RBC Investor & Treasury Services

STRAIGHT THROUGH ENTRY
CUSTODY

Technical specifications for file interface
Loan / Time Deposit

Version 14.00

Release date 26.02.2016

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 Notice

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 fields. 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 your 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	Order	A30	M	CREATE
2	EMETTEUR		A16	M	Source id origin
3	REF-EXT	Your trade reference number	A16	M	Must be unique by trade
4	INTERNAL_ORIGID		A16	O	Source of the internal ID
5	INTERNAL_ID		A16	O	BFS reference
6	INTERNAL_STATUS		A20	O	BFS status
7	EXTERNAL_ORIGID		A16	O	Source of the internal ID
8	EXTERNAL_ID		A20	O	Focus reference
9	EXTERNAL_STATUS		A20	O	Focus status
10	DATE_OUT	Processing date	A8	O	YYYYMMDD
11	TIME_OUT		A6	O	HHMMSS – processing time
12	ERROR_MESSAGE		A70	O	Error message
13	OPE-TYP	Operation type	A3	M	LOA/DEP
14	MGP	Fund Reference.	A16	M	RBC Investor & Treasury Services Portfolio Reference Code

#	FIELD	DESCRIPTION	FORMAT	M / O / C	RULES
15	TRA-DAT	Trade Date	A8	M	YYYYMMDD
16	SET-DAT	Settlement date	A8	M	YYYYMMDD
17	END-DAT	Maturity date	A8	M	YYYYMMDD
18	AMT	Principal Amount	N13.4	M	In the currency of the trade
19	CUR	Transaction currency	A3	M	ISO 4217 format
20	SET-CUR	Settlement Currency	A3	M	ISO 4217 format
21	INT-AMT	Interest amount	N13.4	M	number of decimals obeys the ISO currency rules
22	RATE	Rate	N9.6	M	fixed rate of the loan or the time deposit
23	BASE-N-DAYS	Day count fraction	A7	M	
24	BRK-REF	Broker reference	A11	M	SWIFT address (BIC code)
25	BRK-DES	Broker description	A30	O	Designation (name, country, city)
26	BRK-CUST-REF	Brk's cust reference	A11	M	SWIFT address (BIC code)
27	BRK-CUST-LIB	Brk's cust designation	A30	O	Designation (name, country, city)
28	BRK-CUST-SAFE	Brk's cust account ref	A35	O	
29	BRK-CUST-CITY	Brk's cust city	A11	O	
30	BRK-CUST-NSCS	Brk's cust NCSC number	A35	O	
31	BRK-INT-CUS-REF	INTERMED	A35	O	SWIFT address (BIC code)
32	BRK-INT-CUS-LIB	INTERMED	A35	O	Designation (name, country, city)
33	BRK-INT-CUS-SAF	INTERMED	A15	O	
34	BRK-INT-CUS-CIT	INTERMED	A35	O	
35	BRK-INT-CUS-NCS	INTERMED	A15	O	
36	RBCISCUS-REF	RBCIS's SubCustodian	A11	O	SWIFT address (BIC code)
37	RBCIS-CUS-LIB	RBCIS's SubCustodian	A35	O	Designation (name, country, city)
38	RBCIS-CUS-SAFE	RBCIS's SubCustodian	A11	O	
39	RBCIS-CUS-CITY	RBCIS's SubCustodian	A35	O	
40	RBCIS-CUS-NCSC	RBCIS's SubCustodian	A11	O	
41	FM-TXT	Account manager number		-	Not proceed
42	BEN-REF-SAFE	Benefiacy account ref	A35	O	
43	BEN-REF-NCSC	Benefiacy NCSC number	A35	O	

Field description

13. OPE-TYP

Transaction code to be used: LOA = Loan
                                 DEP = Time-deposit

14. MGP

This field identifies the fund into which the trades are to be input.
It can be the PTG identifier or the Vostro account identifier in our environment.

23. BASE-N-DAYS

This field specifies the number of days which are used for the calculation of the interest. This field specifies the Day Count Fraction as per ISDA definitions.

One of the following codes must be used:

CODIFICATION	DESCRIPTION
ACT/365	'Actual/365' or 'Actual/Actual' (28-31/365-6)
AFI/365	'Actual/365 (fixed)' (28-31/365)
ACT/360	'Actual/360' (28-31/360)
360/360	'30/360', '360/360' or 'Bond Basis'
30E/360	'30E/360' or 'Eurobond Basis'

Example of transaction

USERID;RBCIS;20080319;130637;083500;FILE200803191306.stp;STP;FTP_CUS;1

CREATE;USERID;20090814-001;130208_01;;;;;;;;20130208;162533;;DEP;<PTG_CODE>;20130208;20130208;20130215;20000000;EUR;EUR;311.11;0.08;ACT/360;ROYCCAT2;RBC;ROYCCAT2;RBC;;;;;;;;;;;;;;;;