



JetPay Batch Format Specification

© 2011 JetPay LLC. All rights reserved.

Contents

- 1 Overview
 - ◆ 1.1 Who Will Benefit from this Guide
 - ◆ 1.2 Confidentiality Agreement
 - ◆ 1.3 Service and Availability
 - ◆ 1.4 How It Works
 - ◆ 1.5 Internet Transmissions Specification
 - ◆ 1.6 Response Files
- 2 Fundamentals, Formatting, and Construction of Batch Files.
 - ◆ 2.1 Construction of Batch File Types
 - ◇ 2.1.1 Typical Batch File
 - ◇ 2.1.2 Typical Batch File with Customer Sending Additional CPS Data
 - ◇ 2.1.3 Multiple Merchant Batch File
 - ◆ 2.2 Fundamentals of Batch File Elements
 - ◇ 2.2.1 Amounts
 - ◇ 2.2.2 Sequence Numbers
 - ◇ 2.2.3 Transaction Sequence numbers
 - ◇ 2.2.4 Terminal IDs
 - ◇ 2.2.5 Tokens
 - ◇ 2.2.6 FH- File Header -- Required
 - ◇ 2.2.7 BH- Batch Header Record -- Optional
 - ◇ 2.2.8 CH- ACH Record -- Conditional
 - ◇ 2.2.9 DR- Detail Record -- Conditional
 - ◇ 2.2.10 QA- Qualification Addenda Record -- Optional
 - ◇ 2.2.11 XD- Extended Data Record -- Optional
 - ◇ 2.2.12 AU- Account Updater Addenda Record -- Optional
 - ◇ 2.2.13 BT- Batch Trailer Record -- Conditional
 - ◇ 2.2.14 FT- File Trailer Record -- Required
 - ◆ 2.3 Constructed Batch Files
 - ◇ 2.3.1 Typical Single Merchant Batch File
 - ◇ 2.3.2 Batch file with Extended Data
 - ◇ 2.3.3 Multiple merchant batch file:
 - ◇ 2.3.4 Account Updater File
- 3 File Submission
- 4 JetPay Certification
 - ◆ 4.1 File Testing
 - ◆ 4.2 Key Exchange
 - ◆ 4.3 Live Processing

1 Overview

JetPay's Batch Processing system can support a wide range of transaction processing needs, such as:

- Simple Batch File
- Batch File with CPS Required Data
- Multiple Merchant batch file.
- ACH transactions
- Account updater file

The Batch files consist of comma separated value records. The number of records required for each transaction will depend on the needs of the merchant. The merchant will encrypt the file and FTP it to JetPay. Once the file has been processed, JetPay will notify the merchant by email that the encrypted response file is ready to be picked up on the FTP server.

1.1 Who Will Benefit from this Guide

This guide is intended to outline and provide samples for development engineers that have a need to send transactions to JetPay as a single file.

Further, it is the responsibility of the Merchant development staff to check for accuracy, test and have their code certified by JetPay before batch processing can begin. Coding for batch processing should be handled by experienced development engineers.

1.2 Confidentiality Agreement

The information furnished herein by JetPay, LLC is confidential and is distributed to JetPay, LLC clients for their exclusive use in operating their credit card batch processing programs. By accepting and using this documentation, you acknowledge this information is confidential and that it shall not be duplicated, published or disclosed in whole, or in part, without prior express written permission from JetPay, LLC.

1.3 Service and Availability

The JetPay, LLC Batch Authorization and Settlement system provides availability for file transmission 24-hours a day, 365 days a year, with the exception of scheduled maintenance downtimes. Information pertaining to scheduled maintenance downtime will be provided, in advance, by JetPay, LLC. JetPay, LLC will assign transmission window times to settlement files for monitoring purposes. All settlement transmissions should initiate and complete within the transmission window.

1.4 How It Works

As the merchant, your system uploads an encrypted comma delimited file containing the transactions to JetPay. The transactions are processed in a timely manner. An email is sent when the encrypted response file is ready for download. Each merchant will have their own account on the FTP server that is not visible to any other merchant.

1.5 Internet Transmissions Specification

Encryption is **required** when transferring files to the JetPay Batch System. JetPay uses GNU Privacy Guard for file transfers when transmitting across the Internet. The commercial program PGP may also be employed by the merchant, but JetPay will be unable to provide technical assistance for it.

