



ACH Direct Payments (PAD) Service

RBC Automated Clearing House ACH094 Debit File Format Specification

Version 10
November 2013

© Royal Bank of Canada 2013: All Rights Reserved. Restricted / Confidential / RBC Internal / Public: The information contained in this document is the property of the RBC Financial Group. Except as specifically authorized in writing by the RBC Financial Group, the holder of this document shall keep the information contained herein confidential and shall protect same in whole or in part from disclosure or dissemination to third parties.

Table of Contents

TABLE OF CONTENTS	2
GENERAL INFORMATION	3
<i>Summary</i>	3
<i>Format and Organization</i>	3
<i>Basic Specifications</i>	4
<i>Currency</i>	4
<i>Use of Client Numbers in File</i>	4
<i>Destination Country</i>	4
<i>Account Numbers</i>	5
<i>Client Number Format</i>	5
<i>File Transmission Routing Records</i>	5
<i>NACHA IAT Rule - Cross Border Payment Processing</i>	5
<i>IAT Format- Originator & Receiver Address Format</i>	6
<i>Identification of Additional Parties to an IAT Cross Border Payment</i>	7
DESCRIPTION OF RECORD FORMATS	8
<i>Header Record</i>	8
IAT FORMATTED RECORDS	9
<i>IAT Company/Batch Header Record</i>	10
<i>IAT Entry Detail Record</i>	12
<i>1st IAT Addenda Record – Customer/Receiver Information</i>	13
<i>2nd IAT Addenda Record – Originator Information</i>	14
<i>3rd IAT Addenda Record – Originator Address Information</i>	15
<i>4th IAT Addenda Record – Originator Bank Information</i>	16
<i>5th IAT Addenda Record – Receiving Bank Information</i>	17
<i>6th IAT Addenda Record – Customer/Receiver Address Information</i>	18
<i>7th IAT Addenda Record – Customer/Receiver Address Information</i>	19
<i>IAT Addenda Record for Remittance Information</i>	20
<i>IAT Addenda Record for Foreign Correspondent Bank Information</i>	21
NON CROSS BORDER PAYMENT FORMATTED RECORDS	22
<i>CCD/PPD - Company/Batch Header Record - Except IAT</i>	23
<i>CCD/PPD - Entry Detail Record – Except IAT</i>	25
COMMON RECORDS – CCD/PPD/IAT	27
<i>Company/Batch Control Record</i>	28
<i>File Control Record – Trailer Record</i>	29
APPENDIX 1 – USA TRANSACTION CODES	30
APPENDIX 2 – CANADIAN CPA TRANSACTION CODES	30
APPENDIX 3 – FILE TRANSMISSION ROUTING RECORDS	31

General Information

Summary

RBC Automated Clearing House (ACH) format is used by banks and clients in the United States. This format can also be used to send Canadian or U.S. dollar electronic payments destined to Canadian Banks and/or electronic U.S. dollar payments to a U.S. bank, and requiring a currency conversion. A mixture of electronic USD payments and CAD payments can be part of the same file, however all payments in a single batch must be for the same currency. ACH format is recommended if you currently use the format to exchange payments in the United States.

Client who are sending payments to accounts in the United States and have been approved to process Cross Border Payment must use this file format.

Format and Organization

ACH standard records are transmitted via telecommunication networks between participants. Characters used in inter-regional ACH records are restricted to 0-9, A-Z, blank and seven special characters (# - \$. & * ,). Any other characters are not to be used. For payments destined to the USA, the USA ACH Network cannot handle French Characters. If French Characters are received for payments destined to the USA, when RBC processes the cross border payment, the system will replace the French Character with a blank space.

Logical files must consist of logical records in sequence of:

- Header Record, type 1
- Company/Batch Header Record, type 5
- Entry Detail Record, type 6
- Addenda Record, type 7. Note: Multiple Addenda records are mandatory for payments destined to the USA
- Control/Batch Control Record, type 8
- File Control Record, type 9

Separate batches are required for IAT (International ACH Transactions). Separate batches are also required for U.S. dollar payments and Canadian payments. If you are sending a mixture of payments in the same file, the input should be as follows:

- Header Record - type 1
- IAT Company/Batch Header Record – Type 5 SEC = IAT
 - IAT Entry Detail Record – Type 6
 - 1st Addendum Record - Type 7-10
 - 2nd Addendum Record – Type 7-11
 - 3rd Addendum Record – Type 7-12
 - 4th Addendum Record – Type 7-13
 - 5th Addendum Record – Type 7-14
 - 6th Addendum Record – Type 7-15
 - 7th Addendum Record – Type 7-16
- Company /Batch Control Record- type 8
- Company/Batch Header Record – Type 5 SEC = CCD or PPD
 - Entry Detail Record – Type 6

- Entry Detail Record – Type 6
- Company /Batch Control Record- type 8
- File Control Record – type 9

Multiple logical files can be submitted on a physical transmission.

Basic Specifications

- Input must conform to the Automated Clearing House (ACH) Record Descriptions (94 characters per record)
- All fields on the records have an indicator as to their format:
 - (N) = Numeric
 - (AN) = Alphanumeric
- All numeric fields must be unsigned and right justified and zero filled.
- Alphanumeric fields shall be left justified and blank filled.
- All unused fields should have an initial value of zeros (11110000 binary code EBCDIC or 00110000 binary code ASCII), if numeric, or spaces (01000000 binary code EBCDIC or 00110000 binary code ASCII), if alphanumeric.

