

Technical Specification

120-Byte Batch Processing Format Specification
Version 3.0.0 Revision 5.1
Addendum in Support of American Express
Rev. 1
March 31, 2011



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Version 3.0.0 Revision 5.1
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Rev. 1

March 31, 2011



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The following updates, additions, corrections have been incorporated in
120-Byte Batch Processing Format Specification Version 3.0.0 Revision 5.1
Addendum In Support of American Express

Page No(s)	Action	Description of Change
ii	Updated	Definition of Chip EMV to include reference to American Express Extension Record (EAX003)
Extension Records		
1	Updated	End of record notes in the American Express 1 Extension record (EAX001) to include information about restrictions for Canadian TAAs.
2	Updated	End of record notes in the American Express 2 Extension record (EAX002) to include information about restrictions for Canadian TAAs.
Product Records		
1-9	Updated	Various field level notes in Product Records: Chip EMV1 (PCP001) and Chip EMV2 (PCP002) to show that those fields are now required for American Express.
12	Updated	End of record note in the Entertainment/Ticketing Information 1 (PET001) record to add Canada.
13	Updated	End of record note in the Entertainment/Ticketing Information 2 (PET002) record to add Canada.
14	Updated	End of record note in the Insurance Information 1 (PIN001) record to add Canada.
15	Updated	End of record note in the Insurance Information 2 (PIN002) record to add Canada.
16	Updated	End of record note in the Lodging 1 (PLG001) record to include Canada.
17	Updated	End of record note in the Lodging 2 (PLG002) record to include Canada.
18-21	Added	New Product Record: Response Information (PRI001)
22	Updated	Retail Record (PRR001) to include a new note in the Terminal Identification field. Also updated sample.
"S" Record Output File		
23	Updated	AVS Response Code field to include a new note.
APPENDIX B: ADDRESS VERIFICATION		
24-28	Updated	Appendix to rename certain sections and reorganize sections for better comprehension. These changes include: <ul style="list-style-type: none"> • Switched the order of the Types of Address Records and JCB sections so that the Types of Address Records appears directly after the Introduction. • Renamed sections to create a Address Verification Exceptions section and a RevolutionCard Address Verification section
26-27	Updated	Appendix to include a new section on American Express Advanced Verification. This new section used the pre-existing sections of the Address Verification process that pertained to American Express.

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The following updates, additions, corrections have been incorporated in
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Addendum In Support of American Express

Page No(s)	Action	Description of Change
APPENDIX D: INTERNATIONAL PROCESSING		
34-40	Updated	Appendix to make the following changes: <ul style="list-style-type: none"> • Included a new paragraph in the Settlement Currencies section that explains the byte length difference within the Euro currency for American Express. • Also entered an asterisk (*) next to each currency that uses seven bytes for American Express. • Also added a new section called American Express - Euro - Byte Lengths to show which countries using the Euro use seven or nine bytes.
APPENDIX W: AMERICAN EXPRESS		
41-44	Updated	Appendix's Introduction, Card Acceptor Network (CAPN), and Legacy sections to include reference to Canadian support of American Express.

The following updates, additions, corrections have been incorporated in
120-Byte Batch Processing Format Specification Version 3.0.0 Revision 5.1
Addendum In Support of American Express

Definition of Chip EMV: EMV® is a global standard for credit and debit payment cards based on chip card technology. EMV chip-based payment cards, also known as smart cards, contain an embedded microprocessor, a type of small computer. The microprocessor chip contains the information needed to use the card for payment, and is protected by various security features.

Notes: This addendum is used for deposits of authorizations obtained outside of Chase Paymentech's Stratus platform. This product is only supported for American Express, MasterCard, and Visa. The MOP specific extended authorization data records must also be sent (EAX003, EVI001 or EMC001).

There are several types of machines used for EMV processing at the point of sale. Specific fields within the EMV product records may be required based on the type of machine. For further information, please contact your Chase Paymentech representative.

EMV data between card and device is generally in binary format, commonly referred to as BER-TLV (Basic Encoding Rules-Tag Length Value). It must be converted to ASCII format by the merchant prior to submitting to Chase Paymentech. Chase Paymentech does not require either the Tag or the Length of this data. In addition, to minimize file size, all data must be submitted in single byte ASCII, unless otherwise stated.

