Upload Transaction File Guide

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Introduction

In addition to submitting real time transactions to the payment gateway from your website, you can also upload a file of transactions to the payment gateway from the Merchant Interface. Transactions uploaded through the Merchant Interface are sent for settlement at the same time as transactions submitted from your website.

The Upload Transaction File feature can be especially useful if you collect transaction information over the course of the day, and want to upload all transactions for processing at one time.

Note: To optimize upload time, it is recommended that you limit the number of transactions submitted per upload file to 1,000. Multiple transaction files may be uploaded during any given day.

The payment gateway only accepts upload transaction files that are formatted correctly. Before you upload a transaction file, it is important that you understand how to format and customize transaction information. Preparing upload transaction files correctly decreases transaction validation and processing errors, which saves you time.

Transaction File Upload Format

A file of transactions suitable for upload typically includes several lines of information. Each line represents an individual transaction and is broken into a series of fields. Each field contains specific information about the transaction, for example the transaction amount, or the credit card number. Each field is separated by a delimiter, a special character that indicates the end of one field and the beginning of another. Formatting the line of information in this way helps the payment gateway separate information from the uploaded transaction file into individual transactions.

Assembling the File

A transaction file can be created by exporting transactions from a program, such as a database or spreadsheet program, or a program can be written to construct the file.

When constructing a transaction file, fields that have no information for a particular transaction (for example, a credit card number for an eCheck.Net transaction) should be represented with just the delimiting characters and no characters in between them. For example, if three fields needed to be included because of the way the file format is structured, but information was only available for the first and third, these fields in the transaction file might look like:

```
,"data", ,"data",
```

Once the file has been prepared, it can be can be given any filename and saved to your local system. Only plain text files with a delimiter will be accepted for upload.

Default File Format

Unless otherwise changed in the Upload Transaction Files settings in the Merchant Interface, the default transaction file format is comma-delimited and uses a double-quote (“) encapsulation character. The default order of the fields is as follows:

POSITION IN DEFAULT FILE FORMAT	FIELD NAME	EQUIVALENT FORM FIELD NAME	MAX LENGTH	DESCRIPTION
1	Invoice Number	x_invoice_num	20	Merchant-assigned invoice number.
2	Description	x_description	255	Description of the transaction.
3	Amount	x_amount	15	Total value to be charged or credited inclusive of tax. Use positive amount for Credit transactions of type CREDIT.
4	Payment Method	x_method	N/A	Indicates the method of payment for the transaction being sent to the system. Possible Values: CC or ECHECK. If left blank, this value will default to CC.
5	Transaction Type	x_type	N/A	Indicates the type of transaction. Must be exactly one of: AUTH_CAPTURE, AUTH_ONLY, CAPTURE_ONLY, CREDIT, VOID, PRIOR_AUTH_CAPTURE. If the value in the field does not match any of the values stated, the transaction will be rejected. If no value is submitted in this field, the gateway will process the transaction as an AUTH_CAPTURE.
6	Authorization Code	x_auth_code	6	Six-digit numeric or alphanumeric authorization code for a previous transaction not authorized on the gateway that is being submitted for capture. Required and necessary only for CAPTURE_ONLY type transactions.
7	Transaction ID	x_trans_id	10	ID of a transaction previously authorized by the gateway. Required and necessary only for CREDIT, VOID or PRIOR_AUTH_CAPTURE type transactions.
8	Credit Card Number	x_card_num	22	Contains the credit card number. For Credits, include the full or last four digits of the credit card or bank account number (accepted formats are: the full number with no spaces; the last four digits only; or the masked number, like XXXX4455)

POSITION IN DEFAULT FILE FORMAT	FIELD NAME	EQUIVALENT FORM FIELD NAME	MAX LENGTH	DESCRIPTION
9	Credit Card Expiration Date	x_exp_date	N/A	Contains the date on which the credit card expires. Must be one of the following: MMYY, MM/YY, MM-YY, MMYYYY, YYYY-MM-DD, YYYY/MM/DD. Optional for Credits.
10	Bank Account Number	x_bank_acct_num	20	The checking or savings account number. For ECHECK method transactions.
11	Bank Account Type	x_bank_acct_type		Must be CHECKING, SAVINGS or BUSINESS CHECKING. If no value is provided, default is set to CHECKING.
12	Bank ABA Routing Code	x_bank_aba_code	9	The ABA Routing number for ECHECK transactions.
13	Bank Name	x_bank_name	50	Contains the name of the customer's financial institution. For ECHECK method transactions.
14	Customer ID	x_cust_id	20	Merchant-defined, unique identifier to represent the customer associated with the transaction.
15	Customer First Name	x_first_name	50	Contains the first name of the customer associated with the billing address for the transaction.
16	Customer Last Name	x_last_name	50	Contains the last name of the customer associated with the billing address for the transaction.
17	Customer Company	x_company	50	Contains the company name associated with the billing address for the transaction.
18	Customer Address	x_address	60	Contains the address of the customer associated with the billing address for the transaction. Suggested for Address Verification System (AVS).
19	Customer City	x_city	50	Contains the city of the customer associated with the billing address for the transaction.
20	Customer State	x_state	40	Contains the state of the customer associated with the billing address for the transaction. Any valid two-character state code or full state name.
21	Customer	x_zip	20	Contains the ZIP code of the customer associated with the billing address for

