



electronic payment exchange

Transaction Specs - ACH

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5/23/16	2.0	C. Meaney	Reformatting
10/16/18	2.1	C. Meaney	Added General Ledger CKG2 (Debit) and CKG3 (Credit) transaction sections

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Contents

EPX Transaction Specs – ACH Overview	1
BRIC/Token Transactions	1
Field Types	1
Transaction Types	2
Pre-Note Credit (CKC1/CKS1)	2
Account Information	2
XML example	2
GUID/BRIC	2
XML example	3
Pre-Note Debit (CKC0/CKS0)	3
Account Information	3
XML example	3
GUID/BRIC	4
XML example	4
Refund/Account Credit - GUID/BRIC (CKC3/CKS3)	4
XML example	4
Refund/Account Credit – Saleless (CKC3/CKS3)	5
XML example	5
Sale/Account Debit (CKC2/CKS2)	5
Account Information	5
XML example	5
GUID/BRIC	6
XML example	6
Sale/Account Debit - POP using MICR Data (CKC2/ CKS2)	6
Account Information	6
XML example	7
Void (CKCX/CKSX)	7
XML example	7
General Ledger Sale/Account Debit (CKG2)	7
Account Information	8
GUID/BRIC	8
General Ledger Refund/Account Credit (CKG3)	8
GUID/BRIC	9

Account Information	9
---------------------------	---

EPX Transaction Specs – ACH Overview

The following sections contain information on mandatory and optional fields and transaction types that cover pre-note Debit and Credit, sale/account Debit, refund/account credit with GUID/BRIC, and refund/account Credit Saleless transactions.

BRIC/Token Transactions

The EPX BRIC (GUID/Token) can be used to create new transactions within the EPX system, and examples of this use are provided below. For more information the usage of a BRIC please refer to the *EPX BRIC Reference* manual.

Field Types

For each transaction type, some fields are listed as mandatory and others as optional. Mandatory fields are shown in bold text and need to be submitted with the transaction request to ensure a successful response; optional fields can be omitted.

An example request is provided for each transaction type listed in XML format. The request fields can also be sent in a Key-Value pair format over HTTPS.

NOTE: The Standard Entry Class Code (STD_ENTRY_CLASS) of “CCD” is to be used for business-to-business transactions. When using this code, the RECV_NAME field is required and the FIRST_NAME and LAST_NAME are optional. The name fields, if optionally used, should contain a person’s name and not a duplicate of the business name which might contain illegal characters (such as a space) for these fields. For all other SEC Codes, the FIRST_NAME and LAST_NAME are required, and RECV_NAME is optional. Please see the *Processing Data Dictionary* for more information regarding these individual fields.

Transaction Types

In the ACH environment, account types that can be acted upon include Checking and Savings. This chapter contains various example transaction types.

Note the following about the examples in this section:

- In the following examples, the Transaction Types all refer to Checking accounts. For Checking accounts, the Transaction code starts with “CKC.”
- To reference a savings account, the Transaction Types used end in the same value; however, the code starts with “CKS.” All other attributes of the transaction are the same as the Checking examples.

NOTE: Mandatory fields are shown in **BOLD** and optional fields are shown in plain type.

Pre-Note Credit (CKC1/CKS1)

Account Information

The Pre-Note Credit transaction is used to validate an account and the ability to credit the account before running a monetary transaction. This is done by sending a \$0.00 amount during the transaction.

XML example

```
<DETAIL CUST_NBR="1234" MERCH_NBR="1234567" DBA_NBR="1" TERMINAL_NBR="1">
<TRAN_TYPE>CKC1</TRAN_TYPE>
<ACCOUNT_NBR>12345678</ACCOUNT_NBR>
<ROUTING_NBR>123123123</ROUTING_NBR>
<BATCH_ID>20061126</BATCH_ID>
<TRAN_NBR>35</TRAN_NBR>
<AMOUNT>0.00</AMOUNT>
<FIRST_NAME>Joe</FIRST_NAME>
<LAST_NAME>Tester</LAST_NAME>
<ADDRESS>123 My Street</ADDRESS>
<CITY>Claymont</CITY>
<STATE>DE</STATE>
<ZIP_CODE>19703</ZIP_CODE>
<STD_ENTRY_CLASS>PPD</STD_ENTRY_CLASS>
<RECV_NAME>Joe Tester</RECV_NAME>
</DETAIL>
```

GUID/BRIC

In the following example, the ORIG_AUTH_GUID is being used to reference a previous ACH transaction in the EPX system. Because the ORIG_AUTH_GUID is a unique reference value,

there is no need to send the account information, but it can be sent to get an updated GUID/BRIC from the system.

