NCPTS

E-Pay Interface

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E-PAY INTERFACE OVERVIEW

OBJECTIVE

This document outlines the file structures and processes necessary to setuo the E-Pay interface. The NCPTS E-Pay interface involves two components including the **export of the E-Pay Billing extract file** and the **import of the E-Pay Payment file** into NCPTS. This document is intended to be a client-facing reference for NCPTS System Administrators.

DESCRIPTION

This document explains how to configure E-Pay payment integration options to meet county business needs. To that end, the document includes detailed descriptions of configuration settings, as well as detailed checklists on processing E-Pay cases en mass, specific considerations, and precise file formatting for records used in the E-Pay interface. It is assumed that System Administrators have a basic understanding of how to access and within the Batch Management and Lookup Management NCPTS modules.

E-Pay refers to the processing of credit card and e-check payments through a third party vendor. Billing and Payment files are sent to and received from E-Pay vendors in electronic form. These payments can be made to the third party vendor either over the phone or online. The county submits billing files to the third party vendor and the third party vendor then submits payment information electronically to the County for processing.

WORK FLOW
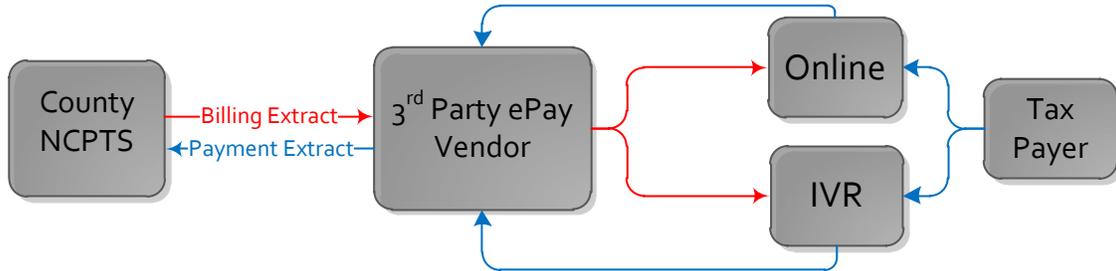
Billing Phase

NCPTS generates an **unpaid billing extract file** and exports it to the 3rd party E-Pay vendor. The E-Pay vendor manages the billing information to make it publicly available to the taxpayer via two portals, IVR and online.

Payment Phase

Taxpayers make payments to a third party vendor either over the phone or online. The E-Pay vendor then submits **payment file** electronically to the County for processing.

E-PAY INTERFACE CHECKLIST

The E-Pay Interface setup includes ten key steps outlined within four phases. Following these steps will ensure a successful E-Pay interface. Within NCPTS, all payments are tracked by recording them in batches. A batch is a collection of payment or payment-related transactions that are similar in terms of their processing mode (online or offline). E-Pay payment batches are processed in an offline mode.

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Phase 1: Coordinate with E-Pay Vendor

Step 1. Establish contact with the E-Pay vendor 30-60 days prior to going live with NCPTS.

NCPTS expects the text file to be in the format specified in this guide. It is important to share the NCPTS E-Pay payment file formats with the E-Pay vendor.

> ⚠️ Allow a minimum of 30-60 days for vendors to establish file format changes. Initiate this process as soon as possible.

Step 2. Institute a monthly and nightly schedule to transmit E-Pay files with the E-Pay vendor.

Billing

A monthly **full** file should be sent from NCPTS to E-Pay vendor with a full list of the unpaid billing information.
A nightly **delta** file should be sent from NCPTS to E-Pay vendor with a list of the *updated* unpaid billing information.

The full and delta file can also be generated on demand. Flags can be configured such that bills with certain flags will not be included in the extract.

Payment

A payment file will be received from the E-Pay vendor to the County with a full list of payments for a given day.