Currency

- Under the Company/Batch Header Record, the Destination Currency can be Canadian or US Dollars.
- If the "Destination Currency" field is "blank" the currency will default to the currency of the service.
- If the "Destination Currency" field is other than CAD, or USD, or Blank, the currency will default to the currency of the service.

NOTES:

- All payments in a single batch must be for the same currency.
- A batch can only contain one transaction service type. A file may contain many similar service type batches.

Use of Client Numbers in File

- **Client with No Subsidiaries (Centralized)** - All basic records must have the same subsidiary number (0000) as the header record.
- **Operating Subsidiaries** - All basic records must have the same subsidiary number as the header record.
- **Non-operating Subsidiaries** -The header and trailer must be the Parent 6-digit number assigned plus 0000. Each basic record may have the last 4 digits different, depending on where the record would be returned.

Destination Country

The financial institution on which the item is drawn can be in Canada or the United States.

When payment transactions are destined for a U.S. financial institution:

- The destination currency must be USD. To avoid currency conversion, always use a USD ACH Direct Deposit Service (PDS - USD).
- U.S. bank identification number:

- First four positions TTTT = transit routing and ABA number
- Second four positions AAAA = financial institution number
- Ninth position R = transit routing code

"Destination Country " field is "Mandatory".

Account Numbers

The maximum length for a savings or chequing account number drawn on a Canadian financial institution is 12 digits even though ACH format will accept a length of 35. The Canadian Payments Association (CPA) sets this 12-digit restriction.

The maximum length of an account number drawn on an U.S. financial institution is 17 digits as defined by the NACHA ACH Rules.

Account numbers must be left justified. Do not zero fill. Input only the significant digits.

Client Number Format

This format requires the use of a ten-digit client number, comprised of six digits assigned by RBC and four digits assigned either by RBC (0000) or for Operating and Non-Operating Subsidiaries - defined by the client to identify a subsidiary. This information is called the Client Number or Originator Identification Number.

File Transmission Routing Records

Please refer to Appendix 3 at the end of this document for details on generating the Routing Record for transmission methods such as RBC Express File Transfer, Web File Transfer and FTP SSL.

For Dedicated and Private Network Solutions, such as Connect:Direct and SWIFT NetFile Act, please ensure you are in contact with RBC's Client Connectivity Team directly.

NACHA IAT Rule - Cross Border Payment Processing

Effective September 18th, 2009, an amendment to the *NACHA Operating Rules (Rules)* become effective that will:

1. require Originating Banks to identify all international payment transactions transmitted via the ACH Network as International ACH Transactions using a new Standard Entry Class Code (IAT); and
2. require IAT transactions to include the specific data elements defined within the Bank Secrecy Act's (BSA) "Travel Rule" so that all parties to the transaction have the information necessary to comply with U.S. law, which includes the programs administered by the Office of Foreign Assets Control (OFAC). This amendment will align the *Rules* with OFAC compliance obligations and make it easier for Receiving Banks to comply with those requirements.

The ACH094 format was modified to meet the requirements for the IAT Rule changes.

Clients will have the ability using this format to submit:

1. Payments destined to USA only that originate in Canada.
2. Payments destined to Canadian banks only that originate in Canada.
3. Payments destined to Canadian Banks & USA Banks that originate in Canada.
4. US Market - Client classified as US Market can originate payments to USA Banks.

The IAT Company Batch Header Record and associated addendum records have been modified to also accommodate payments that are destined to Canadian Banks. The originator and recipient addressing information is currently not required for payments destined to Canadian Banks. The following format has been modified to accommodate these records if submitted with your input file. RBC's system will accept the addendum records but will not pass them along to the Canadian receiving bank.

IAT Format- Originator & Receiver Address Format

To ensure that payments are not rejected by the receiving bank or processing is not delayed, formatting of the address records is as follows:

- a. It is strongly recommended that all segments of the address field be provided and correct formatting is used. Incorrect formatting may result in the payment being rejected by the receiving bank
- b. Each field must be left justified.
- c. Do not include leading/trailing spaces.
- d. Do not insert spaces or commas between the data elements.
- e. Hotels and/or Motels addresses are not permitted unless it is the permanent address of the receiver.
- f. Addresses for all Originators and/or Receivers must be the physical street address. General use of PO Box is not allowed. In rare instances it is possible that a Street address does not exist for your customer, this would be the only time a PO Box would be acceptable. Every effort on your part must be made to obtain the physical/street address. Use of a PO Box addresses will be reported on your Warnings Report.
- g. Mandatory use of the 2 digit ISO Country Codes.
http://www.iso.org/iso/country_codes/iso_3166_code_lists/country_names_and_code_elements
- h. Recommended where possible to use the 2 digit ISO Province or State codes.
- i. Originator or Receiver - **City and Province or State**
 - Data Elements must be separated by an asterisk * and must end with a backslash \.
 - Examples: MONTREAL*QC\ ATLANTA*GA\
*Province\ *QC\
*State\ *GA\
Reminder – no leading spaces, left justify.
 - ii. If the last data element is missing, do not include the asterisk * but the backslash is still mandatory at the end. In the example if missing the Province or State, the format would be:
City\ Montreal\
Reminder – no leading spaces, left justify.
- j. Originator or Receiver - **Country and Postal or Zip Code**
 - Data Elements must be separated by an asterisk * and must end with a backslash \.
 - Examples: CA*A1B2C3\ US*123456789\
*Country\ US\
Reminder – no leading spaces, left justify.

