



BluePay bp20post 2.0

API Integration POST Method

Reference Guide

April 2025

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Overview

BluePay Post (bp20post) is an automated integration API. This interface is NOT for POSTing directly from a web form.

URL

The URL of this interface is currently:

Sample: <https://secure.bluepay.com/interfaces/bp20post>

This URL may change in the future. In integrating your system, please remember to make the URL a parameter so that it can easily be changed, if required.

If you are coding a shopping cart, please make the URL a parameter the merchants can easily set.

Account Name

The authentication process uses 12 digit gateway account ID number and the 32 character secret key. To check the your authentication details follow the below steps:

1. Login into the BluePay Gateway web site at <https://secure.bluepay.com>
2. On the left side menu go to ADMIN>Accounts>List and click on the account name.
3. Now, you can see the account details.

Request Format

Expected input format is that of a standard HTTPS POST. All parameters are uri-encoded in the body of the request.

For example:

```
# BEGIN REQUEST EXAMPLE

POST https://secure.bluepay.com/interfaces/bp20post

Content-Type: application/x-www-form-urlencoded

ACCOUNT_ID=123412341234&NAME1=Chris%20J.&NAME2=Jansen

# END REQUEST EXAMPLE
```

There are more parameters than that required for a successful transaction.

Response Format

Expected output is that of a standard HTTPS response. All response parameters are uri-encoded in the body of the response. See below under "Output format" for more details.

For example:

```
#BEGIN RESPONSE EXAMPLE

HTTP/1.1 200 OK

Cache-Control: max-age=0

Connection: close

Date: Tue, 07 Dec 2004 17:31:12 GMT

Server: Apache

Content-Type: text/html; charset=ISO-8859-1

Expires: Tue, 07 Dec 2004 17:31:12 GMT

TRANS_ID=100000000150&STATUS=0&AVS=0&CVV2=7&MESSAGE=Declined&REBID=

#END REQUEST EXAMPLE
```

INPUT PARAMETER

The following input parameter are available:

AMOUNT	
Description:	The FULL amount of the transaction, including tax and tip.
Format:	XXXXXXXX.XX

ACCOUNT_ID	
Description:	12-digit BluePay 2.0 Account ID.

USER_ID	
Required:	Optional
Description:	12-digit BluePay 2.0 User ID.

TAMPER_PROOF_SEAL	
Required:	Yes
Description:	Hash for security, using selected algorithm (either TPS_HASH_TYPE or account's 'Hash Type in APIs' value). See TAMPER_PROOF_SEAL & BP_STAMP section for more details.

TRANS_TYPE			
Required:	Optional (defaults to SALE)		
Description:	<ul style="list-style-type: none"> Use PAYROLL for PPD DOC_TYPE when the TRANSACTION_TYPE is CREDIT for payment of wages, salaries and similar types of compensation. Use PURCHASE for e-commerce purchases. For this purpose, an e-commerce purchase is a SALE TRANSACTION_TYPE authorized by a consumer for the online purchase of goods, including recurring purchases first authorized online. An e-commerce purchase uses the WEB DOC_TYPE except as permitted by the rule on Standing Authorization to use the PPD or TEL DOC_TYPE. <p>Following are the available transaction types:</p> <table border="1" style="width: 100%;"> <tbody> <tr> <td> <ul style="list-style-type: none"> AUTH SALE REFUND (ACH requires DOC_TYPE PPD or CCD.) CAPTURE </td> <td> <ul style="list-style-type: none"> VOID UPDATE CREDIT (ACH requires DOC_TYPE PPD or CCD.) AGG </td> </tr> </tbody> </table>	<ul style="list-style-type: none"> AUTH SALE REFUND (ACH requires DOC_TYPE PPD or CCD.) CAPTURE 	<ul style="list-style-type: none"> VOID UPDATE CREDIT (ACH requires DOC_TYPE PPD or CCD.) AGG
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F_REBILLING	
Required:	Optional
Description:	Rebiling flag. Only used for non-BluePay generated rebillings to identify the transaction as a rebilling. Set value to 1 for rebill transaction..

PAYMENT_TYPE	
Required:	Optional
Description:	<p>Provides the payment type of the transaction.</p> <ul style="list-style-type: none"> • CREDIT = Credit Card (Default) • ACH = Automated Clearing House/E-check • DEBIT = Debit Card

MODE	
Required:	Optional
Description:	<ul style="list-style-type: none"> • "LIVE" - To run a production transaction that moves funds. • "TEST" - To run a simulated test transaction. This is the default mode.
<div style="border: 1px solid orange; padding: 10px;"> <p> - If the MODE is not set and a master transaction is used, then the master transaction's mode will be used on the new transaction.</p> <p>- If the MODE is anything other than "LIVE" and there is no master transaction, the new transaction will be processed using MODE of "TEST".</p> </div>	

MASTER_ID	
Required:	Optional, Yes for CAPTURE or REFUND
Description:	<p>When optional, The TRANS_ID of a previous transaction;</p> <ul style="list-style-type: none"> • Any parameters not sent will be filled out from the previous transaction. • This allows you to run a "manual" rebilling. The results of a test transaction are determined by the dollar amount of the transaction without cents. • If the dollar amount is odd a approval is returned. If the dollar amount is even a decline is returned. <p>When required the TRANS_ID of the transactionbis set to CAPTURE or REFUND.</p>

ACH_DESCRIPTION	
Required:	Optional when PAYMENT_TYPE=ACH. No for other PAYMENT_TYPE values.
Description:	<p>Defaults to value configured on the gateway account if not provided.</p> <ul style="list-style-type: none">• 10 character alphanumeric field that is used to identify the type of transaction being performed.• The ach_description must be ACCTVERIFY for a Micro-Deposit.• When MODE=TEST and PAYMENT_TYPE=ACH, ACH_DESCRIPTION can be used to trigger specific ACH transaction results. ACH Account Validation must be enabled on the gateway account to use the ACH Account Validation test actions. Refer VALIDATION_RESULT in the Output section for additional information.

ACH_DESCRIPTION																									
Example:	When ACH Description is BPTSTVRB, then the BluePay test validation result indicates that account validation for this transaction was bypassed.																								
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ACH_SAME_DAY_FUNDING	
Required:	Optional

ACH_SAME_DAY_FUNDING	
Description:	Flag to determine if the current transaction should be processed as a Same-Day ACH transaction. Same-Day ACH funding requires approval before it can be enabled and is not available for all banks. For Same-Day funding, the transaction must be processed prior to the final Same-Day cutoff.
Valid Value:	<ul style="list-style-type: none"> • 1 (True) same-day funding • 0 (False) standard funding, '0', is a default value if not set
<div style="border: 1px solid #00aaff; border-radius: 10px; padding: 5px;">  To view this field value in the output, set the VERSION field to 9 or above. </div>	

CUST_TOKEN	
Required:	Optional
Description:	The Customer Token whose stored payment information should be used for this transaction. Any parameters not sent will be filled out referring the last transaction that used this Customer Token.

NEW_CUST_TOKEN	
Required:	Optional
Description:	The new Customer Token that will store this customer's payment information. Must be 6-16 alphanumeric characters. Cannot include the values of NAME1 , NAME2 , or COMPANY_NAME . Cannot include the last 4 digits of the customer's payment account number. Must be unique to this account.

AUTH_CODE	
Description:	Authorization code for a force transaction (voice auth).

CARD_CVV2	
Description:	The customer's Card Validation Code. This is the three-digit code printed on the back of most credit cards.

CARD_EXPIRE	
Description:	The customer's Credit Card Expiration Date, in MMY format.

DOC_TYPE	
Required:	Optional, when PAYMENT_TYPE =ACH. No for other PAYMENT_TYPE values.

DOC_TYPE	
Description:	<p>Documentation Type also known as Standard Entry Class (SEC) Codes. Can be one of the following:</p> <ul style="list-style-type: none"> • PPD (Prearranged Payment and Deposit): Indicates there is a personal signed agreement on file for the customer, this is the default DOC_TYPE, if the DOC_TYPE is not set. • CCD (Corporate Credit or Debit Entry): Indicates there is a company-signed agreement on file for the customer. • WEB (Internet Initiated/Mobile Entry): Indicates the customer has agreed to the charges via an internet-based or electronic form. If no value is set, it is used as a default value. • TEL (Telephone-Initiated Entry): Indicates there is a recorded telephone call on file with the customer verbally agreeing to be charged. • ARC (Accounts Receivable Entry): Indicates that a consumer check was received in the mail or at a drop box location and converted to an ACH transfer. • BOC (Back Office Conversion Entry): Indicates that a consumer check was received in person from the consumer and later converted to an ACH transfer. • POP (Point of Purchase Entry): Indicates that a consumer check was received in person from the consumer and was converted to an ACH transfer while the consumer was present.

PAYMENT_ACCOUNT	
Required:	Yes, for ACH transactions unless MASTER_ID is set.
Description:	<p>This is set to three colon-separated fields:</p> <ol style="list-style-type: none"> 1. The account type must be 'C' for checking, or 'S' for savings. 2. The bank's routing number. 3. The customer's account number.
Example:	'C:123456789:1234123412341234'

BP_STAMP_DEF	
Required:	Optional
Description:	Space-separated list of field names in the order they are to be used in the calculation of BP_STAMP. This is similar to the TPS_DEF, but the BP_STAMP_DEF uses output fields rather than input fields. Refer BP_STAMP in output section for more information.

BP_STAMP_DEF

If set as blank or not sent, it will default to: "TRANS_ID ISSUE_DATE STATUS". The merchant's Secret Key is always used in the calculation of the BP_STAMP, but should NOT be included in the BP_STAMP_DEF.

TPS_DEF

Required:	Optional
Description:	<p>Space-separated list of input field names in the order they are to be used in the calculation of the TAMPER_PROOF_SEAL.</p> <ul style="list-style-type: none"> If set as blank or not sent, it will default to: "ACCOUNT_ID TRANS_TYPE AMOUNT MASTER_ID NAME1 PAYMENT_ACCOUNT". The merchant's Secret Key is always used in the calculation of the TAMPER_PROOF_SEAL, but should NOT be included in the TPS_DEF.



