

## Advanced Recur and TDBE System

This will document using the eProcessingNetwork Advanced Recur system and the Transparent Database Engine Template (TDBE) to create recurring transactions and to cancel transactions that are already recurring.

ePNAccount:	<input type="text" value="04971"/>
Inv:	<input type="text" value="report"/>
RestrictKey:	<input type="text" value="evCc252BGzDpmPd"/>
TranType:	<input type="text" value="Sale"/>
CardNo:	<input type="text" value="0227271714569"/>
ExpMonth:	<input type="text" value="09"/>
ExpYear:	<input type="text" value="06"/>
Total:	<input type="text" value="23.98"/>
Address:	<input type="text" value="123 Maple St."/>
Zip:	<input type="text" value="77449"/>
CVV2Type:	<input type="text" value="1"/>
CVV2:	<input type="text" value="111"/>
HTML:	<input type="text" value="Yes"/>
First Name:	<input type="text" value="Julian"/>
Last Name:	<input type="text" value="Brown"/>
City:	<input type="text" value="Houston"/>
State:	<input type="text" value="TX"/>
E-Mail:	<input type="text" value="jbrown@eprocessingne"/>
Phone:	<input type="text" value="713 880 0327"/>
RecurMethodID:	<input type="text" value="1"/>
Identifier:	<input type="text" value="0155ABB"/>
Submit:	<input type="button" value="Submit"/>

### Using TDBE To Create A Recurring Transaction

Shown here is a CGI form filled out with the relevant data to pass to the TDBE. The HTML code for this HTML file is listed in Appendix 1. The fields you need to pass are listed here. The **ePNAccount** and the **Inv** fields are critical. Setting **Inv=report** will return additional information including the transaction ID.

The **TranType** should be Sale. If you have the RecurringMethod initial amount set to zero, then this is overridden to be an **AuthOnly** with the recurring amount to confirm that the credit card is good. See ePNRecurConfig for a detailed description of how this works. Next are the CardNo, ExpMonth and ExpYear.

Following that is order information that is stored with the recurring transaction such as **Address, Zip, FirstName, LastName, City, State, Zip, Email** and **Phone**. **Company** is also recorded if passed in. Also, be sure to pass in the **CVV2** and **CVV2Type** values.

Then is the RecurringMethod, which is the ID from the ePNRecurConfig page that you set up that governs how this transaction is to recur. This defines such things as a Monthly transaction occurring on the 15<sup>th</sup>. Next is the “**Identifier**”, which is a field that you can use to identify this transaction to your database or application and this should be an **alphanumeric value only**. We record this data, but do not use it. When you get a postback from us it will include this Identifier.

The response from this transaction is here.

```
"YAUTH/TKT 021624","Address and Zip Code Do Not Match (N)","", "6856", "20050221111110-04971-6856", "RecurID=75"
```

The important information in the **CSV** response are the **Transaction ID**, “20040221111110-04971-6856” and most importantly the “RecurID=75”. The RecurID identifies this recurring transaction to our system.

# Advanced Recur and TDBE System

## Postback URL

An optional feature of the Advanced Recur system is to be notified when a recurring transaction has occurred. You can specify a URL that will be **POST**ed to by our transaction server. The URL **must not contain a question mark or a GET string**, the postback will fail if you have a **GET** string in the URL, since we are **POST**ing to it. To set a postback url, go to the Advanced Section of ePN Recur Config.

### Recur Postback URL

Enter a URL that will be posted to whenever a recurring transaction is processed. **This URL cannot have a question mark (?) in it. We post to this URL and the question mark causes the postback to fail.** If you do not wish to have postbacks then set this to blank

Save Recur Postback URL

## Postback on Execute

When this RecurID executes, that is when this transaction is recurred. If you have the postback URL set, we will post to that URL the information from the recurring transaction. To the right is the information posted:

The postback URL that is specified for this test is a script that just records all the CGI parameters that are sent to it to a log file. Here is a screenshot of the log entry. First is the ePNAccount number.