PHASE 2: CREATE BILLING EXTRACT

NCPTS creates an E-Pay billing extract of all the unpaid bills currently in the system. NCPTS uses batch jobs to retrieve and export the data. This billing extract will be used by the E-Pay vendor to publically post the unpaid bills for taxpayers. NCPTS creates two types of billing extracts, a monthly extract and a nightly extract. System administrators will need to set up two separate batch jobs for the following billing extracts.

E-Pay Monthly Billing Extract
- **Full** file -includes all unpaid bills
- NCPTS sends to E-Pay vendor **monthly**

E-Pay Nightly Billing Extract
- **Delta** file- difference between current bill and prior day file
- Delta file considers difference on basis of criteria defined by **transaction types***
- NCPTS sends to E-Pay vendor **nightly**
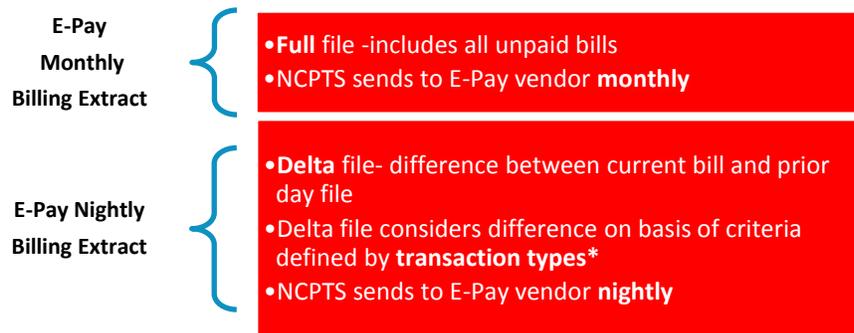
ⓘ TRANSACTION TYPES

F →Transaction type for records indicating a new file of unpaid bills, irrespective of what file is generated on the prior day. This will also be transaction type of any new Full file records.

A→Add is the transaction type for all records that did not exist in the prior day full file.

D→Delete is the transaction type for records that are not in an unpaid state after the prior day full file has run.

M→Modified is the transaction type for records which are modified after the prior day full file has run. The delta file compares the amount due of the bills from the prior day full file and reports any difference.

Step 3. Log into NCPTS Batch Management

From the **NCPTS Main Menu**, from the **Admin** dropdown menu, select **Batch Management.**

Step 4. Schedule a New *E-Pay Monthly Extract* Batch Job in Batch Management

➤ Click on the **'Schedule New Batch Job'** button at the top of the screen.

➤ Populate the **Job Name, Description, Enabled, Recurrence Type, Start** and **End Date** parameters for the batch job.

⚠ NCPTS recommends the system administrator set the recurrence type to **monthly** for the E-Pay Monthly extract (billing).

➤ **Batch Steps:** In the bottom section of the screen, the user can drag the batch steps which need to be included in the batch job. The batch steps can also be ordered by dragging up or down. If a mistake has been made, click on the 'Start Over' button to start again.

📝 E-Pay Billing extract file requires the **E-Pay Monthly** batch step name to be dragged and dropped in the Batch Steps Box.
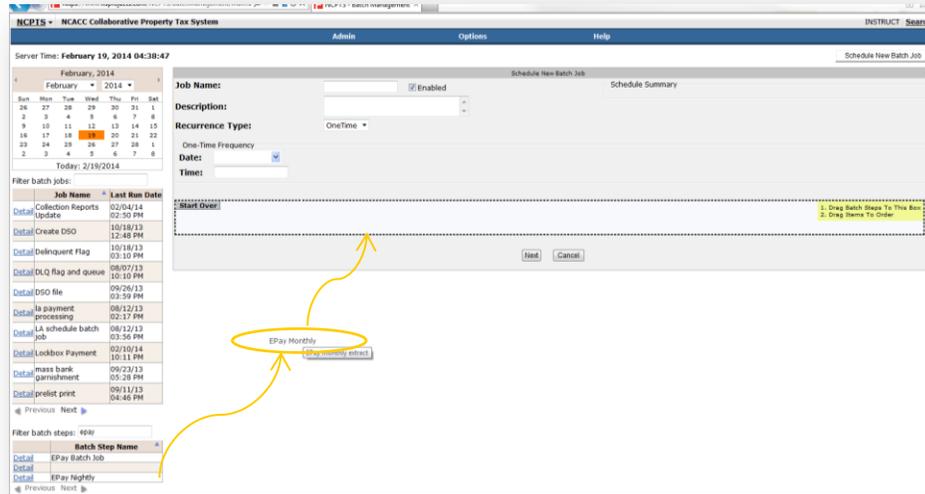
➢ **Click Next**: After all the required fields have been specified, click '**Next**' to move on to the next step of batch job creation.