The use of this field can possibly weaken your security. Please be sure you understand how the TAMPER_PROOF_SEAL works before you consider using this option.

TPS_HASH_TYPE

Required:	Optional
Description:	The algorithm used to compute the TAMPER_PROOF_SEAL and BP_STAMP.
Value:	<p>The accepted values are:</p> <ul style="list-style-type: none"> MD5 SHA256 SHA512 HMAC_SHA256 HMAC_SHA512.



Merchant's 'Hash Type in APIs' value is used if this parameter is not present.

AMOUNT_TIP

Required:	Optional
Description:	If AMOUNT_TIP supplied AMOUNT value must be modified to include this value.

AMOUNT_FOOD	
Required:	Optional
Description:	If AMOUNT_FOOD supplied AMOUNT value must be modified to include this value.

AMOUNT_MISC	
Required:	Optional
Description:	If AMOUNT_MISC supplied AMOUNT value must be modified to include this value.

ORDER_ID	
Required:	Optional
Description:	Unique 128 Characters identification number that is associated with the transaction.

The following fields are available only when PAYMENT_TYPE is set to DEBIT

SMID_ID	
Required:	Yes
Description:	This is the encryption key information.

PIN_BLOCK	
Required:	Yes
Description:	This is the encrypted PIN.

AMOUNT_CASHBACK	
Required:	Optional
Description:	Amount of cash given to customer.

AMOUNT_SURCHARGE	
Required:	Optional
Description:	Surcharge for performing cash back.



DEBIT also requires you to send either SWIPE or TRACK2.

The following fields are available but not currently required for any application:

SSN	
Required:	Optional
Description:	The customer's SSN or TAXID, all digits (no dashes) (9 Characters).

BIRTHDATE	
Required:	Optional
Description:	The customer's birthdate in ISO format (YYYY-MM-DD).

CUST_ID	
Required:	Optional
Description:	The customer's state ID or driver's license. (25 Characters).

CUST_ID_STATE	
Required:	Optional
Description:	The state of issuance of the customer's ID. (16 Characters).

These fields may be required for the best transaction rate.

Field	Required	Description
IS_CORPORATE	Optional	Set to '1' if this is a corporate transaction, rather than personal.
COMPANY_NAME	Optional	The name of the company on the check or credit card. (64 characters)
NAME1	Optional	The customer's first name (32 characters)
NAME2	Optional	The customer's last name (32 characters)
ADDR1	Optional	The customer's street address, necessary for AVS. (64 Characters)
ADDR2	Optional	The customer's second address line, if any (64 Characters)
CITY	Optional	The customer's city (32 Characters)
STATE	Optional	The customers' state, province, or equivalent. (16 Characters max; 2-letter abbrev preferred)
ZIP	Optional	The customer's zip code or equivalent. (16 Characters)
COUNTRY	Optional	The customer's country (64 Characters)

Field	Required	Description
PHONE	Optional	The customer's phone number. (16 Characters)
EMAIL	Optional	The customer's email address. (64 Characters)
MEMO	Optional	128-character descriptor field.
CUSTOM_ID	Optional	Merchant-specified data, searchable and reportable. (16 Characters)
CUSTOM_ID2	Optional	Merchant-specified data, searchable and reportable. (64 Characters)
DUPLICATE_OVERRIDE	Optional	Set to 1 to turn off duplicate scrubbing for a transaction. Set to 0 or leave blank to process with duplicate scrubbing.
CUSTOMER_IP	Optional	IP address of the customer. Used for velocity filtering. It is recommended that this value be sent.
VERSION	Optional	Determines fields included in output. See output section below.

Rebilling

Rebilling is only available to US merchants.

The following fields are to add rebilling to a SALE or AUTH:

DO_REBILL	
Required:	Yes, for rebillings
Description:	<ul style="list-style-type: none"> 1 for rebilling. 0 or absent for regular non-rebilling.

REB_FIRST_DATE	
Required:	Yes, for rebillings
Description:	<p>The date of the first rebilling. See "How Rebilling Works" section for additional information. The valid formats are:</p> <ul style="list-style-type: none"> "YYYY-MM-DD HH:MM:SS" (Hours, minutes, and seconds are optional). "XX UNITS" Relative date as explained below (Marked from the time of the transaction, for example: 10 DAYS, 1 MONTH, 1 YEAR). "XX UNITS" Relative date as explained below. Format for REB_FIRST_DATE expressions is: "XXX DAY" or "XXX MONTH" or "XXX YEAR" or "XXX HOUR" or "XXX MINUTE"
Where XXX is any valid integer. For example, "10 MINUTE" represents, of course, 10 minutes.	

REB_EXPR	
Required:	Yes, for rebillings
Description:	The period of time in-between rebillings. "XX UNITS" Relative date as explained below. Format for REB_EXPR expressions is: "XXX DAY" or "XXX MONTH" or "XXX YEAR" or "XXX HOUR" or "XXX MINUTE"
 Where XXX is any valid integer. For example, "10 MINUTE" represents, of course, 10 minutes.	

REB_CYCLES	
Required:	Optional
Description:	Number of times to rebill. Don't send or set to "" for infinite rebillings (or until canceled).

REB_AMOUNT	
Required:	Optional
Description:	Amount to rebill. Defaults to amount of transaction if not provided.

REB_IS_CREDIT	
Required:	Optional for rebillings
Description:	Field to indicate whether the rebill transaction is a SALE or CREDIT.
Valid Value:	<ul style="list-style-type: none"> • 1: For CREDIT • 0: For SALE (default)

STORED CREDENTIAL & INDICATORS

Only merchants who are set up to use the following processor(s) should include these fields:

North/8583

The use of a Stored Credential is only meant to provide additional information to the credit card companies to better manage risk and fraud. It is not used in place of payment information. Credit card companies want to know when a merchant stores a cardholder's payment information *with the cardholder's permission*, as well as when the merchant uses that stored payment information. The most common example of this would be when a cardholder sets up a recurring payment.

When sending initial transaction:

- Include STORED_INDICATOR=F
- Include STORED_TYPE set to either 'M' or 'C'

- Include VERSION with a value of 8 or higher
- A transaction identifier will be returned in the response as STORED_ID (only returned if the transaction was approved)

When sending subsequent transactions:

- Include STORED_INDICATOR=S.
- Include STORED_TYPE set to either 'M' or 'C'.
- Include STORED_ID set to the value received in the initial transaction.

The following fields are available in the Stored Indicators.

STORED_INDICATOR	
Required:	Optional
Description:	This field indicates whether a stored credential is being used with the transaction. Refer STORED CREDENTIALS section for more information (1 AN). <ul style="list-style-type: none"> • 'F' - "First" transaction of a stored credential transaction. • 'S' - "Subsequent" transaction in a stored credential setup. • (null) - Ignore this entire new system and do nothing different.
<div style="border: 1px solid orange; padding: 5px;">  Where sending the first transaction ('F'), the VERSION field must be set to 8 or higher so that the response will include the STORED_ID (which will be required for the subsequent transactions). </div>	

STORED_ID	
Required:	Yes, if STORED_INDICATOR = 'S'
Description:	Value of the STORED_ID response field from the initial 'F' stored indicator transaction. Refer STORED CREDENTIALS section for more information.

STORED_TYPE	
Required:	Yes, if STORED_INDICATOR sent
Description:	This field indicates who initiated this transaction. Refer STORED CREDENTIALS section for more information. <ul style="list-style-type: none"> • 'M' - "Merchant" initiated stored credentials transaction. • 'C' - "Cardholder" initiated stored credentials transaction.

SWIPE OPTIONS

BluePay accepts the swipe data in multiple formats.

Unencrypted Swipe

Option	Description
SWIPE	The full swiped track data, just the way it comes to you from the card reader, including both Track1 and Track2.
TRACK2	Track2 of the swiped data

Encrypted Swipe

Option	Description
KSN	Key Serial Number
TRACK1_ENC	Track 1 data encrypted
TRACK1_EDL	Pre-encryption track 1 length
TRACK2_ENC	Track 2 data encrypted
TRACK2_EDL	Pre-encryption track 2 length

EMV (IDTech Augusta S)

EMV_DATA	
Required:	Optional
Description:	The full output of a keyboard emulation EMV reader.

EMV_DIRECT	
Required:	Optional
Description:	Set to "1" to indicate a direct read from a connected EMV card reader device.

EMV_FALLBACK	
Required:	Optional
Description:	Set to "1" on a swipe transaction after an EMV transaction has failed.

TRANSARMOR TOKENS

Only merchants who are set up to process TransArmor Tokens should include these fields.

F_TRANSARMOR	
Required:	Yes, If using or creating a TransArmor Token
Description:	<ul style="list-style-type: none"> 0: or not present if not applicable. 1: If using a TransArmor Token. 2: If creating a TransArmor Token.

CARD_TYPE	
Required:	Yes, if F_TRANSARMOR=1 ; Otherwise, this field will be ignored
Description:	A four-character indicator of the credit card brand represented by the TransArmor Token.
Valid Value:	<ul style="list-style-type: none"> AMEX = American Express DC = Diner's Club DISC = Discover JCB = JCB MC = MasterCard VISA = Visa

When creating a TransArmor Token

F_TRANSARMOR	= Set to '2' if creating a TransArmor Token
TRANS_TYPE	= Must be AUTH or SALE
VERSION	= Must be '8' or higher to include TOKEN_TRANSARMOR field in response

When using a TransArmor Token

F_TRANSARMOR	= Set to '1' if using a TransArmor Token
PAYMENT_ACCOUNT	= This is set to the TransArmor Token being used
CARD_TYPE	= Credit card brand of the credit card represented by the TransArmor Token
CARD_EXPIRE	= Expiration date of the credit card represented by the TransArmor Token

LEVEL 2 (Optional)

The following optional fields are available in the Level 2:

INVOICE_ID	
Required:	Optional; US Required: Yes (L2); Canada Required: Yes (L2)
Description:	64 Characters Invoice ID'.
Length/Type:	10/AN

AMOUNT_TAX	
Required:	Optional; US Required: Yes (L2); Canada Required: Yes (L2)
Description:	If AMOUNT_TAX is supplied AMOUNT value must be modified to include this value.
Length/Type:	6/N

LEVEL 3 (Optional)

LV2 names represent Level-3 order level fields and LV3 represent Level-3 line detail fields. The following optional fields are available in the Level 3.