Identification of Additional Parties to an IAT Cross Border Payment

International Payments can involve more parties than the two traditionally identified as Originator and Receiver; these are commonly known as “split-transactions” payments or “for further credit to” payments, where a third-party service provider originates and settles two separate transactions to complete the underlying payment transactions on behalf of the parties.

This NACHA ACH Rule establishes an obligation to identify within an IAT Entry:

1. ACH Direct Payment Services (PAP-PAD)
 - a. the ultimate foreign beneficiary of the funds transfer when the proceeds from a debit IAT Entry from an account in the USA are for further credit to an ultimate foreign beneficiary that is a party other than the Originator of the debit IAT Entry, or
2. ACH Direct Deposits Service (PDS)
 - a. the foreign party ultimately funding a credit Southbound IAT Entry when that party is not the Originator of the credit IAT Entry.

The ultimate beneficiary (if not the Originator of the ACH PAD payment) must be identified in the Payment Related Information Field of the IAT Remittance Addenda Record.

Formatting of Additional Parties:

Must include the ultimate foreign beneficiary’s name, street address, city, state/province, postal/zip code, and 2 digit ISO Country Code.

Example: Johann Schmidt*Mainzer Landstrasse 201*60326 Frankfurt am Main*DE\
 ABC Company Ltd*123 Londonderry Road*Dublin*IE\

DESCRIPTION OF RECORD FORMATS

Header Record

This header record is used to delimit the beginning of each input file and must be the first record on each file.

Record is used for all variations of the ACH format. Should be the first record for:

- Payments destined to the United States & Canada using the IAT format.
- Payments destined to Canada using the CCD/PPD format.
- USA Market Clients – payments originating and destined to US Financial Institutions.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	1
02	02-03	2	N	Priority Code	Priority Code	01
03	04-13	10	AN	Filler	Immediate Destination	Blank fill
04	14-23	10	AN	Client Number	Immediate Origin	10 digit client number as follows: 6 digit client number assigned by RBC Global Services and 4 digit subsidiary number assigned by the client. (Where no subsidiary exists insert zeros as the last 4 digits).
05	24-29	6	N	File Creation Date	File Creation Date	Enter date file was created Format YYMMDD
06	30-33	4	AN	File Creation Number	File Creation Time	4 digit numeric to identify this file, must be different from previous 9 numbers submitted for processing. When submitting a test file, the FCN must be TEST
07	34-34	1	AN	File ID Modifier	File ID Modifier	Only Upper-case A-Z and 0-9
08	35-37	3	N	Record Size	Record Size	094
09	38-39	2	N	Blocking Factor	Blocking Factor	10
10	40-40	1	N	Format Code	Format Code	1
11	41-63	23	AN	Destination Bank	Immediate Destination name	RBC Royal Bank or leave blank
12	64-86	23	AN	Company Name	Immediate Origin Name	Client Long Name
13	87-94	8	AN	Filler	Reference Code	Blank fill

IAT Formatted Records

**Format used for ALL payments destined to the USA
Cross Border Payments**

IAT Company/Batch Header Record

For Payments destined to USA Banks and Canadian Banks

This record identifies the client and destination of the payments included in the batch. The information contained in the company/batch record applies uniformly to all subsequent entry detail records in the batch. Only one destination country is permitted per batch.

This record can also be used to send payments to Canadian Banks.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	5
02	02-04	3	N	Service Identifier	Service Class Code	225 Debit transactions
03	05-20	16	AN	Filler	IAT Indicator	Leave Blank For forward IAT entries, this field should be left blank.
04	21-22	2	AN	Foreign Exchange Ind	Foreign Exchange Ind	FV fixed to variable VF variable to fixed FF fixed to fixed or leave blank
05	23-23	1	N	Foreign Exchange Reference Ind	Foreign Exchange Reference Ind	Code used to indicate the content of the Foreign Exchange Reference Field. Code values for this field are: 1 - Foreign Exchange Rate; 2 - Foreign Exchange Reference Number; or 3 - Space Filled.
06	24-38	15	AN	Foreign Ex Reference	Foreign Ex Reference	Rate, reference number or leave blank <i>Contains either the foreign exchange rate used to execute the foreign exchange conversion of an IAT entry or another reference to the foreign exchange transaction. Content is defined by the Foreign Exchange Reference Indicator Field.</i>
07	39-40	2	AN	Destination Country	ISO Destination Country	Mandatory Destination Country of Payment: US United States CA Canada
08	41-50	10	AN	Client Number	Originator Identification	10-digit client number as follows: 6-digit client number assigned by RBC and 4-digit subsidiary number assigned by the client. (Where no subsidiary exists insert zeros as the last 4 digits).
09	51-53	3	AN	Standard Entry Class Code	Standard Entry Class Code	IAT

