ACH Direct Payments-(PAP-PAD) Service
ACH Direct Deposits-(PDS) Service

Data File Format
Output Specifications

Version 9
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General Information

Summary

You may arrange to receive data files via Payment Manager or transmission covering:

a. All records (valid, invalid, rejected, returns and reversed)
b. Returned Items
c. Reversed Items
d. Input records (valid, invalid, rejected)
e. Valid records
f. Invalid records
g. Rejected records

NOTE" " *I" in Excess payments applies to credit payments only and are added to the "Invalid Record".* *"I" payments are not applicable to debits.*
If you receive a data file and you have chosen option "A" or "D" or "F" then you will receive the "I" in Excess payments as those will be added to the "Invalid Records".
The reason/ messages attached to the "I" payments will not be included in the data file, however if those payments have "W" warnings then we will pass the warning messages. If you wish to receive "I" in Excess payment and your GRADS client profile is set up for "Retain Errors" to NO , then choose options "A" or "D" or "F" and you will receive "I" in Excess payments under the "Invalid Records".

Option A or B above, does not include "Returned Reversals". A "Returned Reversal" is a payment that has been reversed and subsequently returned and such payments will NOT be included with the "returns" data file. Those will only be reported on the Returned Items Report- Returned Reversal.

You may select to receive various combinations depending on your needs and the capability of your system. In addition to the data file, you will receive the mandatory reports in the medium selected.

The data file will be produced for items d. through g. when an input file is received from the client. A data file for items b. and c. are produced when returned items are received or when a client has requested items to be reversed. If you sent more than one input file for a particular day, then the datafiles d through g listed above will have multiple logical files within one physical data file. The number of logical files will be the same as the number of input files that you sent that day.

If you select to receive a data file of "Returned Items" (item b) AND a data file of "Invalid Records" (item f), our system will create TWO separate data files (header, records and trailer) one data file for the "Returned Items " and one data file for the "Invalid Items". The same would apply for all other individual data files. However if you select to receive a data file of "All Records" (Item a), our system will create ONE data file for all records (valid, invalid, rejected, returns and reversed). The same would apply for a data file of "Input Records' (item d).

A client with operating subsidiaries may receive:

A separate transmission for each subsidiary covering the data file item or items selected. For example, a client with ten subsidiaries, requiring details of invalid records and returned items by transmission or Payment Manager, each subsidiary would receive a transmission covering invalid records and returned items.

Alternatively, the client may receive a combined transmission for all subsidiaries or a selected subsidiary covering the data file or items selected. For example, a client with ten subsidiaries, requiring details of invalid records and returned items by transmission or Payment Manager would receive one transmission and a header, details of invalid records and a trailer for **each** subsidiary.

General Description

This is a file layout used to provide payment information electronically to the client via:

- Payment Manager
- Data Transmission

The file is 190 characters in length.

Three record types are present on the file.

- Header, mandatory and is the first record on the file
- Detail, mandatory for each payment record meeting the category selected.
  - For valid records, an Error Message Record may follow each detail.
  - For invalid or rejected records, an Error Message Record will follow each detail.
  - For "I" payments added to the Invalid Records, only warning messages if any will follow each detail record. If no warnings are attached, no messages will follow.
  - For returned or reversed records, a Foreign Currency Information Record may follow each detail if there has been currency conversion involved with the original payment.
- Trailer, mandatory and is the last record on the file.
  - For returned records, the "Account Trailer Record " and "Client Trailer Record" will be produced
  - For All Records and/or All Input records, the "Client2/All Records/Input Trailer Record" will be produced.
  - For all others, the "Client Trailer Record" will be provided.

The following abbreviations are used in the record definitions:
- AN   Alphanumeric
- N   Numeric unsigned

Network Gateway- Data Files/Reports Output

If you are receiving your data files using Network Gateway, the following are how the data files names are identified:

- RPT0900P- All Records
- RPT0901P- Returned Items
- RPT0906P- Reversed Items
- RPT0902P- All input records (Valid, Invalid, Rejected)
- RPT0903P- Valid Records
- RPT0904P- Invalid Records
- RPT0905P- Rejected Records

Note: " I" in Excess payments only applies to credit payments and are added to the "Invalid Record". Depending on your set up they will be included with RPT0900P – All records or RPT0902P- All input Records or RPT0904P – Invalid Records. The reason/ messages attached to the "I" payments will not be included in the data file, however if those payments have "W" warnings then we will pass the warning messages .

