ePN Network

The everywhere Processing Network℠

Transparent Database Engine

Transparent Database Engine Template (TDBE)
Integration Guide
January 11,2012

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1 Introduction

The **eProcessingNetwork Transparent Database Engine Template** (TDBE) is an Application Programming Interface (API) that allows you to integrate your website or application with the **eProcessingNetwork Transaction Processing Gateway** to perform credit card, debit card, gift card, and check transactions. Integrating with the TDBE requires advanced computer skills, including programming skills.

Websites and applications that collect and maintain a customer's order information can use the TDBE to seamlessly process transactions without the customer ever leaving the website.

Applications communicate with the TDBE using HTTPS to ensure transactions are transmitted securely. Developers generally must install the required HTTPS libraries for the language being used on their own server. Installing these libraries is beyond the scope of the support offered by eProcessingNetwork. Consult the documentation for your desired library for instructions on installation and use.

This document describes the information required to perform transactions using the TDBE and provides examples of the values to send and the responses received. Examples are provided as sample HTML forms (with the HTML code in the Appendix) showing the HTTP POST values sent to the TDBE. Do not use these HTML forms in your integration with the TDBE.

2 Using the TDBE

Your website must use HTTP POST to communicate with the TDBE. For security reasons, do not use GET. The URL for TDBE transactions and most functions is:

https://www.eProcessingNetwork.Com/cgi-bin/tdbe/transact.pl

Note: Some functions require a different API URL. These functions are noted in the document.

2.1 Required Fields (Credit and Debit)

The following sections define the fields required for credit and debit transactions.

2.1.1 Card Not Present Transactions

The following table lists the minimum fields you must submit to the TDBE for a credit card not present transaction. All fields are case sensitive. In addition, we recommend you submit the fields listed in Optional Fields on page 8.

Table 1 – Required Fields (Credit Card)

Field	Description
ePNAccount	The merchant's eProcessingNetwork account number. Do not submit the Business Name or the Merchant ID assigned by the Acquiring Bank or Merchant Service Provider.
CardNo	The credit card number.
ExpMonth	The 2-digit credit card expiration month, 01 through 12.
ExpYear	The 2-digit credit card expiration year. For example, 12 for 2012.
Total	The total amount of the transaction. For example 12.34. Do not include currency symbols or commas.
Address	The street address on file with the cardholder's issuing bank (for AVS).
Zip	The ZIP code on file with the cardholder's issuing bank (for AVS).
CVV2Type	Value indicating whether the CVV2 value was submitted for this transaction. For security reasons, you should always require the CVV2 value. Values are: 0 – CVV2 should not be used for this transaction 1 – CVV2 should be used for this transaction 2 – The card's CVV2 is illegible 9 – This credit card has no CVV2 imprinted on it *Note: Before using the CVV2Type 9, verify that the merchant's processor allows this.*
CVV2	The CVV2 value on the card. If you submit 0 for CVV2Type, then submit this field as empty.

2.1.2 Swiped/Card Present Transactions

For swiped transactions, complete track data is required; AVS and CVV2 data is not required. The TDBE ignores expiration dates on swiped transactions. The following table describes the fields required for swiped transactions.

Table 2 – Required Fields (Swiped/Card Present)

Field	Description
ePNAccount	The merchant's eProcessingNetwork account number. Do not submit the Business Name or the Merchant ID assigned by the Acquiring Bank or Merchant Service Provider.
Total	The total amount of the transaction. For example 12.34. Do not include currency symbols or commas.
CardNo	The complete data from either Track 1 or Track 2, including the sentinels such as %, ; and ?. This value must be URL Encode**d. CardNo=urlencode($CardNo)**
Swiped	Indicates the card was swiped. Always: 1
SKIP_MISSING	If a cards magnetic strip is unreadable you can pass the field SKIP_MISSING=1 this will allow you to process the card without having to enter the AVS or CVV2 information.

2.1.3 PIN Debit Transactions

PIN debit transactions are similar to swiped transactions but also required the PIN and key serial data from the PIN pad. The following table describes the fields required for PIN debit transactions.

Table 3 – Required Fields (PIN Debit)

Field	Description
ePNAccount	The merchant's eProcessingNetwork account number. Do not submit the Business Name or the Merchant ID assigned by the Acquiring Bank or Merchant Service Provider.
Total	The total amount of the transaction. For example 12.34. Do not include currency symbols or commas.
PINBlock	This information is provided directly from your PIN debit device.
KeySerial	This information is provided directly from your PIN debit device.
CardNo	The complete data from Track 2 only, including the sentinels such as %, ; and ?.
Swiped	Indicates the card was swiped. Always: 1

2.1.4 Purchase Card Level II

Purchase Card Level II transactions require the tax amount for the transaction and the customer code value with the cardholder's invoice number/customer code. The following table describes the fields required for Purchase Card Level II transactions.

Table 4 – Required Fields (Purchase Card Level II)

Field	Description
ePNAccount	The merchant's eProcessingNetwork account number. Do not submit the Business Name or the Merchant ID assigned by the Acquiring Bank or Merchant Service Provider.
Total	The total amount of the transaction, including tax. For example 12.34. Do not include currency symbols or commas.
CardNo	The complete data from Track 2 only, including the sentinels such as %, ; and ?.
Tax	The tax amount of the transaction. For example 1.23. Do not include currency symbols or commas. If the tax value is not required, submit 0.00.
CustCode	The invoice number, purchase order number, or customer code for this transaction. Up to 17 characters.
Swiped	Indicates the card was swiped. Always: 1

2.2 Response Values

The response is essentially three quoted, comma-delimited strings. The first string always starts with a **Y** (Yes, approved), an **N** (No, declined) or a **U** (No, unable), and is followed by up to 16 characters describing the transaction response. The second string is the Address Verification Systems' response to the street address and Zip code supplied. The third string is the CVV2 systems' response to the CVV2 information supplied. The following example shows a typical approval response:

```
"YAPPROVED 184752","AVS Match 9 Digit Zip and Address
(X)","CVV2 Match (M)","23","20080828140719-080880-23"
```

Depending on the result, the TDBE returns one or more strings.

The following table describe the response fields:

Table 5 – Response Values

String	Value	Description
1	Transaction Response	The approval response. The response starts with one of the following 1-character value indicating the success of the transaction: Y – Approved N – Declined U – Unable to perform the transaction The 1-character response is followed by up to 16 characters explaining the response, for example: APPROVED 123456.
2	AVS Response	The AVS response returned by the issuing bank.
3	CVV2 Response	The CVV2 response returned by the issuing bank. TDBE only returns this value if CVV2 is used for the transaction.
4	Invoice Number	Invoice number for the transaction. The TDBE only returns this value if you submit the Inv field in the request.

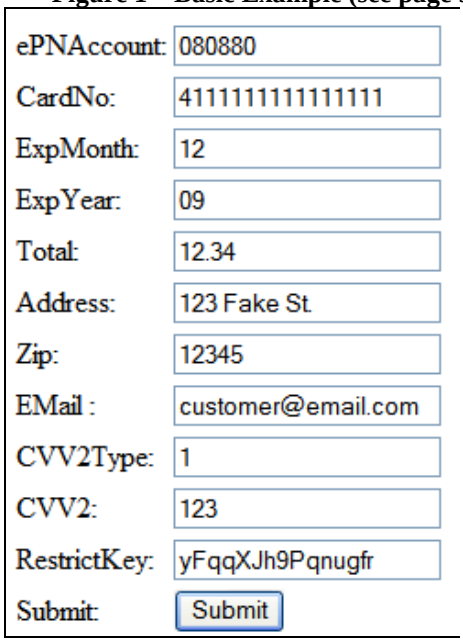
String	Value	Description
5	Transaction ID	The transaction ID (TransID) that identifies this transaction on the TDBE. Use the TransID to reference this transaction in other transactions, such as Voids and Returns. The format for the TransID value is: timestamp-account number-invoice number Some transaction IDs includes a fourth value: -0 for declines; -6 for checks; -5 for voids. TDBE only returns this value if you submit the Inv field in the request.

2.3 Basic Examples

The following examples shows a basic transaction using the minimum required fields. The HTML for the example is available in Basic Example on page 38.

All of the examples in this document use the ePNAccount number 080880 which requires the RestrictKey value. See RestrictKey Field and Security on page 12 for more information.

Figure 1 – Basic Example (see page 38)



Response

```
<html>
<body>"YAPPROVED 755596","AVS Match 9 Digit Zip and Address (X)","CVV2 Match (M)"
</body>
</html>
```

By default, the TDBE returns the response wrapped with HTML, which is useful for debugging.

Use the HTML field with a value of No to parse the response without the HTML wrapper.

Figure 2 – Basic Example without HTML Response (see page 39)

Response

```
"YAPPROVED 195632","AVS Match 9 Digit Zip and Address (X)","CVV2 Match (M)"
```

In the first string, the first character indicates the transaction was approved. The remaining characters are the details returned by the host including the response message and approval codes. The next two strings are the AVS response and CVV2 response from the issuing bank.

2.4 Optional Fields

You can submit the following fields; they are stored by the TDBE. Using these optional fields improves the results for reporting purposes. Some fields, such as Inv and RestrictKey, have special uses.

Table 6 – Optional Fields

Field Name	Description
Company	The name of the cardholder's company.
FirstName	The cardholder's first name.
LastName	The cardholder's last name.
City	The cardholder's city.
State	The 2-character state code of cardholder's state.
Phone	The contact phone number for the transaction.
EMail	If you submit a valid email address, eProcessingNetwork emails a transaction summary to the cardholder. If you do not want eProcessingNetwork to send an email confirmation, do not submit this field.
Inv	Invoice number. Up to 8 digits. Used for reporting and enables additional features. See Invoice Number on page 10 for more information.
Description	Description of the transaction, for example, what was ordered.
RestrictKey	Shared secret set up on the eProcessingNetwork Merchant Support Center. Used for security. See RestrictKey Field and Security on page 12 for more information.

Field Name	Description
TranType	The type of transaction being submitted. Defaults to Sale if you do not submit a value. See Transaction Types on page 9 for more information.

2.4.1 Transaction Types

To perform transactions of types other than Sale, you must submit a value for the TranType field. The following table lists the TranType values for the transactions supported by the TDBE.

Table 7 – Transaction Types

TranType	Description
AuthOnly	Authorization only. The transaction is not captured in the batch. To capture an AuthOnly transaction, perform an Auth2Sale transaction using the TransID returned by the TDBE.
Auth2Sale	Capture a transaction previously approved using AuthOnly. Use the TransID returned in the original authorization.
AuthDel	Removes an authorization only transaction from the database if you decide not to capture it. Use the TransID returned in the original authorization.
Sale	Authorize and capture the transaction. This is the default TranType.
AuthConvert	Performs an Authorization Only transaction and then checks the AVS response and the CVV2 response. The TDBE returns an approval if the AVS and CVV2 response match the values you set in the Processing Controls in the Merchant Support Center; otherwise, the TDBE returns a decline (although the authorization only transaction is not deleted.)
Void	Removes a sale or captured authorization only transaction from the current batch. You can only use a void transaction before you close the batch containing the transaction; afterward, you must use a return. Use the TransID returned in the original authorization.
Return	Refunds money to the cardholder. You can use either the CardNo field or the TransID to refund money for an existing transaction.
Store	Stores the cardholder's credit card data on the TDBE without processing a transaction. To process future transactions against the cardholder's data,. use the TransID returned in the response.
DebitSale	Processes a debit sale transaction. Debit transactions require a DUKPT PIN pad properly encrypted with your processor keys. See PIN Debit Transactions on page 5 for more information on required fields for debit transactions.
DebitReturn	Processes a debit return transaction, which refunds money to the cardholder's account. See PIN Debit Transactions on page 5 for more information on required fields for debit transactions.
Voice	Enter a sale transaction into the batch when you receive the authorization from another source, such as a voice authorization. Submit the AuthCode value containing the 6-digit authorization code you received.
Recur	Process a recurring transaction. Do not submit CVV2, Address, or Zip values; the TDBE ignores these values.