LV2_ITEM_TAX_RATE	
Required:	Optional; Canada Required: Yes (L3)
Description:	Tax rate for the item.
Length/Type:	4/N

LV2_ITEM_GOODS_TAX_RATE	
Required:	Optional; Canada Required: Yes (L3)
Description:	Tax rate for the item goods.
Length/Type:	4/N

LV2_ITEM_GOODS_TAX_AMOUNT	
Required:	Optional; Canada Required: Yes (L3)
Description:	Tax amount for the item.
Length/Type:	6/N

LV2_ITEM_SHIPPING_AMOUNT	
Required:	Optional; Canada Required: Yes (L3)
Description:	Shipping amount for the item.
Length/Type:	10/N

LV2_ITEM_DISCOUNT_AMOUNT	
Required:	Optional; Canada Required: Yes (L3)
Description:	Discount amount for the item.
Length/Type:	10/N

LV2_ITEM_CUST_PO	
Required:	Optional; Canada Required: Yes (L3)
Description:	Customer PO of the item.
Length/Type:	22/AN

LV2_ITEM_GOODS_TAX_ID	
Required:	Optional; Canada Required: Yes (L3)
Description:	Goods Tax ID of the item.
Length/Type:	30/AN

LV2_ITEM_TAX_ID	
Required:	Optional; Canada Required: Yes (L3)
Description:	Tax ID for the item.
Length/Type:	30/AN

LV2_ITEM_CUSTOMER_TAX_ID	
Required:	Optional; Canada Required: Yes (L3)
Description:	Customer Tax ID for the item.
Length/Type:	15/AN

LV2_ITEM_DUTY_AMOUNT	
Required:	Optional
Description:	Duty amount for the item.
Length/Type:	10/N

LV2_ITEM_SUPPLEMENTAL_DATA	
Required:	Optional
Description:	Supplemental data for the item.
Length/Type:	24/AN

LV2_ITEM_CITY_TAX_RATE	
Required:	Optional
Description:	City tax rate for the item.
Length/Type:	4/N
Amex Only:	Yes

LV2_ITEM_CITY_TAX_AMOUNT	
Required:	Optional
Description:	City tax amount for the item.
Length/Type:	6/N
Amex Only:	Yes

LV2_ITEM_COUNTY_TAX_RATE	
Required:	Optional
Description:	Country tax rate for the item.
Length/Type:	4/N
Amex Only:	Yes

LV2_ITEM_COUNTY_TAX_AMOUNT	
Required:	Optional
Description:	Country tax amount for the item.

LV2_ITEM_COUNTY_TAX_AMOUNT	
Length/Type:	6/N
Amex Only:	Yes

LV2_ITEM_STATE_TAX_RATE	
Required:	Optional
Description:	State tax rate for the item.
Length/Type:	4/N
Amex Only:	Yes

LV2_ITEM_STATE_TAX_AMOUNT	
Required:	Optional
Description:	State tax amount for the item.
Length/Type:	6/N
Amex Only:	Yes

LV2_ITEM_BUYER_NAME	
Required:	Optional; Canada Required: Yes (L3)
Description:	Buyer name for the item.
Length/Type:	40/AN
Amex Only:	Yes

LV2_ITEM_CUSTOMER_REFERENCE	
Required:	Optional; US Required: Yes (L2); Canada Required: Yes (L2)
Description:	Customer reference for the item.
Length/Type:	17/AN
Amex Only:	Yes

LV2_ITEM_CUSTOMER_NUMBER	
Required:	Optional
Description:	Customer number for the item.

LV2_ITEM_CUSTOMER_NUMBER	
Length/Type:	30/AN
Amex Only:	Yes

LV2_ITEM_SHIP_NAME	
Required:	Optional
Description:	Ship name for the item.
Length/Type:	40/AN
Amex Only:	Yes

LV2_ITEM_SHIP_ADDR1	
Required:	Optional
Description:	Ship address1 for the item.
Length/Type:	40/AN
Amex Only:	Yes

LV2_ITEM_SHIP_ADDR2	
Required:	Optional; US Required: Yes (L2); Canada Required: Yes (L2)
Description:	Ship address2 for the item.
Length/Type:	40/AN
Amex Only:	Yes

LV2_ITEM_SHIP_CITY	
Required:	Optional
Description:	Ship cityfor the item.
Length/Type:	30/AN
Amex Only:	Yes

LV2_ITEM_SHIP_STATE	
Required:	Optional
Description:	Ship statefor the item.

LV2_ITEM_SHIP_STATE	
Length/Type:	2/A
Amex Only:	Yes

LV2_ITEM_SHIP_ZIP	
Required:	Optional
Description:	Ship zipcode for the item.
Length/Type:	15/AN
Amex Only:	Yes

LV2_ITEM_SHIP_COUNTRY	
Required:	Optional; Canada Required: Yes (L3)
Description:	Ship countryfor the item.
Length/Type:	3/AN
Amex Only:	Yes

The following fields are available for Level 3 processing with corporate purchasing cards. "x" is replaced with a unique sequence number for each item. Maximum number of items is 99.

LV3_ITEMx_ITEM_SKU	
Required:	Optional; Canada Required: Yes (L3)
Description:	Item SKU for the item.
Length/Type:	12/AN

LV3_ITEMx_ITEM_DESCRIPTOR	
Required:	Optional; US Required: Yes (L3); Canada Required: Yes (L3)
Description:	Description of the item purchased.
Length/Type:	26/AN

LV3_ITEMx_COMMODITY_CODE	
Required:	Optional; US Required: Yes (L3); Canada Required: Yes (L3)

LV3_ITEMx_COMMODITY_CODE	
Description:	The Commodity Code of the item. A list of Commodity Codes can be found at: <div style="border: 1px solid black; padding: 5px;"> https://urldefense.com/v3/http://www.census.gov/svsd/www/cfsdat/2002data/cfs021200.pdf ;!!P9vvK-4S!0 fdYVH1S8Dz52NxzFz22EC-XgSDrWicB8sMVQLdPqL OCoQxmxKufYFf5m3jbo0tg\$ </div>
Length/Type:	12/AN

LV3_ITEMx_PRODUCT_CODE	
Required:	Optional; US Required: Yes (L3)
Description:	Merchant-defined code for the product or service being purchased. This can be an inventory, catalog, UPC code or other.
Length/Type:	12/AN (Characters)

LV3_ITEMx_MEASURE_UNITS	
Required:	Optional; US Required: Yes (L3); Canada Required: Yes (L3)
Description:	The unit of measure of the item purchase. Normally EA for Each.
Length/Type:	12/AN (3 characters)
Refer:	Appendix I (Measure Units and Codes)

LV3_ITEMx_UNIT_COST	
Required:	Optional; US Required: Yes (L3); Canada Required: Yes (L3)
Description:	The cost per unit of item.
Length/Type:	10/N (9-digits decimal)

LV3_ITEMx_QUANTITY	
Required:	Optional; US Required: Yes (L3); Canada Required: Yes (L3)
Description:	The number of units of item.
Length/Type:	10/N (5-digitsLV3_ITEMx_ITEM_DESCRIPTOR)

LV3_ITEMx_ITEM_DISCOUNT	
Required:	Optional; Canada Required: Yes (L3)

LV3_ITEMx_ITEM_DISCOUNT	
Description:	The amount of any discounts on the item.
Length/Type:	10/N (12 digits decimal)

LV3_ITEMx_TAX_RATE	
Required:	Optional; US Required: Yes (L3)
Description:	Tax rate for the item.
Length/Type:	4/N

LV3_ITEMx_GOODS_TAX_RATE	
Required:	Optional; US Required: Yes (L3)
Description:	Goods tax rate for the item.
Length/Type:	4/N

LV3_ITEMx_TAX_AMOUNT	
Required:	Optional; US Required: Yes (L3)
Description:	Tax amount for the item.
Length/Type:	10/N (9-digits)

LV3_ITEMx_GOODS_TAX_AMOUNT	
Required:	Optional; Canada Required: Yes (L3)
Description:	Goods tax amount for the item.
Length/Type:	10/N

LV3_ITEMx_CITY_TAX_RATE	
Required:	Optional
Description:	City tax rate for the item.
Length/Type:	4/N
Amex Only:	Yes

LV3_ITEMx_CITY_TAX_AMOUNT	
Required:	Optional
Description:	City tax amount for the item.
Length/Type:	10/N
Amex Only:	Yes

LV3_ITEMx_COUNTY_TAX_RATE	
Required:	Optional
Description:	Country tax rate for the item.
Length/Type:	10/N
Amex Only:	Yes

LV3_ITEMx_COUNTY_TAX_AMOUNT	
Required:	Optional
Description:	Country tax amount for the item.
Length/Type:	10/N
Amex Only:	Yes

LV3_ITEMx_STATE_TAX_RATE	
Required:	Optional
Description:	State tax rate for the item.
Length/Type:	4/N
Amex Only:	Yes

LV3_ITEMx_STATE_TAX_AMOUNT	
Required:	Optional
Description:	State tax amount for the item.
Length/Type:	10/N
Amex Only:	Yes

LV3_ITEMx_ITEM_SKU	
Required:	Optional
Description:	Item SKU for the item.
Length/Type:	30/AN
Amex Only:	Yes

LV3_ITEMx_CUST_SKU	
Required:	Optional
Description:	Customer SKU for the item.
Length/Type:	30/AN
Amex Only:	Yes

LV3_ITEMx_CUST_PO	
Required:	Optional
Description:	Customer PO for the item.
Length/Type:	22/AN
Amex Only:	Yes

LV3_ITEMx_SUPPLEMENTAL_DATA	
Required:	Optional
Description:	Supplemental data for the item.
Length/Type:	40/AN
Amex Only:	Yes

LV3_ITEMx_GL_ACCOUNT_NUMBER	
Required:	Optional; US Required: Yes (L3); Canada Required: Yes (L3)
Description:	GL account number for the item.
Length/Type:	40/AN
Amex Only:	Yes

LV3_ITEMx_DIVISION_NUMBER	
Required:	Optional
Description:	Division number for the item.
Length/Type:	40/AN
Amex Only:	Yes

LV3_ITEMx_PO_LINE_NUMBER	
Required:	Optional
Description:	PO line number for the item.
Length/Type:	5/N
Amex Only:	Yes

LV3_ITEMx_LINE_ITEM_TOTAL	
Required:	Optional; US Required: Yes (L3)
Description:	The total amount for the item including taxes and discounts.
Length/Type:	10/N

LODGING (Optional)

The following fields are available for Lodging processing:

LODGING_FOLIO_NUM	
Required:	Yes
Description:	The lodging folio number.

