Uploading Bills, Downloading Information, and Automating the Process

This document describes uploading bills to Xpress-pay, downloading payments, and downloading recurring payment information. There is no requirement for a bill to uploaded prior to payment because Xpress-pay offers a variety of methods through which transactions can be initiated. For information on these popular alternatives, please contact our Support Department.

The payment download function is always available regardless of how a transaction was originated. Two types of downloads are available… payment history and recurring payment enrollee information.

Email notifications: Xpress-pay can email a notice in response to an upload. This feature provides significant convenience to the consumer and is highly effective in stimulating payment activity. We strongly encourage you to provide an email address with uploaded bills.

Section 1: Uploading bills

Bill are uploaded to allow consumers to provide criteria used to locate and pay specific bills. Multiple search fields can presented and each can be optional or required. Where required, a partial value or exact match can be required.

Bills matching the visitor's criteria are then presented for review and selection. Note that upon presentation, additional information may be displayed. For example, search criteria might require an account number and last name, but displayed bills matching the criteria might also reveal the full name and service address in addition to the amount due. This allows privacy in searching but enhances consumer confidence in selecting bills for payment.

Prior to uploading bills, the payment type and file format must be defined to Xpress-pay by our Support Department. Your file can be a fixed-format ASCII text file or an Excel spreadsheet (currently **.**xls only). There must be one record or line for each bill. Extraneous lines may be included provided that reliable criteria exists to exclude them, such as an asterisk in position one.

File uploads are accomplished in one of two ways:

- Import bills: This option is invoked from the Xpress-pay administrative menu. Use your login and password to access this function.

- Automated FTP: You can establish a schedule within your own environment to submit requests to upload or download files from Xpress-pay as needed. For more information, see the end of this document or the PDF entitled *Automated Uploads & Downloads* on our *Contact us/Merchant Support* page

6 Locust Avenue
Cortland, New York 13045
www.systemseast.com

Office: (607) 753-6156
mail@systemseast.com
Version 2.15, Page 1

Field list for uploading bills

- **Bill date:** Optional. Billing date and the basis for interest calculation. If omitted here, it must be provided when uploading bills.

- **Unique ID (entity):** Optional. Used to uniquely identify the entity being billed. This facilitates subsequent email notifications or associations with prerequisite outstanding bills (contact our Support Team for additional information).

- **Bill amount:** Required. The amount of the bill or, if negative, the credit. This field can be in multiple locations within a record and is thus cumulative. Amounts in this field are subject to the interest formula you may define for each bill type.

- **Bill amount (no interest):** Alternative to **"**Bill amount"; cumulative. Xpress-pay interest formulas will not be applied to these bill amounts.

- **Bill credit:** Optional; cumulative. The amount of credit to be applied to (subtracted from) the bill amount; cumulative. Not applicable to "Bill amount (no interest)".

- **Interest:** Optional; cumulative. The amount of interest to be presented with the bill (negates use of Xpress-pay interest formulas).

- **Interest credit:** Optional; cumulative. The amount of credit to be subtracted from the interest.

- **Payment type restriction:** C=cards only, E=eChecks only. Though you may elect to accept both cards and eChecks, this feature allows restriction of payment types for specific bills. For example, if a customer has bounced checks, you may wish to specify "C" on all bills you upload for that customer to restrict them to credit/debit card payments only.

- **Locators 1-5:** Five 250-character captioned flexible data fields are available. Contents can be concatenated (ex. first name+space+last name). Each can be a required or optional search field, and exact matches can be required. A locator can be flagged as hidden, allowing you to associate additional information with a bill without revealing it to the visitor.

- **Bill image filename (PDF, JPG, etc.):** Optional. Provide the filename+extension here. Your server's URL/foldername will be included in the Xpress-pay configuration for the payment type.

- **Email address:** Providing an email address allows us to send email notifications upon bill upload. Recipients need only click the button to retrieve matching bills. Email notifications significantly elevate consumer convenience and payment activity and is **highly** recommended. Note that you can restrict this feature to one or two specific days per month. This allows you to upload a consistent file without spamming your clients. Please discuss this option with our Support Group.

Uploading Bills and Credits

Records with an amount due of $0 will be ignored. Records with amounts due > $0 are bills and records with amounts due < $0 (a minus sign preceding the amount) are considered to be credits.