TranType	Description
CashSale	Records a cash sale transaction. Used only for reporting.
CashReturn	Records a cash return transaction. Used only for reporting.
CloseBatch	Closes the batch.

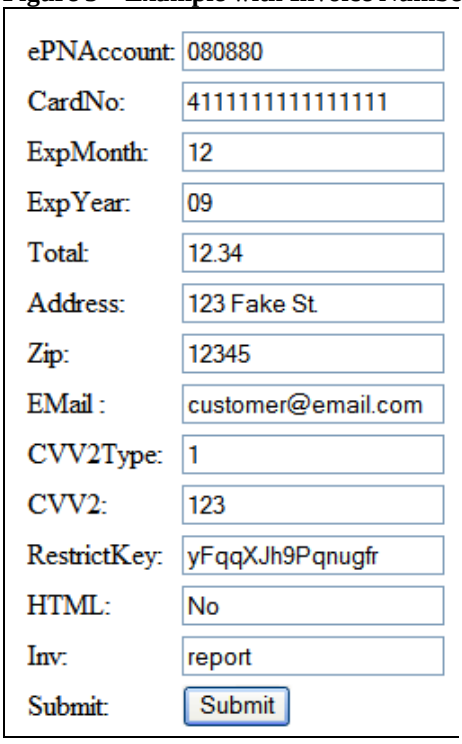
2.4.2 Invoice Number

The Inv field allows you to submit an invoice number for the transaction or have the TDBE generate an invoice number. If you submit the Inv field in the request, the TDBE returns the invoice number and the eProcessingNetwork transaction ID in the response.

The Inv value can be up to 8 digits. If you submit a value, the TDBE echoes that value in the response. If you submit the lowercase word “report” in the Inv field, the TDBE generates an invoice number and returns that value in the response. The TDBE starts the invoice number at 1 and auto-increments the value with each approved transaction.

If you submit your own invoice numbers, start in a high range so that there is no conflict with any transactions entered using the Online Terminal.

Figure 3 – Example with Invoice Number **(see page 40)**



Response

```
"YAPPROVED 184752","AVS Match 9
Digit Zip and Address (X)","CVV2 Match
(M)","23","20080828140719-080880-23"
```

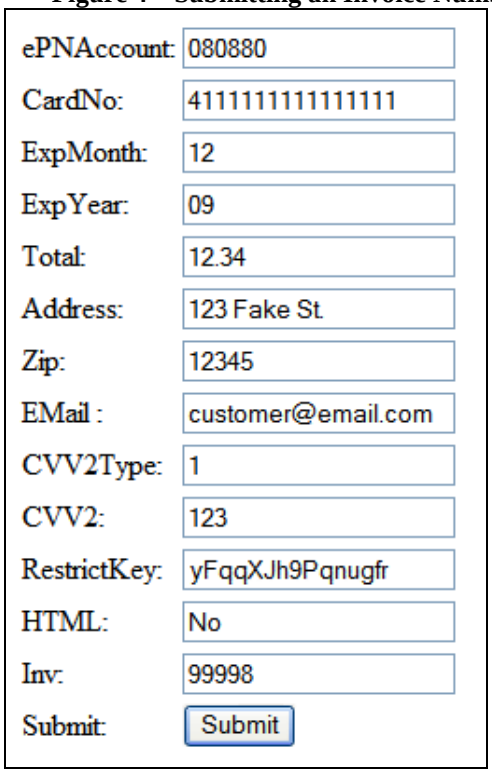
Because we submitted a value for the Inv field in the request, the TDBE returns the invoice number and transaction ID in the response. You may need to use the transaction ID for other transactions, such as voids or returns.

2.4.2.1 Confirmation Script and Invoice Number

Invoice numbers can be used to verify the status of transactions. For example, in the case of a network error, you may not receive a response from the TDBE. If you submitted an invoice number with the transaction, you can use that value to look up the transaction results.

The following example shows a sale transaction in which we specify an invoice number.

Figure 4 – Submitting an Invoice Number



Response

```
"YAPPROVED 063004","AVS Match 9
Digit Zip and Address (X)","CVV2
Match (M)","99998","20080828142107-
080880-99998"
```

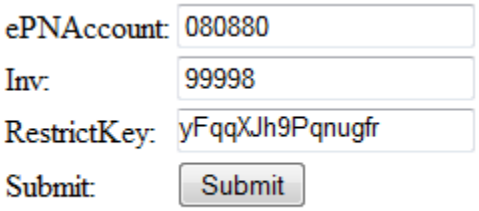
The TDBE echoes the invoice number in the response value.

If you did not receive a response from the TDBE, you can send the invoice number to the following URL to verify the response:

https://www.eprocessingnetwork.com/cgi-bin/tdbe/confirmation.pl

The script returns a response identical to the original response value. The following example shows how to use the confirmation script.

Figure 5 – Confirmation Script (see page 41)



Response

```
"Y","YAPPROVED 063004","AVS
match, address & 9 digit Zip","CVV2
Match","99998","20080828142107-
080880-99998"
```

If the TDBE cannot find the invoice number submitted, it returns the following response:

```
"N","Not Found"
```

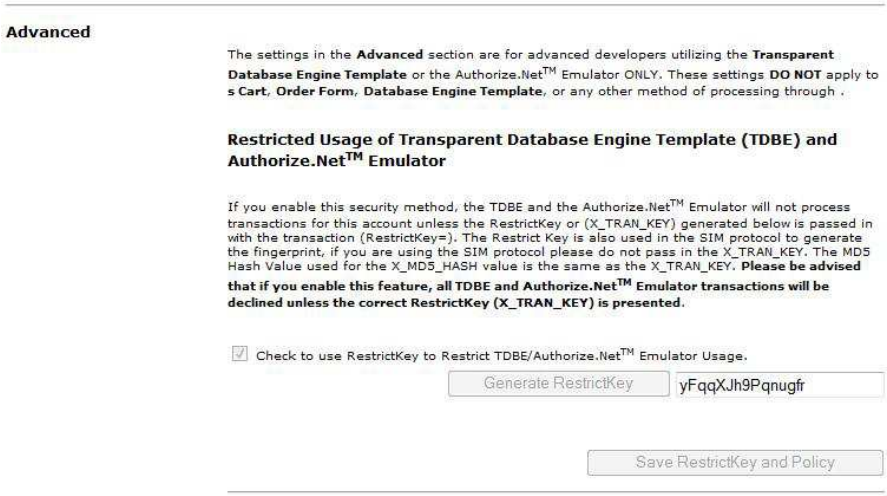
Note: Because the transaction may be queued, you may need to wait up to two minutes after the original request before using the confirmation script.

2.4.3 RestrictKey Field and Security

For security reasons, eProcessingNetwork recommends that you submit your account's RestrictKey value for each transaction you send to the TDBE. The RestrictKey is a shared secret that helps to confirm that the transaction is coming only from you. That way, if your RestrictKey is ever compromised, you can change the value on the Merchant Support Center.

To set or change the RestrictKey, log in to the Merchant Support Center and select **Processing Controls**. In the Advanced section at the bottom of the screen, there you will see that the **Check to use RestrictKey to Restrict TDBE/Authorize.NetTM Emulator Usage**, is already set with a key on your account, if not click the check box and then click to save key and policy.

When you set the RestrictKey, the TDBE will not process any transactions without the correct RestrictKey value. Advanced transactions always require the RestrictKey.



If you set the RestrictKey, the TDBE sends the following response to transactions without a correct RestrictKey value.

```
"UService Unavailable"
```

If you run an advanced transaction that requires a RestrictKey, and have not set one, the TDBE returns the following response:

```
"UTransaction Not Compatible"
```

2.4.4 Verified by Visa/MasterCard SecureCode CAVV/XID/UCAF

The TDBE supports the following optional fields for Verified by Visa and MasterCard SecureCode transactions:

Table 8 – Verified by Visa/MasterCard SecureCode

Field	Description
XID	Base 64 encoded XID value for Verified by Visa transactions.
CAVV	Base 64 encoded CAVV value for Verified by Visa transactions.
UCAF	Base 64 encoded UCAF value for MasterCard SecureCode transactions.

3 Testing Information

The following sections describe the values that you can use for testing your application against the TDBE.

3.1 Accounts

eProcessingNetwork has two testing accounts for the TDBE. One account requires the RestrictKey; the other does not. These accounts behave like any other account except that no money changes hands.

The test accounts are:

Test Account Information	
UserName/ePNAccount Number:	080880
Password:	080880pw
RestrictKey:	yFqqXJh9Pqnugfr

3.2 Approvals and Declines

When using the testing accounts, the TDBE returns approvals and declines based on the amount of the transaction:

- **Declined** – To receive a decline response, submit a Total ending with 1, such as 2.01 or 44.51.
- **Approved** – To receive an approve response; submit a Total ending in an even number such as 2.02 or 44.00.

3.3 AVS Responses

By default, the TDBE returns an AVS response of "AVS Match 9 Digit Zip and Address (X)." To receive a specific AVS response value, send one of the following values as the first four digits of the Address:

Table 9 – AVS Response Testing Values

Address	Response
1000	A - Address Matches, Zip Code does not Match
1001	E - Error Response
1002	N - Address and Zip Code do not match
1003	R - Retry, System Not Available
1004	S - Service Not Supported
1005	U - Address Information is Not Available
1006	W - 9 digit Zip Code matches, Address does not match
1007	X - Exact Match of Address and Zip Code

Address	Response
1008	Y - Match of Address and 5 digit Zip Code
1009	Z - 5 digit Zip Code matches, Address does not match
1010	G - Non AVS Participant Outside of U.S
1011	B - Street Address matches for international transaction. Postal Code not verified due to incompatible formats
1012	C - Street Address and Postal Code not verified for international transaction due to incompatible formats
1013	D - Street Address and Postal Code match for international transaction
1014	I - Address information is not verified for international transaction
1015	M - Street Address and Postal Code match for international transaction
1016	P - Postal Code matches for international transaction. Street Address not verified due to incompatible formats
1017	(space) - Unknown Response

3.4 CVV2 Responses

By default, the TDBE returns a CVV2 response of "CVV2 Match (M)." To receive a specific CVV2 response value, send one of the following values as the first three digits of the CVV2 value:

Table 10 – AVS Response Testing Values

CVV2 #	CVV2 response
100	M - Card Verification Value matches
101	N - Card Verification does not match
102	P - Not Processed
103	S- Card should have a Card Verification Value, Merchant indicated Value is not present
104	U - Issuer Not Certified
105	(space) - Unknown CVV2 Response (CVV2 not available)

4 Sample Transaction

This chapter provides a number of sample transactions to demonstrate how to integrate with the TDBE.

