BAI FORMAT

WEB BUSINESS BANKING - REPORTING
Version 1.1

TD Commercial Banking

BAI Format

BAI Format - Overview

Some customers may download their files in Bank Administration Institute (BAI) format which was developed as the basis for uniform formats and terminology by the Institute. Customers can use their own software application to generate spreadsheets or reports from the data in the BAI file.

In BAI format, each entry is separated by a comma and the last character is followed by a slash (/). **The comma is not counted as part of the entry length**

Record Types

BAI files via Web Business Banking Balance Reporting include the following types of records:

Record Code	Record Name
01	File Header
02	Group header
03	Account Identifier and Summary/Status
16	Account Transaction Detail
88	Continuation of Account Summary Record
49	Account Trailer
98	Group Trailer
99	File Trailer

These Record Types will be described in more detail beginning on page 2 of this document.
A sample file can be found in the Appendix at the end of this document.

Type Codes

The **type code** defines the value that immediately follows it. Each code is described in the table below

TYPE CODE	DESCRIPTION
040	Opening Account Balance
045	Closing Account Balance
056	Loan Balance
100	Total Credits
108	Credit Detail
400	Total Debits
409	Debit Detail

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Table 1: File Header

The File Header is the first record in a BAI format file. It always has a record code of **01**.
Ex:

```
01,0004,12345,060321,0829,001,80,1,2/
02,12345,0004,1,060317,,CAD,/
03,10200123456,CAD,040,+000000000000,,,045,+000000000000,,/
```

ENTRY NO.	CHARACTER POSITION	ENTRY LENGTH	DESCRIPTION	EXAMPLE
1	1	2	**Record Code**	01,*
2	4	4	Sender	0004,* (TD Bank)
3	9	5	Receiver (customer number)	12345,
4	15	6	Date File Created (YYMMDD)	060321,
5	22	4	Time File Created (HHMM)	2400,
6	27	3	File ID Number	001, (daily)
7	31	2	Physical Record Length	80,*
8	34	1	Block Size	1,*
9	36	1	Version Number	2/* **

Value never changes
*** / indicates end of logical record*

Table 2: Group Header

The Group Header is the second record in a BAI format file. It always has a record code of **02**.
Example:

```
01,0004,12345,060321,0829,001,80,1,2/
02,12345,0004,1,060317,,CAD,/
03,10200123456,CAD,040,+000000000000,,,045,+000000000000,,/
```

ENTRY NO.	CHARACTER POSITION	ENTRY LENGTH	DESCRIPTION	EXAMPLE
1	1	2	Record Code	02,*
2	4	5	Receiver (customer number)	12345,
3	10	4	Sender	0004,* (TD Bank)
4	15	1	Group Status	1,*
5	17	6	As-of-Date (YYMMDD)	060317,
6	24	0	As-of-Time (n/a)	,
7	25	3	Currency Code	CAD, or USD,
8	29	0	As-of-Date Modifier (n/a)	/**

* Value never changes
** / indicates end of logical record

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Table 3: Account Identifier and Summary/Status for Current (CDA), Personal (PDA), and Loan accounts

CDA and PDA accounts

This record contains information on opening and closing balances for CDA and PDA accounts. It always has a record code of **03**.

Example:
```
01,0004,12345,060321,0829,001,80,1,2/
02,12345,0004,1,060317,,CAD,/
03,10200123456,CAD,040,+000000000000,,,045,+000000000000,,/
```

ENTRY NO.	CHARACTER POSITION	ENTRY LENGTH	DESCRIPTION	EXAMPLE
1	1	2	Record Code	03,*
2	4	11	Account Number	10200123456,
3	16	3	Currency Code	CAD, or USD,
4	20	3	Type Code	040,*
5	24	13	Opening Balance	+123456789012,
6	38	0	Item Count (n/a)	,
7	39	0	Funds Type (n/a)	,
8	40	3	Type Code	045,*
9	44	13	Closing Balance	+123456789012,
10	58	0	Item Count (n/a)	,
11	59	0	Funds Type (n/a)	/**