**RBC ACH094 Debit File
Layout Specification**

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
10	54- 63	10	AN	Company Entry Description	Company Entry Description	<p>Mandatory for USA destined payments – provide a description of the purpose of the entry which will be displayed to the Receiver.</p> <p>Examples:</p> <ul style="list-style-type: none"> • GAS BILL • REG SALARY • INS PREM • PURCHASE <p>DO NOT use for INVOICE or Reference Numbers.</p> <p>Optional - for Canadian Banks – information will be added to the Electronic Message field.</p>
11	64-66	3	AN	Origination Currency Code	ISO Originating Currency Code	<p>USD or CAD</p> <p>If left blank will default to currency of Service</p>
12	67-69	3	AN	Destination Currency Code	ISO Destination Currency Code	<p>USD or CAD</p> <p>Note: Destination Currency cannot be CAD for payments destined to the United States.</p>
13	70-75	6	N	Due Date	Effective Entry Date	<p>Payment date, format YYMMDD.</p> <p>For Payments Destined to USA: today or greater maximum of 173 days.</p> <p>For Payments Destined to CA: Debits can be 173 days in the past or future.</p>
14	76-78	3	N	Filler	Settlement Date (Julian)	Blanks or information entered will be ignored
15	79-79	1	AN	Filler	Originating Status Code	Enter 1 or leave blank
16	80-87	8	N	Filler	Originating DFI Identification	Blanks or information entered will be ignored.
17	88-94	7	N	Batch Number	Batch Number	Must be sequential within file

IAT Entry Detail Record

For Payments Destined to United States and Canada

The **mandatory** entry detail record contains the basic information to post the transaction to the customer's account held at a Financial Institution in the United States of America.

This record can also be used to send payments to Canadian Banks.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	6
02	02-03	2	N	Transaction Code	Transaction Code	27 Demand debit 28 Demand pre-note 37 Savings debit 38 Savings pre-note Enter the appropriate transaction code. This is a mandatory field for all USA destined payments.
03	04-12	9	N	USA Bank Routing Number CAN Bank & Transit Number	Receiving DFI Identification Number	For USA Banks: ABA number of Customer's Bank For Canadian banks: Enter 4 digit bank number followed by the 5 digit transit.
04	13-16	4	N	Number of Addenda Records	Number of Addenda Records	Mandatory – This represents the number of addenda records associated with the Entry Detail Record.
05	17-29	13	AN	Blank	Reserved	Blank - spaces
06	30-39	10	AN	Amount	Amount	Format \$\$\$\$\$\$cc Amount to be in the currency of the service.
07	40-74	35	AN	Account Number	DFI Account Number	Customer Account number, field must be left justified, do not zero fill. Enter significant digits only.
08	75-76	2	AN	Filler	Reserved	Leave Blank
09	77-77	1	AN	Filler	GO OFAC Screening indicator	Leave Blank
10	78-78	1	AN	Filler	Secondary OFAC Screening Indicator	Leave Blank
11	79-79	1	N	Addenda Record Indicator	Addenda Record Indicator	Mandatory - one or more addenda record follows entry. Must = 1
12	80-94	15	N	USD Trace Number	Trace Number	If filled, trace number will be stored on the RBC system in the Electronic Message field. This information will be part of any returns data file. This information is also passed in payments details destined to FI's in Canada.

1st IAT Addenda Record – Customer/Receiver Information

This **mandatory** record for all payments destined to the U.S.A. and to Canada. This record contains information pertaining to the recipient of the payment. This record must follow the IAT Entry Detail Record.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	7
02	02-03	2	N	Addendum Type Code	Addendum Type Code	10
03	04-06	3	AN	Transaction Type Code	Transaction Type Code	<p>Mandatory for payments destined to the USA - This field contains a three-character code used to identify the type of transaction. Select one of the following values:</p> <p>ANN (Annuity), BUS(Business/ Commercial),DEP (Deposit), LOA (Loan), MIS (Miscellaneous), MOR (Mortgage), PEN (Pension), RLS (Rent/Lease), SAL (Salary/Payroll), TAX (Tax), WEB (Internet-Initiated Transaction)</p> <p>For Payments destined to Canada, enter the 3 digit CPA Transaction Code. If left blank, CPA code from Service Profile will default. Refer to Appendix 2</p>
04	07-24	18	N	Foreign Payment Amount	Foreign Payment Amount	<p>Zero Fill or enter the Canadian \$\$ amount if converted</p> <p>\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$cc</p>
05	25-46	22	AN	Filler	Foreign Trace Number	Leave Blank
06	47-81	35	AN	Customer/ Receiver Name	Receiving Company or Individual Name	<p>Enter the name of the Customer or Company. No special characters</p> <p>Note: RBC System will only accept the first 30 characters of this field. Last 5 characters will be truncated.</p>
07	82-87	6	AN	Filler	Reserved	Leave Blank
08	88-94	7	N	Entry Detail Sequence Number	Entry Detail Sequence Number	This number is the same as the last seven digits of the trace number of the related Entry Detail Record or leave blank.

2nd IAT Addenda Record – Originator Information

This **mandatory** record is for all payments destined to the U.S.A. It contains addressing information and must follow the 1st IAT Addenda Record.

For payments destined to Canadian Banks, this record is optional. RBC will not edit or forward information to the Canadian Banks.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	7
02	02-03	2	N	Addendum Type Code	Addendum Type Code	11
03	04-38	35	AN	Client Long Name	Originator Name	Mandatory Enter the Legal name of the originator of the payment. Do not abbreviate or use an acronym.
04	39-73	35	AN	Client Street Address	Originator Street Address	Mandatory Enter the full physical address of the originator of the payment. Do not use PO Box numbers. This must be the street address. Refer to section Originator & Receiver Address Format .
05	74-87	14	AN	Filler	Reserved	Leave Blank
06	88-94	7	N	Entry Detail Sequence Number	Entry Detail Sequence Number	This number is the same as the last seven digits of the trace number of the related Entry Detail Record or leave blank.