POSITION IN DEFAULT FILE FORMAT	FIELD NAME	EQUIVALENT FORM FIELD NAME	MAX LENGTH	DESCRIPTION
	ZIP			the transaction. Suggested for Address Verification System (AVS). Can be 5 or 9 digits in length.
22	Customer Phone	x_phone	25	Contains the phone number of the customer associated with the billing address for the transaction. Recommended format is (123)123-1234.
23	Customer Fax	x_fax	25	Contains the fax number of the customer associated with the billing address for the transaction. Recommended format is (123)123-1234.
24	Customer Email	x_email	255	If provided, customer will receive a standard email receipt, assuming that your account is configured to send customers an email receipt.

Sample transaction file

Following is an example of a properly formatted transaction file using the default file format of comma delimited and double-quote (“) encapsulated fields:

```
"11111","Door welding kit","99.00","CC","AUTH_CAPTURE", ,
,"4111111111111111","0205", , , ,"BDUKE001","Bo" ,"Duke", ,"555 Duke
Farm Road","Hazzard County","GA","30603","(404)555-1234","(404)555-
4321","bo@dukefarm.com"
"11112","Door unwelding
kit","99.00","ECHECK","AUTH_CAPTURE",,,,,"3201456789","CHECKING","12345
6789","Bank of Hazzard", "LDUKE001","Luke","Duke",,"555 Duke Farm Road
","Hazzard County","GA","30603","(404)555-1234","(404)555-
4321","luke@dukefarm.com","WEB"
"11113","Subscription to weight loss plan","55.00","CC","AUTH_ONLY", ,
,"4222222222222222","0205",,,,"JDUKE001" ,"Jesse","Duke",,"555 Duke
Farm Road ","Hazzard County","GA","30603","(404)555-1234","(404)555-
4321", "unclejesse@dukefarm.com"
"11114","Refund for ill-fitting denim
shorts","34.95","CC","CREDIT",,”312345”,"4333333333333333","0205",,,,"D
DUKE001" ,"Daisy","Duke",,"555 Duke Farm Road ","Hazzard
County","GA","30603","(404)555-1234","(404)555-4321",
"daisy@dukefarm.com"
"11115","Hair
combs","19.95","CC","CAPTURE_ONLY",111111,,"4444444444444444","0205",,,
, "CDUKE001","Coy","Duke", ,"555 Duke Farm Road ","Hazzard
County","GA","30603","(404)555-1234","(404)555-4321","coy@dukefarm.com"
"11116","Watch
fob","19.95","CC","VOID",,654321,"4555555555555555","0205",,,,"VDUKE001
","Vance","Duke",,"555 Duke Farm Road ","Hazzard
```

```
County","GA","30603","(404)555-1234","(404)555-
4321","vance@dukefarm.com"
"11117","Dog
Food","41.95","CC","PRIOR_AUTH_CAPTURE",,123456,"4666666666666666","020
5", , , ,"RCOLTRANE001", "Rosco","Coltrane", "Hazzard County Sheriff's
Department","Municipal Building, Suite 123","Hazzard
County","GA","30603","(404)555-9099","(404)555-
9098","rpcoltrane@hazzard.co.ga.us"
```

Additional Fields

This table lists additional fields that can be included with the transaction file. For more information on how to customize a transaction file to include additional fields, see the “Customizing the File Format” section.