* *Value never changes*
** */ indicates end of logical record*

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Loan Account

This record contains the opening and closing balances for loan accounts. It always has a record code of **03**. Each entry of the loan account identifier and summary record is described below:

Example:

```
01,0004,12345,060321,0829,001,80,1,2/
02,12345,0004,1,060317,,CAD,/
03,1020123456701,CAD,056,+000000000000,,V,060201,,056,+000000000000,,
V,060228,/
```

ENTRY NO.	CHARACTER POSITION	ENTRY LENGTH	DESCRIPTION	EXAMPLE
1	1	2	Record Code	03,*
2	4	13	Account Number	1020123456701,
3	18	3	Currency Code	CAD,
4	22	3	Type Code	056,*
5	26	13	Opening Balance	+123456789012,
6	40	0	Item Count (n/a)	,
7	41	1	Funds Type	V,= value dated
8	43	6	Value Date (YYMMDD)	060201,
9	50	0	Value Time (HHMM)	,
10	51	3	Type Code	056,*
11	55	13	Closing Balance	+123456789012,
12	69	0	Item Count (n/a)	,
13	70	1	Funds Type	V,= value dated
14	72	6	Value Date (YYMMDD)	060228,
15	79	0	Value Time (HHMM)	/**

* Value never changes
** / indicates end of logical record

Note: The 03 record for loan accounts contains value date information but NO summary information. There is no 88 record for loan accounts

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Table 4: Continuation of Account Summary Record - Current (CDA) and Personal (PDA) Accounts

This record is a continuation of the account identifier and summary record (see Table 3) and contains value date and summary information (i.e. total credits and debits as well as total credit and debit dollar amounts). It always has a record code of **88**.

Example:

```
01,0004,12345,060321,0829,001,80,1,2/
02,12345,0004,1,060317,,CAD,/
03,10200123456,CAD,040,+000000000000,,,045,+000000000000,,/
88,100,000000000208500,00003,V,060316,,400,000000000208500,00008,
V,060316,/
```

ENTRY NO.	CHARACTER POSITION	ENTRY LENGTH	DESCRIPTION	EXAMPLE
1	1	2	Record Code	88,*
2	4	3	Type Code (total credits)	100,*
3	8	15	Total Credit $ Amount	123456789012345,
4	24	5	Total # of Credits (item count)	12345,
5	30	1	Funds Type	V,= value dated
6	32	6	Value Date (YYMMDD)	060316,
7	39	0	Value Time (HHMM)	,
8	40	3	Type Code	400,*
9	44	15	Total Debit $ Amount	123456789012345,
10	60	5	Total # of Debits (item count)	12345,
11	66	1	Funds Type	V,= value dated
12	68	6	Value Date (YYMMDD)	060316,
13	75	0	Value Time (HHMM)	/**

* Value never changes
** / indicates end of logical record

The 03 record for loan accounts contains value date information but NO summary information. There is no 88 record for loan accounts.

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Table 5: Account Transaction Detail

The account transaction detail record contains information about **current** and **personal deposit account** activity. It always has a record code of **16**.
Example:

```
01,0004,12345,060321,0829,001,80,1,2/
02,12345,0004,1,060317,,CAD,/
03,10200123456,CAD,040,+000000000000,,,045,+000000000000,,/
88,100,000000000208500,00003,V,060316,,400,000000000208500,00008,V,060316,/
16,409,000000000002500,V,060316,,,,RETURNED CHEQUE        /
```

ENTRY NO.	CHARACTER POSITION	ENTRY LENGTH	DESCRIPTION	EXAMPLE
1	1	2	Record Code	16,*
2	4	3	Type Code (credit/debit)	108, or 409,
3	8	15	$ Amount	123456789012345,
4	24	1	Funds Type	V,= value dated
5	26	6	Value Date (YYMMDD)	060316,
6	33	0	Value Time (n/a)	,
7	34	0	Bank Reference # (n/a)	,
8	35	0	Customer Reference # (n/a)	,
9	36	20	Description	Returned Cheque /**

There is no 16 record for loan accounts.