Visitors will provide criteria to search for bills and credits. All records matching the criteria will be displayed, and the visitor may then select which bills to pay or credits to apply. If credits are found and selected, they are applied against selected bills, but to proceed to checkout, the net amount due resulting from their selections must be greater than $0.

6 Locust Avenue
Cortland, New York 13045
www.systemseast.com

Office: (607) 753-6156
mail@systemseast.com
Version 2.15, Page 2

Data Filtration

The upload function allows the inclusion or exclusion of records based on limited criteria. If these filters are omitted, all records will be imported (provided they have a net amount due < or > $0).

Each filter is independent of any other filter line, that is if you specify to include only if position 278, length 1 = C and also specify to include only if position 278, length 1 = R, no records will be imported! That's because it is impossible for position 278 to be both a C and an R, so one of the filters will fail.

You can also use filtration to simplify exportation from your system. As an example, for a property management system, you could still export all bills for both security deposits and rent to a single file. When defining security deposits, use an include filter in its bill type to include only if the position containing the type is "S". When defining rent, use an include filter in its bill type to include only if the bill type is "R". Use of this technique vastly reduces the effort required to import similar bills that would otherwise be transmitted in separate files.

If your exporter is incapable of exporting only outstanding bills, perhaps there is a way of using the filters circumvent to the shortcoming. Maybe you can bypass paid records, such as a "P" in position 302, or include only if payment date is = 00/00/0000. We invite you to discuss this with our Support Team prior to finalizing the design of your extract program.

Test Payments

Testing protocols typically include making test payments for the bills you have uploaded. The hyperlinks to initiate these payments will be provided by our Support Department, but once at the checkout screen, you may wish to use test cards instead of actual cards. Note that regardless of the environment you use, all aspects of Xpress-pay are PCI DSS Level One Certified, including IVR.

To place test transaction, you can use real cards or test cards, but they must be valid card numbers. You cannot simply use a random sixteen-digit number. We are required to pass all card numbers through a validation process, and random numbers are generally rejected.

For your convenience, our checkout process recognizes test card numbers starting with 41111 or 54545. Upon recognizing either, the remainder of the card number will be automatically completed. If you wish to use other test cards, they are readily available on the Internet by searching for "test credit card numbers".

Note: PCI DSS prohibits us from distributing card numbers in any form.

6 Locust Avenue
Cortland, New York 13045
www.systemseast.com

Office: (607) 753-6156
mail@systemseast.com
Version 2.15, Page 3

Section 2: Downloading Profiles or Payments

Xpress-pay records a history record for all payments regardless of their origin. The Administrative Menu allow you to produce a report, and a download icon allows you to capture a file of those payments. See Section 3 for information on the automated FTP upload/download.

As an alternative to downloading a fixed format ASCII payment file as described above, the administrative menu's Payment Detail Report allows you to download payments as a CSV file. CSV files may be opened directly by Microsoft Excel. If the CSV download option is used, the first row will contain column headers and each additional row will contain one payment record.

Notes

The representation "9(10)V99" above is a COBOL-style description of the field's fixed-length internal format. In the first example immediately below, it means ten-dollar digits followed by the two digits representing the cents. For example:

- For a 9(10)V99 format, $1,234.98 would be 000000123498
- For a 9(7)V99 format, $1,234.98 would be 000123498.

In the Payment Detail Report, the icon at the upper right will start a download of the payments being viewed.

Payment File Format (standard)

- **State:** 1-20
- **Merchant name:** 21-70
- **Bill type:** 71-120
- **Entity identifier:** 121-170
- **Bill date:** 171-178 as MMDDYYYY
- **Payment date:** 179-186 as MMDDYYYY
- **Payment type:** 187-192 as "card" or "echeck"
- **Bill amount:** 193-204 as 9(10)V99
- **Interest:** 205-216 as 9(10)V99
- **Client revenue:** 217-228 as 9(10)V99: Bill amount + Interest (sum of the prior two fields; this field is blank if file is generated by the Xpress-pay Report Writer or Scheduler)
- **Merchant fee:** 229-237 as 9(7)V99: Estimated provider transaction fee (not always applicable)
- **Site fee:** 238-246 as 9(7)V99: Xpress-pay fee
- **Payment total:** 247-258 as 9(10)V99: Grand total of the amount paid by the visitor
- **Transaction ID:** 259-270 as x(12)
- **Locator 1:** 271-320 as x(50)   Note: For the five flexible data fields, only the first 50 of the
- **Locator 2:** 321-370 as x(50)   250 characters are echoed in the payment file
- **Locator 3:** 371-420 as x(50)
- **Locator 4:** 421-470 as x(50)