XML example

```
<DETAIL CUST_NBR="1234" MERCH_NBR="1234567" DBA_NBR="1" TERMINAL_NBR="1">
<TRAN_TYPE>CKC1</TRAN_TYPE>
<BATCH_ID>20061126</BATCH_ID>
<TRAN_NBR>40</TRAN_NBR>
<AMOUNT>0.00</AMOUNT>
<ORIG_AUTH_GUID>0V703LH1HDL006J74W1</ORIG_AUTH_GUID>
<FIRST_NAME>Joe</FIRST_NAME>
<LAST_NAME>Tester</LAST_NAME>
<ADDRESS>123 My Street</ADDRESS>
<CITY>Claymont</CITY>
<STATE>DE</STATE>
<ZIP_CODE>19703</ZIP_CODE>
<STD_ENTRY_CLASS>PPD</STD_ENTRY_CLASS>
<RECV_NAME>Joe Tester</RECV_NAME>
</DETAIL>
```

Pre-Note Debit (CKC0/CKS0)

Account Information

The Pre-Note Debit transaction is used to validate an account and the ability to debit the account before running a monetary transaction. This is done by sending a \$0.00 amount the transaction.

XML example

```
<DETAIL CUST_NBR="1234" MERCH_NBR="1234567" DBA_NBR="1" TERMINAL_NBR="1">
<TRAN_TYPE>CKC0</TRAN_TYPE>
<ACCOUNT_NBR>12345678</ACCOUNT_NBR>
<ROUTING_NBR>123123123</ROUTING_NBR>
<BATCH_ID>20061126</BATCH_ID>
<TRAN_NBR>35</TRAN_NBR>
<AMOUNT>0.00</AMOUNT>
<FIRST_NAME>Joe</FIRST_NAME>
<LAST_NAME>Tester</LAST_NAME>
<ADDRESS>123 My Street</ADDRESS>
<CITY>Claymont</CITY>
<STATE>DE</STATE>
<ZIP_CODE>19703</ZIP_CODE>
<STD_ENTRY_CLASS>PPD</STD_ENTRY_CLASS>
<RECV_NAME>Joe Tester</RECV_NAME>
</DETAIL>
```

GUID/BRIC

In the following example, the ORIG_AUTH_GUID is being used to reference a previous ACH transaction in the EPX system. Because the ORIG_AUTH_GUID is a unique reference value, there is no need to send the account information, but it can be sent to get an updated GUID/BRIC from the system.

XML example

```
<DETAIL CUST_NBR="1234" MERCH_NBR="1234567" DBA_NBR="1" TERMINAL_NBR="1">
<TRAN_TYPE>CKC0</TRAN_TYPE>
<BATCH_ID>20061126</BATCH_ID>
<TRAN_NBR>39</TRAN_NBR>
<AMOUNT>0.00</AMOUNT>
<ORIG_AUTH_GUID>0V703LH1HDL006J74W1</ORIG_AUTH_GUID>
<FIRST_NAME>Joe</FIRST_NAME>
<LAST_NAME>Tester</LAST_NAME>
<ADDRESS>123 My Street</ADDRESS>
<CITY>Claymont</CITY>
<STATE>DE</STATE>
<ZIP_CODE>19703</ZIP_CODE>
<STD_ENTRY_CLASS>PPD</STD_ENTRY_CLASS>
<RECV_NAME>Joe Tester</RECV_NAME>
</DETAIL>
```

Refund/Account Credit - GUID/BRIC (CKC3/CKS3)

The Refund or Account Credit - GUID/BRIC transaction is a transaction used to return funds to an account BASED ON a previous sale transaction. Multiple refund transactions may be sent up to the amount equal or less than the amount of the original sale amount. In this example, the ORIG_AUTH_GUID is being used to reference the previous sale transaction. Because the ORIG_AUTH_GUID is a reference value, there is no need to send additional information such as the account number or customer information. If the refund is approved, the transaction will settle during the next settlement window and the money will move from the merchant account to the specified account.

