



TRANSACTION PROCESSING

UPLOAD FILE GUIDE

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GETTING STARTED

FlexPay's batch charge processing service allows merchants to perform the Authorize, Capture, Refund and Void charge actions in bulk by connecting to FlexPay's servers via SFTP and uploading encrypted files containing the relevant transaction data to a designated INPUTS folder.

FlexPay will process files and will output processed files to a designated OUTPUTS folder where they will be available for you to download.

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 will decrease transaction validation and processing errors, which saves you time.

SETUP

FlexPay will set up two subfolders for you: INPUTS and OUTPUTS. You will upload your input files to be processed to the INPUTS folder and download the processed output files from the OUTPUTS folder.

NAMING YOUR INPUT FILES

Your input file must adhere to the following format:

<companycode>yyyyMMddHHmmss.txt

Where <companycode> is the character's code you used to define your company code.

Example

Company Code: CompA

File Name: compa20170112014532.txt

Once you have created your input file, it is ready to be uploaded your security key.

SECURED FTP CONNECTION

When you upload transaction files, they contain sensitive data such as card numbers. For this reason, it is necessary to upload these files over a secure FTP connection. Part of this process includes creating a security key, which is used when connecting with Tungsten FlexPay. This security key actually has two parts: a private key, which you keep on your PC, and a public key, which you will email to Tungsten FlexPay.

Type of key to generate: SSH2 DSA

When we have received your public key and our own setup is complete, we will email you a confirmation. Once you receive this confirmation, you can begin to upload transaction files.

UPLOADING YOUR INPUT FILE

Once your file is encrypted, upload it via SFTP to your designated Inputs folder.

Uploaded transaction files pass through three 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.

CONNECTION

System Requirements

You will require an SFTP client software which must use SSH2.

File Upload Steps

To utilize the batch file upload and obtain credit card authorization or any of the other operation types, you must have obtained a Batch account username and password from FlexPay.

1. Establish an SFTP session with FlexPay SFTP server host using your SFTP client software.
2. Log in using your Batch account username and password. Contact your account manager to request your Sandbox or production SFTP Batch Upload credentials.
3. Upload the Batch File. When uploading a file, it must be put in your inputs folder.
4. Retrieve your response file from the outputs directory.
5. When a file is completed, the response file is sent to the outputs folder. The filename will be identical to what was uploaded.

Connection Details

To connect to the FlexPay Gateway SFTP server, you will require the following.

FIELD	DESCRIPTION
Host URL	sftp.flexpay.io
Port	22

Configuring your CRM system

Though every Customer Relationship Management system or sales tool is different there are key areas that will need to be adjusted during FlexPay integration.

CONFIGURATION POINT	DESCRIPTION
Bank Routes	A bank route will need to be created to allow transactions to be routed to FlexPay
Batch Reports	Batch reports sending transactions to FlexPay will need to be configured to be dropped to the SFTP provided by FlexPay.
Retry logic	Any pre-existing retry logic in your system will have to be disabled to allow FlexPay retries to take precedence.

Processing Environment

Batch account username is used to distinguished between the FlexPay QA environment available for testing versus the live production environment which will connect to the live processing host.

INPUT FILE FORMAT

FIELD	TYPE	DESCRIPTION
merchantTransactionId required	String (50)	This field is your unique ID number associated with each transaction request. You create this value and submit it with the transaction.
orderId required	String (50)	Merchant-assigned order identification number.
description optional	String (255)	Describe the transaction to help reconciliation.
transactionType required	String (15)	Indicates the type of transaction and it must be exactly one of CHARGE, AUTHORIZE, CAPTURE, REFUND, VOID. 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 a CAPTURE.
referenceTransactionId required	String (50)	ID of a transaction previously authorized/capture by the gateway. Maybe required and necessary only for REFUND, VOID or CAPTURE (after AUTHORIZED) type transactions.
customerId optional	String (50)	Merchant-defined, unique identifier to represent the customer associated with the transaction. Required if the email is not provided. Otherwise, a new customer id is created and return.

currencyCode required	String (3)	Three-digit currency code (e.g. USD, CAD). ISO 4217 Currency Codes
amount required	Integer	Amount in cents (e.g. 1957 is equivalent to 19.57)
creditCardNumber required	String (22)	This field is the card number you are charging for this transaction.
expiryMonth required	String (2)	Card expiry month expressed as MM (e.g. 06 for June)
expiryYear required	String (4)	Card expiry year expressed as YYYY (e.g. 2017)
cvv optional	String (4)	This is the 3- or 4-digit security code that appears on the back of the card of a credit card following the card number. This code does not appear on imprints.
firstName required	String (50)	Contains the first name of the customer associated with the billing address for the transaction.
lastName required	String (50)	Contains the last name of the customer associated with the billing address for the transaction.