LODGING_ARRIVAL_DATE	
Required:	Yes
Description:	The date the customer arrived at lodging. Format is "YYYY-MM-DD".

LODGING_DEPART_DATE	
Required:	Yes
Description:	The date the customer checked out of lodging. Format is "YYYY-MM-DD".

LODGING_LOCAL_PHONE	
Required:	Yes
Description:	The local phone number of the specific lodging location, up to 10 digits.

LODGING_COUNTRY	
Required:	Yes, if outside of USA
Description:	The code for the country in which the lodging is located. Defaults to 'USA' if not set. Use the ISO 3166-1 Alpha-3 Country Code (i.e.: USA, CAN).

LODGING_PREF_CUST_F	
Required:	Optional
Description:	<ul style="list-style-type: none"> • 1 if the customer is a preferred customer. • 0 or not present if not applicable.

LODGING_EXTRA_GIFTSHOP_F	
Required:	Optional
Description:	<ul style="list-style-type: none"> • 1 if there was an additional charge for the gift shop. • 0 or not present if not applicable.

LODGING_EXTRA_LAUNDRY_F	
Required:	Optional
Description:	<ul style="list-style-type: none"> • 1 if there was an additional charge for a parking violation. • 0 or not present if not applicable.

LODGING_EXTRA_MINIBAR_F	
Required:	Optional
Description:	<ul style="list-style-type: none"> • 1 if there was an additional charge for the mini bar. • 0 or not present if not applicable.

LODGING_EXTRA_RESTAURANT_F	
Required:	Optional
Description:	<ul style="list-style-type: none"> • 1 if there was an additional charge for the restaurant. • 0 or not present if not applicable.

LODGING_EXTRA_PHONE_F	
Required:	Optional
Description:	<ul style="list-style-type: none"> • 1 if there was an additional charge for the telephone. • 0 or not present if not applicable.

LODGING_EXTRA_OTHER_F	
Required:	Optional
Description:	<ul style="list-style-type: none"> • This should not include gift shop, laundry, mini bar, restaurant, or telephone charges. • 1 if there was an additional charge. 0 or not present if not applicable.

LODGING_CHARGE_TYPE	
Required:	Optional
Description:	The code for the description of the lodging charge. If the value is not set then the default value is '1' (Hotel Stay)
Possible Codes:	<ul style="list-style-type: none"> • 1 = Hotel Stay • 2 = Assured Reservation - No Show • 3 = CAR Deposit • 4 = Delayed Charge • 5 = Express Service • 6 = Assured Reservation

VEHICLE RENTAL (Optional)

The following fields are available for optional Vehicles Rental processing:

VEHICLE_RENT_AGREE_NUM	
Required:	Yes
Description:	The invoice or rental agreement number of the original vehicle rental agreement.

VEHICLE_PICKUP_DATETIME	
Required:	Yes
Description:	The date the vehicle rental began. The format is "YYYY-MM-DD HH:MM:SS" and Hours, minutes, and seconds are optional.

VEHICLE_DROPOFF_DATETIME	
Required:	Yes
Description:	The date the vehicle rental ended. "YYYY-MM-DD HH:MM:SS" Hours, minutes, and seconds are optional.

VEHICLE_PICKUP_CITY	
Required:	Yes (unless same as merchant's city)
Description:	The city in which the vehicle was rented.

VEHICLE_DROPOFF_CITY	
Required:	Yes, (unless same as merchant's city)
Description:	The city in which the vehicle was returned.

VEHICLE_PICKUP_STATE	
Required:	Yes, (unless same as merchant's city)
Description:	The 2-letter abbreviation for the state/province in which the vehicle was rented. Defaults to merchant's state if not set. Use the ISO 3166-2 US or CA standard (i.e.: "AL" = Alabama, "AB" = Alberta).

VEHICLE_DROPOFF_STATE	
Required:	Yes, (unless same as merchant's city)
Description:	The 2-letter abbreviation for the state/province in which the vehicle was returned. Defaults to merchant's state if not set. Use the ISO 3166-2 US or CA standard (i.e.: "AL" = Alabama, "AB" = Alberta).

VEHICLE_DROPOFF_LOCATION_ID	
Required:	Yes
Description:	Identification of return location (phone, store ID, etc.), up to 10 characters.

VEHICLE_PICKUP_COUNTRY	
Required:	Yes, (if outside of USA)
Description:	The code for the country in which the vehicle was returned. Defaults to 'USA' if not set. Use the ISO 3166-1 Alpha-3 Country Code (i.e.: USA, CAN).

VEHICLE_DROPOFF_COUNTRY	
Required:	Yes, (if outside of USA)
Description:	The code for the country in which the vehicle was returned. Defaults to 'USA' if not set. Use the ISO 3166-1 Alpha-3 Country Code (i.e.: USA, CAN).

VEHICLE_RENTER_NAME1	
Required:	Yes, (if different from NAME1)
Description:	The renter's name may be sent as VEHICLE_RENTER_NAME1.

VEHICLE_RENTER_NAME1	
Required:	Optional
Description:	The first name of the renter. Defaults to NAME1 if not set.

VEHICLE_RENTER_NAME2	
Required:	Optional
Description:	The last name of the renter. Defaults to NAME2 if not set.

VEHICLE_PREF_CUST_F	
Required:	Optional
Description:	1 if the customer is a preferred customer. 0 or not present if not applicable.

VEHICLE_EXTRA_GAS_F	
Required:	Optional
Description:	1 if there was an additional charge for gas. 0 or not present if not applicable.

VEHICLE_EXTRA_MILES_F	
Required:	Optional
Description:	1 if there was an additional charge for extra mileage. 0 or not present if not applicable.

VEHICLE_EXTRA_LATE_F	
Required:	Optional
Description:	<ul style="list-style-type: none"> • 1 if there was an additional charge for a late return. • 0 or not present if not applicable.

VEHICLE_EXTRA_VIOLATIONS_F	
Required:	Optional
Description:	<ul style="list-style-type: none"> • 1 if there was an additional charge for a parking violation. • 0 or not present if not applicable.

VEHICLE_ONEWAY_AMOUNT	
Required:	Optional
Description:	The amount charged for a one-way rental.

VEHICLE_NO_SHOW_AMOUNT	
Required:	Optional
Description:	The amount charged if the renter did not claim the vehicle as scheduled.

VEHICLE_TOTAL_EXTRA_AMOUNT	
Required:	Optional
Description:	The total amount of extra charges that have been added.

VEHICLE_TYPE	
Required:	Optional
Description:	The code for the type of vehicle being rented. Defaults to '99' (Miscellaneous) if not set. Refer the Possible codes in the Appendix II .

Apple Pay Fields

The following fields are used for processing the Apple Pay transactions.

APPLE_EPK	
Required:	Yes
Description:	Ephemeral public key.

APPLE_DATA	
Required:	Yes
Description:	Encrypted payment data.

APPLE_SIG	
Required:	Yes
Description:	Signature of the payment & header data.

DEPRECATED OPTIONS

The following fields are DEPRECATED and should not be used

DO_AUTOCAP	
Required:	Optional for TRANSACTION_TYPE of AUTH
Description:	Performs automatically CAPTURE and AUTH, if it is approved. This is equivalent to running a SALE.
Valid Value:	<ul style="list-style-type: none"> '1' will cause BluePay2.0 to automatically CAPTURE and AUTH. 0 will not cause BluePay2.0 to automatically CAPTURE and AUTH.

AVS_ALLOWED	
Required:	Optional for TRANSACTION_TYPE of AUTH & SALE; Overrides legacy AVS filter; Does not override Fraud Management settings.
Description:	Allows a string of allowed Address Verification System (AVS) response codes to be set on a per transaction basis. If the resulting AVS response is not in this list, the transaction will be voided and a decline response returned. If set to '#', all AVS responses are considered valid.
Example:	If the merchant wishes to allow AVS responses 'X', 'Y', and 'Z', he sets this to 'XYZ.'
 The Fraud Management system or the legacy AVS filter should be used to set AVS filters if possible.	

CVV2_ALLOWED	
Required:	Optional for AUTH & SALE; Overrides legacy CVV filter; Does not override Fraud Management settings.
Description:	Allows a string of allowed Card Verification Value (CVV) response codes to be set on a per transaction basis. If the resulting CVV response is not in this list, the transaction will be voided and a decline response returned. If set to '#', all CVV responses are considered valid. For example, if the merchant wishes to allow CVV responses 'X', 'Y', and 'Z', he sets this to 'XYZ'.
 The Fraud Management system or the legacy CVV filter should be used to set CVV filters if possible.	