TECHNICAL SPECIFICATION 120-BYTE BATCH PROCESSING FORMAT SPECIFICATION

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RECORD LAYOUTS

Extension Record: American Express 1

1	2	3	4	5	6	7	8	12	
1234567890123456789012345678901234567890123456789012345678901234567890 . . . 0									
AAANNNAA									
EAX001XYZ COMPANY PRODUCT1					XYZ COMPANY PRODUCT2				↵

Position	Length	Data Type	Field Name	Comments
1	1	A	Extension Record Identifier	“E” Constant – Specifies this record as an extension record of the Chase Paymentech standard format.
2,3	2	A	Extension Record MOP Type	“AX” Constant
4,6	3	N	Extension Record Sequence Number	“001” Constant

Notes: This record can only be sent when MOP = AX or the transaction rejects with Response Reason Code 225 (Invalid Field Data).

Transaction Advice Addendum (TAA) fields are supported for U.S., Canada, and International. American Express restricts TAA fields for Canadian merchants. TAAs are only passed to American Express when Transaction Type = R. In addition, only the first 19 characters of each TAA field are sent to American Express. However, all 40 bytes of these fields are sent for international transactions.

The ship to postal code is required by American Express when sending this record. If the Ship To postal code is not sent with the transaction, the transaction division default postal code is used.

The ship to postal code can be sent in the Formatted Address Record: Ship To Address (HA), Address Record (AS), or Product Record: Procurement Level 2 and Line Item Level Data (PPC001).

RECORD LAYOUTS (Continued)

Extension Record: American Express 2

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890 . . . 0								
AAANNNAAA								
EAX002XYZ COMPANY PRODUCT3				XYZ COMPANY PRODUCT4				J

Position	Length	Data Type	Field Name	Comments
1	1	A	Extension Record Identifier	“E” Constant – Specifies this record as an extension record of the Chase Paymentech standard format.
2,3	2	A	Extension Record MOP Type	“AX” Constant
4,6	3	N	Extension Record Sequence Number	“002” Constant

Notes: This record can only be sent when MOP = AX or the transaction rejects with Response Reason Code 225 (Invalid Field Data).

Transaction Advice Addendum (TAA) fields are supported for U.S., Canada, and International. American Express restricts TAA fields for Canadian merchants. TAAs are only passed to American Express when Transaction Type = R. In addition, only the first 19 characters of each TAA field are sent to American Express. However, all 40 bytes of these fields are sent for international transactions.

The ship to postal code is required by American Express when sending this record. If the Ship To postal code is not sent with the transaction, the transaction division default postal code is used.

The ship to postal code can be sent in the Formatted Address Record: Ship To Address (HA), Address Record (AS), or Product Record: Procurement Level 2 and Line Item Level Data (PPC001).

RECORD LAYOUTS (Continued)

Product Record: Chip EMV 1, (Continued)

Notes: Send this record if the authorization was obtained from a source other than Chase Paymentech's Stratus platform.

If any of the required EMV fields are not sent, Chase Paymentech does not send any of the EMV data records.

If this record is sent when Transaction Type does not = R, the transaction rejects with Response Reason Code 253 (Invalid Transaction Type).

For EMV detail information, this record and Product Record: Chip EMV 2 (PCP002) must be sent or the transaction rejects with Response Reason Code 227 (Missing Companion Data).

This record and Product Record: Chip EMV 2 (PCP002) must be sent when either Product Record: Chip EMV 3 (PCP003) or Product Record: Chip EMV 4 (PCP004) is sent or the transaction rejects with Response Reason Code 227 (Missing Companion Data).

EMV data between card and device is generally in binary format, commonly referred to as BER-TLV (Basic Encoding Rules-Tag Length Value). It must be converted to ASCII format by the merchant prior to submitting to Chase Paymentech. Chase Paymentech does not require either the Tag or the Length of this data. In addition, to minimize file size, all data must be submitted in single byte ASCII, unless otherwise stated.

RECORD LAYOUTS (Continued)

Product Record: Entertainment/Ticketing Information 1

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890 . . . 0								
AAANNNAANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAAAAAAAAAAAAAAAAAAAAA								
PET001EVENT NAME 200707150000000037500002 ↵								

Position	Length	Data Type	Field Name	Comments
1	1	A	Product Record Identifier	“P” Constant – Specifies this record as a product record of the Chase Paymentech standard format.
2,3	2	A	Product Record Type	“ET” Constant
4,6	3	N	Product Record Sequence Number	“001” Constant

Note: This record can be sent for American Express (U.S. and Canada only) transactions.