6 Locust Avenue
Cortland, New York 13045
www.systemseast.com

Office: (607) 753-6156
mail@systemseast.com
Version 2.15, Page 4

- **Locator 5:** 471-520 as x(50)
- **Payer's Email:** 521-570 as x(50)
- **Payment time:** 571-578 as hh:mm:ss
- **Payer's first name:** 579-628 as x(50)
- **Payer's last name:** 629-678 as x(50)
- **Payer's address:** 679-778 as x(100)
- **Payer's city:** 779-808 as x(30)
- **Payer's state:** 809-838 as x(30)
- **Payer's zip code:** 839-848 as x(10)

Section 3: Automated Uploading and Downloading (FTP/sFTP)

Xpress-pay supports FTP and sFTP to allow unattended uploading of bill files and downloading of payment files. These functions are initiated through separate API's described in this section.

Automating the process allows the payments to be retrieved and processed at the end of each day without staff intervention. This function requires that you establish an FTP location as a source or target for files to be exchanged.

Note: The automated process supports only fixed format ASCII text files. It does not currently support Excel spreadsheet files.

The FTP service allows the exchange of billing and payment files between Xpress-pay and your FTP site. Whether uploading billing information to Xpress-pay or downloading payment files from Xpress-pay, your FTP site will be used for the exchange. Using the FTP service allows you to:

- Download payments: Select a date/time range to download as a fixed format ASCII text file, then process these payments against your internal accounts receivable system.
- Upload (post) a fixed format ASCII text file of bills: Allows your customers to search, select, and pay bills.
- Either or both are typically scheduled to automate the process, eliminating staff intervention.

These functions operate independently, and you can use either or both. The hyperlink or HTML Post that initiates the service must contain all necessary information for Xpress-pay to access your FTP site as needed to exchange the targeted information.

Uploading (posting) bills

Sample URL string to upload a fixed format ASCII text file of bills from your FTP site to Xpress-pay:

https://www.xpress-pay.com/ws/service.asmx/PickupImportFileV5?ftptype=*[ftptype]*&mode=*[mode]*&filename=*[filename]*.txt&hostname=*[hostname]*&ftpfolder=*[ftpfolder]*&username=*[username]*&password=*[password]*&fingerprint=*[fingerprint]*&municipality=*[municipality]*&state=*[state]*&emailto=*[emailto]*&billingdate=*[billingdate]*&sendemail=*[sendemail]*&orgID=*[orgid]*&BillTypes=*[billtypes]*

- **ftptype**: Specify ftp or sftp.

6 Locust Avenue
Cortland, New York 13045
www.systemseast.com

Office: (607) 753-6156
mail@systemseast.com
Version 2.15, Page 5

- **mode**: If ftptype=ftp, you must indicate active or passive, otherwise specify the parameter but omit the value.

- **filename**: The name of the bill file that is to be uploaded, including the file extension (ex. "Bills.txt")

- **hostname**: Server URL or IP address of your FTP site (the file source).

- **ftpfolder**: The folder location of the file on your FTP server.

- **username, password**: Credentials to access the source folder on your FTP server.

- **fingerprint**: SSH/SFTP key fingerprint, an security feature for authenticating user and client application. For details, see http://www.jscape.com/blog/ssh-key-fingerprint. If &ftptype=ftp, submit this parameter with no value.

- **municipality:** This is your company or municipality name as provided by Xpress-pay support.

- **state:** The state as you are listed in Xpress-pay. Must be fully spelled out; use + for a space.

- **emailto**: The email address of the person to receive the upload record count and total. Multiple recipients can be specified by separating them with a comma (comma only; no space).