➢ Select **E-Pay REP** from the drop down menu for real personal property.
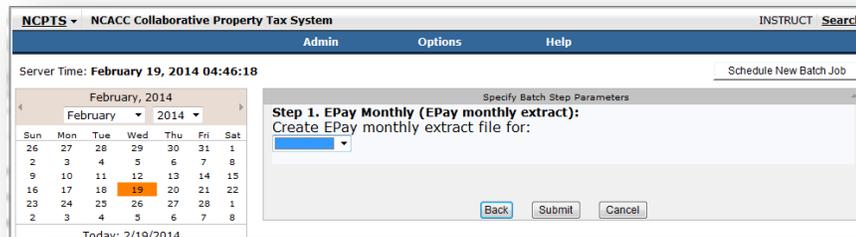
➢ Click **Submit**

➢ The E-Pay full monthly billing extract file can be located in the following location:

\\<ServerName>\Extract\Writer\E-PayREPMonthly

Step 5. Send the monthly billing extract file to the E-Pay vendor

Step 6. Schedule an E-Pay *Nightly* Billing Extract Batch Job in Batch Management

System administrators will need to set up a second batch job to send updated billing information to the third party E-Pay vendor. System administrators will need to use batch management and set the configurations as follows.

➢ From the **NCPTS Main Menu**, select **Admin** dropdown list, select **Batch Management.**
➢ Click on the **'Schedule New Batch Job'** button at the top of the screen.
➢ Populate the **Job Name** field, **Description, Reoccurrence Type, Date & Time, State date, and End date.**

 NCPTS recommends the system administrator set the recurrence type to **nightly** for the E-Pay Nightly extract(billing). This will ensure the batch job is run nightly and a delta list of unpaid bills is exported to the E-Pay vendor.

➢ Drag and Drop the **E-Pay Nightly** batch step from the Batch Steps section into the Batch Steps Box.
➢ Click **Next**: once all required fields have been specified.
➢ Select **E-Pay REP** from the drop down menu for real personal property.
➢ Click **Submit**
➢ The E-Pay delta nightly billing extract can be located in the following location:

\\<ServerName>\Extract\Writer\E-PayREPNightly

This completes the billing extract phase of the E-Pay interface workflow.
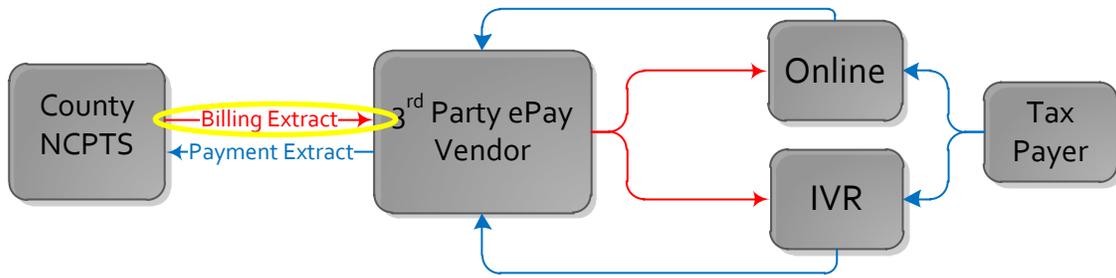
E-PAY BILLING EXTRACT FILE

NCPTS creates the E-Pay billing extract file at the end of phase two. The file includes the following fields and attributes.