FIELD NAME	EQUIVALENT FORM FIELD NAME	MAX LENGTH	DESCRIPTION
Card Code	x_card_code	4	Valid CVV2, CVC2, or CID value. Three- or four-digit number on the back of a credit card (on front for American Express).
Currency Code	x_currency_code	3	Currency of the transaction amount. Defaults to the currency code configured in the Merchant Interface.
Customer Country	x_country	60	Contains the country of the customer associated with the billing address for the transaction. Any valid two-digit country code or full country name (spelled in English).
Customer IP Address	x_customer_ip	15	IP address of the customer initiating the transaction. Required format is 255.255.255.255.
Customer Tax ID or SSN	x_customer_tax_id	9	Tax ID or SSN of the customer initiating the transaction. Optional for Credit transactions if the Driver’s License Date of Birth is provided.
Customer Type	x_customer_organization_type	N/A	I = Individual, B = Business.
Driver’s License Date of Birth	x_drivers_license_dob	N/A	Must be formatted in one of the following: YYYY-MM-DDD, YYYY/MM/DD, MM/DD/YYYY, MM-DD-YYYY. Optional for Credit transactions if the Social Security Number is provided.
Driver’s License	x_drivers_license_num	50	Optional for Credit transactions.

FIELD NAME	EQUIVALENT FORM FIELD NAME	MAX LENGT H	DESCRIPTION
Number			
Driver's License State	x_drivers_license_state	2	Two-character state abbreviation.
eCheck Type	x_echeck_type Required when x _method = ECHECK	N/A	Contains the eCheck.Net transaction type: ARC, BOC, CCD, PPD, TEL, WEB. If left blank, when Bank Account Type is Checking or Savings this value will default to WEB. When Bank Account Type is Business Checking, this value will default to CCD.
Check Number	x_bank_check_number	15	The check number on the customer's paper check. Required only when submitting ARC or BOC eCheck.Net transaction types.
Level 2 Duty	x_duty	10	Contains the amount charged for duty.
Level 2 Freight	x_freight	10	Contains the freight amount charged. Required for all eCheck transactions ($0 is valid) – otherwise optional.
Level 2 PO Number	x_po_num	25	Contains the purchase order number.
Level 2 Tax	x_tax	15	Contains the tax amount. Required for all eCheck transactions ($0 is valid) – otherwise optional.
Level 2 Tax Exempt	x_tax_exempt	5	Indicates whether the transaction is tax exempt. TRUE, FALSE.
Name on Bank Account	x_bank_acct_name Required when x _method = ECHECK	22	Customer's name as it appears on their bank account.
Recurring Billing	x_recurring_billing Required when x_echeck_type = WEB	N/A	YES or NO value. Indicates whether the transaction is a recurring billing transaction.
Shipping Address	x_ship_to_address	60	Contains the customer shipping address.
Shipping City	x_ship_to_city	40	Contains the customer shipping city.
Shipping Company	x_ship_to_company	50	Contains the customer shipping company.
Shipping Country	x_ship_to_country	60	Contains the customer shipping country.

FIELD NAME	EQUIVALENT FORM FIELD NAME	MAX LENGTH	DESCRIPTION
Shipping First Name	x_ship_to_first_name	50	Contains the customer shipping first name.
Shipping Last Name	x_ship_to_last_name	50	Contains the customer shipping last name.
Shipping State	x_ship_to_state	40	Contains the customer shipping state. Any valid two-character state code or full state name.
Shipping ZIP	x_ship_to_zip	20	Contains the customer shipping ZIP code. May be 5 or 9 digits.

Customizing the File Format

The Upload Transaction File feature allows you the ability to customize the format and field order of transaction files. It may be advantageous to customize transaction file field order to match the format used by your business to collect or manage transaction information—eliminating the need for any data conversion.

Using the **Upload Transaction File Format** settings in the Merchant Interface, you can designate which fields the payment gateway requires, the order of those fields, the delimiting character that separates the fields, and the encapsulation character that encloses data within a field. You can also specify which security filters the gateway should apply to the file and if your customers should get an email receipt of the transaction.

To customize your transaction file:

1. Log into the Merchant Interface at https://account.authorize.net.
2. Click **Account** from the main toolbar.
3. Click **Settings** from the main menu on the left.
4. Click **Upload Transaction File Format** in the Transaction Submission Settings section. The Upload Transaction File Settings page appears.

