
1stPayGateway.Net

Batch File Upload Documentation

White Paper Version 2.0

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Purpose

The purpose of this document is to outline the technology and processes that drive the Batch File Upload feature. The feature provides an easy and secure method to submit large numbers of credit card transactions to be batch processed (authorized) in an offline manner. A result file is available for download after the uploaded transactions are processed. The file is securely downloadable via an https interface. The end user, after reading this document, should have sufficient knowledge based on the documentation and working samples provided to successfully construct and use the batch file upload feature of the transaction center.

What is the Batch File Upload Feature

The batch file upload feature is an online accessible option that provides the user the ability to upload a flat text file containing the transaction information to be processed at 6pm EST everyday. A downloadable result file will be made available once the batch is run. This interface resides on transaction servers which communicate directly to credit card processing networks. To access the interface, one must login to the secure transaction center with the given username, merchant id and password. Downloadable result files will only remain on the system for 30 days.

The batch file upload accepts the card purchasers information, including credit card information, billing address, total charge amount and order id, and produces an authorization or decline directly from the merchant bank. This feature provides the capability to perform the following operations: AUTH, SALE, SETTLE, and CREDIT. The transaction information is compiled into a CSV (comma separated format) and is passed via 128bit SSL https post. **** NOTE ** The uploaded CSV file must be a flat CSV text file (.txt file extention), not an Excel (.xls file extention) file.** There is no limit to the number of transactions permitted in each CSV file.

In order to take advantage of this feature the user's browser must support 128-bit SSL encryption.

A sample CSV file is available in this documentation.

Operation Types

The batch file upload feature allows the merchant to perform a CC_AUTH, CC_SALE, CC_ALONE_CREDIT, CC_SETTLE, CC_CREDIT, CC_VOID, ACH_DEBIT, ACH_CREDIT, ACH_VOID, CIM_INSERT, CIM_EDIT, CIM_DELETE, CIM_CC_AUTH, CIM_CC_SALE, CIM_CC_CREDIT, CIM_ACH_DEBIT, CIM_ACH_CREDIT operations.

An AUTH operation is nothing more than a transaction that reserves the funds on a customer's credit card. The AUTH transaction must be accompanied by a SETTLE transaction in order for the merchant to receive funds.

A SALE operation produces a transaction that authorizes and captures the funds of the customer's credit card. The settle will automatically take place at 2:00am EST after the 6pm EST batch processing. The funds will be available within 24-48 hours. AUTH/SALE transactions are authorized by the card issuing bank.

SETTLE operations allow the merchant to submit the reference numbers of corresponding authorized transactions for batch settlement. The settlement occurs at 2:00am each day once the transaction has been processed at 6pm. (If you submit the batch at 7pm it will not be batched until 2am the following day)

CREDIT operations are performed against settled authorizations or sale transactions. Credits may only be performed against settled transactions and may not exceed the settled amount regardless of the original authorized amount. Multiple credits may be performed against a single settled authorization/sale up to the total settled amount.

CIM operations are performed using the CIM system that can be added to your account. In order to use CIM, it must be enabled. Contact your sales representative to ensure CIM is enabled for your account.

ACH operations are bank account transactions. These are similar to credit card transactions but require customer's bank account data instead for processing. Check with your sales representative to ensure ACH is enabled on your account.

To utilize the batch file upload and obtain credit card authorization or any of the other operation types, you must have obtained an active merchant credit card processing account through one of the accepted processing networks. Your Web Browser **MUST** be capable of performing 128bit https (SSL) communication.

