

EASI Link® Service

Appendix D - BAI2 File Specifications

Version 12.4.0

City National Bank
Treasury Management Services
350 South Grand St., 2nd Floor
Los Angeles, CA 90071
(800) 599-0020 (Toll Free)
FAX (213) 673-9459
Copyright © 2018 by City National Bank

CONFIDENTIAL

All rights reserved. No part of this User Guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without the written permission of City National Bank.

The contents of this User Guide are confidential and it is provided with the understanding that the User will maintain the User Guide and its contents in confidence within the User's organization on a "need to know" basis only. The business processes and methods of doing business described in this User Guide are proprietary to City National Bank. Use of these processes or methods independent of City National Bank and the EASI Link Service is strictly prohibited.

Copyright © 2018, City National Bank

TABLE OF CONTENTS

Overview 3

Record Descriptions..... 3

File Header..... 4

Group Header..... 4

Account Identifier and Summary/Status 5

Transaction Detail 5

Continuation Record 6

Account Trailer 6

Group Trailer 7

File Trailer 7

Custom Type Codes..... 8

Extended Transaction Detail..... 8

Overview

EASI creates files conform to the Bank Administration Institute's Cash Management Balance Reporting Specification, Version 2 (BAI2) for distribution to clients. The BAI2 specification is available at http://www.x9.org/standards/free/X9_BAI_Codes_Version_2_Cash_Management_Balance_Reporting.pdf.

Fields within records are delimited by commas ",". The end of a record that does not include text is indicated by the delimiter slash "/". The end of a record ending in text continues until another record that is not a continuation (88) record begins.

Record Descriptions

BAI2 files include the following types of records: both the sisters are married and have small

Record Code	Record Name	Purpose
01	File Header	The file header marks the beginning of a file. It identifies the sender and receiver of the transmission, and it describes the structure of the file.
02	Group Header	The group header identifies a group of accounts that are from the same originator and includes the same as-of-date and as-of-time.
03	Account Identifier and Summary/Status	This record identifies the account number and reports activity summary and account status information.
16	Transaction Detail	This record is used for transmission of detail transaction information. Transaction detail may include two reference numbers and a free-form alphanumeric text.
49	Account Trailer	The Account Trailer record provides account control totals.
88	Continuation	A Continuation record is used when data exceed the maximum physical record length, or whenever it is desirable to continue data into an additional record. It may follow any record type, including another "continuation" (88) record.
98	Group Trailer	This record provides group control totals.
99	File Trailer	This record provides file control totals.

File Header

The file header marks the beginning of a file. It identifies the sender and receiver of the transmission, and it describes the structure of the file.

Field Name	Format	Field Description
Record Code	Numeric	01
Sender Identification	Alphanumeric	122016066
Receiver Identification	Alphanumeric	EASI Site ID
File Creation Date	YYMMDD	Sender Date
File Creation Time	HHMM	Military Format (2400); sender time zone
File Identification Number	Numeric	Identification number defined by the sender. The number must be new for each file with the same file creation date. Used to uniquely identify those files transmitted between a sender and a receiver on a given date.
Physical Record Length	Numeric	Default (variable length records)
Block Size	Numeric	Default (variable block size)
Version Number	Numeric	2

Group Header

The group header identifies a group of accounts that are from the same originator and includes the same as-of-date and as-of-time.

Field Name	Format	Field Description
Record Code	Numeric	02
Ultimate Receiver Identification	Alphanumeric	EASI Site ID
Originator Identification	Alphanumeric	122016066
Group Status	Numeric	1
As-of-Date	YYMMDD	Originator date
As-of-Time	HHMM	Military Format (2400); originator time zone. For reference only.
Currency Code	Alpha	Default (USD)
As-of-Date Modifier	Numeric	2 = Final previous-day data 3 = Interim same-day data As-of-Date Modifier does not affect processing. For reference only.

Account Identifier and Summary/Status

This record identifies the account number and reports activity summary and account status information. An 03 record must be used to identify each account. 03 records cannot report transaction detail. Detail is reported in record 16.

Field Name	Format	Field Description
Record Code	Numeric	03
Customer Account Number	Alphanumeric	Account Number
Currency Code	Alpha	Default (Group Currency Code)
* Type Code	Numeric	Uniform BAI Balance Reporting Type Codes. See Appendix A of the BAI2 specification. For EASI custom type codes, see "Custom Type Codes" section in this document.
* Amount	Numeric	Expressed without a decimal. The implied decimal places is 2 places. Status amounts are signed positive "+" or negative "-". Default of sign is positive. Summary amounts may only be positive or unsigned. Default of field indicates that no amount is being reported.
Item Count	Numeric	For summary type codes only – (100,400,110)
Funds Type	Alpha	Default (Unknown)

*Type 03 records may report several different status and/or summary amounts for the same account. For example, a single 03 record might report ledger balance and available balance, as well as the amount, item count and funds type for total credits and total debits. The "Type Code," "Amount," "Item Count" and "Funds Type" fields are repeated to identify each status or summary type.