- **billingdate**: The billing date to be associated with the uploaded bills. Format is *mm/dd/yyyy*, leading zeros are not required. Note that If the billing date is included with each record in the billing file, it is not needed here, though with a null value such as "&billingdate=". **Note:** If it must be specified, there are three options:
    o Specify a date in the format *mm/dd/yyyy*
    o Use the word *today* for today's date
    o Use the word *bom* to always use the first day of the current month (beginning of month)

- **sendemail:** No longer has any effect; specify 0 (zero) here. **Note:** In the new version of Xpress-pay, emails are sent to the email address specified in each uploaded bill, provided your configuration is set to do so. Emails can be sent with every upload or restricted to only one or two specific days of the month that you specify, and not sent on other days. This feature allows you to send a consistent file without spamming your clients. Please discuss these options with our Support Group.

- **orgID**: If your file contains bills of multiple types (as known to Xpress-pay) and you wish to have Xpress-pay upload them all in a single pass, you can use this parameter instead of the next (billtypes). Our Support Department can provide you with the orgID. If you elect not to use this option, the parameter must still be specified, but with a null value. **Caution:** Using this parameter will override any values provided in the *billtypes* (next) parameter.

- **billtypes**: The specific payment type (billtype pk) established by Xpress-pay for each payment type. To upload multiple payment types in a single pass, separate them with a comma (no spaces) such as 6530,6721, or see the orgID parameter above. If you elect not to use the "billtypes" option, the parameter must still be specified, but with a null value.

(continued)

6 Locust Avenue
Cortland, New York 13045
www.systemseast.com

Office: (607) 753-6156
mail@systemseast.com
Version 2.15, Page 6

Downloading payments

Sample URL string to download a fixed format ASCII text file of payments from Xpress-pay to your FTP site:

https://www.xpress-pay.com/ws/payments.asmx/PushPaymentFileV5?ftptype=*[ftptype]*&mode=*[mode]*&fingerprint=*[fingerprint]*&startdate=*[startdate]*&starttime=*[starttime]*&enddate=*[enddate]*&endtime=*[endtime]*&hostname=*[hostname]*&username=*[username]*&password=*[password]*&ftpfolder=*[ftpfolder]*&filename=*[filename]*.txt&orgID=*[orgid]*&BillTypes=*[billtypes]*

- **Note:** If the Elavon/Converge gateway, use PushPaymentFileV4 above, not V5

- **ftptype**: Specify ftp or sftp.

- **mode**: If ftptype=ftp, you must indicate active or passive, otherwise specify the parameter but omit the value.

- **fingerprint**: SSH/SFTP key fingerprint, an important security feature that helps users and client applications authenticate SSH/SFTP servers. For details, see http://www.jscape.com/blog/ssh-key-fingerprint. If &ftptype=ftp, submit this parameter with a null value.

- **startdate, starttime, enddate, endtime:** Specifies the date range to include in the downloaded file. Date format is mm/dd/yyyy and leading zeroes may be omitted. Time format is *hh:mm:ss [AM|PM]*. **Notes:**
  - The time range for an entire day is 00:00:00%20AM through 11:59:59%20PM
  - %20 must be used to represent a space
  - If your payment file download runs daily and you wish to capture payments for the entire preceding day, you can specify only *&startdate=yesterday&enddate=yesterday* and submit the other two parameters with a null value

- **hostname**: Server URL or IP address of your FTP site (the destination server).

- **username, password**: Credentials to access your FTP site.

- **ftpfolder**: The destination folder on your FTP server.

- **filename**: The name of the bill file that is to be downloaded, including the file extension (ex. "Payments.txt"). We recommend the name be unique such as payments-2017-05-08.txt to prevent inadvertent overwriting.

- **orgID**: If you wish to download payment of all types for the specified period, you can use this parameter instead of the next (billtypepk). Our Support Department can provide you with the orgID. If you elect not to use this option, the parameter must still be specified, but with a null value. **Caution:** Using this parameter will override any values provided in the *billtypes* (next) parameter.

- **BillTypes**: The payment types to download. The identifier (billtype pk) is available from the Xpress-pay Support Group. To download multiple payment types in a single pass, separate them with a comma (no spaces) such as 6530,6721. To download payments for all types in a single pass, see the orgID parameter above. If you elect not to use the "billtypes" option, the parameter must still be specified, but with a null value.