3rd IAT Addenda Record – Originator Address Information

This **mandatory** record is for all payments destined to the U.S.A. It contains addressing information of the originating bank and must follow the 2nd IAT Addenda Record.

For payments destined to Canadian Banks, this record is optional. RBC will not edit or forward information to the Canadian Banks.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	7
02	02-03	2	N	Addendum Type Code	Addendum Type Code	12
03	04-38	35	AN	Originator City & Province/State	Originator City & Province/State	This field must contain the city and state or province of the Originator. An asterisk (“*”) MUST be the delimiter between the data elements, and the backslash (“\”) MUST be the terminator following the last data element. Example: Calgary*Alberta\ Refer to section Originator & Receiver Address Format .
04	39-73	35	AN	Originator Country & Postal Code/Zip Code	Originator Country & Postal Code/ Zip Code	Mandatory Country code This field contains the ISO 2 digit country and postal/zip code of the Originator. An asterisk (“*”) MUST be the delimiter between the data elements, and the backslash (“\”) MUST be the terminator following the last data element. Do not use periods or commas. Example: CA*A1B2C3\ Refer to section Originator & Receiver Address Format .
05	74-87	14	AN	Filler	Reserved	Leave Blank
06	88-94	7	N	Entry Detail Sequence Number	Entry Detail Sequence Number	This number is the same as the last seven digits of the trace number of the related Entry Detail Record or leave blank.

4th IAT Addenda Record – Originator Bank Information

This record is for all payments destined to the U.S.A. It contains information pertaining to the Originating Bank and must follow the 3rd IAT Addenda Record.

FOR **BUSINESS** CLIENTS – **OPTIONAL** - RBC will create this record if not included in input file.

FOR **BANK** CLIENTS – **MANDATORY** – if you are the Originating Bank, enter your own banking information. If you are processing on behalf of another Financial Institution, enter that FI's information.

For payments destined to Canadian Banks, this record is optional. RBC will not edit or forward information to the Canadian Banks.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	7
02	02-03	2	N	Addendum Type Code	Addendum Type Code	13
03	04-38	35	AN	Originator Bank Name	Originator DFI Name	Enter the name of the bank originating the payments. For Business Clients must always be Royal Bank of Canada, Toronto For Banks/Financial Institutions originating payments on behalf of their clients: Enter the originating banks information
04	39-40	2	AN	Originating DFI ID Number Qualifier	Originating DFI ID Number Qualifier	This field contains a 2-digit code that identifies the numbering scheme used in the Originating DFI Identification Number Field. Code values for this field are: Enter: 01 National Clearing System Number; 02 BIC Code; or 03 IBAN
05	41-74	34	AN	Originating Bank Identification (Bank/Routing Number)	Originating DFI Identification	For Business Clients Enter - 0003 For Bank/FI clients , enter the appropriate bank number based on the DFI ID # Qualifier.
06	75-77	3	AN	Originating DFI Branch Country Code	Originating DFI Branch Country Code	This field contains a 2-digit code as approved by the International Organization for Standardization (ISO) used to identify the country in which the branch of the bank that originated the entry is located. Left Justify with SPACE in the last digit.
07	78-87	10	AN	Filler	Reserved	Leave Blank
08	88-94	7	N	Entry Detail Sequence Number	Entry Detail Sequence Number	This number is the same as the last seven digits of the trace number of the related Entry Detail Record or leave blank.

5th IAT Addenda Record – Receiving Bank Information

This **optional** record is for all payments destined to the U.S.A and Canada. It contains addressing information pertaining to the destination bank and must follow the 4th IAT Addenda Record.

If this record is not included in the file, RBC will create this addenda record on behalf of all clients.

RBC will not edit or forward information to the Canadian Banks.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	7
02	02-03	2	N	Addendum Type Code	Addendum Type Code	14
03	04-38	35	AN	Customer Bank Name	Receiving DFI Name	Enter the name of the bank that the payment is destined to. Can leave blank if payment destined to Canadian bank.
04	39-40	2	AN	Receiving DFI ID Number Qualifier	Receiving DFI ID Number Qualifier	This field contains a 2-digit code that identifies the numbering scheme used in the Receiving DFI Identification Number Field. Code values for this field are: 01 National Clearing System Number; 02 BIC Code; or 03 IBAN
05	41-74	34	AN	Receiving DFI Identification	Receiving DFI Identification	Enter the DFI Routing number (ABA Number) for the destination bank. For Canadian banks, indicate the Bank and transit number or leave blank.
06	75-77	3	AN	Receiving DFI Branch Country Code	Receiving DFI Branch Country Code	enter the country of the Bank US Or CA (only for payments destined to Canada)
07	78-87	10	AN	Filler	Reserved	Leave Blank
08	88-94	7	N	Entry Detail Sequence Number	Entry Detail Sequence Number	This number is the same as the last seven digits of the trace number of the related Entry Detail Record or leave blank.