Operational process:

1. The merchant constructs a CSV (comma separated value) file that contains all the transactions they wish to submit for batch processing following the formatting described later in this document. **The first line of the file must be [version 2]** Please refer to sample files.
2. The merchant logs into the transaction center using their assigned Transaction Center merchant id, username and password.
3. The merchant clicks on "**Upload Batch File for Processing**" located in the menu bar of the Transaction Center.
4. The merchant clicks on browse to locate the previously created CSV file containing the transactions to be processed and uploads it to the system.
5. After completing the batch file upload by 6:00pm EST, the merchant may download the results of their batch by 8pm EST. To download the results CSV file, click on the "**Download Processed Batch Upload**" located in the menu bar of the transaction center.
6. Select the result file matching the date and time that you would like to download the results for and click "**Download**". Save this file to you local hard drive and then open it to review the results of the previously uploaded file.

Using the Feature:

The URL used to log in to the transaction center is:

<https://secure.1stpaygateway.net /secure/transcenter/index.aspx>

The CSV file format for all possible operations is illustrated in the following sections.

**** NOTE ** Each field is comma separated and should not have leading spaces! If a field is optional then it can be left blank. All files available for download will have the last line containing the total number of transactions processed.**

CC_SALE/CC_AUTH/CC_ALONE_CREDIT Operations

CC_SALE/CC_AUTH/CC_ALONE_CREDIT – To process an initial credit card charge.

Upload Record Format

Must have 18 fields total. Each field is separated by a comma (,).
After the last field, please enter a “newline” (hit the ENTER key after each record).

Field 1 – **operation type** (cc_auth/cc_sale/cc_alone_credit). Not case sensitive.
Field 2 – **processor id** Processor ID for which this transaction will be processed under.
Field 3 – **order id**. MUST BE UNIQUE ASSIGNED letter number combination of no more than 50 characters.
Field 4 – **amount**. In US Dollars. Example: 59.99, without \$ signs.
Field 5 – **card type**. Either Visa, Amex, Discover or MasterCard. Must use exact spelling, but not case sensitive.
Field 6 – **card number**. A 15 or 16 digit credit card number.
Field 7 – **card expiration**. In MMY format. Example: 0106 for January 2006.
Field 8 – **card owner name**
Field 9 – **card owner street address**. If entering commas (,), please enclose with double-quotes (“”).
Field 10 – **card owner street address 2**. If entering commas (,), please enclose with double-quotes (“”).
Field 11 – **card owner city**
Field 12 – **card owner state**. In 2 letter format. Example: AA.
Field 13 – **card owner zip code**. No less than 5, no more than 10.
Field 14 – **card owner country**. In 2 letter format. Example: US.
Field 15 – **card owner email address**.
Field 16 – **card owner phone number**. Must be no more than 12 characters.
Field 17 – **close date** Used to schedule a transaction. (MM/DD/YYYY)
Field 18 – **recurring type** Use the following to describe the type of recurring order: daily, weekly, biweekly, monthly, quarterly, semiannually, annually.

Example:

```
cc_sale,14933,OrderId-789,1.00,Visa,4111111111111111,1015,Bob Test,123 Test  
Rd.,Cityville,CA,92807,USA,nowhere@email.com,7144761111,,
```

**** NOTE ****

Operation Types:

Auth – just gets the card authorized it does not settle the transaction.

Sale – authorizes the card and settles the transaction.

Credit - issues a credit in the amount specified. The credit will be issued as a new transaction and not be a reversal against a previously settled transaction.

EXAMPLES:

Address containing a comma (,) –

If any fields in your transactions contain additional commas such as:

123 Here St, Suite 100

You must wrap that text in "" . For example:

"123 Here St, Suite 100"

If the transaction does not have a value for a specific field just pass a blank value for that field. Every field must be present to perform the transaction.

CC_CREDIT Operations

CREDIT – To credit money back to a settled charge.

The Credit operation allows the merchant to credit a previously settled transaction. The credit amount may not exceed the amount of the settlement even if the authorization was a greater amount than the settlement amount. Example, an auth operation was approved for \$10.00. The settlement was only authorized for \$5.00. The ensuing credit may only be performed for \$5.00.

Upload File Format:

Must have 4 fields total. Each field is separated by a comma (,). After the last field a newline must be entered. (hit the ENTER key after each record).