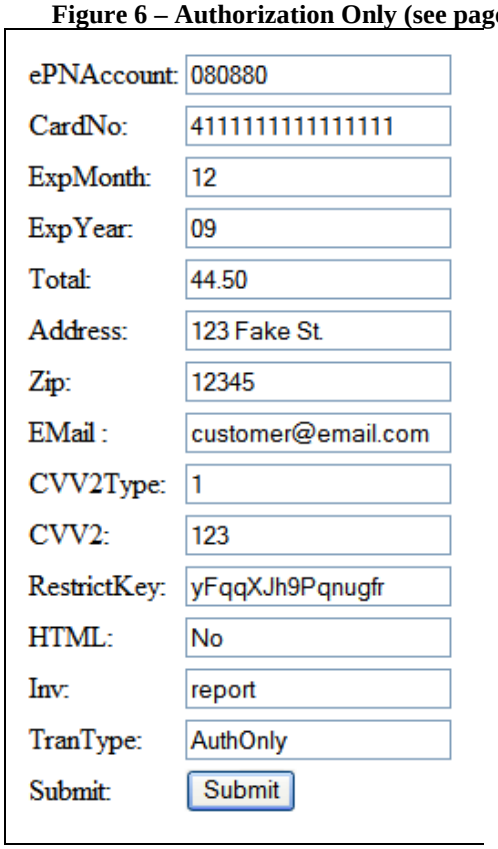
4.1 Authorization Only

An authorization only transaction verifies that the cardholder has sufficient funds to cover the transaction; however, it does not capture the transaction in the batch to transfer funds.

Here is a typical scenario for using the authorization only transaction: reviewing all of the day's transactions at the end of the day and deciding whether to capture the authorization or delete the authorization.

The following example shows an authorization only transaction. We run the transaction twice. Set the TranType to AuthOnly. We will use the AuthDel method to delete the result from the first authorization in Auth2Sale on page 15. Use the Auth2Sale method to capture the second authorization in Auth2Sale on page 15.

Figure 6 – Authorization Only (see page 42)



Response

```
"YAPPROVED 361468","AVS Match 9 Digit Zip and Address (X)","CVV2 Match (M)","24","20080828155437-080880-24"
```

And

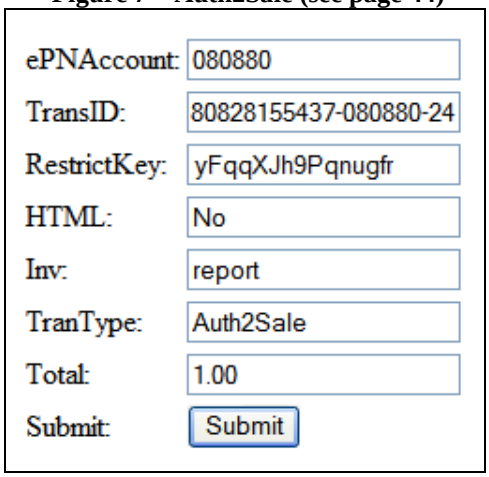
```
"YAPPROVED 124864","AVS Match 9 Digit Zip and Address (X)","CVV2 Match (M)","25","20080828155713-080880-25"
```

4.2 Auth2Sale

This example shows how to convert an authorization only transaction to a sale using the Auth2Sale TranType. Submit the TransID of the original authorization. For the total,

submit an amount less than or equal to the original authorization. You do not need to submit the card information again.

Figure 7 – Auth2Sale (see page 44)



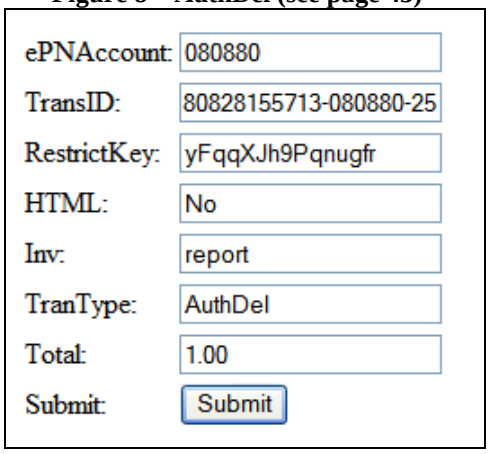
Response

```
"YSUCCESSFUL","","","24","200808281601
12-080880-24"
```

4.3 AuthDel

Use the AuthDel method to delete an authorization only transaction that you do not want to capture. Use the AuthDel TranType. As with the Auth2Sale TranType, submit the TransID of the original transaction to delete.

Figure 8 – AuthDel (see page 43)



Response

```
"YSUCCESSFUL","","","24","200808281557
13-080880-25"
```

The response contains a new TransID because the original authorization has been deleted and no longer exists.

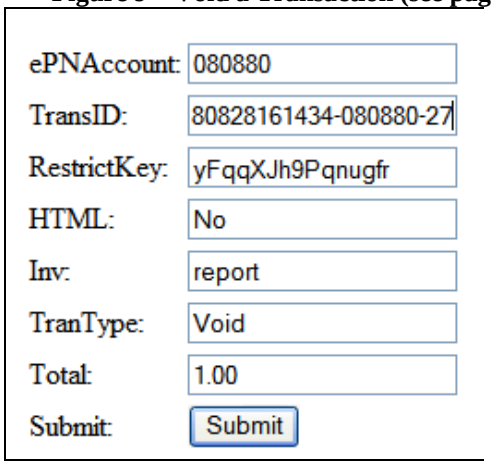
4.4 Voiding a Sale

Use a void transaction to remove a captured transaction from the current batch. You cannot void a transaction that is not in the current batch. If the transaction you want to void is in a batch that you have already closed, you must run a return transaction instead.

To void a transaction, set the TranType to Void and submit the TransID of the transaction you want to void. The following example shows how to void a sale transaction that received this response:

"YAPPROVED 334512","AVS Match 9 Digit Zip and Address (X)","CVV2 Match (M)","27","20080828161434-080880-27"

Figure 9 – Void a Transaction (see page 45)



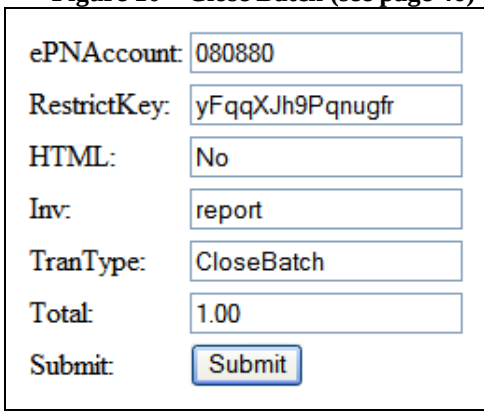
Response

"YSUCCESSFUL","","","27","20080828161728-080880-27-5"

4.5 Close Batch

To close the current batch, use the CloseBatch TranType. The TDBE queues the batch to be closed; the batch may not close immediately, but should close within minutes.

Figure 10 – Close Batch (see page 46)



Response

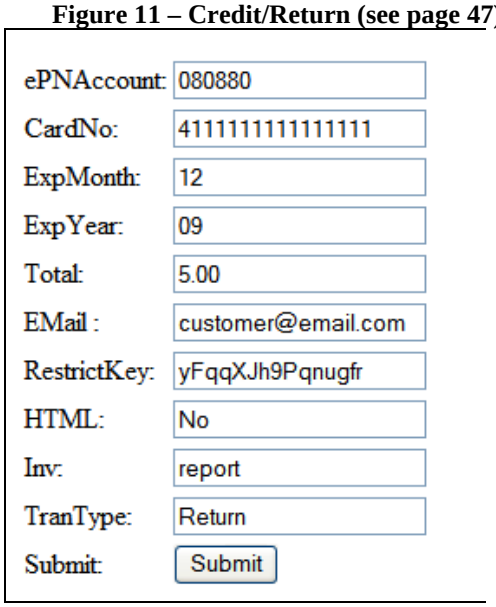
"YSUCCESSFUL”

4.6 Credit/Returns

You can either use a TransID to submit a credit/return for an existing transaction or you can submit the credit card information. The following shows how to submit a credit/return using the credit card information.

Note: Merchants must login to the Processing Controls section of the Merchant Support Center and to activate this feature.

Figure 11 – Credit/Return (see page 47)



Response

```
"YSUCCESSFUL","","","29","20080828164609-080880-29"
```

4.7 Store

Use the TranType value Store to store the cardholder's information for future transactions. The TDBE returns a TransID that you can use to process sale or credit/reurn transactions. The Store function does not process a transaction. See Sale From TransID on page 19 for an example of processing a sale transaction from a TransID. The following example shows how to use the Store function.

Figure 12 – Store (see page 48)

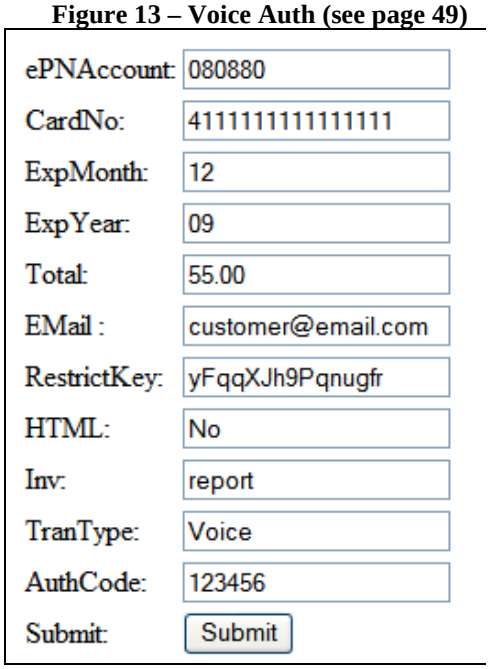
Response

```
"YSUCCESSFUL","AVS Service Not Supported
(S)","","4048","20090720105945-080880-4048"
```

4.8 Voice Auth

If you received a voice authorization for a transaction, use the TranType value of Voice to enter the transaction into the batch. The voice transaction requires the 6-digit authorization code you received from the voice authorization center. You must also submit the credit card information.

Figure 13 – Voice Auth (see page 49)



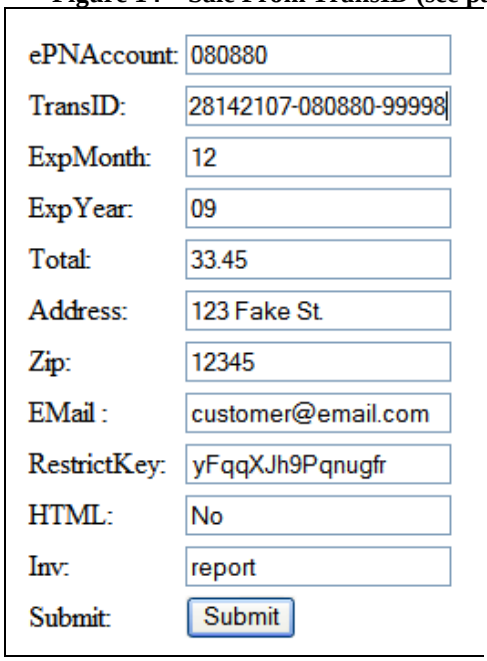
Response

```
"YSUCCESSFUL","","","30","20080828164923-080880-30"
```

4.9 Sale From TransID

For most transaction types that require credit card information, such as sale and credit/return, you can submit the TransID of a previously closed transaction instead of the credit card information. The TDBE looks up the card information without displaying it to the merchant. ExpMonth and ExpYear are not required; however, you can submit these values to update the information stored on the TDBE.