6th IAT Addenda Record – Customer/Receiver Address Information

This **mandatory** record is for all payments destined to the U.S.A and Canada. It contains addressing information pertaining to the customer and must follow the 5th IAT Addenda Record (if created) or previous mandatory record.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	7
02	02-03	2	N	Addendum Type Code	Addendum Type Code	15
03	04-18	15	AN	Customer/Receiver Number	Receiver Identification Number	Client Assigned, Left Justify Mandatory information for both US & CA Destined payments
04	19-53	35	AN	Customer/Receiver Street Address	Receiver Street Address	Enter the complete physical street address of the receiver/customer. Do not use PO Box #'s. Refer to section Originator & Receiver Address Format.
05	54-87	34	AN	Filler	Reserved	Leave Blank
06	88-94	7	N	Entry Detail Sequence Number	Entry Detail Sequence Number	This number is the same as the last seven digits of the trace number of the related Entry Detail Record or leave blank.

7th IAT Addenda Record – Customer/Receiver Address Information

This **mandatory** record is for all payments destined to the U.S.A. It contains addressing information of the receiver/customer and must follow the 6th IAT Addenda Record.

For payments destined to Canadian Banks, this record is optional. RBC will ignore it's contents

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	7
02	02-03	2	N	Addendum Type Code	Addendum Type Code	16
03	04-38	35	AN	Customer/Receiver City & Province/State	Receiver City & Province /State	This field contains the city and, if applicable, the state or province of the Receiver. An asterisk (“*”) MUST be the delimiter between the data elements, and the backslash (“\”) MUST be the terminator following the last data element. Example: New York*New York\ Refer to section Originator & Receiver Address Format.
04	39-73	35	AN	Customer/Receiver Country & Postal Code/Zip Code	Receiver Country & Postal Code/Zip Code	Mandatory Country Code This field contains the country and postal code of the Receiver. An asterisk (“*”) MUST be the delimiter between the data elements, and the backslash (“\”) MUST be the terminator following the last data element. Do not use periods or commas. Example: US*123456789\ Refer to section Originator & Receiver Address Format.
05	74-87	14	AN	Filler	Reserved	Leave Blank
06	88-94	7	N	Entry Detail Sequence Number	Entry Detail Sequence Number	This number is the same as the last seven digits of the trace number of the related Entry Detail Record or leave blank.

IAT Addenda Record for Remittance Information

This **optional** record will be accepted for payments destined to the U.S.A. A maximum of two optional remittance addenda records may be included with each IAT Entry.

NOTE: The total number of Optional Remittance Records and Foreign Correspondent Bank Records cannot exceed five.

The ultimate beneficiary (if not the Originator of the ACH PAD payment) must be identified in the Payment Related Information Field of the IAT Remittance Addenda Record when the payment is part of a “split transaction”.

For Canadian destined payments, this information will be ignored.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	7
02	02-03	2	N	Addendum Type Code	Addendum Type Code	17
03	04-83	80	AN	Payment Related Information	Payment Related Information	<p>Max 80 characters of remittance information. Formatting of Remittance information is normally provided by the receiving customer/vendor.</p> <p>If format information contains the Country - only use the ISO 2 Digit Country Code.</p> <p>Separate fields with asterisks * and end with a backslash \</p> <p>Format for ultimate beneficiary of funds: Example: Johann Schmidt*Mainzer Landstrasse 201*60326 Frankfurt am Main*DE\</p>
04	84-87	4	N	Addenda Sequence	Addenda Sequence Number	The first addenda sequence number must always be a “1”.
05	88-94	7	N	Entry Detail Sequence Number	Entry Detail Sequence Number	This number is the same as the last seven digits of the trace number of the related Entry Detail Record or leave blank.

IAT Addenda Record for Foreign Correspondent Bank Information

Each Foreign Correspondent Bank involved in the processing of an IAT entry must be identified within an Addenda Record for IAT Correspondent Bank Information. A Foreign Correspondent Bank is defined as any bank outside of the United States. There can be a maximum of 3 to 5 Correspondent Addenda Records depending on the number of remittance information addenda used.

For **Business clients** – this record is optional.

For **Banks/FI clients – MANDATORY** – if you are processing on behalf of another financial institution, you are required to create one Correspondent Record that represents your bank information. You can enter up to 4 Correspondent banks. RBC reserves one Correspondent bank Addenda record.

RBC will create one record if not included with your file.

1. Royal Bank of Canada Toronto, Bank # 0003

NOTE: The total number of Optional Remittance Records and Foreign Correspondent Bank Records cannot exceed five.

RBC will not edit or forward information contained in this record to the Canadian Banks

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	7
02	02-03	2	N	Addendum Type Code	Addendum Type Code	18
03	04-38	35	AN	Correspondent Bank Name	Correspondent Bank Name	Enter the name of the Correspondent Bank
04	39-40	2	AN	Correspondent Bank ID Number Qualifier	Correspondent Bank ID Number Qualifier	This field contains a 2-digit code that identifies the numbering scheme used in the Receiving DFI Identification Number Field. Code values for this field are: 01 National Clearing System Number; 02 BIC Code; or 03 IBAN
05	41-74	34	AN	Correspondent Bank Identification Number	Correspondent Bank Identification Number	Enter the applicable bank number associated with the Bank ID Number Qualifier for the Correspondent Bank.
06	75-77	3	AN	Correspondent Bank Branch Country Code	Correspondent Bank Branch Country Code	This field contains a 2-digit code as approved by the International Organization for Standardization (ISO) used to identify the country in which the branch of the Correspondent Bank is located. Left Justify – Space fill the last digit.
07	78-83	6	AN	Filler	Reserved	Leave Blank
08	84-87	4	N	Addenda Sequence	Addenda Sequence Number	The first addenda sequence number must always be a "1" and each subsequent record will increment to a maximum of 5
09	88-94	7	N	Entry Detail Sequence Number	Entry Detail Sequence Number	This number is the same as the last seven digits of the trace number of the related Entry Detail Record or leave blank.