JetPay will provide the merchant with our public key that will be used to encrypt the files that are sent to us. The merchant will generate a public/private key pair and send the public key to us. This key will be used to encrypt the response files.

1.6 Response Files

The full format mirrors the file back to the customer in the same format in which it was received. All relevant fields are filled in with the information supplied by the issuer JetPay. An example is the Authorization Code field in the Detail Record. A customer will submit an empty field and should the transaction be approved, the field in the response file will be filled in with the approval code supplied by the issuer.

2 Fundamentals, Formatting, and Construction of Batch Files.

In this section we will go into detail on the fundamentals, formatting and construction of batch files to be processed by JetPay.

It is important that the developer has a clear understanding of each field and how it is to be used.

There are required and optional field lines that can be included in the Batch File below is a general list of the supported record types and if there are optional or required.

FH	File Header (Required)
BH	Batch Header Record (Optional)
CH	ACH Record (Conditional)
DR	Detail Record (Conditional)
QA	Qualification Addenda Record (Optional)
PC	Purchasing Card Addenda Record (Optional)
XD	Extended Data Record (Optional)
AU	Account Updater Addenda Record (Optional)
BT	Batch Trailer Record (Conditional)

FT

File Trailer Record (Required)

2.1 Construction of Batch File Types

As stated previously, there are several Batch File Types:

- Typical Batch File
- Typical Batch File with CPS Required Data
- Multiple Merchant batch file.

Each file type includes specific or expanded information for that type.

We will start are examples with the Typical Batch File, and provide description of the fields presented. Please be aware of the notes and important information in this example as this will be standard for each example.

The amount of the transaction was \\$.100 however; the amount shown in the Batch File is 100. All amounts transmitted to JetPay have no decimal point. The decimal point is assumed by the host processor based on the merchant currency code.

2.1.1 Typical Batch File

```
FH,1,BIGBUCKS0001,080113,092300,BIGBUCKS.COM,FILE0001
DR,2,0,AC,,,4000300020001000,1301,123,,,,,,,,,M
FT,3,123,1,0,0,123,1,,,,,,,,,
```

This file consists of an FH (File Header) record that has a sequence number of 1 within the file. The Merchant ID is BIGBUCKS0001. The file was created on Jan 13, 2008 (080113) at 9:23:00 A.M. (092300). The merchant is BIGBUCKS.COM and they have decided to identify this file as FILE0001.

The data record is a sale for \$1.23 with the card number “4000300020001000” and an expiration date of January 2013.

The FT (File Trailer) record is sequence number 3. It shows the file has one transaction for \$1.23.

2.1.2 Typical Batch File with Customer Sending Additional CPS Data

```
FH,1,BIGBUCKS0001,080113,092300,BIGBUCKS.COM,FILE0001
DR,2,0,AC,,,4000300020001000,1301,123,,,,,,,,,M
QA,3,1,212b Baker st,12345,,,ABC123,
FT,4,123,1,0,0,123,1,,,,,,,,,
```

This file is the same as the previous typical batch file except the customer is requesting CPS participation.

The QA - Qualification Addenda record at sequence number 3 holds the relevant data. The 1 in field 3 indicates this is the first additional data element of the previous transaction. The addition of “212b Baker St, 12345” as the address and zip code indicates the merchant wants to request AVS participation. The transaction will be accepted or rejected for AVS verification depending on the reject level the merchant has set up in their

merchant account with JetPay. The invoice number is ABC123 contained in field 10.

2.1.3 Multiple Merchant Batch File

This example takes the typical batch file example and expands it to multiple merchants.

```
FH,1,BIGBUCKS0001,080113,092300,BIGBUCKS.COM,FILE0001
BH,2,1,987654A,BIGBUCKS-COM
DR,3,0,AC,,,4000300020001000,1301,543,,,,,,,,,M
BT,4,100,1,0,0,543,1
BH,5,2,987654B,SMALLBUCKS1
DR,6,0,CR,,,5000300020001007,1301,234,,,,,,,,,M
BT,7,-234,1,234,1,0,0
FT,8,309,2,234,1,543,1,,,,,,,,,
```

In sequence 2 the BH- Batch Header identifies this as the first batch (1) submittal with a Terminal ID of BIGBUCKS-COM and a reference number of 987654A.

