Scheduler Overrides

DFUNC   _____   (Transaction name, e.g., TRAC or AFFC)

PARTID   _____   (Participant Number)

LRECL   _____   (Input Record Length)

LRCL   _____   (Output Record Length)

TRANID   _____   (Transmission Number)

Example: CCFICMB1, DFUNC=TRAC, PARTID=9999, LRECL=807, LRCL=847, TRANID=0001

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