The following settings can be customized:

- **Email Customer Information**. Specify whether customers in the transaction file are e-mailed a receipt for their transaction. If the **Email Customer** setting is set to **Yes**, an e-mail receipt will be sent to each customer in the transaction file just as if the transaction had been processed interactively from a website. (Note that if this setting is set to **Yes**, a valid e-mail address must be included as one of the fields in the uploaded file.)
- **Apply Address Verification System (AVS) Filter**. Specify whether to apply the AVS filter to transaction files. The AVS filter is a verification system that compares the billing address information provided by the customer with the billing address on file at the customer’s credit card issuing bank.
- **Apply Card Code Filter**. Specify whether to apply Card Code Verification to transaction files. The Card Code filter is a verification system that compares the Card Code provided by the customer with the Card Code on file at the customer’s credit card issuing bank. (If you choose to apply Card Code

verification to your transaction files, be sure to include the Card Code field in your Upload Transaction File settings. Card Code is not included in the default file format).

Card Code (CVV2/CVC2/CID) is a three- to four-digit security code that is printed on credit cards. The value appears in reverse italic at the top of the signature panel on the back of the card, or on the front of the card just above the end of the credit card number.

+ **Default Field Separator**. Specify the character that separates, or delimits the fields in the transaction file. This delimiting character marks the end of one field and the beginning of the next.

  If the character you would like to use is not in the Default Field Separator drop-down list, **Other** should be selected and the desired character entered in the box to the right of the drop-down list.

+ **Field Encapsulation Character**. Specify the character that encloses all of the data within a single field. Encapsulation characters are typically not needed for transaction files. However, transactions that use a delimiting character that might also possibly appear in the content of a field, such as a comma, also need to include an encapsulation character, such as ("). This differentiates the comma included as content in a field from the commas that are used as a delimiting character.

  If the character you would like to use is not in the Field Encapsulation Character drop-down list, **Other** should be selected and the desired character entered in the box to the right of the drop-down list.

+ **Field Inclusion and Order Settings**. Specify which fields will be included in the transaction file, and the order in which they will appear. Choose the field name for each position from the corresponding drop-down boxes. Select **Exclude** for each of the fields you do not want to include in the transaction file.

Note: All included fields must be listed in sequence starting at Position 1. Select **Exclude** for all unused field positions. Excluded fields can only be specified after all included fields have been listed.

Click **Submit** to save your Upload Transaction Files settings.

Uploading a Transaction File

Uploaded transaction files pass through four stages.

+ **File Upload** – You choose which file of transactions to upload from your local system.
+ **Data Formatting** – The payment gateway validates the transaction file for formatting errors.
+ **Transaction Processing** – Files that pass the data format validation are then placed in the current batch to await settlement (Auth_Only and Auth_Capture transactions are also authorized during this time).

- **Receipt E-mail** – A receipt e-mail is sent to the customer (if you chose YES in the Email Customer section of the Upload Transaction File Format settings).

File Upload

The process of uploading a transaction file is initiated from the Upload Transactions menu of the Merchant Interface.

To upload a new file of transactions:

1. Log into the Merchant Interface at https://account.authorize.net.
2. Click **Tools** from the main toolbar.
3. Click **Upload Transactions**.
4. Click **Upload New Transaction File**.
5. The **Upload New Transaction File** pop-up window appears prompting for the path and filename of the file to be uploaded.
6. Click **Browse** to locate the upload transaction file on your local system.
7. Select the upload transaction file and click **Open** (or, double-click on the file name).
8. Click **Upload File** to begin the file upload.

Note: Do NOT close the Upload New Transaction File pop-up window until either a FileID or error list appears, as transactions are processing during this time.

Data Formatting

As the transaction file uploads to the payment gateway, various checks are performed to determine if the file contains usable transaction data. The system checks the number of fields in each line, and also validates the data in each field. If any validation errors in the file are encountered, the upload process is aborted and corresponding error messages are returned in the Upload New Transaction File pop-up window. In this event, the system displays which lines contained validation errors so that the file can be corrected and re-uploaded. However, only up to 50 lines with validation errors are listed. If 50 lines with validation errors are listed, you may need to consider reformatting your entire transaction file.

Transaction Processing

As soon as the file has been validated against formatting errors, and the upload is successfully completed, transaction processing begins. The payment gateway scans the file and processes each transaction, line by line. Transactions that require authorization are authorized during this process. The system then inserts the transactions as part of the current batch of unsettled transactions. When the uploaded transaction file finishes processing, a FileID is returned in the Upload New Transaction File pop-up window.

Note: Do NOT close the Upload New Transaction File window until a FileID appears, as transactions are processing during this time.

Receipt E-mail

Once the uploaded transaction file is successfully validated and processed, an e-mail receipt is sent to the customer. You have the option to turn on or off this receipt e-mail in the Upload Transaction File Format settings section of the Merchant Interface.