In sequence number 4, the Batch Trailer identifies a net of \$5.43 from a single sale transaction. There were no credits and no credit transactions.

Sequence number 5 starts the next batch for the next terminal. It is batch number 2 with the Terminal ID of SMALL_BUCKS1 and has the reference number of 987654B.

Sequence number 6 is a credit for \$2.34.

Sequence number 7 is the batch trailer for the batch that started on line 5. It indicates a net of -\$2.34 with a single credit of \$2.34 and no debits.

Finally we have the file trailer. It shows a net value on the file of \$3.09.

2.2 Fundamentals of Batch File Elements

The following examples and the subsequent break-out demonstrate the required fields and the proper placement with the record.

Each Specification Table will provide detailed information as to the function of each field, the field type: AN (Alpha Numeric) or N (Numeric), the maximum field length, and if the field is required, optional or an output field.

A 10 field record must have 9 commas even if some of fields are blank.

Fields will be truncated to the specified maximum length if it is shorter than the length of the data provided. If there are any parsing errors, such as an out of order sequence number, the file in its entirety will be rejected.

Some of the fields are marked as "unused". These fields are present to support legacy systems and merchants submitting older batch files. While they are not used any longer, a comma must still be included to denote the field. JetPay at some future time may choose to reuse these fields for either a new input or output item.

2.2.1 Amounts

All amounts in the batch file are represented without any decimal points. JetPay's system will use the currency code that the merchant is configured for to determine where the decimal point should be. If a merchant is doing business in US Dollars then \$15 would be 1500 in the batch file and \$123.54 would be 12354. If a merchant uses Japanese Yen then 124 Yen would be 124 in the batch file, because there are no fractional Yen. There are no negative amounts and no currency symbol should be used.

2.2.2 Sequence Numbers

Each line in the batch file has a sequence number. They start at 1 for the first line and each subsequent line should have a sequence that is one more than the line preceding it. Any deviation from this will cause the whole batch file to reject.

2.2.3 Transaction Sequence numbers

Each record that is part of a financial transaction has an additional sequence number indicating its index in that group. They start at zero and increase by one. When the next transaction starts, the number resets to 0. Any deviation from this will cause the whole batch file to reject.

2.2.4 Terminal IDs

When a merchant is set up for the JetPay batch system, part of that configuration is an ftp/sftp login and a terminal ID. Every file sent using that login will be processed using the terminal ID that it is configured for. The only way to process transactions sent using that login with another terminal ID is to use the Batch Header (BH) record.

2.2.5 Tokens

Jetpay's Account Safe token system allows merchants to obtain a token from Jetpay that represents a credit card number and expiration date. This token gets used in place of the card number in subsequent transactions. There is no information in the token that would allow a third party to obtain the credit card number. Also tokens cannot be shared between merchants, adding an additional layer of security. Because the tokens are not card holder information, merchants using tokens do not have to secure them in the same way they have to protect card holder information.

The Jetpay Batch system will accept tokens in place of actual card data. These tokens are generated from previous transactions and are passed back to the merchant for later use. Depending on the merchant's configuration, the tokens are bound to either a single terminal ID or merchant ID. Only those merchants that have been configured to use tokens via the batch system will be able to send or receive tokens in a batch file.

Each token is 24 characters long consisting only of upper case letters. A token will map to a single card number and expiration date. It is possible for more than one token to map to the same card number, and the batch system does not guarantee that all transactions using the same cardnumber will return the same token

When electing to process batch files with tokens, the resulting response files contain only tokens. This means that you cannot use the cardnumber field in the response file to associate responses with the original request.

Tokens can also be used when processing ACH transactions. A token in this context will take the place of both the ABA and DDA numbers. All the same rules apply as for credit card tokens.

2.2.6 FH- File Header -- Required

The FH (File Header) record is a required element for batch processing. The FH record provides JetPay with a method of tracking each Batch. The FH will also aid in expediting searches in the unlikely event that a Batch File was handled incorrectly.