XML example

```
<DETAIL CUST_NBR="1234" MERCH_NBR="1234567" DBA_NBR="1" TERMINAL_NBR="1">
<TRAN_TYPE>CKC3</TRAN_TYPE>
<BATCH_ID>20061126</BATCH_ID>
<TRAN_NBR>38</TRAN_NBR>
<AMOUNT>10.00</AMOUNT>
<ORIG_AUTH_GUID>0V702PVR9F400ZU9ED9</ORIG_AUTH_GUID>
</DETAIL>
```

Refund/Account Credit – Saleless (CKC3/CKS3)

The Refund or Account Credit - Saleless transaction is used to return funds to an account that may or may not have a previous sale transaction associated with it. There is no limit to the number of times a saleless refund can be done on an account. Preferably, merchants use the ORIG_AUTH_GUID when performing a refund transaction; however, a saleless refund is available for merchants who may not have the original sale information. If the refund is approved, the transaction will settle during the next settlement window and the money will move from the merchant account to the specified account.

XML example

```
<DETAIL CUST_NBR="1234" MERCH_NBR="1234567" DBA_NBR="1" TERMINAL_NBR="1">
<TRAN_TYPE>CKC3</TRAN_TYPE>
<ACCOUNT_NBR>12345678</ACCOUNT_NBR>
<ROUTING_NBR>123123123</ROUTING_NBR>
<BATCH_ID>20061126</BATCH_ID>
<TRAN_NBR>35</TRAN_NBR>
<AMOUNT>10.00</AMOUNT>
<FIRST_NAME>Joe</FIRST_NAME>
<LAST_NAME>Tester</LAST_NAME>
<ADDRESS>123 My Street</ADDRESS>
<CITY>Claymont</CITY>
<STATE>DE</STATE>
<ZIP_CODE>19703</ZIP_CODE>
<STD_ENTRY_CLASS>PPD</STD_ENTRY_CLASS>
<RECV_NAME>Joe Tester</RECV_NAME>
</DETAIL>
```

Sale/Account Debit (CKC2/CKS2)

Account Information

The Sale or Account Debit transaction is used to debit funds from a checking or savings account.

XML example

```
<DETAIL CUST_NBR="1234" MERCH_NBR="1234567" DBA_NBR="1" TERMINAL_NBR="1">
<TRAN_TYPE>CKC2</TRAN_TYPE>
<ACCOUNT_NBR>12345678</ACCOUNT_NBR>
<ROUTING_NBR>123123123</ROUTING_NBR>
<BATCH_ID>20061126</BATCH_ID>
<TRAN_NBR>35</TRAN_NBR>
<AMOUNT>10.00</AMOUNT>
<FIRST_NAME>Joe</FIRST_NAME>
<LAST_NAME>Tester</LAST_NAME>
```

```
<ADDRESS>123 My Street</ADDRESS>
<CITY>Claymont</CITY>
<STATE>DE</STATE>
<ZIP_CODE>19703</ZIP_CODE>
<CHECK_NBR>1500</CHECK_NBR>
<STD_ENTRY_CLASS>PPD</STD_ENTRY_CLASS>
<RECV_NAME>Joe Tester</RECV_NAME>
</DETAIL>
```

GUID/BRIC

The Sale or Account Debit transaction is used to debit funds from a checking or savings account. In the following example, the ORIG_AUTH_GUID is being used to reference a previous Sale in the EPX system. Because the ORIG_AUTH_GUID is a unique reference value, there is no need to send the account information. The GUID/BRIC Sale or Account Debit is commonly used to collect funds from a customer after the initial purchase using the account information, such as in a recurring payment model.