Field No	Field Type A=Alpha N=Numeric	Field Name	Position	Length	Examples
1	A	Transaction Type	1 – 1	1	F, D, M, or A **Full,Delete,Modify,Add**
2	A	Bill# (**Abstract#+ Tax Year+ Year For+ Listing Type**)	2-23	22	22 as per NCPTS bill# or 15 as per legacy bill number *0700006428-2007-2007-0000-00* **=070000642820072007 0000** *Legacy Bill Number Example: Legacy Bill #: 2009123456789 (13 characters) Third Party should prefix the legacy bill number with 0's so the bill number will appear as "002009123456789" to satisfy the length of 15 required digits
3	N	Taxes & Fees	24 – 32	9	987.22=**000098722**
4	N	Interest & Penalties	33 – 41	9	987.22=**000098722**
5	N	Interest Date	42 – 49	8	CCYYMMDD 1st **Jan 2007=20070101**
6	N	Credits	50 –58	9	987.22=**000098722**
7	N	Amount Due	59 – 67	9	987.22=**000098722**
8	N	Real Estate Value	68 – 76	9	98722=**000098722**
9	N	Personal Value	77 – 85	9	98722=**000098722**
10	N	**Exempt Value**	**86 – 90**	**5**	5400=**05400**
11	N	Taxable Value	91 – 99	9	78000=**000078000**
12	A	Parcel #	100 –109	10	678965=**0000678965**
13	N	Account #	110 – 119	10	
14	A	Primary Owner	120 – 149	30	(Last, First, Mid, Sfx, Ext)
15	A	Situs Address	150 –191	42	*Street# Street_Prefix Street_Name Street_Type Street_Suffix Planning_Jurisdiction* to max length of 42 (All fields are separated by space and truncated from right when length is>42)

16	N	Principal Discount Amount Due	192-208	17	*Principal Discount Amount Due*
17	A	Full Parcel#	209-228	20	*Parcel number for length larger than 20*
18	A	Legacy Bill Number **(OLD BILL#)**	229-252	24	*20009123456*= **00000000000020009123456**
			Record Size	**228**	

PHASE 3: PREPARE PAYMENT INTERFACE

E-Pay payments are processed in an offline mode. The E-Pay Payment batch can be scheduled to run two times daily, once as a *Trial Run* and once as an *Update Run.* This will require the user to complete the following E-Pay Payment batch process twice. The trial run batch job process stimulates the creation of bills and detects any errors and logs them for review. No bills are created during trial run. Statistics on the amount billed by source type for different jurisdictions are maintained for trial billing. Any exceptions encountered during the bill creation process (such as missing line items, invalid amount due, missing due date, missing source type, corrupt file) are written to the error log for review.

Step 7. Institute a nightly schedule process to receive E-Pay payment files from the E-Pay vendor.

Once the E-Pay payment has been conformed to the NCPTS file format (as seen in Step 8), the county will set up a nightly process to receive the files via email or FTP.

Allow a minimum of 30-60 days for E-Pay vendors to establish file format changes. Initiate this process as soon as possible.

Step 8. Ensure E-Pay Payment File is received in correct format

E-Pay payments are received from E-Pay vendors and processed. NCPTS expects the E-Pay Payment File received from the third party vendor to be in the following format. Payments by the E-Pay agent to the County typically take the form of a wire transfer directly into the County's account.