Sample: FH,1,BIGBUCKS.COM,060701,080053,,00000015A5A1

Field 1 Record Type Max Length: 2 Type: AN Required: Yes	This field will always contain FH.
Field 2 Sequence Number Max Length: 5 Type: N Required: Yes	The sequence number is always 1.
Field 3 unused Max Length: 15 Type: AN Required: Yes	
Field 4 Date File Created Max Length: 6 Type: N Required: Yes	The Date Created field contains the date stamp for this batch file. A properly formatted Date Field is as such: YYMMDD
Field 5 Time File Created Max Length: 6 Type: N Required: Yes	The Time Created field contains the time that the Batch file was generated. A properly formatted Time field is as such: HHMMSS
Field 6 Merchant Name Max Length: 5 Type: AN Required: No	The Merchant name is generally the long name of the company.
Field 7 File Reference Number Max Length: 15 Type: AN	This is a unique ID which can be used by the merchant to track the batch file along with fields 4 and 5.

Required: No	
--------------	--

2.2.7 BH- Batch Header Record -- Optional

The Batch Header Record is not required if the customer is not submitting multiple merchants or otherwise batching transactions into specific groups. If a batch header is used it **must** be matched with a batch trailer later in the file. Batches may **not** be nested.

Sample: BH, 5, 1001, 00000015A5A1, BIGBUCK.COM

Field 1 Record Type Max Length: 2 Type: AN Required: Yes	This field will always contain BH.
Field 2 Sequence Number Max Length: 5 Type: N Required: Yes	See section on #Sequence_Numbers .
Field 3 Batch Number Max Length: 4 Type: N Required: Yes	The Batch Number field is from 1 to 9999.
Field 4 Batch Reference Number Max Length: 15 Type: AN Required: No	Unique ID which can be referenced to track a batch within a file. This number is only used for the batch file and does not show up on the reporting system.
Field 5 Terminal ID Max Length: 15 Type: AN Required: Yes	This is the JetPay Terminal ID that the transactions inside the batch will be processed as.

2.2.8 CH- ACH Record -- Conditional

This record is used when a merchant wants to submit a bank draft (ACH) transaction. If the transaction comes back with an approved action code (000), it only means that JetPay will submit the transaction in its daily ACH file. It does not have any bearing on the availability of funds.

Sample:

CH, 1, 0, DB, 123456789, 12345678901234567, 0101, B, 1000, JOHNDOE, , , 00000015A5A1

Field 1 Record Type Max Length: 2 Type: AN	This record will begin with CH.
--	---------------------------------

Required: Yes	
Field 2 Sequence Number Max Length: 5 Type: N Required: Yes	See section on #Sequence_Numbers .
Field 3 Transaction Sequence Number Max Length: 1 Type: N Required: Yes	This field should be a zero.
Field 4 Transaction Type Max Length: 2 Type: AN Required: Yes	Transaction types: CR Credit (Funds returned to account) DB Debit (Capture funds for settlement)
Field 5 ABA Number Max Length: 9 Type: N Required: Yes	This is the ABA Routing Number for the check/e-check presented for payment. This is not required if using tokens
Field 6 Account Number Max Length: 17 Type: N Required: Yes	This is the specific account number (DDA) for the check/e-check presented for payment. If using tokens, then this is the token. See #Tokens for more information
Field 7 Check Number Max Length: 17 Type: N Required: Yes	This typically is a number on the physical check
Field 8 Account Type Max Length: 1 Type: AN Required: Yes	Account Types C Checking S Savings B Business
Field 9 Transaction Amount Max Length: 12 Type: N Required: Yes	This is the amount of the check/e-check submitted for payment. See section amountsec.
Field 10 Account Holder Name Max Length: 20	This is the name that appears on the check/e-check.