PostbackType is set to "recur" which tells you this postback comes from the recurring system. PostbackTime is a timestamp telling you when eProcessingNetwork first tried to notify you of the transaction. PostbackAttempt tells you how many times eProcessingNetwork attempted to contact this URL. If it succeeds immediately it will have a value of 1. This is increased everytime eProcessingNetwork attempts the postback. eProcessingNetwork will try multiple times for up to 48 hours to execute this postback. If after 48 hours we were unable to post to your URL, we will stop trying.

Next is the specific data for this postback. RecurOperation indicates what from the recur system triggered this postback. In this case "ExecuteRecur" tells you that this is a normal recur transaction. IsApproved is set to "Y", this means the transaction succeeded. If IsApproved is set to "N" then this transaction was declined and the transaction will no longer recur; it is moved to the completed transaction list. Next you get the response, the last 6 digits are always the approval code. If this is a decline, then the decline message would appear here. Next is the RecurID, telling you which transaction is recurring, then the identifier and the RecurringMethod that governs this recurring transaction. Next is the ePN Invoice number and Transaction ID. After those values is the order information that was recorded for this recurring transaction.

```
ePNAccount=04971
PostbackType=recur
PostbackTime=20050221111551
PostbackAttempt=1
RecurOperation=ExecuteRecur
IsApproved=Y
Response=YAUTH/TKT 021355
RecurID=75
Identifier=TEST_41_05
RecurringMethod=41
Invoice=6857
TransID=20050221111537-04971-6857
FirstName=Julian
LastName=Brown
Address=123 Maple St.
City=Houston
State=TX
Zip=77449
Phone=713 880 0327
Email=
```

## Advanced Recur and TDBE System

### Cancel a Recur

To cancel a recurring transaction without manual intervention, you can use a special CGI program for this purpose.

The URL for this script is:

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

The HTML code for this HTML file is listed in Appendix 2.

This script **will not work without the correct RestrictKey**.

When posting to this URL the only TranType allowed is "Cancel" and you must specify the RecurID.

Here is the response.

```
"Y","Successful"
```

It is a CSV response. If the system could not find the recurring transaction ID then the first value will be "N" and a message indicating what went wrong.

This script will generate a postback.

To the right is the postback received.

The RecurOperation is "**CancelRecur**", the **RecurID** and **Identifier**, and order information.

ePNAccount:	<input type="text" value="04971"/>
RestrictKey:	<input type="text" value="evCc252BGzDpmPd"/>
TranType:	<input type="text" value="Cancel"/>
RecurID:	<input type="text" value="25"/>
Submit:	<input type="submit" value="Submit"/>

```
ePNAccount=04971
PostbackType=recur
PostbackTime=20050221112016
PostbackAttempt=1
RecurOperation=CancelRecur
RecurID=75
Identifier=TEST_41_05
RecurringMethod=41
FirstName=Julian
LastName=Brown
Address=123 Maple St.
City=Houston
State=TX
Zip=77449
Phone=713 880 0327
Email=
```

# Advanced Recur and TDBE System

## Generating your own RecurringMethod

You can specify every aspect of the RecurringMethod when you create the transaction.

ePNAccount:	<input type="text" value="04971"/>	Last Name:	<input type="text" value="Brown"/>
Invoice:	<input type="text" value="report"/>	City:	<input type="text" value="Houston"/>
RestrictKey:	<input type="text" value="evCc252BGzDpmPd"/>	State:	<input type="text" value="TX"/>
TranType:	<input type="text" value="Sale"/>	Email:	<input type="text" value="jbrown@eprocessingne"/>
CardNo:	<input type="text" value="0227271714569"/>	Phone:	<input type="text" value="713 880 0327"/>
ExpMonth:	<input type="text" value="09"/>	RecurringMethod:	<input type="text" value="0"/>
ExpYear:	<input type="text" value="06"/>	Identifier:	<input type="text" value="0155ABB"/>
Total:	<input type="text" value="23.98"/>	RCRRecurAmount:	<input type="text" value="20.00"/>
Address:	<input type="text" value="123 Maple St"/>	RCRPeriod:	<input type="text" value="Monthly"/>
Zip:	<input type="text" value="77449"/>	RCRChargeWhen:	<input type="text" value="OnDayOfCycle"/>
CVV2Type:	<input type="text" value="1"/>	RCRStartAfterInitialDays:	<input type="text" value="12"/>
CVV2:	<input type="text" value="111"/>	RCRRecurs:	<input type="text" value="3"/>
HTML:	<input type="text" value="Yes"/>	Submit:	<input type="button" value="Submit"/>
First Name:	<input type="text" value="Julian"/>		

Notice in this example that there are 5 extra parameters beginning with RCR.