Figure 14 – Sale From TransID (see page 50)



Response

```
   "YAPPROVED 475288","AVS Match 9
Digit Zip and Address
(X)","","28","20080828163249-080880-
28"`
```

4.10 Partial Approvals

Contact our support people to determine if we support Partial Approvals on your processor.

To allow for a partial approval of a transaction, you need to pass in one additional parameter and watch for and parse the response.

Add the parameter "PartialApproval" = "Y".

If the transaction fully approves, there is no difference in the response it will be a normal response.

If the transaction partially approves, the response will be different.

Here is an example of a transaction submitted with PartialApproval = Y but is fully approved.

"YAPPROVED DSC971","","","5979","20120111155452-060321-5979"

If the transaction is only partially approved then the response will reflect that.

"YPARTIAL TAS532","Address and Zip Code Do Not Match (N)","CVV2 Match (M)","5980","20120111155458-060321-5980",”PartialAmount=5.55”

Normally the response is "APPROVED 123456" in the case of a partial approval the response will be "PARTIAL 123456". Also at the end of the response will be the phrase "PartialAmount=" and the partial amount that was approved is listed.

You can test PartialApproval transactions on our various DEMO accounts. With the following rules, if the amount ends in 1 penny it is declined. If it ends in 8 pennies it is partially approved for half the amount of the original amount. All other PartialApproval transactions fully approve.

5 Recurring Transactions

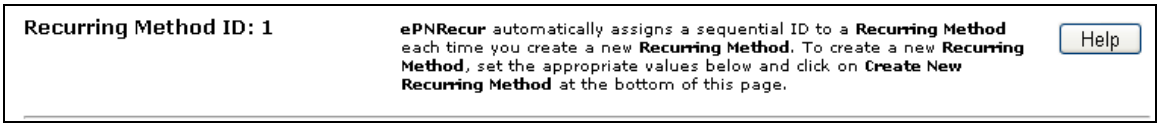
There are two ways to create recurring transactions with the TDBE.

- Recurring Methods – Set up recurring methods defining the periods and amounts for the recurring transaction on the Merchant Support Center.
- Create on the Fly – Define the periods and amounts for the recurring transaction when you submit the recurring transaction request to the TDBE.

5.1 Recurring Methods

Recurring methods are the simplest way to perform recurring transactions using the TDBE. You can use the Merchant Support Center to define multiple recurring methods which define the periods and amounts for the recurring transaction. When you submit the recurring transaction request to the TDBE, you simply submit the ID of the desired recurring method in the RecurMethodID field.

To set up a recurring method, choose **ePNRecurConfig** in the Merchant Support Center and click **CreateRecurringMethod**. Use the Recurring Method ID for the RecurMethodID field:



For example, you can create a transaction that recurs on the 15th of every month for $25.00.

To create a recurring transaction using recurring methods, enter a standard transaction, such as a sale, and include the following fields:

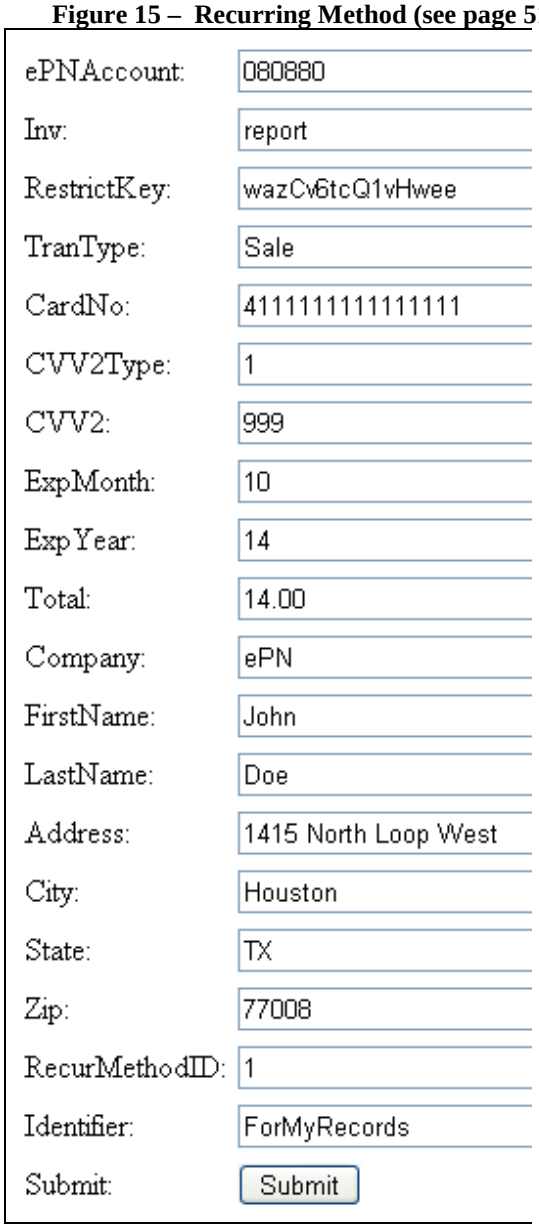
Table 11 – Recurring Method Fields

Field	Description
RecurMethodID	The ID of the recurring method defining the settings for the recurring transaction.
Identifier	Optional text value to identify the transaction. This value appears in Your ID column in the recurring transactions reports.
RecurAmountOverride	Optional amount value. If you include this value, the recurring transaction will be processed for this value instead of the amount set in the recurring method.

The following example shows how to enter a recurring transaction using the RecurMethodID.

Note: The recurring transaction is not created if the initial transaction is declined.

Figure 15 – Recurring Method (see page 51)



Response

```
"YAPPROVED 092020","AVS Match 9 Digit Zip and Address (X)","CVV2 Match (M)","104","20081014145816-080880-104","RecurID=1"
```

The response value contains a sixth string which includes the RecurID value. You can use the RecurID value to find the transaction in the recurring transaction reports in the Merchant Support Center. The RecurID is also used to cancel a recurring transaction (see Cancelling a Recur on page 26).

5.2 Create on the Fly

If you want to have more control over the details of each recurring transaction, you can set the details for each transaction as you submit it. Use the following fields to create a recurring transaction on the fly:

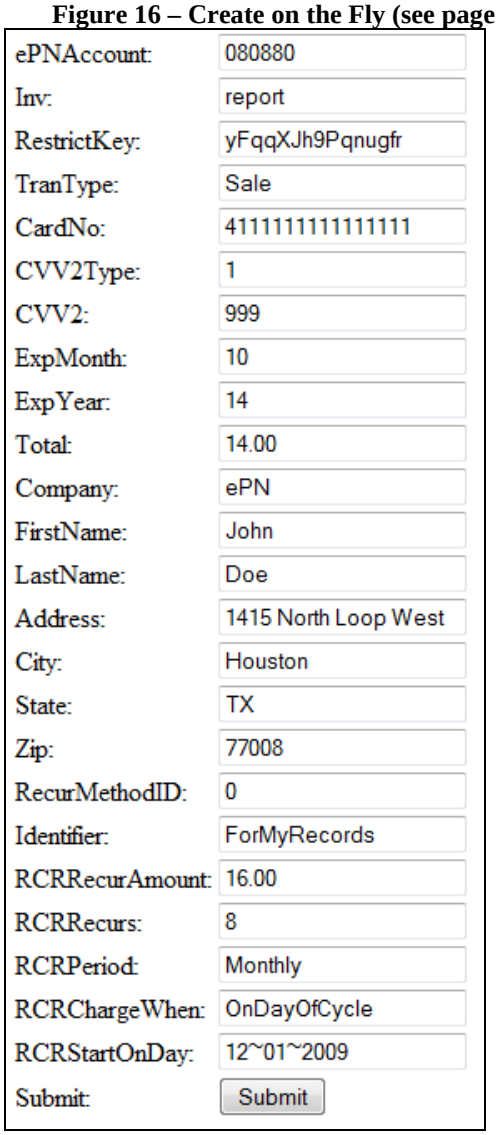
Table 12 – Create on the Fly

Field	Description
RecurMethodID	Submit 0 (zero) to indicate you are creating the recurring transaction on the fly.
Identifier	Optional text value to identify the transaction. This value appears in the **Your ID** column in the recurring transactions report.

Field	Description
RCRRecurAmount	The amount charged each time the transaction is run.
RCRPeriod	Indicates the period between recurrences. Values are: Weekly BiWeekly Monthly 2Months 3Months 6Months 12Months
RCRRecurs	The number of periods the recurring transaction should run. Submit 0 (zero) to run until it is explicitly canceled.
RCRChargeWhen	Always: OnDayOfCycle
RCRStartOnDay	The date of the first recurrence in the format MM~DD~YYYY. For example, 10~22~2009. (Note that the delimiter is the "~" character.) All following recurrences take place based on the value set in the RCRPeriod.

The following transaction shows how to set a recurring transaction starting on December 1 and running on the first of every month for 8 recurrences.

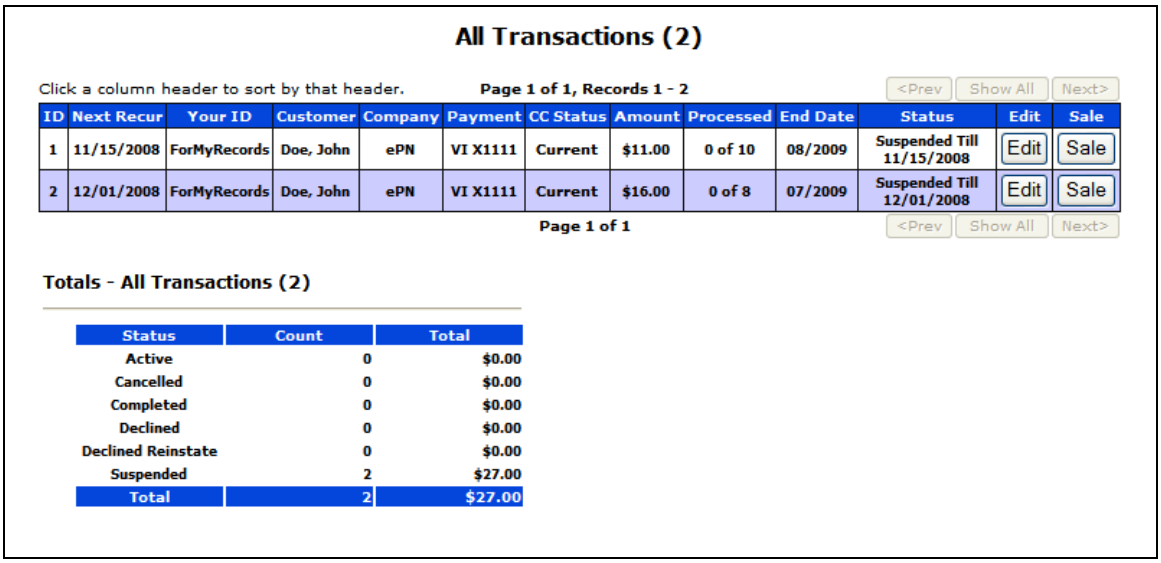
Figure 16 – Create on the Fly (see page 52)



Response

```
"YAPPROVED 021952","AVS Match 9 Digit Zip and Address (X)","CVV2 Match (M)","105","20081014155409-080880-105","RecurID=2"
```

You can locate these transactions in the ePNRecurConfig section of the Merchant Support Center:



All Transactions (2)

Click a column header to sort by that header. **Page 1 of 1, Records 1 - 2** <Prev Show All Next>

ID	Next Recur	Your ID	Customer	Company	Payment	CC Status	Amount	Processed	End Date	Status	Edit	Sale
1	11/15/2008	ForMyRecords	Doe, John	ePN	VI X1111	Current	$11.00	0 of 10	08/2009	Suspended Till 11/15/2008	Edit	Sale
2	12/01/2008	ForMyRecords	Doe, John	ePN	VI X1111	Current	$16.00	0 of 8	07/2009	Suspended Till 12/01/2008	Edit	Sale

Page 1 of 1 <Prev Show All Next>

Totals - All Transactions (2)

Status	Count	Total
Active	0	$0.00
Cancelled	0	$0.00
Completed	0	$0.00
Declined	0	$0.00
Declined Reinstate	0	$0.00
Suspended	2	$27.00
Total	2	$27.00

5.3 Cancelling a Recurring Transaction

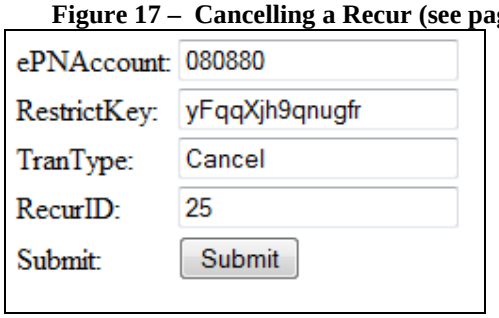
To cancel a recurring transaction, submit a transaction with a TranType value of Cancel and the RecurID of the transaction to cancel.