	<p>AO Auth Only</p> <p>AC Auth and Capture for settlement. This is a normal “Sale” transaction.</p> <p>NO Do Nothing. This is only useful when used with an AU record for Account updater</p>
<p>Field 5 unused Max Length: 0 Type: AN Required: No</p>	
<p>Field 6 unused Max Length: 0 Type: AN Required: No</p>	
<p>Field 7 PAN/Token Max Length: 24 Type: AN Required: Yes</p>	<p>Credit Card Primary Account Number. If the merchant is configured for tokens then this can be either a card number or a token on the incoming file, but in the response file it will either be a token or empty (if the tokenization failed). See section #Tokens for more information.</p>
<p>Field 8 Expiration Date Max Length: 4 Type: N Required: Yes</p>	<p>Expiration Date from Credit Card in the following format YYMM. The YYMM format for the expiration date is what the card associations use internally. This is not required for tokens.</p>
<p>Field 9 Transaction Amount Max Length: 12 Type: N Required: Yes</p>	<p>This is the amount of the check/e-check submitted for payment. See section amountsec.</p>
<p>Field 10 unused Max Length: 0 Type: AN Required: No</p>	
<p>Field 11 unused Max Length: 0 Type: AN Required: No</p>	
<p>Field 12 unused Max Length: 0 Type: AN Required: No</p>	

<p>Field 13 Authorization Code Max Length: 6 Type: AN Required: No</p>	<p>This field will be blank for an initial auth request or an auth and capture but will need to be the original values returned from an auth only transaction when customer wishes to settle a transaction.</p> <p>It is also an output field for auth (AO), refund (CR), and auth/capture (AC) transactions.</p>
<p>Field 14 Response Code Max Length: 3 Type: N Required: Output</p>	<p>This field will be blank for an initial auth request or an auth and capture but will need to be the original values returned from an auth only transaction when customer wishes to settle a transaction.</p>
<p>Field 15 unused Max Length: 0 Type: AN Required: No</p>	
<p>Field 16 unused Max Length: 0 Type: N Required: No</p>	
<p>Field 17 Reference Number Max Length: 17 Type: AN Required: No</p>	<p>Unique ID provided by the merchant to reference transaction by.</p>
<p>Field 18 unused Max Length: 0 Type: AN Required: No</p>	
<p>Field 19 Transaction Origin Max Length: 1 Type: AN Required: No</p>	<p>Transaction Origin</p> <ul style="list-style-type: none"> I Internet P Point of Sale (retail) R Recurring M Mail Order T Telephone Order

2.2.10 QA- Qualification Addenda Record -- Optional

Qualification Addenda Records supply compliance data for different card related programs. If participation in these programs is desired, the information needs to be submitted in this record and must be accurate or

JetPay Batch Format Specification © 2011 JetPay LLC.

transactions may be downgraded to a higher interchange rate.

Sample: QA,1,1,123 NORTH 1ST,75007,,,,0,1,123

Field 1 Record Type Max Length: 2 Type: AN Required: Yes	Qualification Addenda will begin with QA
Field 2 Sequence Number Max Length: 5 Type: N Required: Yes	See section on #Sequence_Numbers .
Field 3 Transaction Sequence Number Max Length: 1 Type: N Required: Yes	See section on #Transaction_Sequence_Numbers
Field 4 Billing Address for AVS Max Length: 20 Type: AN Required: No	Card Holder's Billing Address If address or zip code data supplied by customer then AVS checking will be performed and acceptance or rejection of the transaction will depend on if the merchant subscribes to JetPay's AVS Reject Service.
Field 5 Billing Zip Code for AVS Max Length: 9 Type: N Required: No	Card Holder's Zip Code
Field 6 unused Max Length: 0 Type: AN Required: No	
Field 7 unused Max Length: 0 Type: AN Required: No	
Field 8 unused Max Length: 0 Type: AN Required: No	
Field 9 unused Max Length: 0 Type: AN	

Required: No	
Field 10 unused Max Length: 0 Type: AN Required: No	
Field 11 unused Max Length: 0 Type: AN Required: No	

2.2.11 XD- Extended Data Record -- Optional

The data in these fields is primarily used to help the merchant track and reference transactions in the batch file, JetPay’s online reporting system, or other custom reports the merchant receives.

Sample: XD, 5, 1, JOHN DOE, , , 5555551234, , 192.168.1.101, ,

Field 1 Record Type Max Length: 2 Type: AN Required: Yes	The Extended Data record starts with XD
Field 2 Sequence Number Max Length: 5 Type: N Required: Yes	See section on #Sequence_Numbers .
Field 3 Transaction Sequence Number Max Length: 1 Type: N Required: Yes	See section on #Transaction_Sequence_Numbers
Field 4 User Data 1 Max Length: 32 Type: AN Required: No	Custom defined user information.
Field 5 User Data 2 Max Length: 32 Type: AN Required: No	Custom defined user information.
Field 6 User Data 3 Max Length: 32 Type: AN	Custom defined user information.