F_BYPASS_CAU	
Required:	Optional for TRANSACTION_TYPE of AUTH & SALE
Description:	The Card Account Updater service will not be used. On some occasions the Card Account Updater service receives invalid information. This flag can be used to process a transaction using the provided information instead of the updated information..
Valid Value:	<ul style="list-style-type: none">• 0 or not present to use Card Account Updater if enabled on the gateway account.• 1 to process transaction as submitted.

OUTPUT FIELDS

VERSION NULL

The following output fields are returned in the API response.

TRANS_ID	
Description:	The ID assigned to the transaction by the gateway

STATUS	
Description:	Code for the final status of the transaction.
Value:	<ul style="list-style-type: none"> • 1 for approved • 0 for declined • E and all other responses are ERROR.
<div style="border: 1px solid orange; padding: 5px;"> <p> - If a transaction is blocked by Duplicate Scrub then STATUS will be 1 and MESSAGE will be DUPLICATE.</p> <p>- All other fields will be from the original transaction, not the current transaction.</p> </div>	
<div style="border: 1px solid orange; padding: 5px;"> <p> The results of a test transaction are determined by the dollar portion of the amount without cents.</p> <p>- If the dollars are odd an approval is returned.</p> <p>- If the dollars are even a decline is returned.</p> </div>	

AVS	
Description:	Address Verification System (AVS) response code received on the transaction.
Value:	Refer the AVS response code in the Appendix III
<div style="border: 1px solid orange; padding: 5px;"> <p> When a transaction is processed with MODE=TEST if the first character of ADDR1 is one of the possible AVS response codes that value will be returned as the AVS response value.</p> </div>	

CVV2	
Description:	Card Verification Value 2 response code. Result of the validation of the CVV2 value entered by the payer.

CVV2	
Values:	<ul style="list-style-type: none"> • _ = Unsupported on this network or transaction type • M = CVV2 Match • N = CVV2 did not match • P = CVV2 was not processed • S = CVV2 exists but was not input • U = Card issuer does not provide CVV2 service • X = No response from association • Y = CVV2 Match (Amex only when processed through BluePay Canada)
<p> When a transaction is processed with MODE=TEST if the first character of ADDR2 is one of the possible CVV2 response codes that value will be returned as the CVV2 response value.</p>	

MESSAGE	
Description:	Human-readable description of the result of the transaction which describes the transaction result. This description may be used on response pages or customer receipts but may vary between supposedly identical transactions.
<p> Do not attempt to use this field to determine the exact "Result" of a transaction by attempting to parse the contents of this field. Use the "result" field to determine the true status of a transaction.</p>	

REBID	
Description:	The ID of the newly-created rebilling sequence, if any

TRANS_TYPE	
Description:	The transaction type. The only time it should be different from the requested TRANS_TYPE is in the case of VOID promotion where a REFUND was sent and we returned a VOID.

VERSION 1

Following fields are the additional fields returned along with fields in lower VERSIONS.

AUTH_CODE	
Description:	The auth code for successful AUTH

PAYMENT_ACCOUNT_MASK	
Description:	The used credit card or ACH account, masked with 'X' as appropriate

CARD_TYPE	
Description:	The type of card used for the transactions. <ul style="list-style-type: none"> • VISA • MC • DISC • AMEX • ACH

VERSION 2

Following fields are the additional fields returned along with fields in lower VERSIONS.

BIN	
Description:	Bank Identification Number, first six digits of the credit card number used. Identifies the bank that issued the card.

VERSION 3

Following are the additional fields that return along with the fields in lower RESPONSEVERSIONS.

BINDATA	
Description:	Tilde (~) separated list of transaction information returned by credit card processing network.
Example:	Character varying (32) <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> BINDATA = 6~V~X~~~~~~A~N~Y~C </div>

BINDATA																																	
Processing Data	<p>Each character separated by Tilde (~) represents the following processing data</p> <table border="1"> <thead> <tr> <th>Character</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>binlen:</td> <td>Length of the Bank Identification Number (BIN). A value between 1 and 16</td> </tr> <tr> <td>cardtype:</td> <td>Refer various BINDATA available for cardtypes in Appendix IV</td> </tr> <tr> <td>cardusage:</td> <td>Refer the various BINDATA available for cardusage in the Appendix IV</td> </tr> <tr> <td>networks:</td> <td>Refer the various BINDATA available for network types in the Appendix IV for processing</td> </tr> <tr> <td>ebt:</td> <td>Electronic Benefit Transfer State</td> </tr> <tr> <td>fsa:</td> <td>Flexible Spending Account</td> </tr> <tr> <td>issbin:</td> <td>Unused</td> </tr> <tr> <td>processbin:</td> <td>Unused</td> </tr> <tr> <td>ica:</td> <td>Unused</td> </tr> <tr> <td>prepaid:</td> <td> <ul style="list-style-type: none"> • Not Present - Not a Prepaid Card • P - Prepaid Card </td> </tr> <tr> <td>prodid:</td> <td>Card Product Subcategory. Refer the various card product sub category in the Appendix V</td> </tr> <tr> <td>regulated:</td> <td> <ul style="list-style-type: none"> • B - ISS Regulated Issuer • N - ISS Non-Regulated Issuer or Non-US issued card • 1 - ISS Regulated Issuer with fraud </td> </tr> <tr> <td>subtype:</td> <td>Refer the various BINDATA available for subtype in the Appendix IV for processig.</td> </tr> <tr> <td>largeticket:</td> <td> <ul style="list-style-type: none"> • L - Visa Large Ticket • Space - Not Visa Large Ticket </td> </tr> <tr> <td>acctylproc:</td> <td> <ul style="list-style-type: none"> • Y - Account Level Processing • Space - No Account Level Processing • N - Not applicable for BIN </td> </tr> </tbody> </table>	Character	Description	binlen:	Length of the Bank Identification Number (BIN). A value between 1 and 16	cardtype:	Refer various BINDATA available for cardtypes in Appendix IV	cardusage:	Refer the various BINDATA available for cardusage in the Appendix IV	networks:	Refer the various BINDATA available for network types in the Appendix IV for processing	ebt:	Electronic Benefit Transfer State	fsa:	Flexible Spending Account	issbin:	Unused	processbin:	Unused	ica:	Unused	prepaid:	<ul style="list-style-type: none"> • Not Present - Not a Prepaid Card • P - Prepaid Card 	prodid:	Card Product Subcategory. Refer the various card product sub category in the Appendix V	regulated:	<ul style="list-style-type: none"> • B - ISS Regulated Issuer • N - ISS Non-Regulated Issuer or Non-US issued card • 1 - ISS Regulated Issuer with fraud 	subtype:	Refer the various BINDATA available for subtype in the Appendix IV for processig.	largeticket:	<ul style="list-style-type: none"> • L - Visa Large Ticket • Space - Not Visa Large Ticket 	acctylproc:	<ul style="list-style-type: none"> • Y - Account Level Processing • Space - No Account Level Processing • N - Not applicable for BIN
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BINDATA	
Character	Description
acctfunsrc:	Account Fund Source <ul style="list-style-type: none"> • C - Credit • D - Debit • P - Prepaid • H - Charge • R - Deferred Debit (Visa Only) • Space - Network Only

BANK_NAME	
Description:	Up to 64 characters containing the customer's bank name.

CARD_COUNTRY	
Description:	Country of credit card issuer.

VERSION 4

Following fields are returned along with fields in lower VERSIONS.

CUSTOM_ID	
Description:	The CUSTOM_ID value submitted on the transaction.

CUSTOM_ID2	
Description:	The CUSTOM_ID2 value submitted on the transaction.

ORDER_ID	
Description:	Merchant specified value. Usually the an identifier for the payment from the merchant's system.

INVOICE_ID	
Description:	Merchant specified value. Usually the an identifier for the payment from the merchant's system.

ISSUE_DATE	
Description:	Date and time that the transaction was processed.

BP_STAMP	
Description:	Hash of the merchant's Secret Key and a string concatenation of the values of various fields returned from BluePay. The exact fields and their order are determined by BP_STAMP_DEF, and the hash type used is the same algorithm that the merchant used to calculate the TAMPER_PROOF_SEAL (the TPS_HASH_TYPE provided in the response from BluePay).
 See TAMPER_PROOF_SEAL & BP_STAMP section for more details.	

BP_STAMP_DEF	
Description:	Definition of which fields are included in the BP_STAMP.
 See TAMPER_PROOF_SEAL & BP_STAMP section for more details.	

TPS_HASH_TYPE	
Description:	The algorithm used to validate the TAMPER_PROOF_SEAL and to generate the BP_STAMP. This is either the TPS_HASH_TYPE value received in the transaction request or the merchant's 'Hash Type in APIs' value.
 See TAMPER_PROOF_SEAL & BP_STAMP section for more details.	

VERSION 5

Following fields are returned along with fields in lower VERSIONS.

ACCT_UPDATE_ID	
Description:	The ID of any updated account data for the payment account used for the transaction. Updated account data only provided for merchants using Account Updater.

CARD_EXPIRE	
Description:	Expiration date for a credit card in MMY. This will be blank for an ACH.
Type:	Character (4)

VERSION 6

Following fields are returned along with fields in lower VERSIONS.

CUST_TOKEN	
Description:	The Customer Token that may be used in the future to reuse this customer's payment information.

VERSION 7

Following fields are returned along with fields in lower VERSIONS.

EMV	
Description:	A hash value that contains information, such as emv_serial number, emv_version and emv_data in the form of key-value pair.

EMV_APPLICATION	
Description:	The EMV Application ID, also known as AID, to be printed on the EMV receipt. This field displays in the output only when EMV data is in provided in the transaction request.

EMV_APPNAME	
Description:	The EMV Application Name to be printed on the EMV receipt. This field displays in the output only when EMV data is provided in the transaction request.

VERSION 8

Following fields are returned along with fields in lower VERSIONS.

TOKEN_TRANSARMOR	
Description:	<p>TransArmor token that is generated for the credit card transaction and is used in this transaction. This field displays only when the following parameters are set in the request:</p> <ul style="list-style-type: none"> F_TRANSARMOR must set to '2' TRANS_TYPE must either be AUTH or SALE

VERSION 9

Following fields are returned along with fields in lower RESPONSEVERSIONS.