- In order to take advantage of these parameters you need to set the **RecurringMethod** to **0** (zero).
- **RCRRecurAmount**, this is the amount that this transaction will recur at.
- **RCRPeriod**, this can be Weekly, Monthly, 2Months, 3Months, 6Months or 12Months.
- **RCRChargeWhen**, set this to **OnDayOfCycle**, which means you will recur on the day of the month (or whatever your period is).
- **RCRStartAfterInitialDays** – This is the day of the cycle that the transaction will recur on.
- **RCRRecurs**, this is the number of times that the transaction will recur for. If you set this to zero it will recur forever.

# Advanced Recur and TDBE System

## Appendix 1 – TDBE Recur HTML

```
<html>
<title>ePNRecur </title>
<body>
<form name="doit" action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl" method="POST">
<table>
<tr><td>ePNAccount: </td>
  <td><input type="text" name="ePNAccount" value="04971" size="20"></td></tr>
<tr><td>Inv:</td>
  <td><input type="text" name="Inv" value="report" size="20"></td></tr>
<tr><td>RestrictKey:</td>
  <td>
    <input type="text" name="RestrictKey" value="evCc252BGzDpmPd" size="20"></td></tr>
<tr><td>TranType:</td>
  <td><input type="text" name="TranType" value="Sale" size="20"></td></tr>
<tr><td>CardNo:</td>
  <td><input type="text" name="CardNo" value="0227271714569" size="20"></td></tr>
<tr><td>ExpMonth:</td>
  <td><input type="text" name="ExpMonth" value="09" size="20"></td></tr>
<tr><td>ExpYear:</td>
  <td><input type="text" name="ExpYear" value="06" size="20"></td></tr>
<tr><td>Total:</td>
  <td><input type="text" name="Total" value="23.98" size="20"></td></tr>
<tr><td>Address:</td>
  <td><input type="text" name="Address" value="123 Maple St." size="20"></td></tr>
<tr><td>Zip:</td>
  <td><input type="text" name="Zip" value="77449" size="20"></td></tr>
<tr><td>CVV2Type:</td>
  <td><input type="text" name="CVV2Type" value="1" size="20"></td></tr>
<tr><td>CVV2:</td>
  <td><input type="text" name="CVV2" value="111" size="20"></td></tr>
<tr><td>HTML:</td>
  <td><input type="text" name="HTML" value="Yes" size="20"></td></tr>
<tr><td>First Name:</td>
  <td><input type="text" name="FirstName" value="Julian" size="20"></td></tr>
<tr><td>Last Name:</td>
  <td><input type="text" name="LastName" value="Brown" size="20"></td></tr>
<tr><td>City:</td>
  <td><input type="text" name="City" value="Houston" size="20"></td></tr>
<tr><td>State:</td>
  <td><input type="text" name="State" value="TX" size="20"></td></tr>
<tr><td>EMail:</td>
  <td><input type="text" name="EMail" value="jbrown@eprocessingnetwork.com" size="20"></td></tr>
<tr><td>Phone:</td>
  <td><input type="text" name="Phone" value="713 880 0327" size="20"></td></tr>
<tr><td>RecurMethodID:</td>
  <td><input type="text" name="RecurMethodID" value="1" size="20"></td></tr>
<tr><td>Identifier:</td>
  <td><input type="text" name="Identifier" value="0155ABB" size="20"></td></tr>
<tr><td>Submit:</td>
  <td><input type="submit" name="submit" value="Submit"></td></tr>
</table>
</form></body></html>
```