PAYMENT FILE

Field No	Field Type A=Alpha N=Numeric	Field Name	Particulars	Max Length	Sample
1	AN	Custom Data Element #2	INT-DATE	75	20001231
2	AN	Custom Data Element #1	BILL	75	20009123456 or 07000064282007200700 000 11 or 22 as the bill# can be old or new (Old or new bill# will be 0

					22)
3	AN	Custom Data Element #3	TAG	75	ABC123
4	AN	Custom Data Element #4	BLOCK FLAG	75	Y
5	AN	Custom Data Element #5	not used,	75	
6	AN	Custom Data Element #6	not used,	75	
7	AN	Custom Data Element #7	not used,	75	
8	AN	Custom Data Element #8	not used,	75	
9	AN	Custom Data Element #9	not used,	75	
10	N	Date	Trans-Date	8	20001231
11	N	Time	Trans-Time	6	135901
12	Currency	Payment Amount #1	Payment Amount applied on Bill	50	837.12
13	Currency	Payment Amount #2	not used,	50	
14	Currency	Payment Amount #3	not used,	50	
15	Currency	Payment Amount #4	not used,	50	
16	Currency	Payment Amount #5	Not used,	50	
17	Currency	Payment Amount #6	Not used,	50	
18	Currency	Payment Amount #7	Not used,	50	
19	Currency	Payment Amount #8	Not used,	50	
20	Currency	Payment Amount #9	Not used,	50	
21	Currency	Convenience Fee	Optional	50	3.5
22	Currency	Total Charge	Not used,	50	840.62
23	A N	Credit Card Type	Type-Payment	10	V, M, A, D, or E V-Visa M-Master Card A-American Express D-Discover E-Echeck
24	AN	Authorization Code	Optional	100	?
25	AN	Receipt Number	Receipt-memo	50	?
26	N	Traffic School Flag	Optional	4	?
27	N	Payment ID	Optional	4	1= RE/PP 2=VT
28	N	Phone Number	Optional	20	
29	N	ANI (caller id)	Optional	10	
30	AN	First Name	Optional	50	
31	AN	Middle Name	Optional	50	
32	AN	Last Name	Optional	75	
33	AN	Street Address1	Optional	?	
34	AN	Street Address 2	Optional	?	
35	AN	City	Optional	64	

36	AN	Reserved	Optional	64	
37	AN	State	Optional		
38	AN	Zip	Optional		
39	AN	Email Address	Optional	75	
40	AN	Country	Optional	64	
41	AN	Returned Date	Optional	64	
42	AN	Returned Code	Optional		
43	AN	Payment Channel	IVR/NET	3	IVR/NET
44	AN	Unique Identifier	Optional		
			Record Size	**1887**	

Step 9. Save E-Pay Payment File to E-Pay Reader Directory

When the NCPTS installer is downloaded for the first time, it will create a default file path. A system administrator can also manually create this file path. This file path location will direct to the E-Pay payment file location.
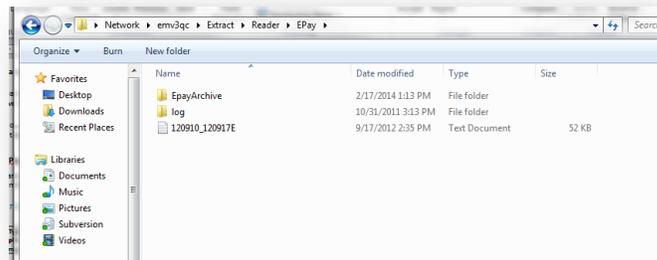
The default file path is **<<Server Name>>\Extract\Reader\E-Pay**. The system administrator in your tax office will have to manually drag and drop the e-pay payment text file into in the **E-Pay** folder on a daily basis.

Best Practice: Drag and drop the E-Pay payment text file into the E-Pay and E-Pay Trial folder at the same time daily. This will prepare the E-Pay Payment file to be read for both a trial and update run.

