STRAIGHT THROUGH ENTRY

CUSTODY

Technical specifications for file interface
Cash Movements

Version 13.00
Release date 10/29/2013

Introduction

This document describes RBC Investor & Treasury Services proprietary file format and structure to be sent using secured STP connections.

Trades can be sent via STP using 2 different protocols:

The HTTP protocol (HTTPS)

    This protocol is available on our secured web portal "Investor Services Online" https://online.rbcis.com. Authorized transactions can be manually keyed or uploaded, checked and confirmed on a one-by-one basis or by batch processing. Only confirmed transactions are executed. Unconfirmed transactions remain pending until cancelled.

    After confirming all transactions, you should receive the following message: "No pending transaction."

The FTP protocol (SFTP - PUT METHOD)

    This process is an automated way to post encrypted transactions on our server using a secured connection. You send a first file with the extension *filename*.stp.pgp or *filename*.stp.gpg with the trades, and to notify us the end of the trade, you send an empty file with the extension *filename*.stp.ok (just keep the same filename).

    There are 4 possible technical confirmation messages:
    - **.ack** return receipt to confirm the successful delivery of your file to our server;
    - **.nack** return receipt to confirm the non-delivery of your file;
    - **.sok** return receipt indicates that the file we received was properly formatted and has been injected;
    - **.sko** return receipt indicates that the file needs to be repaired and sent back.

Also for FTP Protocol, you will have the possibility to consult the status return online using Investor Services Online.

Each transaction type has a specific file format corresponding to a distinct layout description. Please advise your relationship manager in case you require further information on the interfaced transactions types available.

Please note that it is not required to send a separate file by transaction type if you plan to interface more than one type. In other words, a STP file can be made of different transaction types.

Important notices

An:	The maximum length allowed is **n** alphanumeric characters;
Nn.d:	Numeric field for **n** digits before the decimal place and **d** digits after;
STP col.:	**M** for mandatory fields, **O** for optional fields and **C** for conditional fileds. The file transfer will only be accepted if all the mandatory fields are filled in.

A maximum of 1000 trades per file can be uploaded.

The following special characters are not supported: **< > \ / " ' &**
With this layout you are able to handle the trade in Linked Deals.

File interface

The same file description will be used for collecting STP data and sending back the results.

- The file is in TXT format;
- The field separator is the semicolon ";" and field values are free (without any quote);
- The decimal separator is the dot ".".

Fields are described below and listed in the same order as in the file. A new line follows the file header, and then a new line follows each trade in the file body.

File Header

FIELD	FORMAT	IN / OUT	M / O	RULE
FROM	A30	IN	M	your user ID
TO	A30	IN	M	RBC
DATE	A8	IN	O	YYYYMMDD
TIME	A6	IN	O	HHMMSS
PATH	A200	IN	O	Path of file
NAME	A30	IN	M	Name of file. This name is unique for each new file sent
EXTNAME	A30	IN	O	Extension of file
ANSWER1	A30	IN	O	Transfer method: FTP_CUS / HTTP_CUS
COUNT	N6	IN	M	Number of trades in the file. Used for file consistency checking

The User ID is provided by our Client Services Manager.

File Body and specifications per operation type

M / O / C: Mandatory / Optional / Conditional.

#	FIELD	DESCRIPTION	FORMAT	M/O/C	RULES
1	ACTION	Action code	A30	M	CREATE / DELETE
2	EMETTEUR	Your user ID	A16	M	
3	REF-EXT	Your trade reference number	A16	M	Must be unique for each trade
4	INTERNAL_ORIGID		A16	O	
5	INTERNAL_ID		A16	O	
6	INTERNAL_STATUS		A20	O	
7	EXTERNAL_ORIGID		A16	O	
8	EXTERNAL_ID		A20	O	
9	EXTERNAL_STATUS		A20	O	