fullName optional	String (100)	The full name of the cardholder. If provided, will be parsed to determine firstName and lastName.
billingAddress1 optional	String (255)	Contains the address line 1 of the customer associated with the billing address for the transaction. Suggested for Address Verification System (AVS).
billingAddress2 optional	String (255)	Contains the address line2 of the customer associated with the billing address for the transaction.
postalCode required	String (100)	Contains the postal code (ZIP code if in the US) of the customer associated with the billing address for the transaction. Suggested for Address Verification System (AVS). Can be 5 or 9 digits in length.
billingCity required	String (100)	The field contains the city of the customer associated with the billing address for the transaction.
billingState required	String (100)	The field contains the state of the customer associated with the billing address for the transaction. Any valid two characters' state code or full state name.
billingCountry required	String (3)	The field contains the country of the customer associated with the billing address for the transaction. Three-letter country codes defined in ISO 3166-1.

billingEmail optional	String (100)	Cardholder's email address. Optional if customer Id is provided
billingPhoneNumber optional	String (100)	Cardholder's phone number. Optional if customer Id is provided
customerIp optional	String (15)	IP address of the customer initiating the transaction. The required format is 255.255.255.255.
shippingAddress1 optional	String (255)	Contains the address line 1 of the customer associated with the shipping address for the transaction.
shippingAddress2 optional	String (255)	Contains the address line 2 of the customer associated with the shipping address for the transaction.
shippingPostalCode optional	String (100)	Contains the postal code (ZIP code if in the US) of the customer associated with the shipping address for the transaction.
shippingCity optional	String (100)	The field contains the city of the customer associated with the shipping address for the transaction.
shippingState optional	String (100)	The field contains the state of the customer associated with the shipping address for the transaction. Any valid two characters' state code or full state name.

shippingCountry optional	String (3)	The field contains the country of the customer associated with the shipping address for the transaction. Three-letter country codes defined in ISO 3166-1
assignedGatewayToken optional	String (50)	This field is the gateway associated with a merchant account against which the request will be made on a next attempt.
productSku optional	String (150)	The field contains the unique product identifier (SKU).
productCategory optional	String (150)	Contains the primary category code associated with the product.
billingPlan optional	String (50)	Contains the code associated with the billing plan.
retryCount required	Integer	The field contains the number of retry of the billing cycle. The initial attempt is 0 and all others retries will increase the count by 1.
billingCycle optional	Integer	When the transaction is for a recurring payment, the field contains billing cycle number. Start at 1
dateFirstAttempt optional	DateTime	The field contains the date of the first transaction attempt for this billing cycle. The date is required when the retry count is greater than 1. UTC and date format(Iso 8601) YYYY-

		MM-DDThh:mm:ss.sTZD (eg 1997-07-16T19:20:30.45+01:00)
referenceData optional	String (512)	Reference data received from the gateway when a payment failed. Return this data on retry transaction for the same payment.
customVariable1 optional	String (50)	Optional user defined string value.
customVariable2 optional	String (50)	Optional user defined string value.
customVariable3 optional	String (50)	Optional user defined string value.
customVariable4 optional	String (50)	Optional user defined string value.
customVariable5 optional	String (50)	Optional user defined string value.

Sample Input File

See FlexPay Support Page for this document.

DOWNLOADING YOUR OUTPUT FILE

If your file fails the validation stage, it will not be processed and our support team will contact you.

If your file processed successfully, FlexPay will create a corresponding output file with the same filename and extension as the input and make it available for download from your designated OUTPUT folder.

OUTPUT FILE FORMAT

The *output file* generated by FlexPay will contain the updated statuses of all the transactions included in your *input file*. The file format is comma-delimited and uses a double-quote and uses (") encapsulation character without header. Each transaction row in the output file will be formatted and ordered as follows:

FIELD	TYPE	DESCRIPTION
merchantTransactionId	String (50)	This data is typically used to reference transactions on the host systems and must display on any receipt presented to the customer. This information is to be stored by the merchant.
transactionStatus	Integer	Indicates the result of the transaction: 1 = Approved 2 = Declined 3 = Error
responseCode	String (6)	Transaction Response Code
message	String (500)	Response description returned from issuing institution. This message should not display on any cardholder facing materials
transactionId	String (50)	This field is the gateway-generated number to identify a transaction and can be used to submit a modification of this transaction at a later time (such as