Transaction Detail

This record reports transaction detail with accompanying text and reference numbers.

Field Name	Format	Field Description
Record Code	Numeric	16
Type Code	Numeric	Uniform BAI Balance Reporting Type Codes. See Appendix A of the BAI2 specification. For EASI custom type codes, see "Custom Type Codes" section in this document.

Appendix D – BAI2 File Specifications

Amount	Numeric	Always positive (unsigned). Expressed without a decimal. The implied decimal places is 2 places. Default of field indicates that no amount is being reported.
Funds Type	Alpha	If funds type = V, the next two fields are value date (YYMMDD) and value time in military format (2400).
Bank Reference Number	Alphanumeric	Defined by the originator.
Customer Reference Number	Alphanumeric	Defined by the originator. The Customer Reference Number will be the check number for the Transaction Detail type codes 474, 475 and 395.
Text	Alphanumeric	The transaction code description and additional data following will be on the 88 record. See "Extended Transaction Detail" in this document.

Continuation Record

Record 88 is a Continuation record. If the data in any type of record exceed the physical record size, or if dividing the record is desirable for any other reason, an 88 record allows the data to continue in the same format. The continuation is labeled as a type 88 record. A Continuation (88) record may follow any type of record, including another Continuation (88).

Any record type may be continued by a type 88 Continuation record. A field may not be split across physical records unless that field is a text field.

Field Name	Format	Field Description
Record Code	Numeric	88
(Next Field)		The "Record Code" field is followed by a continuation of the preceding record. The format is exactly the same as in the preceding record. If the preceding record ended within a text field, the text continues in the 88 record. If the preceding record did not end within the text field, the 88 record continues with whatever field follows the final field in the preceding physical record.

Account Trailer

The Account Trailer record provides account level control totals.

Appendix D – BAI2 File Specifications

Field Name	Format	Field Description
Record Code	Numeric	49
Account Control Total	Numeric	Algebraic sum of all “Amount” fields in the preceding type 03 record and all type 16 and 88 records associated with that account. This field includes the sign (“+” or “-”) for the total. If no sign precedes the total, the default is positive.
Number of Records	Numeric	Integer. The total number of records in the account, including the 03 record and all 16 and 88 records, and including this account trailer 49 record.

Group Trailer

The Group Trailer record provides group level control totals.

Field Name	Format	Field Description
Record Code	Numeric	98
Group Control Total	Numeric	Algebraic sum of account control totals in this group. This field includes the sign (“+” or “-”) for the total. If no sign precedes the total, the default is positive.
Number of Accounts	Numeric	Integer. The number of 03 records in this group.
Number of Records	Numeric	Integer. The total number of all records in this group. Include the 02, all 03, 16, 49, and 88 records, and this 98 record.

File Trailer

The File Trailer record provides file control totals.

Field Name	Format	Field Description
Record Code	Numeric	99
File Control Total	Numeric	Algebraic sum of all group control totals in this file. This field includes the sign (“+” or “-”) for the total. If no sign precedes the total, the default is positive.
Number of Groups	Numeric	Integer. The number of 02 records in this file.

Appendix D – BAI2 File Specifications

Number of Records	Numeric	Integer. Total number of records of all codes in the file, including Continuation records, headers and trailers (and including this 99 record).
-------------------	---------	---

Custom Type Codes

BAI2 custom type codes fall within the following ranges:

Type Codes	Description
801, 900–919	Account Status Codes
920–959	Credit Summary and Detail
960–999	Debit Summary and Detail

EASI reports the following custom type codes:

Type Code	Transaction	Level	Description
801	NA	STATUS	SWEEP BALANCE
910	NA	STATUS	INVESTABLE BALANCE
935	CR	DETAIL	RETURN WIRE
936	CR	DETAIL	DRAWDOWN WIRE
940	CR	DETAIL	CITY NATL SECURITIES
941	CR	DETAIL	CNI DEPOSIT
942	CR	DETAIL	CAPITAL GAIN DIST
943	CR	DETAIL	CNI SHARES REDEMPTION
944	CR	DETAIL	CLOSE FUND SWEEP
945	CR	DETAIL	DIVIDEND PAID
970	DB	DETAIL	CITY NATL SECURITIES
973	DB	DETAIL	CNI SHARES PURCHASE
974	DB	DETAIL	MONTHLY SWEEP FEE

Extended Transaction Detail

EASI reports extended transaction detail in the Text field of the Transaction Detail Record. The extended transaction detail field is comprised of series of sub field records below. Each sub field record is separated by '|’.