  * Value never changes
** / indicates end of logical record

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Table 6: Corporate Transfer Service (CTS)
Transaction Detail

The CTS transaction detail record contains information about **CTS activity**. It always has a record code of **16**.

Example:

```
01,0004,12345,060321,0829,001,80,1,2/
02,12345,0004,1,060317,,CAD,/
03,10200123456,CAD,040,+000000000000,,,045,+000000000000,,/
88,100,000000000208500,00003,V,060316,,400,000000000208500,00008,V,060316,/
16,108,0000000254671,V,060316,,01023,123456789,STORE NAME          /
```

ENTRY NO.	CHARACTER POSITION	ENTRY LENGTH	DESCRIPTION	EXAMPLE
1	1	2	Record Code	16,*
2	4	3	Type Code (credit/debit)	108, or 409,
3	8	13	$ Amount	1234567890123,
4	22	1	Funds Type	V,= value dated
5	24	6	Value Date (YYMMDD)	060316,
6	31	0	Value Time (n/a)	,
7	32	5	Bank Reference # (branch)	1234,
8	38	9	Customer Reference #	123456789,
9	48	20	Customer Ref. Description	Store Name /**

* Value never changes
** / indicates end of logical record

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Table 7: Centralized Money Management (CMM) Transaction Detail

The CMM transaction detail record contains information about **CMM activity**. It always has a record code of **16**.

Example:

```
01,0004,12345,060321,0829,001,80,1,2/
02,12345,0004,1,060317,,CAD,/
03,10200123456,CAD,040,+000000000000,,,045,+000000000000,,/
88,100,000000000208500,00003,V,060316,,400,000000000208500,00008,V,060316,/
16,108,000000000187938,V,060316,,,,Store104              /
```

ENTRY NO.	CHARACTER POSITION	ENTRY LENGTH	DESCRIPTION	EXAMPLE
1	1	2	Record Code	16,*
2	4	3	Type Code (credit/debit)	108, or 409,
3	8	15	$ Amount	123456789012345,
4	24	1	Funds Type	V,= value dated
5	26	6	Value Date (YYMMDD)	060316,
6	33	0	Value Time (n/a)	,
7	34	0	Bank Reference # (n/a)	,
8	35	0	Customer Reference # (n/a)	,
9	36	20	Text Description	Store104 /**

* Value never changes
** / indicates end of logical record

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Table 8: Account Trailer

The account trailer record contains information on the **account control total** and the **number of records**. The account control total is the sum of the amount values in the preceding type 03, 16 and 88 records associated with the account. The number of records is the total of all records in the account, including the account trailer (type **49**) record.

Example:
```
01,0004,12345,060321,0829,001,80,1,2/
02,12345,0004,1,060317,,CAD,/
03,10200123456,CAD,040,+000000000000,,,045,+000000000000,,/
88,100,000000000208500,00003,V,060316,,400,000000000208500,00008,V,060316,/
16,108,000000000187938,V,060316,,,, Store104          /
49,+00000000000446000,000000009/
```

ENTRY NO.	CHARACTER POSITION	ENTRY LENGTH	DESCRIPTION	EXAMPLE
1	1	2	Record Code	49,*
2	4	18	Account Control Total	+ 12345678912345678,
3	23	9	Number of Records	000000009/**

* Value never changes
** / indicates end of logical record

Table 9: Group Trailer

The group trailer is the second last record in a BAI format file. This record contains information on the **group control total**, the **number of accounts** and the **number of records**. The group control total is the sum of the account control totals in the group. The number of records is the total of all type 02, 03, 16, 49, 88 and 98 records in the group.