XML example

```
<DETAIL CUST_NBR="1234" MERCH_NBR="1234567" DBA_NBR="1" TERMINAL_NBR="1">
<TRAN_TYPE>CKC2</TRAN_TYPE>
<BATCH_ID>20061126</BATCH_ID>
<TRAN_NBR>37</TRAN_NBR>
<AMOUNT>10.00</AMOUNT>
<ORIG_AUTH_GUID>0V703LH1HDL006J74W1</ORIG_AUTH_GUID>
<FIRST_NAME>Joe</FIRST_NAME>
<LAST_NAME>Tester</LAST_NAME>
<ADDRESS>123 My Street</ADDRESS>
<CITY>Claymont</CITY>
<STATE>DE</STATE>
<ZIP_CODE>19703</ZIP_CODE>
<STD_ENTRY_CLASS>PPD</STD_ENTRY_CLASS>
<RECV_NAME>Joe Tester</RECV_NAME>
</DETAIL>
```

Sale/Account Debit - POP using MICR Data (CKC2/CKS2)

Account Information

The Sale or Account Debit POP transaction is used to debit funds from a checking or savings account when using a check scanner to attain MICR data. The Account number and Routing number must still be sent in addition to the MICR Data received from the reader.

NOTE: EPX cannot support MICR data from business checks that have an Auxiliary On-Us field present. EPX cannot support any check greater than \$25,000.

XML example

```
<DETAIL CUST_NBR="1234" MERCH_NBR="1234567" DBA_NBR="1" TERMINAL_NBR="1">
<TRAN_TYPE>CKC2</TRAN_TYPE>
<ACCOUNT_NBR>12345678</ACCOUNT_NBR>
<ROUTING_NBR>123123123</ROUTING_NBR>
<MICR_DATA>T999999991T 12345678900 1234</MICR_DATA>
<STD_ENTRY_CLASS>POP</STD_ENTRY_CLASS>
<CARD_ENT_METH>M</CARD_ENT_METH>
<BATCH_ID>20061126</BATCH_ID>
<TRAN_NBR>45</TRAN_NBR>
<AMOUNT>10.00</AMOUNT>
<FIRST_NAME>Joe</FIRST_NAME>
<LAST_NAME>Tester</LAST_NAME>
<ADDRESS>123 My Street</ADDRESS>
<CITY>Claymont</CITY>
<STATE>DE</STATE>
<ZIP_CODE>19703</ZIP_CODE>
<CHECK_NBR>1501</CHECK_NBR>
<RECV_NAME>Joe Tester</RECV_NAME>
</DETAIL>
```

Void (CKCX/CKSX)

The Void transaction is used to stop a sale or refund transaction prior to settlement. If the transaction referenced by the ORIG_AUTH_GUID has already settled, this function will not be available.

XML example

```
<DETAIL CUST_NBR="1234" MERCH_NBR="1234567" DBA_NBR="1" TERMINAL_NBR="1">
<TRAN_TYPE>CKCX</TRAN_TYPE>
<ORIG_AUTH_GUID>0V702N40Y0B00MK69YX</ORIG_AUTH_GUID>
</DETAIL>
```

General Ledger Sale/Account Debit (CKG2)

The General Ledger Debit transaction is used to debit funds from a General Ledger account.

NOTE: NACHA rules state that both ACH credits and debits may direct to a financial institution's general ledger account. ODFIs must have authorization in the form of an agreement with the RDFI to transmit entries to a general ledger account.

For the CKG2 transaction, the SEC value must be set to CCD and the RECV_NAME is a mandatory field.