Note: "P" indicates Production and for a Test file it would be identified by "T". Data files always start with 09.

If you are receiving your report files using Network Gateway, the following are some examples of how the report files names are identified:

- RPT0101P- Input Verification and Edit Report
- RPT0102P- Warnings Report
- RPT0103P- Payments Correction Form
- RPT0104P- Payments Register
- RPT0106P- File Input Payment Confirmation Report
- RPT0201P- Payments Activity Report
- RPT0202P- Mass Request Report
- RPT0203P- Client Value Date Totals Report
- RPT0204P- Pending Representment Register Report
- RPT0205P- Returned Items Report
- RPT0207P- Payment Selection Error Report
- RPT0208P- Foreign Exchange Report
- RPT0210P- Notice of Payment Information Change Report
- RPT0211P- Daily Limit – Payment Details Report
- RPT0401P- File Error Report
- RPT0500P- File Schedule Report
- RPT0610P- Notification of Change/Pre-Note Response Report For USA-FI

Note: "P" indicates Production and for a Test file it would be identified by ""T". Report files are always identified with the report number.

DESCRIPTION OF RECORD FORMATS

HEADER RECORD   The header record is used to identify the beginning of each new data file type and must be the first record on each file.

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
01	01-01	1	AN	Record type	0 (zero)
02	02-04	3	N	Filler	000 (zeros)
03	05-14	10	AN	Client Number	10 digit client number as follows: 6 digit client number assigned by the RBC Royal Bank and 4 digit subsidiary number assigned by the client.
04	15-15	1	AN	Filler	0 (zero)
05	16-18	3	N	Service Types	Service Indicator: 001 PAP CAD 002 PAP USD 003 PDS CAD 004 PDS USD 005 PC-PAP-CAD 006 PC-PAP-USD 007 PC-PDS-CAD 008 PC-PDS-USD 009 CPS-CAD 010 CPS-USD
06	19-23	5	AN	File Creation Number	Number to identify this file. Format YYDDD Year & Julian date.
07	24-25	2	AN	Filler	Spaces
08	26-33	8	N	Processing Date	Date file was created. Format MMDDYYYY
09	34-43	10	AN	Original Client #	Client Number – same as in Field 03
10	44-45	2	AN	Data File Type	Values: 01 All records 02 Returned items 03 Reversed items 04 Input records 05 Valid records 06 Invalid records/In Excess 07 Rejected records " I" in Excess payments only

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
					applies to credit payments and are included with the "Invalid Records"/ "T" level errors.
11	46-190	145	AN	Filler	Spaces

DEBIT DETAIL RECORD

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
01	01-01	1	AN	Record Type	1
02	02-04	3	N	Filler	000 (zeros)
03	05-14	10	AN	Client Number	10 digit client number as follows: 6 digit client number assigned by RBC Royal Bank and 4 digit subsidiary number assigned by the client
04	15-15	1	AN	Filler	0 (zero)
05	16-18	3	N	Service Types	Service Indicator: 001 PAP CAD 002 PAP USD 005 PC-PAP-CAD 006 PC-PAP-USD 009 CPS-CAD 010 CPS-USD
06	19-19	1	N	Filler	0 (zero)
07	20-23	4	AN	File Creation Number	File Creation Number from the originating file
08	24-25	2	AN	Filler	Spaces
09	26-26	1	AN	Payment Type	D
10	27-27	1	AN	Debit Detail Record Type	Value: 0(zero)
11	28-38	11	AN	Filler	Spaces
12	39-57	19	AN	Customer Number	As assigned by the client
13	58-63	6	AN	Filler	Spaces
14	64-93	30	AN	Customer Name	As indicated on payment record
15	94-101	8	N	Original Due Date	Original date as indicated on payment. Format MMDDYYYY
16	102-103	2	N	Filler	00 (zeros)
17	104-105	2	N	Payment Number	As indicated on Payment. Value 00-99
18	106-110	5	AN	Filler	Spaces