To turn on/off the customer receipt e-mail:

1. Log into the Merchant Interface at https://account.authorize.net.
2. Click **Tools** from the main toolbar.
3. Click **Upload Transactions**.
4. Click **View Upload Transaction File Settings**.
5. Under Upload Processing Information you will find a drop-down box next to **Email Customer**.
6. Click the drop-down box and choose **Yes** or **No** to turn on or off the option to send a receipt e-mail to your customer.

Checking the Status of an Uploaded Transaction File

Full status information for uploaded transactions that have been successfully processed can be viewed in the View Status of Uploaded Transaction Files section of the Upload Transaction Files menu in the Merchant Interface.

To view status information for an uploaded file:

1. Log into the Merchant Interface at https://account.authorize.net.
2. Click **Tools** from the main toolbar.
3. Click **Upload Transactions**.
4. Click **View Status of Uploaded Transaction Files**.
5. Select the desired uploaded transaction file from the **Select Upload File** drop-down list.
6. Click **Submit**.

The Uploaded Transaction File Status page will display:

- The payment gateway's internal file ID
- The date and time that the file was uploaded
- The total number of transactions found in the file
- The current status of each of the four phases of processing (File Upload, Data Formatting, Transaction Processing, and Receipt Email)
- The elapsed file processing time

On the Uploaded Transaction File Status page, click the FileID to view a summary of individual transactions. The Uploaded Transactions page appears listing the summary for each transaction contained in the file.

The Uploaded Transactions page will display:

- The payment gateway's internal transaction ID
- The invoice number associated with the transaction
- The status of each transaction (for example, Successfully Settled, Declined)
- The date and time the transaction was processed
- The customer's name for the transaction
- The masked payment method for the transaction
- The payment amount for the transaction
- The settlement date for the transaction (if applicable)

- The settlement amount for the transaction (if applicable)

Each transaction can be viewed in full detail by clicking any Transaction ID.

Note: For security reasons, all sensitive information, including credit card and bank account numbers is masked in the Merchant Interface, meaning that only the last four characters or digits of the number are visible (e.g., XXXX9876). Expiration dates are fully masked (e.g., XXXX).

View errors in the uploaded transaction file

Uploaded transactions that failed or experienced errors during transaction processing (such as duplicate transactions in the file, specifically credits or voids) are listed separately. These errors can be viewed from the Uploaded Transaction File Status page.

To view errored uploaded transactions:

1. Log into the Merchant Interface at https://account.authorize.net.
2. Click **Tools** from the main toolbar.
3. Click **Upload Transactions**.
4. Click **View Status of Uploaded Transaction Files**.
5. Select the desired uploaded transaction file from the **Select Upload File** drop-down list.
6. Click **Submit**. The Uploaded Transaction File Status page appears.
7. Click the linked FileID to view upload transaction file details. The Uploaded Transactions page appears listing summaries for transactions included in the file.
8. Click the **View Errors in File** link (this link appears only for those uploaded transaction files that experienced errors during transaction processing). The Transaction Errors pop-up window appears listing transactions in the uploaded file that experienced errors and were not successfully processed.

You can also view the status of uploaded transactions, including declined transactions, by running various reports from the Reports menu of the Merchant Interface. For more information about how to use reports, see the Reports help text in the Merchant Interface.

Uploading Credits in a Transaction File

Credits submitted via the Upload Transaction File feature will be automatically accepted for processing by the payment gateway, but may later be rejected (for example, a duplicate credit transaction). You can view the status of credits from an uploaded transaction file on the Uploaded Transactions page (see the “Checking the status of an uploaded file” section above).

Note: Rejected credits, and the reason why the credit was rejected, will be listed in the Transaction Errors page (see the “View errors in the uploaded transaction file” section above). For more information about the reasons why a credit may be rejected, see the Response Codes table in the Implementation Guide for your connection method; or if you do not submit transactions via a website, contact Customer Support.

Credits must be submitted to the payment gateway within 120 days of the date and time the original transaction successfully settled on the Payment Gateway. ALL credits submitted after 120 days of the original transaction, regardless of whether full sensitive account information is provided, will be rejected.

For more information on issuing credits, see the *Issuing Credits Guide* at
http://www.authorize.net/files/creditreturnsummary.pdf.

Downloading Transaction Files

In addition to uploading transaction files, the payment gateway allows you to search and download settled and unsettled transactions to your computer. For more information on downloading transaction information, please see the Downloading a File help topic in the Merchant Interface, or the *Download Transaction File Guide* at
http://www.authorize.net/files/downloadguide.pdf.