Required: No	
Field 7 Phone Number Max Length: 16 Type: AN Required: No	Customer phone number – do not include special characters (- . /) between number sets Example: 555-555-5555 = 5555555555
Field 8 Email Address Max Length: 16 Type: AN Required: No	Email address of card holder
Field 9 User IP Address Max Length: 16 Type: AN Required: No	IP address of card holder
Field 10 User Host Max Length: 16 Type: AN Required: No	Name of Host

2.2.12 AU- Account Updater Addenda Record -- Optional

The account updater record allows the merchant to make use of the services that provide updated card information from the card associations. This service requires an additional sign up and approval.

Sample: AU, 5, 3, , , 1

Field 1 Record Type Max Length: 2 Type: AN Required: Yes	Account Updater Addenda will begin with AU
Field 2 Sequence Number Max Length: 5 Type: N Required: Yes	See section on #Sequence_Numbers .
Field 3 Transaction Sequence Number Max Length: 1 Type: N Required: Yes	See section on #Transaction_Sequence_Numbers .
Field 4 PAN/Token Max Length: 24 Type: AN	Credit Card Primary Account Number or token. Only in output file. If the merchant is configured for tokens then this will either be a token or empty. See section tokensec for more information.

Required: Output	
Field 5 Expiration Date Max Length: 4 Type: N Required: Output	Expiration Date from Credit Card in standard YYMM format. Only in output file. Not present if tokens are used.
Field 6 Reason Code Max Length: 1 Type: AN Required: Output	Reason account was or was not updated. Only in output file. Reasons for visa cards are <ul style="list-style-type: none"> • A - Match made, new account number. • C - Match made, closed account • E - Match made, new expiration date • N - Non-participating BIN, no match • Q - Match made, contact cardholder • P - Participating BIN, no match • V - Match made, account number and expiration date unchanged from information provided in the acquirer inquiry record. and the ones for MC are <ul style="list-style-type: none"> • C ? Closed Account • E ? Update Expiration Date (Update Only) • U ? Updated Card information • 0 ? Error in processing

2.2.13 BT- Batch Trailer Record -- Conditional

If customer submits a batch header then the batch MUST be terminated with a batch trailer. If there is a batch trailer than the sums and counts must be correct. If they are not then the whole batch file will reject and not process.

Sample: BT, 4, 150000, 120000, 30, 30000, 5

Field 1 Record Type Max Length: 2 Type: AN Required: Yes	Batch Trailer Record will begin with BT
Field 2 Sequence Number Max Length: 5 Type: N Required: Yes	See section on #Sequence_Numbers .
Field 3 Net Amount Max Length: 13 Type: N Required: No	This is a signed amount. See section amountsec.

Field 4 Detail Count Max Length: 6 Type: N Required: No	Number of transactions in present batch.
Field 5 Credit Amount Max Length: 12 Type: N Required: No	Total amount of credits in present batch. These are the CR transactions that credit funds to the card holder.
Field 6 Credit Count Max Length: 6 Type: N Required: No	Number of credits in present batch.
Field 7 Debit Amount Max Length: 12 Type: N Required: No	Total amount of debits in present batch. These are the AC and DB transactions that debit funds from the card holder.
Field 8 Debit Count Max Length: 6 Type: N Required: No	Number of debits in present batch.

2.2.14 FT- File Trailer Record -- Required

The FT- File Header is a required element for Batch Processing. The FH provides JetPay with a method of tracking each Batch. The FT will also aid in the expediting searches in the unlikely event that a Batch File was handled incorrectly.

Sample: FT, 5, 50000, 20, 45000, 19, , , 45000, 19, , , 5000, 1, 45000, 19

Field 1 Record Type Max Length: 2 Type: AN Required: Yes	File Trailer Record will begin with FT
Field 2 Sequence Number Max Length: 5 Type: N Required: Yes	See section on #Sequence_Numbers .
Field 3 Net Amount Max Length: 13 Type: N Required: No	This is a signed amount. It is the amount of the “AC” and “DB” transactions minus the amount of the “CR” transactions.