STORED_ID	
Description:	<ul style="list-style-type: none"> The transaction identifier generated after passing the STORED_INDICATOR flag as 'F' to store the customer's payment information. This value should be stored by the merchant and must be included in the STORED_ID input field for any subsequent stored credential transactions, that is when STORED_INDICATOR = 'S'.

VERSION 10

The following fields are returned along with fields in lower VERSIONS.

ACH_SAME_DAY_FUNDING	
Description:	The flag value (0 or 1) received in the transaction request that controls same-day funding.'

ACH_NOC_ID	
Description:	A 12-digit Notification of Change (NOC) ID generated and displayed when a transaction is processed using the corrected details received in the ACH NOC. If there is no ACH_NOC_ID value then no Notice Of Change information was used.

VALIDATION_RESULT	
Description:	Status value that includes bank account validation results.

VALIDATION_RESULT	
Possible Value:	<ul style="list-style-type: none"> '15': Known bad bank account. The transaction is immediately declined (validation fee charged for LIVE) '20': Unknown bank account but with a valid format (validation fee charged for LIVE transactions) '25': bank account (validation fee charged for LIVE transactions) '35': Bank account found but pending transaction settlement (validation fee charged for LIVE transactions) '45': Known good bank account (validation fee charged for LIVE transactions) <ul style="list-style-type: none"> 'B': Account validation bypassed (no validation fee charged) 'R': Bank Account received was known bad previously (no validation fee charged) 'E': Error, Bank account validation failed (no validation fee charged) null: Account validation not performed (no validation fee charged)
 See ACH_DESCRIPTION in the Input section for method to trigger specific results on MODE=TEST transactions.	

VERSION 11

The following fields are returned along with fields in lower VERSIONs.

REB_IS_CREDIT	
Description:	Flag value that indicates whether the rebill transaction is SALE or CREDIT.
Possible Value:	<ul style="list-style-type: none"> 1: For CREDIT 0: For SALE

OUTPUT FORMAT

Output HTTP status code is 200 for a successfully processed transaction, whether it was declined or approved. Output HTTP status code is 400 for an error transaction.

The number and ordering of output fields may change. Do not rely on either to be the same or your code may break in a future update.

TAMPER_PROOF_SEAL & BP_STAMP

BluePay uses cryptographic hash (or "digest") functions as a means of both protecting transaction data from being altered and ensuring that the transaction is genuine. A cryptographic hash function is an algorithm that maps data of any size to a bit string of a fixed size that cannot be deciphered.

All merchants have a default hash type assigned to their account. This can be viewed and updated on the merchant's Account Admin page of BluePay's Gateway (<https://secure.bluepay.com>) under "Hash Type in APIs". Merchants may override their default by including the [TPS_HASH_TYPE](#) field in the transaction request.

TPS_HASH_TYPE

The default hash type and the TPS_HASH_TYPE may be any of the following algorithms (in hexadecimal form):

Hash Type	Description	# of Hexadecimal Characters in Result
MD5	Use md5sum or a similar program to calculate a 128-bit hash, then convert it into hexadecimal form; result is 32 hexadecimal characters.	32
SHA256	Use sha256sum or a similar program to calculate a 256-bit hash, then convert it into hexadecimal form; result is 64 hexadecimal characters.	64
SHA512	Use sha512sum or a similar program to calculate a 512-bit hash, then convert it into hexadecimal form; result is 128 hexadecimal characters.	128
HMAC_SHA256	A 128-bit hash, resulting in a sequence of 64 hexadecimal characters.	64
HMAC_SHA512	A 128-bit hash, resulting in a sequence of 128 hexadecimal characters included.	128

Steps to find the HMAC of either SHA256 (HMAC_SHA256) or SHA512 (HMAC_SHA512):

1. Compare the length of the key (the merchant's Secret Key) to the hash's input blocksize. SHA256 blocksize = 64, SHA512 blocksize = 128.
 - If length of key is > blocksize, set the key's value to the hash of the original key.
 - If length of key is < blocksize, pad the key to the right with zeros until its length equals the blocksize.
2. Create the inner key (inner_key):
 - Create an inner padding value of 0x36 repeated the blocksize number of times.
 - Perform a bitwise exclusive-OR (XOR) on the key and the inner padding to create the inner key.
3. Create the outer key (outer_key):
 - Create an outer padding value of 0x5c repeated the blocksize number of times.
 - Perform a bitwise exclusive-OR (XOR) on the key and the outer padding to create the outer key.
4. Calculate the hash of the inner key concatenated with the text string, then calculate the hash of the outer key concatenated with the previous hash result: hash (outer_key + hash (inner_key + string))
5. Convert the result into a hex string.

When using a program or function to calculate the TAMPER_PROOF_SEAL and BP_STAMP, make sure that it will accept a text string (or "message") argument and will return the hashed string (or "message digest") in hexadecimal form.

Calculating the BP_STAMP

STEP 1: Concatenate the BP_STAMP_DEF Value

Concatenate the values of the fields that make up the BP_STAMP_DEF in same order that they are listed. Use "" (empty string - no space) as the value for any fields that are empty or unsent. When no

BP_STAMP_DEF is sent ('+' represents string concatenation, and the field names represent the contents of the respective fields).

message	= TRANS_ID + ISSUE_DATE + STATUS
---------	----------------------------------

STEP 2: Perform the BP_STAMP

Calculate the expected BP_STAMP and compare that value to the BP_STAMP in the response to verify that the response is genuine. The hash type used is the same algorithm that the merchant used to calculate the TAMPER_PROOF_SEAL (the TPS_HASH_TYPE provided in the response from BluePay)

- If TPS_HASH_TYPE is 'MD5', 'SHA256', or 'SHA512', find the md5sum, sha256sum, or sha512sum of (the merchant's Secret Key + message) in hex format.
- If TPS_HASH_TYPE is 'HMAC_SHA256' or 'HMAC_SHA512', find the HMAC_SHA256 or HMAC_SHA512 of (the merchant's Secret Key, message) in hex format.

Finally, the merchant should take the result and compare it to the value of BP_STAMP. If they match, the response is genuine. If they do not, the response has been tampered with somehow.

Example

Merchant B's account information is as follows:

Secret Key	= "abcdabcdabcdabcd"
Account ID	= "123412341234"
Hash Type in APIs (default hash type)	= "MD5"

If Merchant B sent the transaction described in the previous section and included their BP_STAMP_DEF set as "MASTER_ID REBID CARD_TYPE AVS MESSAGE", the transaction would include

BP_STAMP_DEF	= "MASTER_ID REBID CARD_TYPE AVS MESSAGE"
MERCHANT	= "123412341234"
Amount	= "10.00"
MODE	= "TEST"
VERSION	= "4"
TPS_HASH_TYPE	= (we'll look at 3 examples)

Merchant B's response post might include the following output fields:

MASTER_ID	= "987654321001"
AVS	= "M"
MESSAGE	= "Approved Sale"

BP_STAMP_DEF	= "MASTER_ID REBID CARD_TYPE AVS MESSAGE"
CARD_TYPE	= "AMEX"
TPS_HASH_TYPE	= ? (TPS_HASH_TYPE sent with transaction OR the merchant's default hash type)
BP_STAMP	= ? (this differs based on the TPS_HASH_TYPE used)

To calculate the BP_STAMP_DEF, Merchant would need to:

STEP 1: Concatenate the BP_STAMP_DEF Value

Concatenate the values in the BP_STAMP_DEF to create a message string. Remember, if the field isn't returned or if the value is undefined, use an empty string as that field's value.

message	= MASTER_ID + REBID + CARD_TYPE + AVS + MESSAGE = "987654321001" + "" + "AMEX" + "M" + "Approved Sale" = "987654321001AMEXMAApproved Sale"
---------	--

STEP 2: Calculate the BP_STAMP

Calculate the expected BP_STAMP and compare that value to the BP_STAMP in the response to verify that the response is genuine. This step will vary depending on which TPS_HASH_TYPE is included in the response.

- If TPS_HASH_TYPE = "" or wasn't sent in the transaction request, the response would include TPS_HASH_TYPE = "MD5" and BP_STAMP = "9cc17c0b8e1064dec7a91fccaeac6331"

TAMPER_PROOF_SEAL	= md5sum(Secret Key + message) in hex format = md5sum("abcdabcdabcdabcd" + "12341234123410.00TEST") in hex format = "91750725E668979C4B91E7303CB69CC0"
-------------------	---

Since the expected BP_STAMP matches the BP_STAMP from the response, the response is genuine.

- If TPS_HASH_TYPE = "SHA256" in the transaction request, the response would include TPS_HASH_TYPE = "SHA256" and BP_STAMP="1f6e33b2354a013ea3f4b4884cce1a7ad67c4ca18e800717b7c1887872dff7c7"

Expected BP_STAMP	= sha256sum(Secret Key + message) in hex format = sha256sum("abcdabcdabcdabcd" + "987654321001AMEXMAApproved Sale") in hex format = "1f6e33b2354a013ea3f4b4884cce1a7ad67c4ca18e800717b7c1887872dff7c7"
-------------------	--

Since the expected BP_STAMP matches the BP_STAMP from the response, the response is genuine.

- If TPS_HASH_TYPE = "HMAC_SHA256" in the transaction request, the response would include TPS_HASH_TYPE = "HMAC_SHA256" and BP_STAMP = "d20275b3123051ed682d4fe25238dfa58b9e6668ccef05f9696ef38cebd295a0"

Expected BP_STAMP	= HMAC_SHA256(Secret Key, message) in hex format = HMAC_SHA256("abcdabcdabcdabcd", "987654321001AMEXMAproved Sale") in hex format = "d20275b3123051ed682d4fe25238dfa58b9e6668ccef05f9696ef38cebd295a0"
-------------------	--

Since the expected BP_STAMP matches the BP_STAMP from the response, the response is genuine.