Field 1 – operation type (cc_credit)

Field 2 – processor id

Field 3 – Reference Number.

Field 4 – amount. In US Dollars. Example: 59.99, without \$ signs.

Example:

Cc_credit,12345,123456,75.00

**** NOTE ****

reference_number – the number that was originally returned by the auth/sale type..

CC_SETTLE Operations

SETTLE – To finalize an auth. This will put the money into your account.

The Settle operation allows the merchant to batch settle any successful authorizations. Authorizations will not transfer money until settled. An authorization merely reserves the funds on the customer's credit card. The funds will not transfer to the merchant's bank account until a settle is performed against the authorization. Sale transactions do not need nor can they be settled.

Upload File Format:

Must have 4 fields total. Each field is separated by a comma (,). After the last field a newline must be entered. (hit the ENTER key after each record).

Field 1 – operation type (cc_settle)
Field 2 – processor id
Field 3 – Reference Number.
Field 4 – amount. In US Dollars. Example: 59.99, without \$ signs.

Example:

Cc_settle,12345,123456,75.00

**** NOTE ****

reference_number – the number that was originally returned by the auth/sale command

CC_VOID/ACH_VOID Operations

VOID – To cancel an unclosed authorization or pending ACH transaction.

The VOID operation will stop an unclosed transaction from batching out. This can only be called on transactions that have not yet closed.

Upload File Format:

Must have 3 fields total. Each field is separated by a comma (,). After the last field a newline must be entered. (hit the ENTER key after each record).

Field 1 – operation type (cc_void/ach_void)
Field 2 – processor id
Field 3 – Reference Number.

Example:

Cc_void,12345,123456

**** NOTE ****

reference_number – the number that was originally returned by the auth/sale command

ACH_DEBIT/ACH_CREDIT Operations

ACH_DEBIT/ACH_CREDIT – To process an initial ACH payment.

Upload Record Format

Must have 20 fields total. Each field is separated by a comma (,).
After the last field, please enter a “newline” (hit the ENTER key after each record).

Field 1 – **operation type** (ach_debti, ach_credit). Not case sensitive.
Field 2 – **processor id** Processor ID for which this transaction will be processed under.
Field 3 – **order id**. MUST BE UNIQUE ASSIGNED letter number combination of no more than 50 characters.

Field 4 – **amount**. In US Dollars. Example: 59.99, without \$ signs.
 Field 5 – **ABA** 9 Digit bank routing number
 Field 6 – **DDA**. Bank account number
 Field 7 – **ACH Account Type**. Checking or Savings indicator (C, S)
 Field 8 – **ACH Category Text**. ACH category this transaction will be processed under. This value must correspond to an existing category created in the Transaction Center.
 Field 9 – **ACH Name**. Nickname for bank account
 Field 10 – **card owner name**
 Field 11 – **card owner street address**. If entering commas (,), please enclose with double-quotes (“ ”).
 Field 12 – **card owner street address 2**. If entering commas (,), please enclose with double-quotes (“ ”).
 Field 13 – **card owner city**
 Field 14 – **card owner state**. In 2 letter format. Example: AA.
 Field 15 – **card owner zip code**. No less than 5, no more than 10.
 Field 16 – **card owner country**. In 2 letter format. Example: US.
 Field 17 – **card owner email address**.
 Field 18 – **card owner phone number**. Must be no more than 12 characters.
 Field 19 – **close date** Used to schedule a transaction. (MM/DD/YYYY)
 Field 20 – **recurring type** Use the following to describe the type of recurring order: daily, weekly, biweekly, monthly, quarterly, semiannually, annually.

Example:

Ach_debit,14933,OrderId-789,1.00,123456789,12345,C,Website Payment,Checking Account,Bob Test,123 Test Rd,,Cityville,CA,92807,USA,nowhere@email.com,7144761111,,

**** NOTE ****

Operation Types:

Debit – debits the bank account specified for the amount requested.

Credit - issues a credit in the amount specified. The credit will be issued as a new transaction and not be a reversal against a previously settled transaction.