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
19	111-114	4	N	Financial Institution Number	As indicated on payment record
20	115-119	5	N	Branch Number	Branch/transit number of customer's account as indicated on payment record.
21	120-137	18	AN	Account Number	Account number of customer as indicated on payment record.
22	138-140	3	AN	Currency	Values: CAD Canadian $$ USD United States $$
23	141-143	3	AN	Destination Country	Where payment is destined to. Value: CAN Canada USA United States
24	144-157	14	N	Debit Payment Amount	Format $$$$$$$$$$$$¢¢
25	158-165	8	N	Filler	00000000 (Zeros)
26	166-180	15	AN	Electronic Message	Electronic Message as indicated on payment record.
27	181-181	1	AN	Payment Status	Values: (blank) Valid Payment E Reversed Payment/Record W Warnings T T level errors R Rejected Payment/Record U Returned Payment/ *Item P Represented Item *Represented Item only applies to Debits will be reported on your data file as a payment status of "P". That indicates an item that has been returned and represented. However, if the same represented item is returned it will have a payment status of "U" as this item cannot be represented a 2nd time.
28	182-184	3	N	Transaction Code	CPA or ACH transaction code or return reason code.
29	185-190	6	AN	Filler	Spaces

CREDIT DETAIL RECORD

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
01	01-01	1	AN	Record Type	2
02	02-04	3	N	Filler	000 (zeros)
03	05-14	10	AN	Client Number	10 digit client number as follows: 6 digit client number assigned by RBC Royal Bank and 4 digit subsidiary number assigned by the client.
04	15-15	1	AN	Filler	0 (zero)
05	16-18	3	N	Service Types	Service Indicator: 003 PDS CAD 004 PDS USD 007 PC-PDS-CAD 008 PC-PDS-USD
06	19-19	1	N	Filler	0 (zero)
07	20-23	4	AN	File Creation Number	File Creation Number from the originating file
08	24-25	2	AN	Filler	Spaces
09	26-26	1	AN	Payment Type	C
10	27-27	1	AN	Credit Detail Record Type	Value: 0 (Zero)
11	28-38	11	AN	Filler	Spaces
12	39-57	19	AN	Customer Number	As assigned by the client
13	58-63	6	AN	Filler	Spaces
14	64-93	30	AN	Customer Name	As indicated on payment record
15	94-101	8	N	Original Due Date	Original date as indicated on payment. Format MMDDYYYY
16	102-103	2	N	Filler	00 (Zeros)
17	104-105	2	N	Payment Number	As indicated on payment. Value 00-99
18	106-110	5	AN	Filler	Spaces
19	111-114	4	N	Financial Institution	As indicated on payment record

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
				Number	
20	115-119	5	N	Branch Number	Branch/transit number of customer's account as indicated on payment record.
21	120-137	18	AN	Account Number	Account number of customer as indicated on payment record.
22	138-140	3	AN	Currency	Values: CAD Canadian $$ USD United States $$
23	141-143	3	AN	Destination Country	Where payment is destined to. Value: CAN Canada USA United States
24	144-157	14	N	Credit Payment Amount	Format $$$$$$$$$$$$¢¢
25	158-165	8	N	Filler	00000000 (Zeros)
26	166-180	15	AN	Electronic Message	Electronic Message as indicated on payment record.
27	181-181	1	AN	Payment Status	Values: (blank) Valid Payment E Reversed Payment/Record W Warnings T T level errors R Rejected Payment/Record U Returned Payment/Record I In Excess Payments " *I" in Excess payments only applies to credit payments - Record Type 2 and are included with the the "Invalid Record"/ "T" level errors.*
28	182-184	3	N	Transaction Code	CPA or ACH transaction code or return reason code.
29	185-190	6	AN	Filler	Spaces

ERROR MESSAGE RECORD

The Error Message Record will be found after a debit/credit detail record when a payment has an error (T level, W level or R level) attached to it. If there are multiple error messages attached to a debit/credit detail record, we will pass all multiple error codes and messages.

" I" in Excess payments applies to credit payments only and are added to the "Invalid Record"**.** The reason/ message attached to the "I" payments will not be included in the data file, however if those payments have "W" warnings then we will also pass the warning messages.