RECORD LAYOUTS (Continued)

Product Record: Entertainment/Ticketing Information 2

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890 . . . 0								
AAANNNAANNNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA								
PET001EVENT CITY/VENUE NH 840 J								

Position	Length	Data Type	Field Name	Comments
1	1	A	Product Record Identifier	“P” Constant – Specifies this record as a product record of the Chase Paymentech standard format.
2,3	2	A	Product Record Type	“ET” Constant
4,6	3	N	Product Record Sequence Number	“002” Constant

Notes: This record can be sent for American Express (U.S. and Canada only) transactions.

This is an optional record. If sent, this record must immediately follow Product Record: Entertainment/Ticketing Information 1 (PET001) or the transaction rejects with Response Reason Code 227 (Missing Companion Data).

RECORD LAYOUTS (Continued)

Product Record: Insurance Information 1

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890 . . . 0								
AAANNNAAAAAAAAAAAAAAAAAAAAAAAAAANNNNNNNNNNNNNNNNNNNNAA								
PIN0011234-56-7890A			2007071520080715ANNUAL AUTO-COMPREHENSIVE			J		

Position	Length	Data Type	Field Name	Comments
1	1	A	Product Record Identifier	“P” Constant – Specifies this record as a product record of the Chase Paymentech standard format.
2,3	2	A	Product Record Type	“IN” Constant
4,6	3	N	Product Record Sequence Number	“001” Constant

Note: This record can be sent for American Express (U.S. and Canada only) transactions.

RECORD LAYOUTS (Continued)

Product Record: Insurance Information 2

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890 . . . 0								
AAANNNAA								
PIN002JOHN SMITH			1234-56-7890B			J		

Position	Length	Data Type	Field Name	Comments
1	1	A	Product Record Identifier	“P” Constant – Specifies this record as a product record of the Chase Paymentech standard format.
2,3	2	A	Product Record Type	“IN” Constant
4,6	3	N	Product Record Sequence Number	“002” Constant

Notes: This record can be sent for American Express (U.S. and Canada only) transactions.

This is an optional record. If sent, this record must immediately follow Product Record: Insurance Information 1 (PIN001), or the transaction rejects with Response Reason Code 227 (Missing Companion Data).

RECORD LAYOUTS (Continued)

Product Record: Lodging 1

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890 . . . 0								
AA								
PLG00105N07110107110645670000000009852123456				6038698000				J

Position	Length	Data Type	Field Name	Comments
1	1	A	Product Record Identifier	“P” Constant – Specifies this record as a product record of the Chase Paymentech standard format.
2,3	2	A	Product Record Type	“LG” Constant
4,6	3	N	Product Record Sequence Number	“001” Constant

Notes: This record can be sent for American Express (U.S. and Canada only), Discover, Discover Diners, JCB, MasterCard, and Visa (U.S. and Canada only) transactions.

For American Express, if both American Express Folio Number **and** Folio Number fields are populated, American Express Folio Number value is used.

RECORD LAYOUTS (Continued)

Product Record: Lodging 2

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890 . . . 0								
AAANNNAAAAAAAAAAAAAAAAAAAAAAAAAANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA								
PLG002JOHN SMITH								

Position	Length	Data Type	Field Name	Comments
1	1	A	Product Record Identifier	“P” Constant – Specifies this record as a product record of the Chase Paymentech standard format.
2,3	2	A	Product Record Type	“LG” Constant
4,6	3	N	Product Record Sequence Number	“002” Constant

Notes: This record can be sent for American Express (U.S. and Canada only) transactions. This is an optional record. If sent, this record must immediately follow the Product Record: Lodging 1 (PLG001), or the transaction rejects with Response Reason Code 227 (Missing Companion Data).