		voiding or crediting the transaction or capturing an Authorize transaction).
referenceTransactionId	String (50)	ID of a transaction previously authorized/capture by the gateway.
transactionDate	DateTime	Processing host date stamp.
avsCode	String (1)	Indicates the address verification result code
avsMessage	String (250)	Indicates the address verification result message
cvvCode	String (15)	Indicates the CVV verification result code
cvvMessage	String (250)	Indicates the CVV verification result message
errorCode	String (15)	Indicates the error code
errorDetail	String (250)	Indicates the error details
currencyCode	String (3)	Three-digit currency code (e.g. USD, CAD). ISO 4217 Currency Codes
amount	Integer	Amount in cents (e.g. 1957 is equivalent to 19.57)
gatewayToken	String (50)	This field is the gateway associated with a merchant account against which the request is made.
gatewayType	String (50)	Code to identify on witch gateway the transaction has been attempt (e.g. Vantiv)

gatewayTransactionId	String (50)	Gateway transaction ID -- Gateway return Transaction ID
merchantAccountReferenceId	String (50)	Reference the merchant account used for the transaction
customerId	String (50)	Merchant-defined, unique identifier to represent the customer associated with the transaction. Required if the email is not provided. Otherwise, a new customer id is created and return.
assignedGatewayToken		This field is the gateway associated with a merchant account against which the request will be made on a next attempt.
orderId	String (50)	Return the merchant-assigned order identification number from the request.
transactionType	String (15)	This field indicates the type of a transaction: AUTHORIZE, CAPTURE, REFUND or VOID.
creditCardNumber	String (22)	This field is the card number you are charging for this transaction. 451112**4259(will be blank if status is Capture, Refund or Void)
referenceData	String (512)	Reference data received from the gateway when a payment failed. Return this data on retry transaction for the same payment.

retryDate	DateTime	Indicates the date and time when the transaction should be retried.
retryCount	Integer	The field contains the number of retry of the billing cycle. The initial attempt is 0 and all others retries will increase the count by 1.
dateFirstAttempt	DateTime	The field contains the date of the first transaction attempt for this billing cycle. Date Format Iso 8601 and is UTC
customVariable1	String (50)	Optional user defined string value.
customVariable2	String (50)	Optional user defined string value.
customVariable3	String (50)	Optional user defined string value.
customVariable4	String (50)	Optional user defined string value.
customVariable5	String (50)	Optional user defined string value.

Sample Output File

See FlexPay Support Page for this document.

RESPONSE CODES

FIELDS	CODE RANGE	DESCRIPTION
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Approved	10000	The request was successful.
Soft Decline	20000	The request declined, though subsequent attempts may be successful.
Hard Decline	30000	The request declined. Most hard declines require the Issuer or Cardholder to rectify the outstanding issue(s) before a subsequent attempt can be made.
Risk Responses	40000	The request triggered a risk response. The status of the response (responseCode and status) will depend on the action specified in your risk settings on your gateway.
API Validation	50000	The request failed API validation and was not successful due to the error

Approved

CODE	DESCRIPTION
10000	Approved
10001	The reversal was processed successfully.

Soft Decline

CODE	DESCRIPTION
20000	You need to refer to the Card Issuer

20002	Invalid or inactive merchant
20003	Declined - do not honor
20012	Re-enter transaction or transaction has been expired
20013	Invalid response
20018	Completed Partially
20022	Bank decline
20023	The card has been declined due to insufficient funds.
20039	Response timeout
20043	Transaction cannot be completed
20046	System error
20047	Other / Unidentified responses
20048	Unable to authorize
20050	Over daily limit
20056	Customer token/Id is incorrect or invalid
20057	Your merchant account authentication failed
20068	Invalid API access token

20073	Batch data is missing or Invalid
20075	Transaction limit for merchant exceeded
20076	Transaction required data are missing or invalid

Hard Decline

CODE	DESCRIPTION
30000	The bank has requested that you retrieve the card from the cardholder - validate with the bank.
30001	The bank has requested that you retrieve the card from the cardholder - it may be a lost or stolen card.
30002	Invalid card: Luhn algorithm failed (MOD - 10)
30003	Expired Card - Pick Up
30004	Suspected Fraud - Pick Up
30006	Restricted Card - Pick Up
30008	The bank has requested that you retrieve the card from the cardholder - it may be a lost card.
30009	The bank has requested that you retrieve the card from the cardholder - it may be a stolen card.
30010	The void request failed.

30011	Invalid transaction
30012	Invalid card number
30013	The reversal request failed.
30015	The external gateway has reported that you have submitted an invalid amount with your request.
30016	Error / Invalid parameters in the request
30017	Format Error
30019	Not a credit account
30024	Not a cheque account
30025	Not a savings account
30026	Expired card
30029	Transaction not permitted to that cardholder
30031	Suspected fraud
30034	Restricted card
30044	Duplicate transaction
30049	Decline for CVV2 failure

30051	Limit exceeded. Enter a lesser value.
30052	Invalid transaction date
30053	Card not supported
30055	Invalid expiry date format
30058	You submitted an unsupported card type with your request.
30059	Gateway declined - Invalid transaction
30061	The external gateway has reported that you have submitted an invalid currency with your request.
30062	Billing address is missing
30064	Authorisation already reversed (voided) or capture is larger than initial authorised value.
30065	Authorization is completed.
30066	Transaction already reversed
30071	Invalid API version
30074	Invalid customer/user
30077	This processor does not accept partial reversals.
30078	Original transaction for reversal not found.