PHASE 4: POST E-PAY PAYMENTS

Step 10. Schedule an E-Pay Payment Batch Job in Batch Management

System administrators will need to set up a trial and update batch job to receive payment information from the E-Pay vendor. System administrators will need to use batch management and set the configurations as follows.

➢ From the **NCPTS Main Menu**, select **Admin** dropdown list, select **Batch Management.**
➢ Click on the **'Schedule New Batch Job'** button at the top of the screen.
➢ Populate the **Job Name** field, **Description, Reoccurrence Type, Date & Time, State date, and End date.**

⚠️ NCPTS recommends the system administrator set the recurrence type to daily for the E-Pay Payment Batch job. This will ensure the batch job is run daily.

☝️ **Best practice:** Run the **Trial Run around early afternoon**, allowing time for the system administrator to address errors. Run the **Update Run after close of business**, allowing for all updates to occur before start of business the following day.

➢ Drag and drop the **E-Pay Payment** batch step from the Batch Steps section into the Batch Steps Box.
➢ Click **Next**: once all required fields have been specified.
➢ Click **Submit**
➢ The E-Pay delta nightly billing extract can be located in the following location:

\\<ServerName>\Extract\Reader\E-Pay

Step 11. Confirm E-Pay Payment Posting in the Offline Payment Log

➢ From the **NCPTS Main Menu,** select the **Cashiering Collections** module.
➢ Select the **Workflow** menu, select **Offline Payment Log**
➢ Use the filter section to select a desired date range of when the E-Pay file was imported

Filter					? ⊟
Date Range :	From :	03/21/2013	To :		Refresh Clear Filter

➢ **The Offline Payment Summary** will populate with a summary of the E-Pay payments.

Offline Payment Summary ?
... 45 46 47 48 49 50 51 52 53 54

Process Date	File Type ▽	File Name	Total Payment ($)	# Bills	# Errors	Posted Date	Batch#	Status	Created By
10/24/2013 5:20:31 PM	LOCKBOX	PNClbx102413.txt	14,852.17	249	0	10/24/2013	52979		
10/25/2013 5:49:38 PM	LOCKBOX	PNClbx102513.txt	16,049.61	224	1	10/25/2013	52990		

➢ Selecting the **File Type** hyperlink, will allow you to view the bill details, payment method and details, and any errors or exceptions.

- ➢ The **File Type** hyperlink will link to a **Transaction Summary and List**. This will show the total payment count/amount, posted and unposted. The Bill# hyperlink will show the amount posted.

Refund Approval	Bankruptcy	Foreclosure	Workflow	Options	Help

NCPTS -> Collection -> Offline Payment Log -> Transaction List ⑦

Transaction Summary ⑦ ⊟

ile Type	: LOCKBOX	File Name	: PNClbx102513.txt
:ounty	: RANDO	Posted Date	: 10/25/2013

Payment Summary ⑦ ⊟

	Count	Payment Amount
Total	: 224	$ 16,049.61
Posted	: 224	$ 16,049.61
Unposted	: 0	$ 0.00

Filter ⑦ ⊟

◉ ALL ○ No Error Logs ○ Error Logs

Transaction List ⑦

. 2 3 4 5 6 7 8 9 10 …

Bill#	Check#	Check Account#	Check Routing#	Check Amount ($)	Interest Thru Date	Exception	Exception Amount ($)	Paymen Amount ($)
0002045067-2013-2013-0000				24.33	10/20/2013	NONE		20.6!
0002045068-2013-2013-0000				24.33	10/20/2013	NONE		3.6!
0000021014-2013-2013-0000				440.93	10/20/2013	NONE		78.0.
0000021022-2013-2013-0000				440.93	10/20/2013	NONE		71.8.
0000021017-2013-2013-0000	00079840	000004039333	033111377	440.93	10/20/2013	NONE		78.9

- ➢ Any payments that are unable to be posted will show up in the Error Log. The Error Log can be found by using the filter error log radio button.

This completes the following phase of the E-Pay interface workflow.