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RECORD LAYOUTS, (Continued)

Product Record: Response Information

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	. . . 0
AAANNNAAA								. . . A
PRI001Y NSRUY								J

Position	Length	Data Type	Field Name	Comments
1	1	A	Product Record Identifier	"P" Constant – Specifies this record as a product record of the Chase Paymentech standard format.
2,3	2	A	Product Record Type	"RI" Constant
4,6	3	N	Product Record Sequence Number	"001" Constant
7	1	A	Enhanced Verification Flag	<p>Flag that indicates the request and receipt of enhanced accountholder information.</p> <p>Valid values: Y – Enhanced verification requested. N – Enhanced verification is not requested.</p> <p>Notes: When this field = Y, this record is returned. When this field = N, this record is not returned.</p>
8,9	2	A	AVS Response Code	<p>Response for the Address Verification request.</p> <p>This field should be blank filled in the input file.</p> <p>This field is populated in the output file.</p> <p>Left justified/blank filled</p> <p>Notes: When MOP does not equal AX and the Enhanced Verification Flag = Y, this field is populated as well as the AVS Response Code field in the "S" Record Output.</p>

Continued on next page

RECORD LAYOUTS, (Continued)

Product Record: Response Information, (Continued)

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	. . . 0
AAANNNAAA								. . . A
PRI001Y NSRUY								J

Position	Length	Data Type	Field Name	Comments
			AVS Response Code, (Continued)	When MOP = AX, and the Enhanced Verification Flag = Y, this field is blank. When MOP = AX, and the Enhanced Verification Flag = Y, but the inbound address information does not pass Chase Paymentech edit checks, this field may be populated as well as the AVS Response Code field in the "S" Record Output. If this field is populated, the AVS Response Code field on the "S" Record Output is also populated.
10	1	A	Postal Code Verification Response	The Bill to Postal Code verification response. Valid values: <ul style="list-style-type: none"> N – Data does not match R – Retry S – Service not allowed U – Data unchecked Y – Data matches " " – Blank (Data not sent) Note: This field is currently only populated for American Express transactions.
11	1	A	Street Verification Response	The Bill to Street Address verification response. Valid values: <ul style="list-style-type: none"> N – Data does not match R – Retry S – Service not allowed U – Data unchecked Y – Data matches " " – Blank (Data not sent) Note: This field is currently only populated for American Express transactions.

Continued on next page

RECORD LAYOUTS, (Continued)

Product Record: Response Information, (Continued)

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	. . . 0
AAANNNAA								. . . A
PRI001Y NSRUY								J

Position	Length	Data Type	Field Name	Comments
12	1	A	Name Verification Response	<p>The Bill to Name verification response.</p> <p>Valid values:</p> <ul style="list-style-type: none"> N – Data does not match R – Retry S – Service not allowed U – Data unchecked Y – Data matches " " – Blank (Data not sent) <p>Note: This field is currently only populated for American Express transactions.</p>
13	1	A	Phone Verification Response	<p>The Bill to Phone verification response.</p> <p>Valid values:</p> <ul style="list-style-type: none"> N – Data does not match R – Retry S – Service not allowed U – Data unchecked Y – Data matches " " – Blank (Data not sent) <p>Note: This field is currently only populated for American Express transactions.</p>

Continued on next page

RECORD LAYOUTS, (Continued)

Product Record: Response Information, (Continued)

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	. . . 0
AAANNNAAA								. . . A
PRI001Y NSRUY								J

Position	Length	Data Type	Field Name	Comments
14	1	A	Email Verification Response	<p>The Bill to Email verification response.</p> <p>Valid values:</p> <ul style="list-style-type: none"> N – Data does not match R – Retry S – Service not allowed U – Data unchecked Y – Data matches " " – Blank (Data not sent) <p>Note: This field is currently only populated for American Express transactions.</p>
15,120	106	A	Reserved	Blanks

Note: This record is returned when the Enhanced Verification Flag = Y.

See *Appendix B: Address Verification*.