<p>Field 4 Detail Count Max Length: 6 Type: N Required: No</p>	<p>Number of transactions in file.</p>
<p>Field 5 Credit Amount Max Length: 12 Type: N Required: No</p>	<p>Total amount of credits in file. These are the CR transactions that credit funds to the card holder.</p>
<p>Field 6 Credit Count Max Length: 6 Type: N Required: No</p>	<p>Number of credits in file.</p>
<p>Field 7 Debit Amount Max Length: 12 Type: N Required: No</p>	<p>Total amount of debits in file. These are the AC and DB transactions that debit funds from the card holder.</p>
<p>Field 8 Debit Count Max Length: 6 Type: N Required: No</p>	<p>Number of debits in file.</p>
<p>Field 9 Approved Amount Max Length: 13 Type: N Required: Output</p>	<p>Total of items approved in file. These are the transactions with and approval response code of 000.</p>
<p>Field 10 Approved Count Max Length: 6 Type: N Required: Output</p>	<p>Number of items approved in file.</p>
<p>Field 11 Reject Amount Max Length: 13 Type: N Required: Output</p>	<p>Total amount of items rejected in file. These are the transactions that were declined by JetPay without being send to the card association for approval. For example a transaction with a credit card number that is the wrong length for the card type will be rejected by JetPay's processing system.</p>
<p>Field 12 Rejected Count Max Length: 6 Type: N Required: Output</p>	<p>Number of items rejected in file.</p>
<p>Field 13 Decline Amount</p>	<p>Total amount of items declined in file.</p>

Max Length: 13 Type: N Required: Output	
Field 14 Declined Count Max Length: 6 Type: N Required: Output	Number of items declined in file. Declines are typically refusal by issuer to accept the transaction. Examples are: 005 – Do not honor, 043 Stolen card, 051 – Insufficient funds, etc.
Field 15 Captured Amount Max Length: 13 Type: N Required: Output	Total amount of items captured in file. This is the total of the “AC” and “DB” transactions that were approved.
Field 16 Captured Count Max Length: 6 Type: N Required: Output	Number of items rejected in file.

2.3 Constructed Batch Files

The below examples are fully constructed batch files. Complete with all required elements, optional informational fields and are ready to be processed.

2.3.1 Typical Single Merchant Batch File

```
FH,1,BIGBUCKS.COM,60701,80053,,1302065577
DR,2,0,AC,,,4003002332100002,2011,100,0,0,,0,,0,,
DR,3,0,AC,,,4003096108600005,2011,100,0,0,0,,0,,0,,
DR,4,0,AC,,,4003097494200004,2011,100,0,0,0,,0,,0,,
FT,5,300,3,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
```

Response File

```
FH,1,TESTCOMPUTER,60701,80053, ,1302065577
DR,2,0,AC, , ,4003002332100002,2011,100,0,0,0,TEST41,0, ,0, ,
DR,3,0,AC, , ,4003096108600005,2011,100,0,0,0,TEST41,0, ,0, ,
DR,4,0,AC, , ,4003097494200004,2011,100,0,0,0,TEST41,0, ,0, ,
FT,5,300,3,0,0,300,3,300,3,0,0,0,0,300,3
```

2.3.2 Batch file with Extended Data

```
FH,1,BIGBUCKS.COM,60701,80053,,1302067032
DR,2,0,AC,,,4003045274900004,2011,100,0,0,0,,0,,0,,
QA,3,1,123 NORTH 1ST,75007,,,,,1,123
XD,4,2,JOHN DOE,,,5555551234,,192.168.1.101,
DR,5,0,AC,,,4003036059200009,2011,100,0,0,0,,0,,0,,
QA,6,1,123 NORTH 1ST,75007,,,,,1,123
XD,7,2,JOHN DOE,,,5555551234,,192.168.1.101,
DR,8,0,AC,,,4003048037800008,2011,100,0,0,0,,0,,0,,
```



```
AU,9,1,,,
DR,10,0,NO,,,4003007870600008,2001,0,0,0,0,,0,,
AU,11,1,,,
DR,12,0,NO,,,4003082611900009,2001,0,0,0,0,,0,,
AU,13,1,,,
DR,14,0,NO,,,4003059313000007,2001,0,0,0,0,,0,,
AU,15,1,,,
DR,16,0,NO,,,4003075237200002,2001,0,0,0,0,,0,,
AU,17,1,,,
DR,18,0,NO,,,4003012317300006,2001,0,0,0,0,,0,,
AU,19,1,,,
DR,20,0,NO,,,4003018019900001,2001,0,0,0,0,,0,,
AU,21,1,,,
FT,22,0,10,0,0,0,0,0,0,0,0,0,0,0,0,0
```