Account Information

```
<DETAIL cust_nbr="1234" merch_nbr="1234567" dba_nbr="1" terminal_nbr="1">
<TRAN_TYPE>CKG2</TRAN_TYPE>
<ACCOUNT_NBR>1234567890</ACCOUNT_NBR>
<ROUTING_NBR>123123123</ROUTING_NBR>
<BATCH_ID>1</BATCH_ID>
<TRAN_NBR>6</TRAN_NBR>
<AMOUNT>77.00</AMOUNT>
<RECV_NAME>Joe Tester</RECV_NAME>
<STD_ENTRY_CLASS>CCD</STD_ENTRY_CLASS>
<CHECK_NBR>1177</CHECK_NBR>
<FIRST_NAME>Joe</FIRST_NAME>
<LAST_NAME>Tester</LAST_NAME>
<ADDRESS>123 Any Street</ADDRESS>
<CITY>Any Town</CITY>
<STATE>DE</STATE>
<ZIP_CODE>12345</ZIP_CODE>
</DETAIL>
```

GUID/BRIC

```
<DETAIL cust_nbr="1234" merch_nbr="1234567" dba_nbr="1" terminal_nbr="1">
<TRAN_TYPE>CKG2</TRAN_TYPE>
<BATCH_ID>1</BATCH_ID>
<TRAN_NBR>7</TRAN_NBR>
<AMOUNT>77.00</AMOUNT>
<ORIG_AUTH_GUID>09KGAR3K8TQ9TZW835F</ORIG_AUTH_GUID>
<RECV_NAME>Joe Tester</RECV_NAME>
<STD_ENTRY_CLASS>CCD</STD_ENTRY_CLASS>
<CHECK_NBR>1177</CHECK_NBR>
<FIRST_NAME>Joe</FIRST_NAME>
<LAST_NAME>Tester</LAST_NAME>
<ADDRESS>123 Any Street</ADDRESS>
<CITY>Any Town</CITY>
<STATE>DE</STATE>
<ZIP_CODE>12345</ZIP_CODE>
</DETAIL>
```

General Ledger Refund/Account Credit (CKG3)

The General Ledger Credit transaction is used to deposit funds into a General Ledger account.

NOTE: NACHA rules state that both ACH credits and debits may direct to a financial institution's general ledger account. ODFIs must have authorization in the form of an agreement with the RDFI to transmit entries to a general ledger account.

For the CKG3 transaction, the SEC value must be set to CCD and the RECV_NAME is a mandatory field.

GUID/BRIC

```
<DETAIL cust_nbr="1234" merch_nbr="1234567" dba_nbr="1" terminal_nbr="1">
<TRAN_TYPE>CKG3</TRAN_TYPE>
<BATCH_ID>1</BATCH_ID>
<TRAN_NBR>8</TRAN_NBR>
<AMOUNT>77.00</AMOUNT>
<ORIG_AUTH_GUID>09KGAR3UV8R2ENAG37Q</ORIG_AUTH_GUID>
<RECV_NAME>Joe Tester</RECV_NAME>
<STD_ENTRY_CLASS>CCD</STD_ENTRY_CLASS>
<CHECK_NBR>1177</CHECK_NBR>
<FIRST_NAME>Joe</FIRST_NAME>
<LAST_NAME>Tester</LAST_NAME>
<ADDRESS>123 Any Street</ADDRESS>
<CITY>Any Town</CITY>
<STATE>DE</STATE>
<ZIP_CODE>12345</ZIP_CODE>
</DETAIL>
```

Account Information

```
<DETAIL cust_nbr="1234" merch_nbr="1234567" dba_nbr="1" terminal_nbr="1">
<TRAN_TYPE>CKG3</TRAN_TYPE>
<ACCOUNT_NBR>1234567890</ACCOUNT_NBR>
<ROUTING_NBR>123123123</ROUTING_NBR>
<BATCH_ID>1</BATCH_ID>
<TRAN_NBR>9</TRAN_NBR>
<AMOUNT>77.00</AMOUNT>
<RECV_NAME>Joe Tester</RECV_NAME>
<STD_ENTRY_CLASS>CCD</STD_ENTRY_CLASS>
<CHECK_NBR>1177</CHECK_NBR>
<FIRST_NAME>Joe</FIRST_NAME>
<LAST_NAME>Tester</LAST_NAME>
<ADDRESS>123 Any Street</ADDRESS>
<CITY>Any Town</CITY>
<STATE>DE</STATE>
<ZIP_CODE>12345</ZIP_CODE>
</DETAIL>
```