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
01	01-01	1	AN	Record Type	Values: 1 Debit detail record 2 Credit detail record
02	02-14	3	N	Filler	000 (zeros)
03	05-14	10	AN	Client Number	10 digit client number as follows: 6 digit client number assigned by RBC Royal Bank and 4 digit subsidiary number assigned by the client
04	15-15	1	AN	Filler	0 (zero)
05	16-18	3	N	Service Types	Service Indicator: 001 PAP CAD 002 PAP USD 003 PDS CAD 004 PDS USD 005 PC-PAP-CAD 006 PC-PAP-USD 007 PC-PDS-CAD 008 PC-PDS-USD 009 CPS-CAD 010 CPS-USD
06	19-19	1	N	Filler	0 (Zero)
07	20-23	4	AN	File Creation Number	File Creation Number from the originating file
08	24-25	2	AN	Filler	Spaces
09	26-26	1	AN	Payment Type	Values: D Debit detail record C Credit detail record
10	27-27	1	AN	Debit/Credit Detail Record Type	Value: 3 Error Message Record

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
11	28-31	4	AN	Error Code	4 digit numeric code Refer client manual for Error Message listing
12	32-111	80	AN	Error Message	Refer to descriptive message in client manual for Error Messages
13	112-190	79	AN	Filler	Space

FOREIGN CURRENCY INFORMATION RECORD

The Foreign Currency Information Record is found after a debit/credit record when a payment has currency conversion involved on payments with a status of Reversed or Returned payments.

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
01	01-01	1	AN	Record Type	Values: 1 Debit detail record 2 Credit detail record
02	02-04	3	N	Filler	000 (zeros)
03	05-14	10	AN	Client Number	10 digit client number as follows: 6 digit client number assigned by RBC Royal Bank and 4 digit subsidiary number assigned by the client
04	15-15	1	AN	Filler	0 (zero)
05	16-18	3	N	Service Types	Service indicator: 001 PAP CAD 002 PAP USD 003 PDS CAD 004 PDS USD 005 PC-PAP-CAD 006 PC-PAP-USD 007 PC-PDS-CAD 008 PC-PDS-USD 009 CPS-CAD 010 CPS-USD
06	19-19	1	N	Filler	0 (zero)
07	20-23	4	AN	File Creation Number	File Creation Number from the originating file
08	24-25	2	AN	Filler	Spaces
09	26-26	1	AN	Payment Type	Values: D Debit detail record C Credit detail record
10	27-27	1	AN	Debit/Credit Detail Record Type	Value: 4 4 Currency conversion
11	28-41	14	N	Original Input Amount	
12	42-43	2	N	Filler	0 (zero)

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
13	44-51	8	AN	Original Conversion Rate Filler	9.999999
14	52-56	5	AN	Filler	0 (future expansion of rates)
15	57-70	14	N	Foreign Equivalent Amount	
16	71-72	2	N	Filler	0 (zeros)
17	73-80	8	AN	Returned Conversion Rate	
18	81-85	5	AN	Filler	0 (future expansion of rates)
19	86-190	105	N	Filler	Spaces

ACCOUNT TRAILER RECORD

If Returned Items records have been selected for data files, then the Account Trailer Record will follow the last returned item record and the

appropriate Client Trailer Record will be the last
record in the file.

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
01	01-01	1	AN	Record Type	3
02	02-04	3	N	Filler	000 (zero)
03	05-14	10	AN	Client Number	10 digit client number as follows: 6 digit client number assigned by RBC Royal Bank and 4 digit subsidiary number assigned by the client
04	15-15	1	AN	Filler	0 (zero)
05	16-18	3	N	Service Types	Service indicator: 001 PAP CAD 002 PAP USD 003 PDS CAD 004 PDS USD 005 PC-PAP-CAD 006 PC-PAP-USD 007 PC-PDS-CAD 008 PC-PDS-USD 009 CPS-CAD 010 CPS-USD
06	19-23	5	AN	File Creation Number	Number to identify this file. Format YYDDD Julian date
07	24-25	2	AN	Filler	Spaces
08	26-77	52	AN	Filler	Zero or spaces
09	78-80	3	AN	Filler	Spaces
10	81-88	8	N	Total Number of Credit Records	Total Number of all Record Type 2 – this does not include Error Messages.
11	89-106	18	N	Total Amount of Credit Records	Total Amount of all Record Type 2 - this does not include Error Messages.
12	107-132	26	N	Filler	Zero fill
13	133-140	8	N	Total Number of Debit Records	Total number of all Record Type 1 – this does not include Error Messages.
14	141-158	18	N	Total Amount of Debit Records	Total amount of all Record Type 1 – this does not include Error Messages.