# Advanced Recur and TDBE System

## Appendix 2 – Cancel Recur HTML

```
<html>
<title>ePNRecurCancel</title>
<body>
<form name="doit" action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/Recur.pl" method="POST">
<table>
<tr><td>ePNAccount: </td>
    <td><input type="text" name="ePNAccount" value="04971" size="20"></td></tr>
<tr><td>RestrictKey:</td>
    <td><input type="text" name="RestrictKey" value="evCc252BGzDpmPd" size="20"></td></tr>
<tr><td>TranType:</td>
    <td><input type="text" name="TranType" value="Cancel" size="20"></td></tr>
<tr><td>RecurID:</td>
    <td><input type="text" name="RecurID" value="25" size="20"></td></tr>
<tr><td>Submit:</td>
    <td><input type="submit" name="submit" value="Submit"></td></tr>
</table>
</form>
</body>
</html>
```

# Advanced Recur and TDBE System

## Appendix 3 – RecurringMethod 0 test.

```
<<html>
<body>
<form name="doit" action="https://www.eprocessingnetwork.com/cgi-bin/tdbe/transact.pl" method="POST">
<table>
<tr><td>ePNAccount:</td>
<td><input type="text" name="ePNAccount" value="04971" size="20"></td></tr>
<tr><td>Invoice:</td>
<td><input type="text" name="Inv" value="report" size="20"></td></tr>
<tr><td>RestrictKey:</td>
<td><input type="text" name="RestrictKey" value="evCc252BGzDpmPd" size="20"></td></tr>
<tr><td>TranType:</td>
<td><input type="text" name="TranType" value="Sale" size="20"></td></tr>
<tr><td>CardNo:</td>
<td><input type="text" name="CardNo" value="0227271714569" size="20"></td></tr>
<tr><td> ExpMonth:</td>
<td><input type="text" name="ExpMonth" value="09" size="20"></td></tr>
<tr><td> ExpYear:</td>
<td><input type="text" name="ExpYear" value="06" size="20"></td></tr>
<tr><td> Total:</td>
<td><input type="text" name="Total" value="23.98" size="20"></td></tr>
<tr><td> Address:</td>
<td><input type="text" name="Address" value="123 Maple St." size="20"></td></tr>
<tr><td> Zip:</td>
<td><input type="text" name="Zip" value="77449" size="20"></td></tr>
<tr><td>CVV2Type:</td>
<td><input type="text" name="CVV2Type" value="1" size="20"></td></tr>
<tr><td>CVV2:</td>
<td><input type="text" name="CVV2" value="111" size="20"></td></tr>
<tr><td>HTML:</td>
<td><input type="text" name="HTML" value="Yes" size="20"></td></tr>
<tr><td>First Name:</td>
<td><input type="text" name="FirstName" value="Julian" size="20"></td></tr>
<tr><td>Last Name:</td>
<td><input type="text" name="LastName" value="Brown" size="20"></td></tr>
<tr><td>City:</td>
<td><input type="text" name="City" value="Houston" size="20"></td></tr>
<tr><td>State:</td>
<td><input type="text" name="State" value="TX" size="20"></td></tr>
<tr><td>EMail:</td>
<td><input type="text" name="EMail" value="jbrown@eprocessingnetwork.com" size="20"></td></tr>
<tr><td>Phone:</td>
<td><input type="text" name="Phone" value="713 880 0327" size="20"></td></tr>
<tr><td>RecurringMethod:</td>
<td><input type="text" name="RecurringMethod" value="0" size="20"></td></tr>
<tr><td>Identifier:</td>
<td><input type="text" name="Identifier" value="0155ABB" size="20"></td></tr>
<tr><td>RCRRecurAmount:</td>
<td><input type="text" name="RCRRecurAmount" value="20.00" size="20"></td></tr>
<tr><td>RCRPeriod:</td>
<td><input type="text" name="RCRPeriod" value="Monthly" size="20"></td></tr>
<tr><td>RCRChargeWhen:</td>
```

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## Appendix 3 – RecurringMethod 0 test.

```
<td><input type=text name="RCRChargeWhen" value="OnDayOfCycle" size="20"></td></tr>
<tr><td>RCRStartAfterInitialDays:</td>
  <td><input type=text name="RCRStartAfterInitialDays" value="12" size="20"> </td></tr>
<tr><td>RCRRekurs:</td>
  <td><input type=text name="RCRRekurs" value="3" size="20"></td></tr>
<tr><td>Submit:</td>
  <td><input type=submit name="submit" value="Submit"></td></tr>
</table>
</form>
</body>
</html>
```