MICRO DEPOSITS

A Micro-Deposit is an ACH credit or debit entry used by a merchant for the purpose of verifying a customer's account or an individual's access to an account. ACCTVERIFY in the ACH_DESCRIPTION identifies the transaction is a Micro-Deposit.

Examples of Micro-Deposits credits and debits that are permitted:

- Example 1 -One credit Micro-Deposit of \$0.34 and one debit Micro-Deposit of \$0.19 (aggregate net credits are permitted)
- Example 2 -Two credit Micro-Deposits of \$0.18 and \$0.49; no debit offsets (multiple credit Micro-Deposits are permitted)
- Example 3 -Two credit Micro-Deposits of \$0.18 and \$0.49; and 1 offsetting debit Micro-Deposit of \$0.67 (aggregate Micro-Deposits net to zero)
- Example 4 -Two credit Micro-Deposits of \$0.37 and \$0.84; and 1 offsetting debit Micro-Deposit of \$1.21 (debit Micro-Deposits can be greater than \$1 to offset multiple credit Micro-Deposits)
- Example 5 -Two credit Micro-Deposits of \$0.52 and \$0.63; and 2 offsetting debit Micro-Deposit of \$0.71 and \$0.44 (multiple debit and credit Micro-Deposits that net to zero)
- Examples that are improper:
- Example 6 -One credit of \$1.08 (a credit that is \$1.00 or more)
- Example 7 -One credit of \$0.19 and 1 debit for \$0.34 (in aggregate, a net debit)
- Example 8 -One debit of \$0.34 (a debit that is not an offset of a credit)

Appendix I - Level 3 Measurement Units

Unit	Description
5B	Batch
ACT	Activity
ANN	Year
AU	Activity Unit
DAY	Day
DZN	Dozen
E49	Working Day
EA	Each
FOT	Foot
FTQ	Cubic Foot
GLL	Gallon
GRM	Gram
HUR	Hour
INH	Inch
KGM	Kilogram
KMT	Kilometer
LBR	Pound
LTR	Liter
MIN	Minute
MMT	Millimeter
MON	Month
MTQ	Cubic Meter
MTR	Meter
ONZ	Ounce
SEC	Second
SMI	Mile

Unit	Description
STN	Ton
TNE	Metric Ton
WEE	Week
XBG	Bag
XBX	Box
XCR	Crate
XCS	Case
XCT	Carton
XPK	Package
XPX	Pallet
XSX	Set
YRD	Yard

Appendix II - Vehicle Rental Vehicle Types

Code	Vehicle Type
01	Mini
02	Subcompact
03	Economy
04	Compact
05	Midsized
06	Intermediate
07	Standard
08	Full size
09	Luxury
10	Premium
11	Minivan
12	Van (12-passenger)
13	Van (moving)
14	Van (15-passenger)
15	Van (cargo)
16	Truck (12-foot)
17	Truck (20-foot)
18	Truck (24-foot)
19	Truck (26-foot)
20	Moped
21	Stretch
22	Regular
23	Unique
24	Exotic
25	Truck (small/medium)
26	Truck (large)

Code	Vehicle Type
27	SUV (small)
28	SUV (medium)
29	SUV (large)
30	SUV (exotic)
99	Miscellaneous

Appendix III - Credit Card Address Verification Service (AVS) Response Codes

AVS Code	Description
A	Partial match - Street Address matches, ZIP Code does not
B	International street address match, postal code not verified due to incompatible formats
C	International street address and postal code not verified due to incompatible formats
D	International street address and postal code match
E	Not a mail or phone order
F	Address and Postal Code match (UK only)
G	Service Not supported, non-US Issuer does not participate
I	Address information not verified for international transaction
M	Address and Postal Code match
N	No match - No Address or ZIP Code match
P	International postal code match, street address not verified due to incompatible format
Q	Bill to address did not pass edit checks/Card Association can't verify the authentication of an address
R	Retry - Issuer system unavailable, retry later
S	Service not supported
W	Partial match - ZIP Code matches, Street Address does not
U	Unavailable - Address information is unavailable for that account number, or the card issuer does not support
X	Exact match, 9-digit zip - Street Address, and 9-digit ZIP Code match
Y	Exact match, 5-digit zip - Street Address, and 5-digit ZIP Code match
Z	Partial match - 5-digit ZIP Code match only
1	Cardholder name matches
2	Cardholder name, billing address, and postal code match
3	Cardholder name and billing postal code match
4	Cardholder name and billing address match

AVS Code	Description
5	Cardholder name incorrect, billing address and postal code match
6	Cardholder name incorrect, billing postal code matches
7	Cardholder name incorrect, billing address matches
8	Cardholder name, billing address, and postal code are all incorrect

Appendix IV - BINDATA Values

BINDATA	Description
cardtype	
V	Visa
M	MasterCard
A	American Express
D	Discover
N	PIN Only (Non-Visa/MasterCard/Amex/Discover)
cardusage	
A	Unknown
C	Credit Hybrid (meaning it has pin capability also)
D	Unknown
E	PIN Only Debit with Electronic Benefit Transfer
H	Debit Hybrid (PIN and Signature)
J	USA Commercial Debit, Signature Only, No PIN Access
K	USA Commercial Debit, PIN Capable
L	Non USA Consumer Debit, No PIN Access
M	Non USA Commercial Debit, No PIN Access
N	Non USA Consumer Debit, PIN Capable
O	Non USA Commercial Debit, PIN Capable
P	PIN Only Debit without Electronic Benefit Transfer
R	Private Label Credit (MasterCard)
S	Signature only Debit, No PIN Access
T	Unknown
U	Reloadable Prepaid - Amex only (obsolete)
V	Stored Value Prepaid - Amex only (obsolete)
X	True credit, No PIN/Signature capability
networks	

BINDATA	Description
A5	PAVD FISERV
01	SHAZAM
02	NYCE
03	PULSE
05	STAR-WEST
07	STAR-EAST
14	STAR NE
15	PAVD
16	CNB-ENID
17	ATH-SCOTIA BANK
18	ATH-DIRECT
19	INTERLINK
20	INTERAC EVERLINK
21	EVERLINK INTERAC ICU
25	MAESTRO DIRECT
26	MCX
29	EBT ACS
30	MAESTRO STAR WEST
31	STAR WEST OPTION
33	JEANIE STAR WEST
34	JEANIE DIRECT
35	AFFN DIRECT
36	CU24-DIRECT
37	EBT TEAM OF TEXAS
39	EBT JPCHASE
41	SVS
42	EXXON
43	BASE 24/INTERAC

BINDATA	Description
46	CU24-FIDELITY
47	EBT EFUNDS
48	AFFN FIDELITY
49	EBT NORTHRUP GRUMMAN
51	CU24-FISERV
52	AFFN FISERV
56	STAR-EAST FISERV
57	PULSE FISERV
59	NYCE FISERV
62	STAR-WEST FISERV
63	STAR NE FISERV
64	MAESTRO FISERV
65	INTERLINK FISERV
67	EBT-FISERV
68	ACCEL FISERV
69	OPTION-FISERV
A	PINLESS POS
B	PINNED POS, PINLESS BILLPAY
C	PINLESS BILLPAY, PINLESS POS
D	PINNED POS, PINLESS POS
E	PINNED POS, PINLESS BILLPAY, PINLESS POS
L	PINLESS BILLPAY
P	PINNED POS
ebt	Electronic Benefit Transfer State
fsa	Flexible Spending Account
issbin	Unused
processbin	Unused
ica	Unused

BINDATA	Description
prepaid	
Not Present	Not a Prepaid Card
P	Prepaid Card
prodid	
A	Visa Traditional
B	Visa Traditional Rewards
C	Visa Signature
D	Visa Signature Preferred
E	Visa Proprietary ATM
F	Visa Classic
G	Visa Business
G1	Visa Signature Business (non-US)
G1	Visa Business Tier 3 (US)
G3	Visa Business Enhanced (non-US)
G3	Visa Business Tier 2 (US)
G4	Visa Infinite Business (non-US)
G4	Visa Business Tier 4 (US)
G5	Visa Business Rewards
I^	Visa Infinite
I1	Visa Infinite Privilege
I2	Visa Ultra High Net Worth
J3	Visa Healthcare
K^	Visa Corporate T&E
K1	Visa GSA Corporate T&E (US)?Visa Government Corporate T&E (global)
L^	Visa Electron
N^	Visa Platinum
N1	Visa Rewards
N2	Visa Select

BINDATA	Description
P^	Visa Gold
Q^	Visa Private Label
Q2	Visa Private Label Basic
Q3	Visa Private Label Standard
Q4	Visa Private Label Enhanced
Q5	Visa Private Label Specialized
Q6	Visa Private Label Premium
R^	Visa Proprietary
S^	Visa Purchasing
S1	Visa Purchasing with Fleet
S2	Visa GSA Purchasing (US)?Visa Government Purchasing (Global)
S3	Visa GSA Purchasing with Fleet (US)?Visa Government Purchasing With Fleet (global)
S4	Visa Government Services Loan
S5	Visa Commercial Transport (EBT)
S6	Visa Business Loan
U^	Visa Travel Money
V^	Visa V Pay
BPD	MasterCard Business Premium Debit
DAG	MasterCard Gold Debit MasterCard Salary
DAP	MasterCard Platinum Debit MasterCard Salary
DAS	MasterCard Standard Debit MasterCard Salary
DLG	MasterCard Gold Delayed Debit
DLH	MasterCard World Embossed Delayed Debit
DLP	MasterCard Platinum Delayed Debit
DLS	MasterCard Card Delayed Debit
DOS	MasterCard Standard Debit Social
MAB	MasterCard World Elite for Business
MAC	MasterCard World Elite Corporate Card