30079	This transaction has already been captured.
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Risk Responses

CODE	DESCRIPTION
40000	Risk Blocked Transaction refused due to risk model
40002	Gateway declined - Blacklist transaction cannot be processed
40003	Gateway declined - CVV is missing or incorrect. The merchant's configuration requires a CVV to be entered, but no CVV was provided with this transaction or CVV is incorrect.
40004	Gateway declined - Postal code failed The card's postal code failed validation.
40005	Gateway declined - Missing required data. Please make sure all required data is sent, such as: CVV, Expiry date, Cardholder name, Billing address, Postalcode etc.
40006	Declined – AVS (Address) not matched the transaction payment method.
40007	Mismatch - Shipping to billing shipping country does not match billing country.
40008	Mismatch - Shipping to BIN shipping country does not match bin country.

40009	Mismatch - Shipping to IP shipping country does not match IP country.
40010	Mismatch - Billing to BIN billing country does not match bin country.
40011	Mismatch - Billing to IP billing country does not match IP country.
40012	Mismatch - BIN to IP BIN country does not match IP country.
40030	Gateway declined - Card number is blacklisted
40031	Gateway declined - IP address is blacklisted
40032	Gateway declined - Email is blacklisted
40033	Gateway declined - Phone number is Blacklisted

API Validation

CODE	DESCRIPTION
50000	Validation error
50002	An error was experienced while parsing the payload. Please ensure that the structure is correct.
50003	No parameters were found

50005	Authorization has been denied for this request.
50014	Invalid 'CustomerToken' length
50015	Invalid 'Email' length
50020	Invalid 'PhoneNumber' length
50028	Invalid 'FullName' length
50029	Invalid 'ProvinceStateCode' length
50037	Invalid 'CustomerIp' length
50039	Invalid value for 'CountryCode'
50045	Field 'CurrencyCode' is required
50048	Field 'CustomerToken' or 'email' are required
50055	Field 'Month' is required
50056	Invalid value for 'Month'
50057	Field 'Year' is required
50058	Invalid value for 'Year'
50059	Field 'CreditCardNumber' is required
50060	Invalid 'CreditCardNumber' Length

50068	Invalid 'MerchantDescriptor' length
50073	Invalid 'CurrencyCode' length
50088	Field 'FirstName' is required
50089	Field 'LastName' is required
50090	Fields 'FullName' or 'FirstName' and 'LastName' are required
50091	Invalid 'FirstName' length
50092	Invalid 'LastName' length
50093	Field 'CountryCode' is required
50094	Field 'PostalCode' is required
50095	Invalid 'PostalCode' length
50096	Field 'ProvinceStateCode' is required
50097	Field 'City' is required
50098	Invalid 'City' length
50099	Field 'Address1' is required
50100	Invalid 'Address1' length

50103	Field 'MerchantTransactionReferenceld' is required
50104	Invalid 'MerchantTransactionReferenceld' length
50105	Invalid 'TransactionType'
50106	Invalid 'CustomField1' length
50107	Invalid 'CustomField2' length
50108	Invalid 'CustomField3' length
50109	Invalid 'CustomField4' length
50110	Invalid 'CustomField5' length
50111	Invalid 'ReferenceData' length
50112	Invalid 'ShippingPhoneNumber' length
50113	Invalid 'ShippingCountryCode' length
50114	Invalid 'ShippingPostalCode' length
50115	Invalid 'ShippingProvinceStateCode' length
50116	Invalid 'ShippingCity' length
50117	Invalid 'ShippingAddress2' length
50118	Invalid 'ShippingAddress1' length

50119	Invalid 'Address2' length
50120	Invalid 'BillingPlanCode' length
50121	Invalid 'ProductCategoryName' length
50122	Invalid 'ProductSku' length
50123	Invalid 'MerchantLocation' length
50124	Invalid 'Description' length
50125	invalid 'GatewayTransactionToken' length
50126	Field 'OrderId' is required
50127	Invalid 'OrderId' length
50128	Invalid 'GatewayToken' length
50129	Field 'MerchantTransactionReferenceld' must be unique
50130	No gateways are configured to process the submitted card type.
50131	Original transaction not found using the field 'TransactionReferenceld'.