Non Cross Border Payment Formatted Records

**Payments Destined to Canadian Banks &
or US Market (USA Domestic Payments)**

USING CCD/PPD STANDARD ENTRY CLASS CODES

CCD/PPD - Company/Batch Header Record - Except IAT

For Payments destined to Canadian Banks or USA Domestic Payments.

Note: USA domestic payments are clients who are located in the United States and are originating payments from a USA Financial Institution and their payments are destined to USA Financial Institutions.

This mandatory record identifies the client and describes the service utilized. The information contained in the company/batch record applies uniformly to all subsequent entry detail records in the batch. Only one service identifier is permitted per batch.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	5
02	02-04	3	N	Service Identifier	Service Class Code	225 Debit transactions
03	05-20	16	AN	Client Short Name	Company Name	For customer statements. This will appear on most bank statements. If left blank, client short name from client profile will default. Do not enter ZEROS in this field.
04	21-21	1	AN	Filler		Leave blank
05	22-23	2	AN	Foreign Exchange Ind	Foreign Exchange Ind	FV fixed to variable VF variable to fixed FF fixed t fixed or leave blank
06	24-26	3	AN	Origination Curr	Origination Curr	USD or CAD or leave blank
07	27-28	2	AN	Origination Country	Origination Country	CA or leave blank
08	29-31	3	AN	Destination Curr	Destination Curr	CAD or USD or Leave Blank. If blank or not CAD/USD = Defaults to the currency of the service.
09	32-40	9	AN	Foreign Exchange Rate	Foreign Exchange Rate	Max 9 digits including decimal point or leave blank
10	41-50	10	AN	Client Number	Company Identification	10-digit client number as follows: 6-digit client number assigned by RBC and 4-digit subsidiary number assigned by the client. (Where no subsidiary exists insert zeros as the last 4 digits).
11	51-53	3	AN	Standard Entry Class Code	Standard Entry Class Code	PPD Personal Payments CCD Corporate Payments

**RBC ACH094 Debit File
Layout Specification**

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
12	54-63	10	AN	Company Entry Description	Company Entry Description	For Canadian Banks – information will be in the Electronic Message field. For USA Payments - Mandatory – provide a description of the purpose of the entry which will be displayed to the Receiver. Examples: GAS BILL REG.SALARY INS.PREM PURCHASE; Do not use Invoice or Reference Numbers. If left blank, default will be ACH DR
13	64-69	6	AN	Filler	Company Descriptive Date	Blanks or information will be ignored
14	70-75	6	N	Due Date	Effective Entry Date	Payment date, format YYMMDD. <u>For Payments Destined to CAD:</u> For Debits: can be 173 days in the past or the future. <u>For Domestic USA Payments:</u> today or greater maximum of 173 days.
15	76-78	3	N	Filler	Settlement Date (Julian)	Blanks or information entered will be ignored
16	79-79	1	AN	Originator Status Code	Originating Status Code	1
17	80-87	8	N	Financial Institution	Originating DFI Identification	Blanks or information entered will be ignored.
18	88-94	7	N	Batch Number	Batch Number	Must be sequential within file

CCD/PPD - Entry Detail Record – Except IAT

For Payments Destined To Canadian Banks or USA Domestic Payments

The entry detail record contains the basic information to post the transaction to the customer's account.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	6
02	02-03	2	N	Transaction Code	Transaction Code	27 Demand debit 28 Demand pre-note 37 Savings debit 38 Savings pre-note Enter the appropriate transaction code. This is a mandatory field for all USA destined payments. For payments destined to Canada, the CPA transaction code from your profile will default on all CA destined payments.
Canadian Domestic Banking Info						
03	04-07	4	N	CAN Bank Number	Receiving DFI number	0999 – financial institution number
04	08-12	5	AN	CAN Branch Transit Number		99999 – financial branch number institution Although this field is has been defined by NACHA rules to be "AN", RBC can only accept numerical information.
USA Domestic Banking Info						
03/04	04-12	9	AN	USA Bank ABA Routing Number	Receiving DFI Identification Number	Enter the ABA routing number.
05	13-29	17	AN	Account Number	DFI Account Number	Customer Account number, field must be left justified, do not zero fill. Enter significant digits only.
06	30-39	10	N	Amount	Amount	Format \$\$\$\$\$\$00
07	40-54	15	AN	Customer Number	Individual Identification	Client Assigned, Left Justify
08	55-76	22	AN	Customer Name	Individual Name	Mandatory
09	77-78	2	AN	Destination Country	Discretionary Data	Mandatory Destination Country of Payment: CA Canada US United States
10	79-79	1	N	Addenda Record Indicator	Addenda Record Indicator	Will be ignored for payment destined to Canadian bank

**RBC ACH094 Debit File
Layout Specification**

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
11	80-94	15	N	USD Trace Number	Trace Number	If filled, trace number will be stored on the GRADS system in the Electronic Message field. This information will be part of any returns data file. This information is passed to FI's in Canada.