The URL to cancel recurring transactions is:

https://www.eprocessingnetwork.com/cgi-bin/tdbe/Recur.pl

The following example cancels the recurring transaction with the RecurID of 25.

Figure 17 – Cancelling a Recur (see page 53)



Response

```
"Y ,Successful"
```

5.4 Update A Recur Credit Card Information

To update a recurring records credit card data, post the following with a TranType value of ModifyCreditCard and the RecurID.

The URL to update a recurring records credit card data is:

https://www.eprocessingnetwork.com/cgi-bin/tdbe/Recur.pl

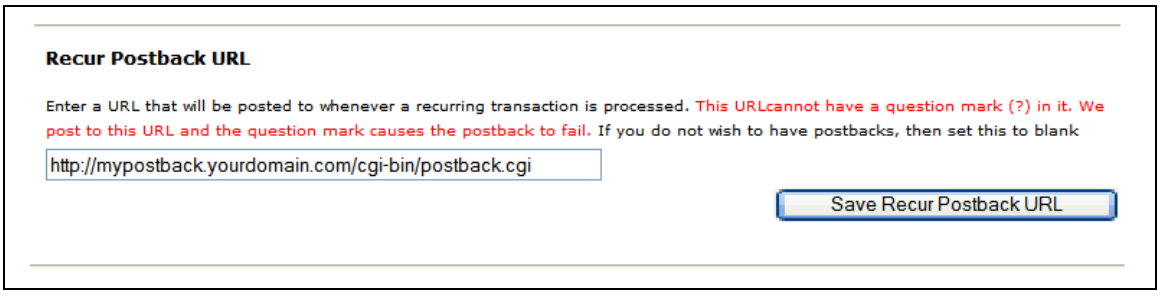
Response

```
"Y ,Successful"
```

Required Fields	Description
TranType	**ModifyCreditCard**
ePNAccount	The merchant's eProcessingNetwork account number. Do not submit the Business Name or the Merchant ID assigned by the Acquiring Bank or Merchant Service Provider.
CardNo	The credit card number. ONLY if you are changing the card number on file. If you are just adjusting the expiration date you can leave this blank.
ExpMonth	The 2-digit credit card expiration month, 01 through 12.
ExpYear	The 2-digit credit card expiration year. For example, 12 for 2012.
RecurID	This is the recurring id that was created for your original recur record.
RestrictKey	Shared secret set up on the eProcessingNetwork Merchant Support Center. Used for security. See RestrictKey Field and Security on page 12 for more information.

5.5 Recur Postback URL

The Recur System can post a message to your application each time it runs a recurring transaction. To receive a postback, set the Recur Postback URL on the ePNRecurConfig page in the Merchant Support Center.



The Recur System sends a post with the following values to the URL specified:

FIELD (ePNAccount)	VALUE (080880)
FIELD (PostbackType)	VALUE (recur)
FIELD (PostbackTime)	VALUE (20081014163553)
FIELD (PostbackAttempt)	VALUE (0)
FIELD (RecurOperation)	VALUE (ExecuteRecur)
FIELD (IsApproved)	VALUE (Y)
FIELD (Response)	VALUE (APPROVED 398884)
FIELD (RecurID)	VALUE (1)
FIELD (Identifier)	VALUE (My first test.)
FIELD (RecurringMethod)	VALUE (0)
FIELD (Invoice)	VALUE (91)
FIELD (TransID)	VALUE (20081014163544-080880-91)
FIELD (FirstName)	VALUE (Julian)
FIELD (LastName)	VALUE (Brown)
FIELD (Address)	VALUE (1415 North Loop West)
FIELD (City)	VALUE (Houston)
FIELD (State)	VALUE (TX)
FIELD (Zip)	VALUE (77008)
FIELD (Phone)	VALUE (713 880 0327)
FIELD (Email)	VALUE (jbrown@jlbprof.com)
FIELD (Amount)	VALUE (10.00)
FIELD (Company)	VALUE (ePN)
FIELD (RecurPeriod)	VALUE (Monthly)
FIELD (RecurDay)	VALUE (14)

The postback includes the standard transaction information including approval values, invoice number and transaction, customer data, and recurring period. The postback also returns the following values:

Table 13 – Postback Fields

Field	Description
PostbackType	The value “recur” indicates this postback comes from the recurring system.
PostbackTime	The timestamp when the recurring system first sent the postback.
PostbackAttempt	The number of times eProcessingNetwork attempted the postback. The first attempt has a value of 0; the value increments for each subsequent attempt. eProcessingNetwork attempts the postback for up to 48 hours until successful.
RecurOperation	Recur System event that triggered the postback. The value “ExecuteRecur” indicates that this is a normal recur transaction.

The Recur System sends the following to the postback URL for Cancel transactions:

NUM (18)

FIELD (ePNAccount)	VALUE (080880)
FIELD (PostbackType)	VALUE (recur)
FIELD (PostbackTime)	VALUE (20081014165048)
FIELD (PostbackAttempt)	VALUE (0)
FIELD (RecurOperation)	VALUE (DeleteRecur)
FIELD (RecurID)	VALUE (1)
FIELD (Identifier)	VALUE (My first test.)
FIELD (RecurringMethod)	VALUE (0)
FIELD (FirstName)	VALUE (Julian)
FIELD (LastName)	VALUE (Brown)
FIELD (Address)	VALUE (1415 North Loop West)
FIELD (City)	VALUE (Houston)
FIELD (State)	VALUE (TX)
FIELD (Zip)	VALUE (77008)
FIELD (Phone)	VALUE (713 880 0327)
FIELD (Email)	VALUE (jbrown@jlbprof.com)
FIELD (RecurPeriod)	VALUE (Monthly)
FIELD (RecurDay)	VALUE (14)

6 Gift Cards

The following sections define the fields used for Gift Card transactions with the TDBE.

Note: Gift Card transactions may require a PSPA value depending on how the merchant's program is set up. When the merchant is set up, the merchant receives a PSPA printout that describes which program requires which PSPA value.

6.1 Gift Card Issuance

You can issue a single card or a batch of consecutive cards. To issue single card, submit the track 2 data for the card in the CardNo field. To issue a batch of cards, submit the track 2 data for the first card in the CardNo field and the last card in the GiftBatchEnd field.

For batch issuance, the Total is applied to each card, so you pay a multiple of that amount.

Table 14 – Gift Card Issuance

Field	Description
Swiped	Indicates the card was swiped. Always: 1
CardNo	The complete data from Track 2 for the card to be issued or the first card in the batch.
GiftBatchEnd	Only used for batch issuance. The complete data from Track 2 for the last card in the batch.
Total	The total amount to put on the gift card. If this is a pre-denominated card, this value must match the denomination.
TranType	Always: GiftCardIssuance
GiftPSPA	An optional PSPA value.

6.2 Gift Card Redemption

A gift card redemption is a sale against the card's value. The redemption can be one of two types, depending on the response when the total amount of the transaction is greater than the amount on the card:

- GiftRedemption – If the total is greater than the amount on the card, the transaction is denied.
- GiftPartialRedemption – If the total is greater than the amount on the card, the transaction is approved for the amount on the card and you must obtain another form of payment for the remainder of the sale.

Table 15 – Gift Card Redemption

Field	Description
Swiped	Indicates if the card was swiped. Values are: 0 – Keyed 1 – Swiped
CardNo	For keyed transactions, the credit card number. For swiped transactions, the complete data from Track 2 for the card.
ExpMonth	For keyed transactions, the 2-digit credit card expiration month, 01 through 12. If the expiration date is not listed, submit 00.
ExpYear	For keyed transactions, the 2-digit credit card expiration year. For example, 12 for 2012. If the expiration date is not listed, submit 00.
CVV2Type	Value indicating whether the CVV2 value was submitted for this transaction. For security reasons, you should always require the CVV2 value. Values are: 0 – CVV2 should not be used for this transaction 1 – CVV2 should be used for this transaction 2 – The card's CVV2 is illegible 9 – This card has no CVV2 imprinted on it *Note: Before using the CVV2Type 9, verify that the merchant's processor allows this.*
CVV2	The CVV2 value on the card. If you submit in 0 for CVV2Type, then submit this field as empty.
Total	The total amount of the transaction. For example 12.34. Do not include currency symbols or commas.
TranType	The type of redemption transaction: GiftRedemption GiftPartialRedemption
GiftPSPA	An optional PSPA value.

6.3 Gift Card Balance Inquiry

The balance inquiry returns the available balance remaining on the gift card.

Table 16 – Gift Card Balance Inquiry

Field	Description
Swiped	Indicates if the card was swiped. Values are: 0 – Keyed 1 – Swiped
CardNo	For keyed transactions, the credit card number. For swiped transactions, the complete data from Track 2 for the card.

Field	Description
ExpMonth	For keyed transactions, the 2-digit credit card expiration month, 01 through 12. If the expiration date is not listed, submit 00.
ExpYear	For keyed transactions, the 2-digit credit card expiration year. For example, 12 for 2012. If the expiration date is not listed, submit 00.
CVV2Type	Value indicating whether the CVV2 value was submitted for this transaction. For security reasons, you should always require the CVV2 value. Values are: 0 – CVV2 should not be used for this transaction 1 – CVV2 should be used for this transaction 2 – The card's CVV2 is illegible 9 – This card has no CVV2 imprinted on it *Note: Before using the CVV2Type 9, verify that the merchant's processor allows this.*
CVV2	The CVV2 value on the card. If you submit in 0 for CVV2Type, then submit this field as empty.
Total	Set this to 1.00.
TranType	Always: GiftBalanceInquiry
GiftPSPA	An optional PSPA value.

6.4 Gift Card Add Value

This transaction adds additional value to a gift card that has already been issued.