Field #	Sub Field Name	Format	Field Description
1	FIELDTYPE	Alphanumeric	DBT or CDT
2	DBTNAMEADDRESS		Debtor name and address
3	ACCTTYPE	Alphanumeric(1)	A - ABA number D - DDA number,

Appendix D – BAI2 File Specifications

			F – Foreign Nostro account number S - S.W.I.F.T.
4	ACCTNUMBER	Numeric	Account Number
5	WIREINFO	Alphanumeric	Wire Service Information
6	OMAD	Alphanumeric	For credit transactions
7	SRF	Alphanumeric	Senders Reference
8	ORF	Alphanumeric	Originators Reference
9	OBI	Alphanumeric	Originator to Beneficiary Instructions
10	BBI	Alphanumeric	Bank to Bank Instructions
11	ADV	Alphanumeric	Advice Instructions
12	MSGTYPE	Alphanumeric	
13	ITEMSEQ	Numeric	Item Sequence
14	ROUTING	Alphanumeric	Credit advice type.
15	FUNDSTYPE	Alpha	Funds category (S=same day; N=next day).
16	CNFSRCCODE	Alphanumeric	Source code.
17	DBTAMT	Numeric	Debit Amount
18	DBTCURCODE	Alphanumeric	Currency for Debit Amount
19	CDTAMT	Numeric	Credit Amount
20	CDTCURCODE	Alphanumeric	Currency for Credit Amount
21	DBTCHG	Numeric	Charges to the credit party
22	CDTCHG	Numeric	Charges to the debit party
23	EXCHANGERATE	Alphanumeric	Exchange rate
24	TRANSTYPE	Alphanumeric	Can be any of the following: CHP CHIPS from Administrative Entry DEP Deposit DFT Draft DFA Draft (advice only) DRW Drawdown FFR Fed Funds Returned FFS Fed Funds Sold FRF Fed from Administrative Entry FTR Funds Transfer MEM Memo Post NON Nonaccounting SWF S.W.I.F.T. from Administrative Entry
25	DELIVERYDT	Alphanumeric	Delivery Date
26	DELIVERYTM	Alphanumeric	Delivery Time
27	HOSTPRINTERDESTID	Alphanumeric	Confirmation subtype

Appendix D – BAI2 File Specifications

28	BBK	Alphanumeric	Beneficiary's Bank Information
29	BNF	Alphanumeric	Beneficiary Information
30	DBT	Alphanumeric	Debit Party Information (included for credit transactions only)
31	IBK	Alphanumeric	Intermediary Bank Information (May occur up to 2 times)
32	OBK	Alphanumeric	Ordering Party's Bank Information
33	ORG	Alphanumeric	Originator Information
34	SBK	Alphanumeric	Sending Bank Information

Here are two sample "record 16" entries for Credit and Debit wire transactions.

16,195,3761000,V,150210,0000,150210006090,,INCOMING WIRE-DOM
88,CDT||D|123305175|IMAD: 0210A1Q002CC00467402101617FT03 Ref:
2015021000038495|
88,0210L2LFCK1C00282702101617FT03|0|150210000006090|INVESTMENT
MANAGEMENT FEE
88,WITH KAYN|||1000|005832|LTR|S|FED|37610.00|USD|37610.00|USD|0|0|0000000.0
88,0000000000|FTR|2015-02-10|13:17:58.74|ESM||D 123305175 KA FUND
ADVISORS LL
88,C 1800 AVENUE OF THE STARS 3RD FL LOS ANGELES CA 90067 |A
011000028 STATE
88,STREET BOSTON BOSTON, MA || 37959665 KAYNE ANDERSON MLP-IEG7
1295 STATE S
88,TREET SPRINGFIELD MA 01111 | 37959665 KAYNE ANDERSON MLP-IEG7
1295 STATE S
88,TREET SPRINGFIELD MA ||
16,495,6625750,V,150211,0000,150211004038,,EASI WIRE-OUT DOM
88,DBT|ARIEL Z EMANUEL/SARAH H ADDINGTON, TTEES C/O THE
MANAGEMENT GROUP 8383 WIL
88,SHIRE BLVD # 400 BEVERLY HILLS CA 90211|D|001018981|IMAD:
0211L2LFCK1C0013
88,84 Ref: 2015021100004038||0|150211000004038|MONTH:FEBRUARY 2015
[11501]
88,[EMANUE|||003764|FED|S|ESQ|66257.50|USD|66257.50|USD|0|0|0000000.0000000
0
88,000|FTR|2015-02-11|11:20:55.02|ESM|A 121201694 US BANK, NA PORTLAND,
OR |
88,153753876017 TABLEMAX GAMING INC. 8275 S. EASTERN AVENUE #200
LAS VEGAS,N
88,V, |||||