CIM_INSERT/CIM_EDIT Operations

CIM_INSERT/CIM_EDIT operations can be used to manage the CIM records under your account. The insert will create a new record with the specified information, whereas the EDIT call, will update an existing CIM record with the new information supplied.

Upload Record Format

Must have 31 fields total. Each field is separated by a comma (,).
 After the last field, please enter a “newline” (hit the ENTER key after each record).

Field 1 – **operation type** (cim_insert, cim_edit). Not case sensitive.

Field 2 – **processor id** Processor ID for which this transaction will be processed under.

Field 3 – **Cim Ref Num** MUST BE UNIQUE ASSIGNED letter number combination of no more than 50 characters used to identify customer

Field 4 – **username**. Unique username for this customer so they can manage their account

Field 5 – **password** Password assigned to this customer’s account so they can manage their account

Field 6 – **card owner name**

Field 7 – **card owner street address**. If entering commas (,), please enclose with double-quotes (“ ”).

Field 8 – **card owner street address 2**. If entering commas (,), please enclose with double-quotes (“ ”).

Field 9 – **card owner city**
 Field 10 – **card owner state**. In 2 letter format. Example: AA.
 Field 11 – **card owner zip code**. No less than 5, no more than 10.
 Field 12 – **card owner country**. In 2 letter format. Example: US.
 Field 13 – **card owner email address**.
 Field 14 – **card owner phone number**. Must be no more than 12 characters.
 Field 15 – **card type**. Either Visa, Amex, Discover or MasterCard. Must use exact spelling, but not case sensitive.
 Field 16 – **card number**. A 15 or 16 digit credit card number.
 Field 17 – **card expiration**. In MMY format. Example: 0106 for January 2006.
 Field 18 – **ABA** 9 Digit bank routing number
 Field 19 – **DDA**. Bank account number
 Field 20 – **ACH Account Type**. Checking or Savings indicator (C, S)
 Field 21 – **ACH Name**. Nickname for bank account
 Field 22 – **Shipping Name**
 Field 23 – **Shipping street address**. If entering commas (,), please enclose with double-quotes (“ ”).
 Field 24 – **Shipping street address 2**. If entering commas (,), please enclose with double-quotes (“ ”).
 Field 25 – **Shipping city**
 Field 26 – **Shipping state**. In 2 letter format. Example: AA.
 Field 27 – **Shipping zip code**. No less than 5, no more than 10.
 Field 28 – **Shipping country**. In 2 letter format. Example: US.
 Field 29 – **Shipping email address**.
 Field 30 – **Shipping phone number**. Must be no more than 12 characters.
 Field 31 – **preferred shipping method**. Fedex, UPS etc.

Example:

cim_insert,14932,CM123456,username,mypwd,Bob Test,123 Test Rd.,
 Brea,CA,92821,USA,email@test.com,1742564848,Visa,4111111111111111,1015,031302955,
 1111111111,C,Bob Bank,Bob Test,123 Test Rd.,Brea,CA,92821,USA,1744844651,,FedEx

cim_edit, 14932,CM123456,username,mypwdupdate,Bob Test,123 Test Rd.,
 Fullerton,CA,92835,USA,newemail@test.com,1742564848,Visa,4111111111111111,1015,031302955,
 1111111111,C,Bob Bank,Bob Test,123 Test Rd.,Anaheim,CA,92807,USA,1744844651,,FedEx

CIM_DELETE Operations

CIM_DELETE can be used to delete a specific payment sequence or an entire CIM record.

Upload Record Format

Must have 6 fields total. Each field is separated by a comma (,).
 After the last field, please enter a “newline” (hit the ENTER key after each record).