Table 17 – Gift Card Add Value

Field	Description
Swiped	For keyed transactions, the credit card number. For swiped transactions, the complete data from Track 2 for the card.
CardNo	For keyed transactions, the 2-digit credit card expiration month, 01 through 12. If the expiration date is not listed, submit 00.
ExpMonth	For keyed transactions, the 2-digit credit card expiration year. For example, 12 for 2012. If the expiration date is not listed, submit 00.
ExpYear	Value indicating whether the CVV2 value was submitted for this transaction. For security reasons, you should always require the CVV2 value. Values are: 0 – CVV2 should not be used for this transaction 1 – CVV2 should be used for this transaction 2 – The card's CVV2 is illegible 9 – This card has no CVV2 imprinted on it *Note: Before using the CVV2Type 9, verify that the merchant's processor allows this.*

Field	Description
CVV2Type	The CVV2 value on the card. If you submit in 0 for CVV2Type, then submit this field as empty.
CVV2	For keyed transactions, the credit card number. For swiped transactions, the complete data from Track 2 for the card.
Total	The total amount to add to the card.
TranType	Always: GiftAddValue
GiftPSPA	An optional PSPA value.

6.5 Gift Card Void

This transaction removes a gift card transaction from the batch.

Table 18 – Gift Card Void

Field	Description
TransID	Transaction ID of the transaction you want to void.
Total	Set this to 1.00.
TranType	Always: GiftVoid
GiftPSPA	An optional PSPA value.

6.6 Gift Card Transfer

The transaction transfers value from one gift card to another.

Table 19 – Gift Card Transfer

Field	Description
Swiped	Indicates the card was swiped. Always: 1
CardNo	The complete data from Track 2 for the card that you are transferring to.
GiftBatchEnd	The complete data from Track 2 for the card you are transferring from.
Total	The total amount to transfer from one card to the other.
TranType	Always: GiftTransfer
GiftPSPA	An optional PSPA value.

7 Common Check System

ePROCESSINGNETWORK is developing a common check system so that merchants can use a single set of fields to process checks, regardless of processor.

The following table describes the fields used for the common check system:

Table 20 – Common Check System Checks

Field	Description
ePNAccount	080880
RestrictKey	yFqqXJh9Pqnugfr
PaymentType	Always: Check
Company	The account holder's Company Name.
FirstName	The account holder's first name.
LastName	The account holder's last name.
BankName	Name of the bank that the check is written on. *Note: CCFS requires you to submit BankName field when processing company checks this is optional on all other setups.*
Address	The account holder's address.
City	The account holder's city.
State	The account holder's 2-character state code.
Zip	The account holder's ZIP code.
Phone	The account holder's phone number.
Total	The total amount you want to charge.
NCNMicr	For scanned checks, the MICR value read from the check reader. Not used for keyed checks.
NCNRoutingNum	For keyed checks, the routing number of the check. Not used for scanned checks.
NCNCheckNum	For keyed checks, the check number. This is optional for most NACHA types; it is required for TEL and may be required depending on the merchant's account setup. Not used for scanned checks.
NCNAccountNum	For keyed checks, the checking account number. Not used for scanned checks.

Field	Description
NCNAccountType	The account type. Values are: BUSINESS CHECKING BUSINESS SAVINGS PERSONAL CHECKING PERSONAL SAVINGS For merchants on Echo, you can also use: PERSONAL LOAN BUSINESS LOAN
NCNDLState	The 2-charcter state code for the driver's license state. If you are not providing a driver's license, submit XX.
NCNDLNum	The driver's license number in the following format EttyymmddDLnnnnnnnn Where: E – Must be used as the identifier for this string. tt – Country (should be US) yy – 2-digit expiration year (leading zero) mm – 2-digit expiration month (leading zero) dd – 2-digit expiration day of month (leading zero) DL – Letters "DL" for driver's license nnnnn – Driver's license number.

Field	Description
NCNTran	The type of NACHA transaction. The default value is WEBCHECK. The merchant account must be configured correctly for the NACHA code. Values are: WEBCHECK WEBVOID TELCHECK TELVOID PPDCHECK PPDVOID CCDCHECK CCDVOID POPCHECK POPVOID ARCCHECK ARCVOID For merchants on GETI, you can also use:Check21CHECK Check21VOID BOCCHECK BOCVOID For merchants on Echo, you can also use: WEBRETURN TELRETURN PPDRETURN CCDRETURN POPRETURN ARCRETURN
NCNOverride	Optional. Forces a specific processing type, overriding the normal determination logic. Values are: convert verify For merchants on Echo, you can also use “achonly” where the check is not verified but will be submitted for ACH processing.
IdentitySSN4 or IdentifyDOBYear	For merchants on GETI only. If your merchant account requires identification, submit one of these two fields: IdentifySSN4 – Last 4 digits of the Social Security Number IdentifyDOBYear – Account holder’s birth year (YYYY)

7.1 Check Image Uploads

For any check transaction, you have the option of submitting check images. For Check21 transactions, both front and back images of the check are required and must be submitted to the processor. For all other transactions, check images are optional; however, we recommend that you submit them as they are available to you for reporting.

You must upload check images in the TIFF format.

For any of the check transactions that you submit that are MICR based (POP, ARC, BOC and Check21), you can include an image of the check for submission to the processor and for later display in reporting.

You can upload check images in one of two ways: as a normal file input HTML element (<input type=file>) or as a field with the entire binary contents of the file as Base 64 encoded text.

To send the check images as file fields, use these fields:

Table 21 – File Field Check Upload

Field	Description
Check21ImageFile1	Front of check image. Use this as the name for the HTML file input field.
Check21ImageFile2	Back of check image. Use this as the name for the HTML file input field.

The send the check images as base 64 encoded binary contents, use these fields:

Table 22 – Binary Check Upload

Field	Description
Check21ImageBytes1	Front of check image. Base 64 encoded text representation of the binary contents of the image file.
Check21ImageType1	Image type for the front of check image. Always: tiff
Check21ImageBytes2	Back Check Image. Base 64 encoded text representation of the binary contents of the image file.
Check21ImageType2	Image type for the back of check image. Always: tiff

8 Appendix – HTML Samples

8.1 Basic Example

```
<HTML><BODY>
<form action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl"
   method=post>
<table>
   <TR>   <TD>ePNAccount:</TD>
          <TD><input type=text name="ePNAccount" value="080880"></TD> </TR>

   <TR>   <TD>CardNo:</TD>
          <TD><input type=text name="CardNo" value="4111111111111111"></TD>
   </TR>
   <TR>   <TD>ExpMonth:</TD>
          <TD><input type=text name="ExpMonth" value="12"></TD>
</TR>
   <TR>   <TD>ExpYear:</TD>
          <TD><input type=text name="ExpYear" value="09"></TD>
</TR>
   <TR>   <TD>Total:</TD>
          <TD><input type=text name="Total" value="12.34"></TD>
</TR>
   <TR>   <TD>Address:</TD>
          <TD><input type=text name="Address" value="123 Fake St."></TD>
   </TR>
   <TR>   <TD>Zip:</TD>
          <TD><input type=text name="Zip" value="12345"></TD>
</TR>
   <TR>   <TD>EMail :</TD>
          <TD><input type=text name="EMail" value="email@address.com"></TD>
</TR>
   <TR>   <TD>CVV2Type:</TD>
          <TD><input type=text name="CVV2Type" value="1"></TD>
</TR>
   <TR>   <TD>CVV2:</TD>
          <TD><input type=text name="CVV2Type" value="123"></TD>
</TR>
   <TR>   <TD>RestrictKey:</TD>
          <TD><input type=text name="RestrictKey"
          value="yFqqXJh9Pqnugfr"></TD>

   </TR>

   <TR>   <TD>Submit:</TD>
          <TD><input type=submit name="submit" value="Submit"></TD>
   </TR>

</table> </form> </BODY> </HTML>
```

8.2 Basic Example without HTML Response

```
<HTML> <BODY>
<form
   action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl"
   method=post>
<table><TR>      <TD>ePNAccount:</TD>
          <TD><input type=text name="ePNAccount" value="080880"></TD>
   </TR>
   <TR>   <TD>CardNo:</TD>
          <TD><input type=text name="CardNo" value="4111111111111111"></TD>
   </TR>
   <TR>   <TD>ExpMonth:</TD>
          <TD><input type=text name="ExpMonth" value="12"></TD>
   </TR>
   <TR>   <TD>ExpYear:</TD>
          <TD><input type=text name="ExpYear" value="09"></TD>
   </TR>
   <TR>   <TD>Total:</TD>
          <TD><input type=text name="Total" value="12.34"></TD>
   </TR>
   <TR>   <TD>Address:</TD>
          <TD><input type=text name="Address" value="123 Fake St."></TD>
   </TR>
   <TR>   <TD>Zip:</TD>
          <TD><input type=text name="Zip" value="12345"></TD>
   </TR>
   <TR>   <TD>EMail :</TD>
          <TD><input type=text name="EMail" value="customer@email.com"></TD>
   </TR>
   <TR>   <TD>CVV2Type:</TD>
          <TD><input type=text name="CVV2Type" value="1"></TD>
   </TR>
   <TR>   <TD>CVV2:</TD>
          <TD><input type=text name="CVV2Type" value="123"></TD>
   </TR>
   <TR>   <TD>RestrictKey:</TD>
          <TD><input type=text name="RestrictKey"
          value="yFqqXJh9Pqnugfr"></TD>
   </TR>
   <TR>   <TD>HTML:</TD>
          <TD><input type=text name="HTML" value="No"></TD>
   </TR>
   <TR>   <TD>Submit:</TD>
          <TD><input type=submit name="submit" value="Submit"></TD>
   </TR>

</table></form></BODY></HTML>
```

8.3 Example with Invoice Number

```
<HTML> <BODY>
<form
   action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl"
   method=post>
<table>   <TR>
          <TD>ePNAccount:</TD>
          <TD><input type=text name="ePNAccount" value="080880"></TD> </TR>

   <TR>   <TD>CardNo:</TD>
          <TD><input type=text name="CardNo" value="4111111111111111"></TD>
   </TR>

   <TR>   <TD>ExpMonth:</TD>
          <TD><input type=text name="ExpMonth" value="12"></TD></TR>

   <TR>   <TD>ExpYear:</TD>
          <TD><input type=text name="ExpYear" value="09"></TD> </TR>

   <TR>   <TD>Total:</TD>
          <TD><input type=text name="Total" value="12.34"></TD></TR>

   <TR>   <TD>Address:</TD>
          <TD><input type=text name="Address" value="123 Fake St."></TD>
   </TR>

   <TR>   <TD>Zip:</TD>
          <TD><input type=text name="Zip" value="12345"></TD>  </TR>

   <TR>   <TD>EMail :</TD>
          <TD><input type=text name="EMail" value="customer@email.com"></TD>
   </TR>

   <TR>   <TD>CVV2Type:</TD>
          <TD><input type=text name="CVV2Type" value="1"></TD> </TR>

   <TR>   <TD>CVV2:</TD>
          <TD><input type=text name="CVV2Type" value="123"></TD></TR>

   <TR>   <TD>RestrictKey:</TD>
          <TD><input type=text name="RestrictKey"
          value="yFqqXJh9Pqnugfr"></TD>
   </TR>

   <TR>   <TD>HTML:</TD>
          <TD><input type=text name="HTML" value="No"></TD></TR>

   <TR>   <TD>Inv:</TD>
          <TD><input type=text name="Inv" value="report"></TD> </TR>

   <TR>
          <TD>Submit:</TD>
          <TD><input type=submit name="submit" value="Submit"></TD>
   </TR>

</table> </form> </BODY> </HTML>
```