BINDATA	Description
MAP	MasterCard MAP Commercial Payments Account
MAQ	MasterCard Prepaid Commercial Payments Account
MBB	MasterCard Prepaid Consumer
MBC	MasterCard Prepaid Voucher
MBD	MasterCard Professional Debit BusinessCard Card
MBE	MasterCard Electronic Business Card
MBF	MasterCard Prepaid Food
MBK	MasterCard Black Card
MBM	MasterCard Prepaid Meal
MBP	MasterCard Corporate Prepaid
MBS	MasterCard B2B Product
MBT	MasterCard Corporate Prepaid Travel
MBW	MasterCard World MasterCard Black Edition Debit
MCB	MasterCard Business Card
MCC	MasterCard Credit Card (Mixed BIN)
MCD	MasterCard Debit Card
MCE	MasterCard Electronic Card
MCF	MasterCard Fleet Card
MCG	MasterCard Gold Card
MCH	MasterCard Premium Charge
MCO	MasterCard Corporate Card
MCP	MasterCard Purchasing Card
MCS	MasterCard Standard Card
MCT	MasterCard Titanium Card
MCV	MasterCard Merchant-Branded Program
MCW	MasterCard World Card
MDB	MasterCard Business Debit Card
MDG	MasterCard Gold Debit Card

BINDATA	Description
MDH	MasterCard Other Embossed Debit Card
MDJ	MasterCard Debit Enhanced
MDL	MasterCard Business Debit Other Embossed
MDO	MasterCard Debit Other
MDP	MasterCard Platinum Debit Card
MDR	MasterCard Debit Brokerage 1
MDS	MasterCard Debit Card
MDT	MasterCard Commercial Debit Card
MDW	MasterCard World Black Debit (LAC region excluding Mexico)
MEB	MasterCard Executive Business Card
MEC	MasterCard Electronic Commercial
MEF	MasterCard Electronic Payment Account
MEO	MasterCard Corporate Executive Card
MFB	MasterCard Flex World Elite
MFD	MasterCard Flex Platinum
MFE	MasterCard Flex Charge World Elite
MFH	MasterCard Flex World
MFL	MasterCard Flex Charge Platinum
MFW	MasterCard Flex Charge World
MGF	MasterCard Government Commercial Card
MHA	MasterCard Healthcare Prepaid Non-Tax
MHB	MasterCard HSA Substantiated
MHD	MasterCard HELOC Debit Standard
MHH	MasterCard HSA Non-Substantiated
MHK	MasterCard Magna Health Access Card
MHL	MasterCard HELOC Debit Gold
MHM	MasterCard HELOC Debit Platinum
MHN	MasterCard HELOC Debit Premium

BINDATA	Description
MIA	MasterCard Prepaid Unembossed Student Card
MIP	MasterCard Prepaid Student Card
MIU	MasterCard Debit Unembossed (Non-US)
MLA	MasterCard Central Travel Solutions Air Card
MLB	MasterCard Brazil Benefit for Home Improvement
MLD	MasterCard Distribution Card
MLE	MasterCard Brazil General Benefits
MLF	MasterCard Agro
MLL	MasterCard Central Travel Solutions Land Card
MNF	MasterCard Public Sector Commercial Card
MNW	MasterCard World Card
MOC	MasterCard Standard Maestro Social
MOG	MasterCard Maestro Gold Card
MOP	MasterCard Maestro Platinum
MOW	MasterCard World Maestro
MPA	MasterCard Prepaid Debit Standard Payroll
MPB	MasterCard Preferred Business Card
MPF	MasterCard Prepaid Debit Standard Gift
MPG	MasterCard Debit Standard Prepaid General Spend
MPH	MasterCard Cash
MPJ	MasterCard Prepaid Debit Voucher Meal/Food Card
MPK	MasterCard Prepaid Government Commercial Card
MPL	MasterCard Platinum Card
MPM	MasterCard Prepaid Debit Standard Consumer Incentive
MPN	MasterCard Prepaid Debit Standard Insurance
MPO	MasterCard Prepaid Debit Standard Other
MPP	MasterCard Prepaid Card
MPR	MasterCard Prepaid Debit Standard Travel

BINDATA	Description
MPT	MasterCard Prepaid Debit Standard Teen
MPV	MasterCard Prepaid Debit Standard Government
MPW	MasterCard Debit Business Card Prepaid Workplace Business to Business
MPX	MasterCard Prepaid Debit Standard Flex Benefit
MPY	MasterCard Prepaid Debit Standard Employee Incentive
MPZ	MasterCard Prepaid Debit Standard Government Consumer
MRC	MasterCard Prepaid Electronic Card (Non-US)
MRF	MasterCard Standard Deferred
MRG	MasterCard Prepaid Card (Non-US)
MRH	MasterCard Platinum Prepaid Travel Card
MRJ	MasterCard Prepaid MasterCard Voucher Meal/Food Card
MRK	MasterCard Prepaid MasterCard Public Sector Commercial Card
MRO	MasterCard Rewards Only
MRL	MasterCard Prepaid Business Preferred
MRP	MasterCard Standard Retailer Centric Payments
MRW	MasterCard Prepaid Business Card (Non-US)
MSA	MasterCard Prepaid Maestro Payroll Card
MSB	MasterCard Maestro Small Business Card
MSF	MasterCard Prepaid Maestro Gift Card
MSG	MasterCard Prepaid Maestro Consumer Reloadable Card
MSI	MasterCard Maestro Card
MSJ	MasterCard Maestro Prepaid Voucher Meal and Food Card
MSM	MasterCard Maestro Prepaid Consumer Promotion Card
MSN	MasterCard Maestro Prepaid Insurance Card
MSO	MasterCard Maestro Prepaid Other Card
MSQ	MasterCard Reserved for future use
MSR	MasterCard Prepaid Maestro Travel Card
MST	MasterCard Prepaid Maestro Teen Card

BINDATA	Description
MSV	MasterCard Prepaid Maestro Government Benefit Card
MSW	MasterCard Prepaid Maestro Corporate Card
MSX	MasterCard Prepaid Maestro Flex Benefit Card
MSY	MasterCard Prepaid Maestro Employee Incentive Card
MSZ	MasterCard Prepaid Maestro Emergency Assistance Card
MTP	MasterCard World Domestic Affluent
MUW	MasterCard World Domestic Affluent
MWB	MasterCard World for Business Card
MWD	MasterCard World Deferred
MWE	MasterCard World Elite
MWO	MasterCard World Elite Corporate Card
MWR	MasterCard World Retailer Centric Payments
OLB	MasterCard Maestro Small Business Delayed Debit
OLG	MasterCard Maestro Gold Delayed Debit
OLP	MasterCard Maestro Platinum Delayed Debit
OLS	MasterCard Maestro Delayed Debit
OLW	MasterCard World Maestro Delayed Debit
PMC	MasterCard Proprietary Credit Card (Sweden domestic)
PMD	MasterCard Proprietary Debit Card (Sweden domestic)
PSC	MasterCard Common Proprietary Swedish Credit Card
PSD	MasterCard Common Proprietary Swedish Debit Card
PVA	MasterCard Private Label A
PVB	MasterCard Private Label B
PVC	MasterCard Private Label C
PVD	MasterCard Private Label D
PVE	MasterCard Private Label E
PVF	MasterCard Private Label F
PVG	MasterCard Private Label G

BINDATA	Description
PVH	MasterCard Private Label H
PVI	MasterCard Private Label I
PVJ	MasterCard Private Label J
PVL	MasterCard Private Label L
SAG	MasterCard Gold Salary Immediate Debit
SAL	MasterCard Standard Maestro Salary
SAP	MasterCard Platinum Salary Immediate Debit
SAS	MasterCard Standard Salary Immediate Debit
SOS	MasterCard Standard Social Immediate Debit
SUR	MasterCard Prepaid Unembossed Card (Non-US)
TBE	MasterCard Electronic Business Immediate Debit
TCB	MasterCard Corporate Executive Business Card Immediate Debit
TCC	MasterCard (mixed BIN) Immediate Debit
TCE	MasterCard Electronic Immediate Debit
TCF	MasterCard Fleet Card Immediate Debit
TCG	MasterCard Gold Card Immediate Debit
TCO	MasterCard Corporate Immediate Debit
TCP	MasterCard Purchasing Card Immediate Debit
TCS	MasterCard Standard Card Immediate Debit
TCW	MasterCard World Signia Card Immediate Debit
TEB	MasterCard Executive BusinessCard Card
TEC	MasterCard Electronic Commercial Immediate Debit
TEO	MasterCard Corporate Executive Card Immediate Debit
TNF	MasterCard Public Sector Commercial Card Immediate Debit
TNW	MasterCard New World Immediate Debit
TPB	MasterCard Preferred Business Card Immediate Debit
TPL	MasterCard Platinum Immediate Debit
TWB	MasterCard World Black Edition Immediate Debi

BINDATA	Description
WBE	MasterCard World Black Edition
regulated	
B	ISS Regulated Issuer
N	ISS Non-Regulated Issuer or Non-US Issued Card
1	ISS Regulated Issuer with fraud
subtype	
AC	Brazil Agriculture Maintenance Account/Custeio
AE	Brazil Agriculture Debit Account/Electron
AG	Brazil Agriculture
AI	Brazil Agriculture Investment Loan/Investimento
CG	Brazil Cargo
CS	Construction
DS	Distribution
HC	Healthcare
LP	Visa large-Purchase Advantage
MA	Visa Mobile Agent
MB	Interoperable Mobile Branchless Banking
MG	Visa Mobile General
VA	Brazil Food or Supermarket
VF	Brazil Fuel / Flex Visa Vale
VR	Brazil Food or Restaurant
largeticket	
L	Visa Large Ticket
Space	Not Visa Large Ticket
acctlylproc	
Y	Account Level Processing
Space	No Account Level Processing
N	Not applicable for BIN

BINDATA	Description
Acctfunsrc (Account Fund Source)	
C	Credit
D	Debit
P	Prepaid
H	Charge
R	Deferred Debit (Visa Only)
Space	Network Only

Revision History

Version	Revision Date	Reason for Change
1.1	April 2025	<ul style="list-style-type: none">Updated the layout format of the document