Example:
```
01,0004,12345,060321,0829,001,80,1,2/
02,12345,0004,1,060317,,CAD,/
03,10200123456,CAD,040,+000000000000,,,045,+000000000000,,/
88,100,000000000208500,00003,V,060316,,400,000000000208500,00008,V,060316,/
16,108,000000000187938,V,060316,,,, Store104          /
49,+00000000000446000,000000009/
98,+00000000001280000,000000002,000000025/
```

ENTRY NO.	CHARACTER POSITION	ENTRY LENGTH	DESCRIPTION	EXAMPLE
1	1	2	Record Code	98,*
2	4	18	Group Control Total	+12345678912345678,
3	23	9	Number of Accounts	000000002,
4	33	9	Number of Records	000000025/**

* Value never changes
** / indicates end of logical record

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Table 10: File Trailer

The file trailer is the last record in a BAI format file. This record contains information on the **file control total**, the **number of groups** and the **number of records**. The file control total is the sum of the group control totals in the file. The number of groups is the sum of type 02 records in the file. The number of records is the sum of all records in the file, including the file trailer (type **99**) record.

Example:

```
01,0004,12345,060321,0829,001,80,1,2/
02,12345,0004,1,060317,,CAD,/
03,10200123456,CAD,040,+000000000000,,,045,+000000000000,,/
88,100,000000000208500,00003,V,060316,,400,000000000208500,00008,V,060316,/
16,108,000000000187938,V,060316,,,, Store104          /
49,+0000000000446000,000000009/
98,+00000000001280000,000000002,000000025/
99,+00000000001280000,000000001,000000027/
```

ENTRY NO.	CHARACTER POSITION	ENTRY LENGTH	DESCRIPTION	EXAMPLE
1	1	2	Record Code	99,*
2	4	18	File Control Total	+12345678912345678,
3	23	9	Number of Groups	000000001,
4	33	9	Number of Records	000000027/**

* Value never changes
** / indicates end of logical record

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Appendix

Sample File Layout

The following is a sample of a Statement of Account downloaded file which contains balance, summary and detail information for 2 days, March 16, 2006 and March 17th 2006. Note that the date of the file download is March 21, 2006.

```
01,0004,12345,060321,0829,001,80,1,2/
02,12345,0004,1,060317,,CAD,/
03,10200123456,CAD,040,+000000000000,,,045,+000000000000,,/
88,100,000000000208500,00003,V,060316,,400,000000000208500,00
008,V,060316,/
16,409,000000000002500,V,060316,,,,RETURNED CHEQUE     /
16,409,000000000090000,V,060316,,,,RTN-UNKNOWN         /
16,409,000000000000500,V,060316,,,,RTD CHQ SERVICE CHRG/
16,108,000000000203500,V,060316,,,,TFR 1020 0345678    /
16,108,000000000002500,V,060316,,,,MACLEOD MALL        /
16,108,000000000002500,V,060316,,,,MASCOUCHE QUE       /
16,409,000000000020000,V,060316,,,,1000 ISLANDS MALL   /
16,409,000000000090000,V,060316,,,,PENHORA MALL         /
16,409,000000000002000,V,060316,,,,CAPILANO MALL       /
16,409,000000000002500,V,060316,,,,GALERIES LA CAPITALE/
16,409,000000000001000,V,060316,,,,PLAZA ROCK FOREST   /
49,+00000000000834000,000000014/
03,10200123456,CAD,040,+000000000000,,,045,+000000000000,,/
88,100,000000000111500,00002,V,060317,,400,000000000111500,00
004,V,060317,/
16,108,000000000011500,V,060317,,,,TFR 1020 0345678    /
16,108,000000000100000,V,060317,,,,MONTREAL            /
16,409,000000000100000,V,060317,,,,GRANDFALL  NB        /
16,409,000000000009000,V,060317,,,,HAMILTON  ON        /
16,409,000000000002000,V,060317,,,,WOODSTOCK  NB        /
16,409,000000000000500,V,060317,,,,GALERIES RICHELIEU  /
49,+00000000000446000,000000009/
98,+0000000001280000,000000002,000000025/
99,+0000000001280000,000000001,000000027/
```

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