(continued)

6 Locust Avenue
Cortland, New York 13045
www.systemseast.com

Office: (607) 753-6156
mail@systemseast.com
Version 2.15, Page 7

Reporting or downloading scheduled payment profiles

Profiles are the configurations for scheduled payments that will occur in the future. Normally the administrative report entitled *Recurring Payment Accounts* will suffice for viewing profiles. In the event that a file is needed, immediately below is a sample URL to download a fixed format ASCII text file of active scheduled payment enrollees to your FTP site:

https://www.xpress-pay.com/ws/payments.asmx/PushScheduledPaymentAccountsFile?
ftpType=*[ftptype]*&Mode=*[mode]*&fingerprint=*[fingerprint]*&hostname=*[hostname]*&username=*[username]*&password=*[password]*&ftpfolder=*[ftpfolder]*&filename=*[filename]*.txt&orgID=*[orgid]*&billtypepk=*[billtypes]*

- **ftptype**: Specify ftp or sftp.
- **Mode**: If ftptype=ftp, you must indicate active or passive, otherwise specify the parameter but omit the value.
- **fingerprint**: SSH/SFTP key fingerprint, an important security feature that helps users and client applications authenticate SSH/SFTP servers. For details, see http://www.jscape.com/blog/ssh-key-fingerprint. If &ftptype=ftp, submit this parameter with a null value.
- **hostname**: Server URL or IP address of your FTP site (the destination server).
- **username, password**: Credentials to access your FTP site.
- **ftpfolder**: The destination folder on your FTP server.
- **filename**: The name of the bill file that is to be downloaded, including the file extension (ex. "Payments.txt"). We recommend the name be unique such as payments-2017-05-08.txt to prevent inadvertent overwriting.
- **orgID**: If you wish to download information relating to scheduled payment for all payment types, you can use this parameter instead of the next (billtypepk). Our Support Department can provide you with the orgID. If you elect not to use this option, the parameter must still be specified, but with a null value. **Caution:** Using this parameter will override any values provided in the *billtypepk* (next) parameter.
- **billtypepk**: Use this parameter to download scheduled payment information relating to one or more specific payment types. The identifier (billtype pk) is available from the Xpress-pay Support Group. To download information for multiple payment types in a single pass, separate them with a comma (no spaces) such as 82123,82124. To download information for all payment types in a single pass, see the orgID parameter above. If you elect not to use the "billtypepk" option, the parameter must still be specified, but with a null value.

File Format

- **Login ID:** 1-50
- **Payment type:** 51-100
- **Start date:** 101-125 as M/D/YYYY or MM/DD/YYYY
- **Next payment date:** 179-186 as M/D/YYYY hh:mm:ss or MM/DD/YYYY hh:mm:ss
- **Payment amount:** 151-165
- **Entity identifier:** 166-265
- **Variable client information:** 266-1520 (5 fields, up to 250 each, comma separated)

6 Locust Avenue
Cortland, New York 13045
www.systemseast.com

Office: (607) 753-6156
mail@systemseast.com
Version 2.15, Page 8

Reporting or downloading scheduled payment history

The administrative report entitled *Recurring Payment Summary* is available to display **only** history for payments that were automatically generated as a result of an active scheduled/recurring profile. When viewing this report, an option will be presented to download a file of the contents. The format is as follows:

- **State:** 1-20
- **Merchant name:** 21-70
- **Payment type:** 71-120
- **Entity identifier:** 121-170
- **Payment date:** 171-178 as MMDDYYYY
- **Bill amount:** 179-190 as 9(10)V99
- **Result:** 191-200 as (Success or Failed)
- **Transaction ID:** 201-212 as x(12)
- **Flexible data field 1:** 213-262 as x(50)
- **Flexible data field 2:** 263-312 as x(50)
- **Flexible data field 3:** 313-362 as x(50)
- **Flexible data field 4:** 363-412 as x(50)
- **Flexible data field 5:** 413-462 as x(50)

We remain available to assist you if and as needed. In the meantime, thank you for selecting Xpress-pay as your ePayment partner.

6 Locust Avenue
Cortland, New York 13045
www.systemseast.com

Xpress-pay
Your Partner in ePayments

Office: (607) 753-6156
mail@systemseast.com
Version 2.15, Page 9