#	FIELD	DESCRIPTION	FORMAT	M/O/C	RULES
10	DATE_OUT		A8	O	
11	TIME_OUT		A6	O	
12	ERROR_MESSAGE		A70	O	
13	ISS-REF	Contract Number	A16	M	
14	MGP	Fund where the trades are to be input	A16	M	PTG/Vostro account/MF Ref
15	OPE-TYP	Cash Transaction Type	A3	M	See below
16	BOOK-CAT	Booking Category	A5	O	Refers to Internal booking types
17	SEC-TYPE	Security Code Type	A2	O	Only required if cash transaction related to a corporate action
18	SEC-NUM	Security Code	A12	O	Only required if cash transaction related to a corporate action.
19	SEC-DES	Security Description	A35	O	Only required if cash transaction related to a corporate action.
20	DEB-CASH-PRD	Debit Cash Product	A6	O	Not required for External Clients. Product Code CABR/CAGNR
21	DEB-ACC-FMT	Debit Account Format	A4	C	M if IBAN
22	DEB-ACC-NR	Debit Account Number	A24	C	M if IBAN. In IBAN format.
23	CRE-ACC-CL	Credit Account Class	A8	O	Not required for external Clients.
24	CRE-ACC-FMT	Credit Account Format	A4	C	M if IBAN
25	CRE-ACC-NR	Credit Account Number	A24	C	M if IBAN. In IBAN Format.
26	CRE-BAL-SHEET-ACC	Credit Balance Sheet Account	A7	O	Not required, for external clients.
27	CASH-AMT-CUR	Cash Amount Currency	A3	M	ISO 4217
28	CASH-AMT	Cash Amount	N13.2	M	
29	CASH-AMT-INIT-CURR	Initial Cash Amount Currency	A3	C	M for FX. ISO 4217.
30	CASH-AMT-INIT	Initial Cash Amount	N13.2	C	M for FX. ISO 4217.
31	EXCH-RATE	Exchange Rate	N9.6	O	M for FX.
32	DEB-VALUE-DATE	Debit Value Date	N8	M	YYYYMMDD Format.
33	CRE-VALUE-DATE	Credit Value Date	N8	M	YYYYMMDD Format.
34	FINAN-TRT	Financial Treatment.	A1	O	Y / N
35	PAIEM-MTH	Payment Method	A1	O	See below
36	BEN-COUNTRY	Ben. country of residence (For Legal report)	A2	M	ISO 3166-1
37	ADR-SWI-BEN	Fund Sub Custodian	A16	C	M if not checks
38	MSG-IND	Swift Message Indicator	A1	M	Y / N. Should be Y if PAIEM-MTH=S
39	FEE-IND	Swift Fees Indicator	A3	C	See below
40	INT-BEN	Intermediary acting on behalf of the beneficiary Institution	A35	O	BIC Code or Name
41	SCUS-BEN	Ben. Sub custodian servicing the final Beneficiary Account	A35	C	BIC Code or Name M if MSG-IND=Y. BIC Code.
42	NCSC-SCUS-BEN	National Clearing Code(Sub Custodian)	A15	O	//XX + 11 car

#	FIELD	DESCRIPTION	FORMAT	M/O/C	RULES
43	ACC-SCUS-BEN	Beneficiary account at Sub Custodian	A30	O	/ + 29 car
44	BEN-CUS-IND	Beneficiary Customer Indicator (Bank or not)	A1	O	Y if bank institution. Otherwise N.
45	BEN-CUS	Final Beneficiary	A35	C	BIC Code or Name M If MSG-IND=Y. BIC Code.
46	NCSC-BEN-CUS	National Clearing Code	A15	O	//XX + 11 car
47	ACC-BEN-CUS	Account at Custodian	A30	O	/ + 29 car
48	BEN-COMM-I	Beneficiary Communication I	A35	O	
49	BEN-COMM-II	Beneficiary Communication II	A35	O	// + 33 car
50	BEN-COMM-III	Beneficiary Communication III	A35	O	// + 33 car
51	BEN-COMM-IV	Beneficiary Communication VI	A35	O	// + 33 car
52	BANK-COMM-I	Bank Communication I	A35	O	/REC/ + 30 car
53	BANK-COMM-II	Bank Communication II	A35	O	// + 33 car
54	BANK-COMM-III	Bank comment / Pub comment	A35	O	// + 33 car
55	BANK-COMM-IV	Internal comment	A35	O	// + 33 car
56	MUL-FUND	PTG Fund credited in case of cash transfer	A20	C	M for TPD transactions
57	DATTAC	Trade Date	A8	M	YYYYMMDD

Field description

15. CASH-TYPE

This field specifies the type of cash payment.
- INV = invoice
- DIV = dividend
- CSH = cash payment
- TPD = cash transfer between 2 MGP
- CSE = cash entry

17. SEC-TYPE

Underlying security type in case of corporate action related cash movement. This field specifies the type of the security identifier.
Supported types are:
- IC = ISIN code
- CV = RBCIS internal security code

22. DEB-ACC-NR

In IBAN format. Account from which the cash will be debited. For Cash Payment and Cash Transfers.

25. CRE-ACC-NR

In IBAN format. Account from which the cash will be credited. For Cash Payment and Cash Transfers. Not required for EBA members.

35. PAIEM-MTH

- S for Swift;
- C for checks;
- N or blank for none.

39. FEE-IIND

- BEN: BENEFICIARY
- OUR: OUR
- SHA: SHARED

42. NCSC-SCUS-BEN

Used to indicate a national clearing system code.
Value of XX:
- BL: German Bankleitzahl (+6 digits);
- SC: Branch Sort Code Chaps (+6 digits);
- FW: Rounding Number Fedwire (+9 digits).

46. NCSC-BEN-CUS

Used to indicate a national clearing system code.
Value of XX:
- BL: German Bankleitzahl (+6 digits);
- SC: Branch Sort Code Chaps (+6 digits);
- FW: Rounding Number Fedwire (+9 digits).

48. BEN-COMM-I

/BNF/ + 30 car. M if Checks.

49-51. BEN-COMM-II TO IV

These fields specify the details which are to be transmitted to the beneficiary customer.
There are 4 fields of 35 available positions.

52-53. BANK-COMM-I TO II

These fields specify additional information for the Receiver.

54. BANK-COMM-III

This field is used with CASH ENTRY transactions. This field is dedicated to comments to be published into Custody reporting.

Example of transaction

USERID;RBC;20080119;1030;;Filename20080226001;TXT;HTTP_CUS;1
CREATE;EK608;ExempleCSH;;;;;;;;;;;;TEST;CSH;PAIEM;;;;CABR;STD;31688746876;;;;;USD;4725
49.85;;;;20070721;20070721;N;;US;;Y;OUR;;CHASUS33;;;N;;;;;;;;;;;;;;;20070721