RECORD LAYOUTS (Continued)

Product Record: Retail

1	2	3	4	5	6	7	8	12
1234567890123456789012345678901234567890123456789012345678901234567890 . . . 0								
AAANNNAA								
PRR0019876543			29	1101273GW			J	

Position	Length	Data Type	Field Name	Comments
1	1	A	Product Record Identifier	“P” Constant – Specifies this record as a product record of the Chase Paymentech standard format.
2,3	2	A	Product Record Type	“RR” Constant
4,6	3	N	Product Record Sequence Number	“001” Constant
7,22	16	A	Terminal Identification	<p>Identifies a processing device associated to a Point of Sale transaction division. (Optional)</p> <p>Left justified/blank filled</p> <p>Notes: If this field does not contain data and the merchant is setup to use Chase Paymentech's detail reporting product, Chase Paymentech populates the report with a value of 9999999999999999.</p> <p>American Express highly recommends that merchants send this field for non-U.S. and non-Canadian transactions as it is used by the Issuer at authorization time.</p>

RECORD LAYOUTS (Continued)

“S” Record Output

1	2	3	4	5	6	7
123456789012345678901234567890123456789012345678901234567890123456789	123456789012345678901234567890123456789012345678901234567890123456789	123456789012345678901234567890123456789012345678901234567890123456789	123456789012345678901234567890123456789012345678901234567890123456789	123456789012345678901234567890123456789012345678901234567890123456789	123456789012345678901234567890123456789012345678901234567890123456789	123456789012345678901234567890123456789012345678901234567890123456789
ANNNNNNNNNNAAANNNNNNNNNNNNNNNNNNNNNNNNNNA						
S0000123456ABC123456789DEF DCVI4123456789012345 12060000000075758401001						

8	9	10	11	12
012345678901234567890123456789012345678901234567890	012345678901234567890123456789012345678901234567890	012345678901234567890123456789012345678901234567890	012345678901234567890123456789012345678901234567890	012345678901234567890123456789012345678901234567890
ANNNNNNAAAAAAAAAAAAAAAAANNAAAAAAAAAAAAAAAAAAAAAA				
031115654321 Y REC001 ↵				

Position	Length	Data Type	Field Name	Comments
1	1	A	Constant	“S” Constant. Specifies this record as a detail record of the Chase Paymentech standard format.
93,94	2	A	AVS Response Code	<p>Response to Address Verification request.</p> <p>Notes: When MOP = AX, and Enhanced Verification Flag = Y, located on the Product Record: Response Information (PRI001), this field is blank.</p> <p>However, if the inbound address information does not pass Chase Paymentech edit checks, this field may be populated.</p> <p>See <i>Appendix B: Address Verification</i> for more information.</p>

APPENDIX B: ADDRESS VERIFICATION

Introduction	<p>The American Express Automated Address Verification (AAV) and the Discover, Discover Diners, International Maestro, JCB, MasterCard, RevolutionCard, UK Domestic Maestro, and Visa Address Verification Service (AVS) are intended to reduce the fraudulent use of credit cards for mail, telephone, and other card not present transactions.</p> <p>International Address Verification is defined as the card Issuer and the merchant being from two different countries. For example, a card Issuer in the U.S. and a merchant in the UK, or a card Issuer in Canada and a merchant in the U.S.</p> <p>Domestic Address Verification is defined as the card Issuer and the merchant being from the same country. For example, both the card Issuer and the merchant are in Canada.</p>
Types of Address Records	<p>Chase Paymentech supports two types of batch address records. One is formatted the other is not formatted.</p> <p>The formatted address records are recommended for best AVS results.</p>
JCB	<p>When JCB is referenced in this appendix, it only applies to U.S. merchants processing USD currency.</p>

Continued on next page

APPENDIX B: ADDRESS VERIFICATION (Continued)

Address Verification Process

Each verification process is executed by comparing the transmitted billing address with the billing address data that is kept on file for the account holder. The Address Verification request is routed from the merchant through the Chase Paymentech system, directly to the specific credit card organization. The address information is then compared to the account holder billing address on file.

The result of the Address Verification comparison is included in the authorization response message returned to the merchant. The Address Verification response is reflected as a two-character code (e.g., I3 or ID). In the Chase Paymentech address format, merchants may transmit either the zip/postal code only or multiple lines of address information. Chase Paymentech recommends Country Code be sent.

If formatted address records are sent for American Express transactions, data validation is not performed and all address information is sent to American Express.

For all other MOPs, if the country code sent on the record is "US", "CA", "GB", or "UK", but the zip/postal code is not properly formatted for the specified country, Chase Paymentech returns AVS Response Code "N2."

If the country code is not sent on the record, the precedence for parsing the zip/postal code is:

1. Attempt a U.S. zip code format.
2. Attempt a Canadian postal code format.
3. Attempt a GB/UK postal code format.
4. Return AVS Response Code "N2".