Field 1 – **operation type** (cim_delete) Not case sensitive.
 Field 2 – **processor id** Processor ID for which this transaction will be processed under.
 Field 3 – **CIM ref num**. CIM Reference number of the account the deletion should impact.
 Field 4 – **card sequence**. CC sequence to delete
 Field 5 – **ach sequence** ACH sequence to delete
 Field 6 – **ship sequence**. Shipping sequence to delete

Example:

Cim_delete,124,CN715264,1,,

**** NOTE ****

If no sequence number is passed in, the entire CIM record will be purged. If a sequence number is passed in, then only the sequence specified will be deleted and the CIM record itself will remain.

CIM_CC_SALE/CIM_CC_AUTH/CIM_CC_CREDIT Operations

These operations can be used to trigger a new credit card transaction of the specified type against an existing CIM record.

Upload Record Format

Must have 8 fields total. Each field is separated by a comma (,).
After the last field, please enter a "newline" (hit the ENTER key after each record).

- Field 1 – **operation type** (cim_cc_sale, cim_cc_auth, cim_cc_credit) Not case sensitive.
- Field 2 – **processor id** Processor ID for which this transaction will be processed under.
- Field 3 – **CIM ref num.** CIM Reference number of the account the deletion should impact.
- Field 4 – **order id.** MUST BE UNIQUE ASSIGNED letter number combination of no more than 50 characters.
- Field 5 – **amount.** In US Dollars. Example: 59.99, without \$ signs.
- Field 6 – **card sequence.** CC sequence to delete
- Field 7 – **close date** Used to schedule a transaction. (MM/DD/YYYY)
- Field 8 – **recurring type** Use the following to describe the type of recurring order: daily, weekly, biweekly, monthly, quarterly, semiannually, annually.

Example:

Cim_cc_sale,12345,CN45678,Order5484,23.24,1,12/01/2016,monthly

CIM_ACH_DEBIT/CIM_ACH_CREDIT Operations

These operations can be used to trigger a new ACH transaction of the specified type against an existing CIM record.

Upload Record Format

Must have 9 fields total. Each field is separated by a comma (,).
After the last field, please enter a "newline" (hit the ENTER key after each record).

- Field 1 – **operation type** (cim_cc_sale, cim_cc_auth, cim_cc_credit) Not case sensitive.
- Field 2 – **processor id** Processor ID for which this transaction will be processed under.
- Field 3 – **CIM ref num.** CIM Reference number of the account the deletion should impact.

Field 4 – **order id**. MUST BE UNIQUE ASSIGNED letter number combination of no more than 50 characters.
Field 5 – **amount**. In US Dollars. Example: 59.99, without \$ signs.
Field 6 – **ach sequence**. ACH sequence to delete
Field 7 – **close date** Used to schedule a transaction. (MM/DD/YYYY)
Field 8 – **recurring type** Use the following to describe the type of recurring order: daily, weekly, biweekly, monthly, quarterly, semiannually, annually.
Field 9 – **ACH Category Text**. ACH category this transaction will be processed under. This value must correspond to an existing category created in the Transaction Center.

Example:

Cim_ach_credit,12345,CN45678,Order5484,23.24,1, , ,Website Payment

File Upload Responses

Download Response

All responses will have 6 fields

Field 1 – operation type (echoed back)

Field 1 – processor id (echoed back)

Field 2 – status. 1 means successful transaction 0 means failed transaction.

Field 3 – reference number. Number used to reference transactions for credits and settles.

Field 5 – response text. Message associated with transaction

Field 6 – order Id. Order Id echoed back

**** NOTE ****

The response will contain a descriptive error message if the uploaded file failed preliminary data checks. In this case the transaction was never attempted to be run. You must first correct the specified errors then re-upload the file for processing.

EXAMPLE 1 – In Field 4, a '\$' is entered in with the amount, which is incorrect. The amount can only contain numbers.

Upload:

cc_sale,12345,100,\$75.00,visa,4486940039677002,0110,Joe Shmoe,"123 North Street, apt #94",,Town,NJ,08215,US,,,

Response:

Line: 1 has an invalid amount: \$75.00. It can only contain digits and must be greater than zero.

