Authorize.Net®

# Upload Transactions

User Guide

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# Introduction

You can 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 when you collect transaction information throughout the day and want to upload all transactions for processing at one time.

**Important:** To reduce upload time, limit the number of transactions submitted for each upload file to 1,000. You can upload multiple transaction files daily.

The upload transaction files must be formatted correctly. Before you upload a transaction file, you should 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 that is suitable for upload typically includes several lines of information. Each line represents an individual transaction and is divided into a series of fields. Each field contains specific information about the transaction such as the transaction amount, or the credit card number. Each field is separated by a separator character, 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

You can create a transaction file by exporting transactions from a program, such as a database or spreadsheet program, or you can write a program to construct the file.

When you construct a transaction file, fields that have no information for a particular transaction should be represented with just the separator characters and nothing in between them. For example, if three fields must be included, but information is available only for the first and third fields, the fields in the transaction file might look like the following example:

**,"data",,"data",**

You can give the file any filename and save it to your local system. Only plain text files are accepted for upload.

**Important:** Certain characters, such as the less-than (<) and greater-than (>) symbols, are not permitted for security reasons, and might result in upload errors.

# Default File Format

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

| POSITION IN DEFAULT FILE FORMAT | FIELD NAME | MAX LENGTH | DESCRIPTION |
|---|---|---|---|
| 1 | Invoice Number | 20 | Merchant-assigned invoice number. |
| 2 | Description | 255 | Description of the transaction. |
| 3 | Amount | 15 | Total value to be charged or credited including tax. Use positive amount for transactions of type CREDIT. |
| 4 | Payment Method | -- | Indicates the method of payment for the transaction. Possible Values: CC or ECHECK. If left blank, this value defaults to CC. |
| 5 | Transaction Type | -- | Indicates the type of transaction. Must be exactly one of: AUTH_CAPTURE, AUTH_ONLY, CAPTURE_ONLY, PRIOR_AUTH_CAPTURE, CREDIT, or VOID. If the value in the field does not match any of the values stated, the transaction is rejected.<br><br>If no value is submitted in this field, the gateway processes the transaction as an AUTH_CAPTURE. |
| 6 | Authorization 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 transactions. |
| 7 | Transaction 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 | 22 | Contains the credit card number. For credits, include the full the credit card or bank account number or the last four digits. Accepted formats are: the full number with no spaces; the last four digits only; or the masked number, such as XXXX4455) |
| 9 | Credit Card Expiration Date | -- | Contains the date on which the credit card expires. Must be one of the following: MMYY, MM/YY, MM-YY, MMYYYY, YYYY-MM-DD, or YYYY/MM/DD. Optional for credits. |
| 10 | Bank Account Number | 20 | The checking or savings account number. For ECHECK method transactions. |
| 11 | Bank Account Type | -- | Must be CHECKING, SAVINGS or BUSINESS CHECKING. If no value is provided, the default is set to CHECKING. |

| POSITION IN DEFAULT FILE FORMAT | FIELD NAME | MAX LENGTH | DESCRIPTION |
|---|---|---|---|
| 12 | Bank ABA Routing Code | 9 | The ABA routing number for ECHECK transactions. |
| 13 | Bank Name | 50 | Contains the name of the customer's financial institution. For ECHECK method transactions. |
| 14 | Customer ID | 20 | Unique merchant-defined identifier to represent the customer associated with the transaction. |
| 15 | Customer First Name | 50 | Contains the first name of the customer associated with the billing address for the transaction. |
| 16 | Customer Last Name | 50 | Contains the last name of the customer associated with the billing address for the transaction. |
| 17 | Customer Company | 50 | Contains the company name associated with the billing address for the transaction. |
| 18 | Customer Address | 60 | Contains the address of the customer associated with the billing address for the transaction. Required for Address Verification Service (AVS) checks. |
| 19 | Customer City | 50 | Contains customer' billing address city for the transaction. |
| 20 | Customer State | 40 | Contains the customer's billing address state for the transaction. Can be any valid two-character state code or full state name. |
| 21 | Customer ZIP | 20 | Contains the customer's billing address ZIP code for the transaction. Required for Address Verification Service (AVS) checks. Can be 5 or 9 digits long. |
| 22 | Customer Phone | 25 | Contains the customer's billing address phone number for the transaction. Recommended format is (123)123-1234. |
| 23 | Customer Fax | 25 | Contains the customer billing address FAX number for the transaction. Recommended format is (123)123-1234. |
| 24 | Customer Email | 255 | The customer's email address. The customer receives a standard email receipt if your account is configured to send customers a receipt. |

### Transaction File Example

Below is an example of a properly formatted transaction file that uses the default file format that is comma-separated and that has 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@example.com"