Response file

```
FH,1,TESTCOMPUTER,60701,80053, ,1302041291
DR,2,0,NO, , ,4003096362900000,2001,0,0,0,0, ,999, ,0, ,
AU,3,1, , ,V
DR,4,0,NO, , ,4003072367500004,2001,0,0,0,0, ,999, ,0, ,
AU,5,1, , ,P
DR,6,0,NO, , ,4003080842300007,2001,0,0,0,0, ,999, ,0, ,
AU,7,1, , ,0
DR,8,0,NO, , ,4003016868400008,2001,0,0,0,0, ,999, ,0, ,
AU,9,1,4003016868400008,1301,E
DR,10,0,NO, , ,4003007870600008,2001,0,0,0,0, ,999, ,0, ,
AU,11,1,4000100020003000,1301,A
DR,12,0,NO, , ,4003082611900009,2001,0,0,0,0, ,999, ,0, ,
AU,13,1,4003082611900009,2001,V
DR,14,0,NO, , ,4003059313000007,2001,0,0,0,0, ,999, ,0, ,
AU,15,1,4000100020003000,1301,A
DR,16,0,NO, , ,4003075237200002,2001,0,0,0,0, ,999, ,0, ,
AU,17,1, , ,C
DR,18,0,NO, , ,4003012317300006,2001,0,0,0,0, ,999, ,0, ,
AU,19,1,4003012317300006,1301,E
DR,20,0,NO, , ,4003018019900001,2001,0,0,0,0, ,999, ,0, ,
AU,21,1,4003018019900001,1301,E
FT,22,0,10,0,0,0,0,0,0,0,0,0,0,0,0,0
```

3 File Submission

Once a merchant has created a batch file to be processed the first step to submit it to the JetPay Batch System is to encrypt the file with JetPay’s public key. Then the file should be sent to the FTP server. Please make sure that the transfer is done in binary mode rather than ASCII. There are three restrictions for the name of the submitted file. It must not contain any spaces, it must end in “.REQ” (not “.REQ.gpg” or “.req”), and the same name cannot be used twice, even if there was an error the first time the name was used.

After the file has been picked up and processed, a response file is generated. This file will be encrypted with the merchant’s public key. The response file will have the same name as the request file except that it will end in “.RSP” instead of “.REQ”. The response file will be placed on the FTP server for the merchant to retrieve and and email will be sent indicating that a file is complete.

4 JetPay Certification

Because of the complexity of the batch system, There are several step a merchant has to go through before starting batch processing with JetPay. If there are no issues, the certification and setup process can be done in 3–5 business days. The merchant must either have a merchant account with JetPay or be in the process of setting one up before we start testing and certification.

4.1 File Testing

The part is to test the file format. The merchant will send batch files with test data to a JetPay engineer. These files will be run through the test system and results reported back to the merchant. If a merchant is using software to generate the files that has previously been certified with JetPay, this step may be omitted.

If a merchant changes the type of batch file that they submit, such as going from a single terminal batch to a multi-terminal batch with batch headers and trailers, it is recommended that they contact JetPay and re-certify the batch format.

4.2 Key Exchange

The second step is key exchange. The merchant and a JetPay engineer will exchange encryption keys and test files to ensure that the production request and response files will be decrypted correctly. This step is also when the merchant's accounts and passwords on the FTP server are configured.

4.3 Live Processing

The last step is the small live file. The merchant will submit a small file with live transactions. This file will be first run through the test system to verify that file is correct and that the merchant's information has been properly loaded into JetPay's processing system. If there are problems with the file, then these issues will be dealt with before the file runs in the live production environment. Otherwise we send the file to production, inform the merchant of the results.