8.4 Confirmation Script

```
   <HTML>
   <BODY>
   <FORM action="https://www.eprocessingnetwork.com/cgi-
bin/tdbe/confirmation.pl"
         method=post>
   <TABLE>
      <TR>
            <TD>ePNAccount:</TD>
            <TD><input type=text name="ePNAccount" value="080880"></TD>
      </TR>

      <TR>
            <TD>Inv:</TD>
            <TD><input type=text name="Inv" value="99998"></TD>
      </TR>

      <TR>
            <TD>NewFormat:</TD>
            <TD><input type=text name="NewFormat" value="1"></TD>
      </TR>

      <TR>
            <TD>RestrictKey:</TD>
            <TD><input type=text name="RestrictKey"
             value="yFqqXJh9Pqnugfr"></TD>
      </TR>

      <TR>
            <TD>Submit:</TD>
            <TD><input type=submit name="submit" value="Submit"></TD>
      </TR>
   </TABLE>
   </FORM>
   </BODY>
   </HTML>
```

8.5 Authorization Only

```
   <HTML> <BODY>
   <FORM action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl"
method=post>
   <TABLE>   <TR>
             <TD>ePNAccount:</TD>
             <TD><input type=text name="ePNAccount" value="080880"></TD> </TR>
       <TR>
             <TD>CardNo:</TD>
             <TD><input type=text name="CardNo" value="4111111111111111"></TD>
</TR>
       <TR>
             <TD>ExpMonth:</TD>
             <TD><input type=text name="ExpMonth" value="12"></TD></TR>
       <TR>
             <TD>ExpYear:</TD>
             <TD><input type=text name="ExpYear" value="09"></TD> </TR>
       <TR>
             <TD>Total:</TD>
             <TD><input type=text name="Total" value="44.50"></TD> </TR>
       <TR>
             <TD>Address:</TD>
             <TD><input type=text name="Address" value="123 Fake St."></TD>
          </TR>
       <TR>
             <TD>Zip:</TD>
             <TD><input type=text name="Zip" value="12345"></TD>  </TR>
       <TR>
             <TD>EMail :</TD>
             <TD><input type=text name="EMail" value="customer@email.com"></TD>
       </TR>
       <TR>
             <TD>CVV2Type:</TD>
             <TD><input type=text name="CVV2Type" value="1"></TD> </TR>
       <TR>
             <TD>CVV2:</TD>
             <TD><input type=text name="CVV2Type" value="123"></TD> </TR>
       <TR>
             <TD>RestrictKey:</TD>
             <TD><input type=text name="RestrictKey"
              value="yFqqXJh9Pqnugfr"></TD>
   </TR>
       <TR>
             <TD>HTML:</TD>
             <TD><input type=text name="HTML" value="No"></TD> </TR>
       <TR>
             <TD>Inv:</TD>
             <TD><input type=text name="Inv" value="report"></TD> </TR>

       <TR>
             <TD>TranType:</TD>
             <TD><input type=text name="TranType" value="AuthOnly"></TD>
       </TR>

       <TR>
             <TD>Submit:</TD>
             <TD><input type=submit name="submit" value="Submit"></TD>
       </TR>
   </TABLE>  </BODY> </HTML>
```

8.6 AuthDel

```
   <HTML>
   <BODY>
   <FORM action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl"
method=post>
   <TABLE>
      <TR>
            <TD>ePNAccount:</TD>
            <TD><input type=text name="ePNAccount" value="080880"></TD>

      </TR>

      <TR>
            <TD>TransID:</TD>
            <TD><input type=text name="TransID" value="20080828155713-080880-
25"></TD>
      </TR>


      <TR>
            <TD>RestrictKey:</TD>
            <TD><input type=text name="RestrictKey"
            value="yFqqXJh9Pqnugfr"></TD>
      </TR>

      <TR>
            <TD>HTML:</TD>
            <TD><input type=text name="HTML" value="No"></TD>
      </TR>

      <TR>
            <TD>Inv:</TD>
            <TD><input type=text name="Inv" value="report"></TD>
      </TR>

      <TR>
            <TD>TranType:</TD>
            <TD><input type=text name="TranType" value="AuthDel"></TD>
      </TR>

      <TR>
            <TD>Total:</TD>
            <TD><input type=text name="Total" value="1.00"></TD>
      </TR>
      <TR>
            <TD>Submit:</TD>
            <TD><input type=submit name="submit" value="Submit"></TD>
      </TR>
   </TABLE>
   </FORM>
   </BODY>
   </HTML>
```

8.7 Auth2Sale

```
   <HTML>
   <BODY>
   <FORM action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl"
method=post>
   <TABLE>
      <TR>
            <TD>ePNAccount:</TD>
            <TD><input type=text name="ePNAccount" value="080880"></TD>

      </TR>

      <TR>
            <TD>TransID:</TD>
            <TD><input type=text name="TransID"
            value="20040831145904-080880-6044"></TD>
      </TR>

      <TR>
            <TD>RestrictKey:</TD>
            <TD><input type=text name="RestrictKey"
            value="yFqqXJh9Pqnugfr"></TD>
      </TR>

      <TR>
            <TD>HTML:</TD>
            <TD><input type=text name="HTML" value="No"></TD>
      </TR>

      <TR>
            <TD>Inv:</TD>
            <TD><input type=text name="Inv" value="report"></TD>
      </TR>

      <TR>
            <TD>TranType:</TD>
            <TD><input type=text name="TranType" value="Auth2Sale"></TD>
      </TR>

      <TR>
            <TD>Total:</TD>
            <TD><input type=text name="Total" value="1.00"></TD>
      </TR>

      <TR>
            <TD>Submit:</TD>
            <TD><input type=submit name="submit" value="Submit"></TD>
      </TR>

   </TABLE> </FORM> </BODY> </HTML>
```

8.8 Void a Transaction

```
   <HTML>
   <BODY>
   <FORM action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl"
method=post>
   <TABLE>
      <TR>
            <TD>ePNAccount:</TD>
            <TD><input type=text name="ePNAccount" value="080880"></TD>

      </TR>

      <TR>
            <TD>TransID:</TD>
            <TD><input type=text name="TransID"
            value="20040831145904-080880-6044"></TD>
      </TR>


      <TR>
            <TD>RestrictKey:</TD>
            <TD><input type=text name="RestrictKey"
            value="yFqqXJh9Pqnugfr"></TD>
      </TR>

      <TR>
            <TD>HTML:</TD>
            <TD><input type=text name="HTML" value="No"></TD>
      </TR>

      <TR>
            <TD>Inv:</TD>
            <TD><input type=text name="Inv" value="report"></TD>
      </TR>

      <TR>
            <TD>TranType:</TD>
            <TD><input type=text name="TranType" value="Void"></TD>
      </TR>

      <TR>
            <TD>Total:</TD>
            <TD><input type=text name="Total" value="1.00"></TD>
      </TR>

      <TR>
            <TD>Submit:</TD>
            <TD><input type=submit name="submit" value="Submit"></TD>
      </TR>

   </TABLE> </FORM> </BODY> </HTML>
```

8.9 Close Batch

```
   <HTML>
   <BODY>
   <FORM action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl"
method=post>
   <TABLE>
      <TR>
            <TD>ePNAccount:</TD>
            <TD><input type=text name="ePNAccount" value="080880"></TD>

      </TR>

      <TR>
            <TD>RestrictKey:</TD>
            <TD><input type=text name="RestrictKey"
             value="yFqqXJh9Pqnugfr"></TD>
      </TR>

      <TR>
            <TD>HTML:</TD>
            <TD><input type=text name="HTML" value="No"></TD>
      </TR>

      <TR>
            <TD>Inv:</TD>
            <TD><input type=text name="Inv" value="report"></TD>
      </TR>

      <TR>
            <TD>TranType:</TD>
            <TD><input type=text name="TranType" value="CloseBatch"></TD>
      </TR>

      <TR>
            <TD>Total:</TD>
            <TD><input type=text name="Total" value="1.00"></TD>
      </TR>

      <TR>
            <TD>Submit:</TD>
            <TD><input type=submit name="submit" value="Submit"></TD>
      </TR>

   </TABLE>
   </FORM>
   </BODY>
   </HTML>
```

8.10 Credit/Return

```
   <HTML> <BODY>
   <FORM action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl"
method=post>
   <TABLE>   <TR>
             <TD>ePNAccount:</TD>
             <TD><input type=text name="ePNAccount" value="080880"></TD>
      </TR>

      <TR>
             <TD>CardNo:</TD>
             <TD><input type=text name="CardNo" value="4111111111111111"></TD>
      </TR>
      <TR>
             <TD>ExpMonth:</TD>
             <TD><input type=text name="ExpMonth" value="12"></TD>
      </TR>
      <TR>
             <TD>ExpYear:</TD>
             <TD><input type=text name="ExpYear" value="09"></TD>
      </TR>
      <TR>
             <TD>Total:</TD>
             <TD><input type=text name="Total" value="5.00"></TD>
      </TR>
      <TR>
             <TD>EMail :</TD>
             <TD><input type=text name="EMail" value="customer@email.com"></TD>
      </TR>
      <TR>
             <TD>RestrictKey:</TD>
             <TD><input type=text name="RestrictKey"
              value="yFqqXJh9Pqnugfr"></TD>
      </TR>
      <TR>
             <TD>HTML:</TD>
             <TD><input type=text name="HTML" value="No"></TD>
      </TR>
      <TR>
             <TD>Inv:</TD>
             <TD><input type=text name="Inv" value="report"></TD>
      </TR>
      <TR>
             <TD>TranType:</TD>
             <TD><input type=text name="TranType" value="Return"></TD>
      </TR>
      <TR>
             <TD>Submit:</TD>
             <TD><input type=submit name="submit" value="Submit"></TD>
      </TR>
   </TABLE> </FORM> </BODY> </HTML>
```

8.11 Store

```
   <HTML><BODY>
   <FORM action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl"
method=post>
   <TABLE>
      <TR>   <TD>ePNAccount:</TD>
             <TD><input type=text name="ePNAccount" value="080880"></TD>
      </TR>
      <TR>
             <TD>CardNo:</TD>
             <TD><input type=text name="CardNo" value="4111111111111111"></TD>
      </TR>
      <TR>   <TD>ExpMonth:</TD>
             <TD><input type=text name="ExpMonth" value="12"></TD>
      </TR>
      <TR>   <TD>ExpYear:</TD>
             <TD><input type=text name="ExpYear" value="09"></TD>
      </TR>
      <TR>   <TD>Total:</TD>
             <TD><input type=text name="Total" value="44.50"></TD>
      </TR>
      <TR>   <TD>Address:</TD>
             <TD><input type=text name="Address" value="123 Fake St."></TD>
      </TR>
      <TR>   <TD>Zip:</TD>
             <TD><input type=text name="Zip" value="12345"></TD>
      </TR>
      <TR>   <TD>EMail :</TD>
             <TD><input type=text name="EMail" value="customer@email.com"></TD>
      </TR>
      <TR>   <TD>RestrictKey:</TD>
             <TD><input type=text name="RestrictKey"
             value="yFqqXJh9Pqnugfr"></TD>
      </TR>
      <TR>   <TD>HTML:</TD>
             <TD><input type=text name="HTML" value="No"></TD>
      </TR>
      <TR>   <TD>Inv:</TD>
             <TD><input type=text name="Inv" value="report"></TD>
      </TR>
      <TR>   <TD>TranType:</TD>
             <TD><input type=text name="TranType" value="Store"></TD>
      </TR>
      <TR>   <TD>Submit:</TD>
             <TD><input type=submit name="submit" value="Submit"></TD>
      </TR>
   </TABLE></FORM></BODY></HTML>
```