"11112","Door unwelding kit","99.00","ECHECK","AUTH_CAPTURE",,,,,"3201456789","CHECKING","123456789", "Bank of Hazzard", "LDUKE001","Luke","Duke",,"555 Duke Farm Road ","Hazzard County","GA","30603","(404)555-1234","(404)555-4321","luke@example.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@example.com"

"11114","Refund for ill-fitting denim shorts","34.95","CC","CREDIT",,”312345”,"4333333333333333","0205",,,,"DDUKE001" ,"Daisy","Duke",,"555 Duke Farm Road ","Hazzard County","GA","30603","(404)555-1234","(404)555-4321", "daisy@example.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@example.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@example.com"

"11117","Dog Food","41.95","CC","PRIOR_AUTH_CAPTURE",,123456,"4666666666666666","0205", , , ,"RCOLTRANE001", "Rosco","Coltrane", "Hazzard County Sheriff's Department","Municipal Building, Suite 123","Hazzard County","GA","30603","(404)555-9099","(404)555-9098","rpcoltrane@example.com"

## Additional Fields

The following 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 below.

| FIELD NAME | MAX LENGTH | DESCRIPTION |
|---|---|---|
| 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 | 3 | Currency of the transaction amount. Defaults to the currency code configured in the Merchant Interface. |
| Customer Country | 60 | Contains the customer’s billing address country for the |

| FIELD NAME | MAX LENGTH | DESCRIPTION |
|---|---|---|
| | | transaction. Can be valid two-digit country code or full country name (spelled in English). |
| Customer IP Address | 15 | IP address of the customer initiating the transaction. The required format is 255.255.255.255. |
| Customer Tax ID or SSN | 9 | Tax ID or Social Security Number of the customer initiating the transaction.<br><br>Optional for credit transactions if the Driver's License Date of Birth is provided. |
| Customer Type | -- | I = Individual, B = Business. |
| Driver's License Date of Birth | -- | Must be formatted in one of the following ways: YYYY-MM-DDD, YYYY/MM/DD, MM/DD/YYYY, or MM-DD-YYYY.<br><br>Optional for credit transactions if the Social Security Number is provided. |
| Driver's License Number | 50 | Optional for credit transactions. |
| Driver's License State | 2 | Two-character state abbreviation. |
| eCheck Type | -- | Contains the eCheck.Net transaction type: ARC, BOC, CCD, PPD, TEL, or WEB. If left blank, when Bank Account Type is CHECKING or SAVINGS, this value defaults to WEB. When Bank Account Type is BUSINESS CHECKING, this value defaults to CCD. |
| 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 | 10 | Contains the amount charged for duty. |
| Level 2 Freight | 10 | Contains the freight amount charged. Required for all eCheck transactions. Zero amounts are valid. |
| Level 2 PO Number | 25 | Contains the purchase order number. |
| Level 2 Tax | 15 | Contains the tax amount. Required for all eCheck transactions. Zero amounts are valid. |
| Level 2 Tax Exempt | 5 | Indicates whether the transaction is tax exempt. Either TRUE or FALSE. |
| Name on Bank Account | 22 | Customer's name as it appears on their bank account. |
| Shipping Address | 60 | Contains the customer's shipping address. |

| FIELD NAME | MAX LENGTH | DESCRIPTION |
|---|---|---|
| Shipping City | 40 | Contains the customer's shipping city. |
| Shipping Company | 50 | Contains the customer's shipping company. |
| Shipping Country | 60 | Contains the customer's shipping country. |
| Shipping First Name | 50 | Contains the customer's shipping first name. |
| Shipping Last Name | 50 | Contains the customer's shipping last name. |
| Shipping State | 40 | Contains the customer's shipping state. Can be any valid two-character state code or full state name. |
| Shipping ZIP | 20 | Contains the customer's shipping ZIP code. Can be 5 or 9 digits. |

# Customizing the File Format

The Upload Transaction File feature enables you to customize the format and field order of transaction files. You can customize the transaction file field order to match the format used by your business to collect or manage transaction information, eliminating the need for data conversion.

Use the **Upload Transaction File Format** settings in the Merchant Interface to designate which fields the payment gateway requires, the order of those fields, the 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 whether 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. Go to the main toolbar and click **Account**.
3. From the main menu on the left, choose **Settings**.
4. Go to the Transaction Submission Settings section and click **Upload Transaction File Format**. The Upload Transaction File Settings page appears.

The following settings can be customized:

- **Email Customer Information**. Specifies whether customers in the transaction file receive an email receipt for their transaction. If the **Email Customer** setting is set to **Yes**, an email receipt is sent to each customer in the transaction file when a valid email address is included in the uploaded file.
- **Apply Address Verification Service (AVS) Filter**. Specifies whether to apply the AVS filter to transaction files. The AVS filter uses a verification system that compares the billing address information provided by the customer to the billing address on file at the customer's card-issuing bank.