Common Records – CCD/PPD/IAT

Company/Batch Control Record

Please note: RBC does NOT use or edit the Company/Batch Control Record. The company/batch control record contains the counts, hash totals, and the total dollar controls for the preceding detail entries within the indicated batch.

This record is used for all variations of the ACH format. Should follow the last entry detail record of a batch:

- Payments destined to the United States & Canada using the IAT format.
- Payments destined to Canada using the CCD/PPD format.
- USA Market Clients – payments originating and destined to US Financial Institutions.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	8
02	02-04	3	N	Service Identifier	Service Class Code	225 Debit transactions only
03	05-10	6	N	Entry/Addenda Count	Entry/Addenda Count	Total number of addenda records in file
04	11-20	10	N	Entry Hash	Entry Hash	Not applicable
05	21-32	12	N	Total Debit Entry Dollar Amount	Total Debit Entry Dollar Amount	Total dollar amount for all detail debit records. Format \$\$\$\$\$\$\$\$¢¢
06	33-44	12	N	Total Credit Entry Dollar Amount	Total Credit Entry Dollar Amount	Zero fill
07	45-54	10	AN	Client Number	Immediate Origin	10-digit client number as follows: 6-digit client number assigned by RBC and 4-digit subsidiary number assigned by the client. (Where no subsidiary exists insert zeros as the last 4 digits).
08	55-73	19	AN	Message Authentication Code	Message Authentication Code	Blank
09	74-79	6	AN	Reserved	Reserved	Blank
10	80-87	8	N	Message Authentication Code	Message Authentication Code	Blank
11	88-94	7	N	Batch Number	Batch Number	Each Batch number must be ascending and incremented by 1

File Control Record – Trailer Record

The file record contains dollar, entry, and hash total accumulations from the company/batch control records in the file. This record also contains counts of the number of blocks and the number batches within the file (batched data transmitted to a single destination).

This record is used for for all variations of the ACH format. Should be the last record of the file:

- Payments destined to the United States & Canada using the IAT format.
- Payments destined to Canada using the CCD/PPD format.
- USA Market Clients – payments originating and destined to US Financial Institutions.

Field #	Character Position	Field Size	Format	RBC Field Name	NACHA Field Name	Data Requirements
01	01-01	1	N	Record Type	Record Type	9
02	02-07	6	N	Block Count	Batch Count	Total number of batch header records, (type 5) in the file
03	08-13	6	N	Block Count	Block Count	Total number of all physical blocks in the file.
04	14-21	8	N	Entry Addenda Count	Entry Addenda Count	Total number of detail records (Type 6) PLUS addenda records (Type 7) in the file.
05	22-31	10	N	Filler	Entry Hash Total	Zero fill
06	32-43	12	N	Total Debit Dollar Amount	Total Debit Entry Dollar Amount in File	Total number of detail debit records. Format \$\$\$\$\$\$\$\$¢¢
07	44-55	12	N	Total Credit Dollar Amount	Total Credit Entry Dollar Amount in File	Zero fill
08	56-94	39	AN	Filler	Reserved	Blank

Appendix 1 – USA Transaction Codes

For all payments destined to accounts held at banks in the United States, one of the following codes must be used.

Tran Code	Transaction Code Description	Tran Code	Transaction Code Description
Demand Accounts Debit Records		Savings Accounts Debit Records	
27	Automated Payment	37	Automated Payment
28	Pre-notification of Demand Debit (zero-dollar)	38	Pre-notification of Savings Debit (zero-dollar)
Demand Accounts Credit Records		Savings Accounts Credit Records	
22	Automated Deposit	32	Automated Deposit
23	Pre-notification of Demand Credit (zero-dollar)	33	Pre-notification of Savings Credit (zero-dollar)

Appendix 2 – Canadian CPA Transaction Codes

For the most recent listing of transactions codes refer to the ACH Direct Payments & Deposits Resource Centre. Quick Reference - Payment Transaction Codes

English: <https://www.rbcroyalbank.com/ach/>

French: <https://www.rbcroyalbank.com/ach-fr/>

Appendix 3 – File Transmission Routing Records

Files which are submitted using file transmission services such as Web File Transfer or FTP SSL, will require a routing record which will be the first record in the file. For Dedicated or Private Connectivity solutions such as Connect:Direct, or SWIFTNet File Act, please contact RBC's Client Connectivity Team directly for assistance.

The standard convention of this File Qualifier is as follows:

These header records will accommodate French Characters within the file.

- Test Input with full record length of 94 bytes
\$\$\$AA01ACH0094[TEST[NL\$\$
- Production Input of full record length of 94 bytes:
\$\$\$AA01ACH0094[PROD[NL\$\$

Existing Clients may also use the following header records.

These header records will not accommodate French Characters within the file. French Characters may be changed to blanks or other letters.

- Test Input with full record length of 94 bytes
\$\$\$AAPAACH0094[TEST[NL\$\$
- Production Input of full record length of 94 bytes
\$\$\$AAPAACH0094[PROD[NL\$\$
- Test Input with record broken down into 80 byte segments
\$\$\$AAPAACH0094[TEST[80\$\$
- Production Input with record broken down into 80 byte segments
\$\$\$AAPAACH0094[PROD[80\$\$

END