8.12 Voice Auth

```
   <HTML>
   <BODY>
   <FORM action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl"
method=post>
   <TABLE>
      <TR>
            <TD>ePNAccount:</TD>
            <TD><input type=text name="ePNAccount" value="080880"></TD>
      </TR>
      <TR>
            <TD>CardNo:</TD>
            <TD><input type=text name="CardNo" value="4111111111111111"></TD>
      </TR>
      <TR>
            <TD>ExpMonth:</TD>
            <TD><input type=text name="ExpMonth" value="12"></TD>
      </TR>
      <TR>
            <TD>ExpYear:</TD>
            <TD><input type=text name="ExpYear" value="09"></TD>
      </TR>
      <TR>
            <TD>Total:</TD>
            <TD><input type=text name="Total" value="55.00"></TD>
      </TR>
      <TR>
            <TD>EMail :</TD>
            <TD><input type=text name="EMail" value="customer@email.com"></TD>
      </TR>
      <TR>
            <TD>RestrictKey:</TD>
            <TD><input type=text name="RestrictKey"
             value="yFqqXJh9Pqnugfr"></TD>
      </TR>
      <TR>
            <TD>HTML:</TD>
            <TD><input type=text name="HTML" value="No"></TD>
      </TR>
      <TR>
            <TD>Inv:</TD>
            <TD><input type=text name="Inv" value="report"></TD>
      </TR>
      <TR>
            <TD>TranType:</TD>
            <TD><input type=text name="TranType" value="Voice"></TD>
      </TR>
      <TR>   <TD>AuthCode:</TD>
            <TD><input type=text name="AuthCode" value="123456"></TD>
      </TR>

      <TR>   <TD>Submit:</TD>
            <TD><input type=submit name="submit" value="Submit"></TD>
      </TR>
   </TABLE> </FORM> </BODY> </HTML>
```

8.13 Sale From TransID

```
<HTML><BODY>
<form
   action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl"
   method=post>
<table>
   <TR>   <TD>ePNAccount:</TD>
          <TD><input type=text name="ePNAccount" value="080880"></TD>
   </TR>

   <TR>   <TD>TransID:</TD>
          <TD><input type=text name="TransID"
          value="20040831145904-080880-6044"></TD></TR>

   <TR>   <TD>ExpMonth:</TD>
          <TD><input type=text name="ExpMonth" value="12"></TD></TR>

   <TR>   <TD>ExpYear:</TD>
          <TD><input type=text name="ExpYear" value="09"></TD></TR>

   <TR>   <TD>Total:</TD>
          <TD><input type=text name="Total" value="33.45"></TD></TR>

   <TR>   <TD>Address:</TD>
          <TD><input type=text name="Address" value="123 Fake St."></TD>
   </TR>

   <TR>   <TD>Zip:</TD>
          <TD><input type=text name="Zip" value="12345"></TD></TR>

   <TR>   <TD>EMail :</TD>
          <TD><input type=text name="EMail" value="customer@email.com"></TD>
   </TR>

   <TR>   <TD>CVV2Type:</TD>
          <TD><input type=text name="CVV2Type" value="1"></TD></TR>

   <TR>
          <TD>CVV2:</TD>
          <TD><input type=text name="CVV2Type" value="123"></TD>
   </TR>

   <TR>   <TD>RestrictKey:</TD>
          <TD><input type=text name="RestrictKey"
          value="yFqqXJh9Pqnugfr"></TD>
   </TR>

   <TR>   <TD>HTML:</TD>
          <TD><input type=text name="HTML" value="No"></TD></TR>

   <TR>   <TD>Inv:</TD>
          <TD><input type=text name="Inv" value="report"></TD></TR>
   <TR>
          <TD>Submit:</TD>
          <TD><input type=submit name="submit" value="Submit"></TD>
   </TR>

</table></form></BODY></HTML>
```

8.14 Recurring Method

```
<HTML> <BODY>
<FORM name="test_recur" method="POST"
 action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl">
<TABLE>
   <TR>
          <TD>ePNAccount:</TD>
          <TD><input type=text name="ePNAccount" value="080880"></TD>
   </TR>
   <TR>   <TD>Inv:</TD>
          <TD><input type=text name="Inv" value="report"></TD></TR>
   <TR>   <TD>RestrictKey:</TD>
          <TD><input type=text name="RestrictKey"
          value="wazCv6tcQ1vHwee"></TD></TR>
   <TR>   <TD>TranType:</TD>
          <TD><input type=text name="TranType" value="Sale"></TD></TR>
   <TR>   <TD>CardNo:</TD>
          <TD><input type=text name="CardNo" value="4111111111111111"></TD>
   </TR>
   <TR>   <TD>CVV2Type:</TD>
          <TD><input type=text name="CVV2Type" value="1"></TD></TR>
   <TR>   <TD>CVV2:</TD>
          <TD><input type=text name="CVV2" value="999"></TD></TR>
   <TR>   <TD>ExpMonth:</TD>
          <TD><input type=text name="ExpMonth" value="10"></TD></TR>
   <TR>   <TD>ExpYear:</TD>
          <TD><input type=text name="ExpYear" value="14"></TD></TR>
   <TR>   <TD>Total:</TD>
          <TD><input type=text name="Total" value="14.00"></TD></TR>
   <TR>   <TD>Company:</TD>
          <TD><input type=text name="Company" value="ePN"></TD></TR>
   <TR>   <TD>FirstName:</TD>
          <TD><input type=text name="FirstName" value="John"></TD></TR>
   <TR>   <TD>LastName:</TD>
          <TD><input type=text name="LastName" value="Doe"></TD></TR>
   <TR>
          <TD>Address:</TD>
          <TD><input type=text name="Address"
          value="1415 North Loop West"></TD>
   </TR>
   <TR>   <TD>City:</TD>
          <TD><input type=text name="City" value="Houston"></TD></TR>
   <TR>   <TD>State:</TD>
          <TD><input type=text name="State" value="TX"></TD></TR>
   <TR>   <TD>Zip:</TD>
          <TD><input type=text name="Zip" value="77008"></TD></TR>
   <TR>   <TD>RecurMethodID:</TD>
          <TD><input type=text name="RecurMethodID" value="1"></TD></TR>
   <TR>   <TD>Identifier:</TD>
          <TD><input type=text name="Identifier" value="ForMyRecords"></TD>
   </TR>
   <TR>   <TD>Submit:</TD>
          <TD><input type=submit name=" submit " value="Submit"></TD> </TR>
</TABLE></FORM></BODY></HTML>
```

8.15 Create on the Fly

```
<HTML><BODY><FORM name="test_recur" method="POST"
 action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl">
<TABLE><TR>      <TD>ePNAccount:</TD>
          <TD><input type=text name="ePNAccount" value="080880"></TD></TR>
   <TR>   <TD>Inv:</TD>
          <TD><input type=text name="Inv" value="report"></TD></TR>
   <TR>   <TD>RestrictKey:</TD>
          <TD><input type=text name="RestrictKey"
           value="wazCv6tcQ1vHwee"></TD></TR>
   <TR>   <TD>TranType:</TD>
          <TD><input type=text name="TranType" value="Sale"></TD></TR>
   <TR>   <TD>CardNo:</TD>
           <TD><input type=text name="CardNo" value="4111111111111111"></TD>
   </TR>
   <TR>   <TD>CVV2Type:</TD>
          <TD><input type=text name="CVV2Type" value="1"></TD></TR>
   <TR>   <TD>CVV2:</TD>
          <TD><input type=text name="CVV2" value="999"></TD></TR>
   <TR>   <TD>ExpMonth:</TD>
          <TD><input type=text name="ExpMonth" value="10"></TD></TR>
   <TR>   <TD>ExpYear:</TD>
          <TD><input type=text name="ExpYear" value="14"></TD></TR>
   <TR>   <TD>Total:</TD>
          <TD><input type=text name="Total" value="14.00"></TD></TR>
   <TR>   <TD>Company:</TD>
          <TD><input type=text name="Company" value="ePN"></TD></TR>
   <TR>   <TD>FirstName:</TD>
          <TD><input type=text name="FirstName" value="John"></TD></TR>
   <TR>   <TD>LastName:</TD>
          <TD><input type=text name="LastName" value="Doe"></TD></TR>
   <TR>   <TD>Address:</TD>
           <TD><input type=text name="Address"
          value="1415 North Loop West"></TD></TR>
   <TR>   <TD>City:</TD>
          <TD><input type=text name="City" value="Houston"></TD></TR>
   <TR>   <TD>State:</TD>
          <TD><input type=text name="State" value="TX"></TD></TR>
   <TR>   <TD>Zip:</TD>
          <TD><input type=text name="Zip" value="77008"></TD></TR>
   <TR>   <TD>RecurMethodID:</TD>
          <TD><input type=text name="RecurMethodID" value="0"></TD></TR>
   <TR>   <TD>Identifier:</TD>
           <TD><input type=text name="Identifier" value="ForMyRecords"></TD>
   </TR>
   <TR>   <TD>RCRRecurAmount:</TD>
          <TD><input type=text name="RCRRecurAmount" value="16.00"></TD>
   </TR>
   <TR>   <TD>RCRRecurs:</TD>
          <TD><input type=text name="RCRRecurs" value="8"></TD></TR>
   <TR>   <TD>RCRPeriod:</TD>
          <TD><input type=text name="RCRPeriod" value="Monthly"></TD></TR>
   <TR>   <TD>RCRChargeWhen:</TD>
          <TD><input type=text name="RCRChargeWhen"
           value="OnDayOfCycle"></TD></TR>
   <TR>   <TD>RCRStartOnDay:</TD>
           <TD><input type=text name="RCRStartOnDay" value="12~01~2009"></TD>
   </TR>  <TR>
          <TD>Submit:</TD>
          <TD><input type=submit name="submit" value="Submit"></TD>   </TR>
</TABLE> </FORM> </BODY> </HTML>
```

8.16 Cancelling a Recurring Transaction

```
<HTML>
<BODY>
<FORM name="test_recur" method="POST"
 action=" https://www.eprocessingnetwork.com/cgi-bin/cgi-bin/tdbe/Recur.pl">
<TABLE>
   <TR>
          <TD>ePNAccount:</TD>
          <TD><input type=text name="ePNAccount" value="080880"></TD>
   </TR>
   <TR>
          <TD>RestrictKey:</TD>
          <TD><input type=text name="RestrictKey"
               value="yFqqXJh9Pqnugfr"></TD>
   </TR>
   <TR>
          <TD>TranType:</TD>
          <TD><input type=text name="TranType" value="Cancel"></TD>
   </TR>
   <TR>
          <TD>RecurID:</TD>
          <TD><input type=text name="RecurID" value="25"></TD>
   </TR>

   <TR>
          <TD>Submit:</TD>
          <TD><input type=submit name="submit" value="Submit"></TD>
   </TR>
</TABLE>
</FORM>
</BODY>
</HTML>
```