- **Apply Card Code Filter**. Specifies 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 to 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. The card code is not included in the default file format.
- **Default Field Separator**. Specifies the character that separates the fields in the transaction file. The separator 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, select **Other** and enter the desired separator character in the box to the right of the drop-down list.
- **Field Encapsulation Character**. Specifies the character that encloses data within a single field. Defaults to double-quotes ("). Typically, encapsulation characters are not needed for transaction files. However, transactions that use a separator character that might also appear in the content of a field, such as a comma (,) in an address, should enclose the content of the field with encapsulation characters to distinguish the comma as data and not part of the file formatting.

  If the character you would like to use is not in the Field Encapsulation Character drop-down list, select **Other** and enter the desired character in the box to the right of the drop-down list.
- **Field Inclusion and Order Settings**. Specifies which fields are included in the transaction file, and the order in which they appear. Choose the field name for each position from the corresponding drop-down boxes. Select **Exclude** for each of the fields that you do not want to include in the transaction file.

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

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

# Uploading a Transaction File

Uploaded transaction files pass through four stages.

1. **File Upload**–You choose the transaction file to upload from your local system.
2. **Data Formatting**–The payment gateway validates the transaction file for formatting errors.
3. **Transaction Processing**–Files that pass the data format validation are placed in the current batch to await settlement. AUTH_ONLY and AUTH_CAPTURE transactions are also authorized during this stage.
4. **Receipt Email**–A receipt email is sent to the customer if you chose *yes* in the Email Customer section of the Upload Transaction File Format settings.

## File Upload

To upload a new file of transactions:

1. Log into the Merchant Interface at https://account.authorize.net.
2. From the main toolbar, click **Tools**.
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 find the upload transaction file on your local system.
7. Select the upload transaction file and click **Open**, or double-click the file name.
8. Click **Upload File** to begin the file upload.

**Important:** Do not close the Upload New Transaction File pop-up window until either a file ID or error list appears. Transactions are processed until the file ID or error list appears.

## Data Formatting

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

## Transaction Processing

As soon as the file is checked for 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 file ID is returned in the Upload New Transaction File pop-up window.

## Receipt Email

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

To toggle the customer receipt email:

1. Log into the Merchant Interface at https://account.authorize.net.
2. From the main toolbar, click **Tools**.

3. Click **Upload Transactions**.
4. Click **View Upload Transaction File Settings**.
5. Under Upload Processing Information, click the drop-down box next to Email Customer and choose **Yes** or **No** to turn on or turn off the option to send a receipt email to your customer.

## Checking the Status of an Uploaded Transaction File

You can view full status information for uploaded transactions that are successfully processed.

To view status information for an uploaded file:

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

The Uploaded Transaction File Status page displays:

- The payment gateway's internal file ID
- The date and time that the file is uploaded
- The total number of transactions found in the file
- The 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 file ID to view a summary of individual transactions. The Uploaded Transactions page appears and lists the summary for each transaction contained in the file.

The Uploaded Transactions page displays:

- 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 when the transaction is 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 it applies).
- The settlement amount for the transaction (if it applies).

You can view each transaction in full detail by clicking any transaction ID.

**Important:** All sensitive information, including credit card and bank account numbers, is masked in the Merchant Interface. Only the last four characters or digits of the number are visible, for example, XXXX9876. Expiration dates are fully masked, for example, 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. You can view these errors from the Uploaded Transaction File Status page.

To view errored uploaded transactions:

1. Log into the Merchant Interface at https://account.authorize.net.
2. From the main toolbar, click **Tools**.
3. Click **Upload Transactions**.
4. Click **View Status of Uploaded Transaction Files**.
5. From the Select Upload File drop-down list, choose an uploaded transaction file.
6. Click **Submit**. The Uploaded Transaction File Status page appears.
7. Click the linked file ID to view upload transaction file details. The Uploaded Transactions page appears and lists summaries for transactions included in the file.
8. Click **View Errors in File** (this link appears only for those uploaded transaction files that experienced errors during transaction processing). The Transaction Errors pop-up window appears and lists 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 through the Upload Transaction File feature are automatically accepted for processing by the payment gateway, but they might be rejected later (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).

**Important:** Rejected credits, and the reason why each credit is rejected, are listed on the Transaction Errors page. See the "View Errors in the Uploaded Transaction File" section above. For more information about the reasons why a credit is rejected, see the Response Codes on the Authorize.net Developer Center.

Credits must be submitted to the payment gateway within 180 days of the date and time that the original transaction successfully settled on the Payment Gateway. Credits submitted after 180 days of the original transaction are 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 enables you to search and download settled and unsettled transactions to your computer. For more information on downloading transaction information, please see the *Download Transaction File Guide* at http://www.authorize.net/files/downloadguide.pdf.