EXAMPLE 2 – In Field 13, the zip code is more than 10 characters in length.

Upload:

cc_sale,12345,101,100.25,mastercard,5251582800301006,0110,Heather Mooky,99 North Street,,Town,NJ,08215190258436,US,888-585-9494,,,

Response:

Line: 3 has an Invalid owner_zip: 08215190258436. Cannot exceed 10 characters.
monthly, quarterly, semiannually, annually.

EXAMPLE 3 – In Field 5, 'american express' is not a valid card type. The proper format accepted for American Express is 'Amex'. In Field 6, the card number entered is only 13 digits in length. In Field 7, the expiration date of the card that was entered, '01/10', is not formatted correctly. It should be entered in as '0110'.

Upload:

Cc_auth,1245,109,12.95,american express,41111111111111,01/10,Jim Bart,81 South Street,,Philadelphia,PA,19125,US,,sales@goe.com,,annually

Response:

Line: 7 has an Invalid card_name: american express. Must be one of the following: Visa, Amex, Discover, MasterCard, VisaCheckCard, MastercardCheckCard.

Line: 7 has an Invalid Card Number: 41111111111111. Must be in format 15 or 16 digits.

Line: 7 has an Invalid Expiration Date: 01/10. Must be in format MMYX ex. 0104.

**** GENERAL NOTES ****

Malformed files in all cases will not be processed. The download file will contain descriptive error messages about each invalid record and the line number the problem was encountered on.

Example Error:

Errors found in file containing transactions attempting to be processed. Please correct the errors and try again.

Line: 1 has an Invalid Card Number: Jon Dickinson. Must be in format 15 or 16 digits.
Line: 1 has an Invalid Expiration Date: 4111111111111111. Must be in format MMYX ex. 0104.
Line: 1 has an Invalid owner_state: Carlisle. Must be in format AA ex. PA.
Line: 1 has an Invalid owner_country: 17013. Must be in format AA ex. US.
Line: 1 has an Invalid phone: US. Must be in format 123-555-5858 or 1234567891 ex. 888-555-4545.
Line: 2 has an Invalid Card Number: Joe Jerel. Must be in format 15 or 16 digits.
Line: 2 has an Invalid Expiration Date: 4111111111111111. Must be in format MMYX ex. 0104.
Line: 2 has an Invalid owner_state: Town. Must be in format AA ex. PA.
Line: 2 has an Invalid owner_country: 08215. Must be in format AA ex. US.
Line: 2 has an Invalid phone: US. Must be in format 123-555-5858 or 1234567891 ex. 888-555-4545.
Line: 3 has an Invalid Card Number: Joel Likel. Must be in format 15 or 16 digits.
Line: 3 has an Invalid Expiration Date: 4111111111111111. Must be in format MMYX ex. 0104.
Line: 3 has an Invalid owner_state: City. Must be in format AA ex. PA.
Line: 3 has an Invalid owner_country: 08815. Must be in format AA ex. US.
Line: 3 has an Invalid phone: US. Must be in format 123-555-5858 or 1234567891 ex. 888-555-4545.
0

Examples of correct and malformed upload files, along with their returned responses, can be downloaded from these locations (txt files):

CORRECT – upload file

https://secure.1stpaygateway.net/secure/transcenter/help/batchfile_upload_v2.txt

CORRECT – response file

https://secure.1stpaygateway.net/secure/transcenter/help/batchfile_upload_v2-return.txt

INCORRECT – upload file

https://secure.1stpaygateway.net/secure/transcenter/help/batchfile_upload_v2-bad.txt

INCORRECT – response file

https://secure.1stpaygateway.net/secure/transcenter/help/batchfile_upload_v2-bad-return.txt

Conclusions

The batch file upload feature is an intuitive interface to the transaction servers that produce credit card transactions and a number of operations on those initial transactions. This is an extremely useful feature for large processing merchants who capture the transaction information offline or are processing recurring payments for subscription based services where real-time authorizations would not be practical.