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
15	159-160	2	AN	Filler	Spaces
16	161-164	4	N	Client's Return Bank Number	0999
17	165-169	5	N	Client's Return Branch Number	99999
18	170-181	12	AN	Client's Return Account Number	Left justified, significant digits only
19	182-190	9	AN	Filler	Spaces

CLIENT TRAILER RECORD

This trailer will be the last record on all data file types except if All Records or All Input has been selected.

If **"All Records"** and **"All Input"** see the **next Client 2 Trailer Total.**

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
01	01-01	1	AN	Record Type	4
02	02-04	3	N	Filler	000 (zeros)
03	05-14	10	AN	Client Number	10 digit client number as follows: 6 digit client number assigned by RBC Royal Bank and 4 digit subsidiary number assigned by the client
04	15-15	1	AN	Filler	0 (zero)
05	16-18	3	N	Service Types	Service indicator: 001 PAP CAD 002 PAP USD 003 PDS CAD 004 PDS USD 005 PC-PAP-CAD 006 PC-PAP-USD 007 PC-PDS-CAD 008 PC-PDS-USD 009 CPS-CAD 010 CPS-USD
06	19-23	5	AN	File Creation Number	Number to identify this file. Format YYDDD Julian date
07	24-25	2	AN	Filler	Spaces
08	26-77	52	N	Filler	Zero fill
09	78-80	3	AN	Filler	Spaces
10	81-88	8	N	Total Number Of Credit Records	Total Number of all Record Type 2 – this does not include Error Messages.
11	89-106	18	N	Total Amount of Credit Records	Total Amount of all Record Type 2 – this does not include Error Messages.
12	107-132	26	N	Filler	Zero fill
13	133-140	8	N	Total Number of Debit Records	Total number of all Record Type 1 – this does not include Error Messages.
14	141-158	18	N	Total Amount of Debit Records	Total amount of all Record Type 1 – this does not include Error Messages.
15	159-166	8	N	Total Number of Error Message Records	Total number of Error Messages Debit/Credit Detail Record type 3

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
16	167-174	8	N	Filler	Zero fill
17	175-182	8	N	Filler	Zero fill
18	183-190	8	N	Total Number of Foreign Currency Information Records	Total number of Foreign Currency Information Debit/Credit Detail Record type 4

CLIENT 2/ALL RECORDS/INPUT TRAILER RECORD

This Client trailer total will be the last record in the file if **"All Records" or "Input Records"** has been selected for data files.

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
01	10-10	1	AN	Record Type	4
02	02-04	3	N	Filler	000 (zeros)
03	05-14	10	AN	Client Number	10 digit client number as follows: 6 digit client number assigned by RBC Royal Bank and 4 digit subsidiary number assigned by the client.
04	15-15	1	AN	Filler	0 (zero)
05	16-18	3	N	Service Types	Service indicator: 001 PAP CAD 002 PAP USD 003 PDS CAD 004 PDS USD 005 PC-PAP-CAD 006 PC-PAP-USD 007 PC-PDS-CAD 008 PC-PDS-USD 009 CPS-CAD 010 CPS-USD
06	19-23	5	AN	File Creation Number	Number to identify this file. Format YYDDD Julian date
07	24-25	2	AN	Filler	Spaces
08	26-33	8	N	Total Number of Records on File. (The Error Message attached to a "T" error is also another record that is included in this count).	
09	34-51	18	N	Total Amount of Records on File	
10	52-59	8	N	Total Number of Valid Records	
11	60-77	18	N	Total Amount of Valid Records	
12	78-85	8	N	Total Number of Invalid Records (Include the "T' level errors plus the "I" in Excess payments)	
13	86-103	18	N	Total Amount of Invalid Records (Include the "T" level errors plus the "I" in Excess payments)	
14	104-111	8	N	Total Number of Returned Records	

Field #	Character Position	Field Size	Format	Field Name	Data Requirements
15	112-129	18	N	Total Amount of Returned Records	
16	130-137	8	N	Total Number of Reversed Records	
17	138-155	18	N	Total Amount of Reversed Records	
18	156-163	8	N	Total Number of Rejected Records	
19	164-181	18	N	Total Amount of Rejected Records	
20	182-190	9	AN	Filler	Spaces

END