The number in the street address and any numeric street name must be sent in numeric form. For example, 123 FIRST STREET should be sent as 123 1ST STREET and ONE MAIN STREET as 1 MAIN STREET. Any apartment number associated with the address should follow directly after the street address on the same line.

For multiple street address lines, the line immediately preceding city, state, and postal code is used. Suite and apartment numbers should be included on the street address line.

Continued on next page

APPENDIX B: ADDRESS VERIFICATION (Continued)

American Express Advanced Verification

Chase Paymentech supports advanced verification for American Express, which allows Chase Paymentech to receive verification responses for the following **Bill To** information:

- Name
- Street
- Postal Code
- Phone
- Email

To support full American Express AAV, the following records must be provided with online authorizations:

- "RI" – Request Information (sending this enables email and phone AAV)
- "LN" – Formatted Bill To Name
- "AB" – Bill To Address
- "HN" – Formatted Ship To Name
- "AS" – Ship To Address
- "AL" – Email Address (Address Subtype =B)

To support full American Express AAV, the following records must be provided with batch authorizations:

- "PRI" – Request Information (sending this enables email and phone AAV)
- "LN" – Formatted Bill To Name
- "LA" – Formatted Bill To Address
- "LT" – Formatted Bill To Telephone
- "HN" – Formatted Ship To Name
- "HA" – Formatted Ship To Address
- "HT" – Formatted Ship To Telephone
- "AL" – Address Record (with Address type of L and Address Subtype of B)

For American Express address verification, the street address, street name and telephone number fields cannot be populated with all zeros and/or slashes.

Continued on next page

APPENDIX B: ADDRESS VERIFICATION (Continued)

American Express Advanced Verification,
(Continued)

The Enhanced Verification Flag must = Y and the formatted address records must be sent to receive these additional responses in the Response Information Reply Format Indicator and/or Record.

Advanced Verification Response Code	Description	Comments
N	Data does not match	
R	Retry	American Express recommends retrying the verification process.
S	Service not allowed	The Issuer does not provide this AVS service.
U	Data unchecked	American Express did not validate data.
Y	Data matches	
Blank	Data not sent	The merchant did not send data or the data did not pass Chase Paymentech's edits.

Continued on next page

APPENDIX B: ADDRESS VERIFICATION (Continued)

Address Verification Exceptions

For **MasterCard and Visa**, MCC's that do not require AVS include:

- Government (9211, 9222, 9399)
- School (8211, 8220, 8299)
- Utility (4900)
- Insurance (5960, 6300)
- Cable and Other Pay TV (4899)
- Healthcare (4119, 5975, 5976, 7277, 8011, 8021, 8031, 8041, 8042, 8043, 8049, 8050, 8062, 8071, 8099)

AVS is not required for Bill Payment transactions unless Transaction Type = 5, 6, or 7.

RevolutionCard Address Verification

For **RevolutionCard**:

It is highly recommended that the merchant send in AVS information. Revolution Money checks the ship to address against the billing address that is on file for fraud protection purposes.

For RevolutionCard – Card Not Present transactions, when Action Code = VF, street address and postal code must be sent or the transaction rejects with Response Reason Code 227 (Missing Companion Data).

Restricted Cards:

Restricted cards are RevolutionCard account numbers that can be used immediately once they are approved, but can only be used for online purchases at the merchant where the customer applied for the RevolutionCard. Once the customer receives a physical card and activates it, the account is no longer restricted and can be used at any merchant that accepts RevolutionCard.

APPENDIX B: ADDRESS VERIFICATION (Continued)

AVS Response Codes	Response	Explanation
	N1	No address given with order.
	N2	Bill-to address did not pass Chase Paymentech's edit checks (e.g., may be foreign).
	" "	AVS not performed (Blanks returned).
	IG	AVS not performed by International Issuer. Address information unavailable for the account number (i.e. gift card), the card Issuer does not support AVS, or card Issuer declined authorization and did not perform AVS.
	IU	AVS not performed by Domestic Issuer. Address information unavailable for the account number (i.e. gift card), the card Issuer does not support AVS, or card Issuer declined authorization and did not perform AVS.
	ID	Issuer does not participate in AVS.
	IE	Edit Error – AVS data is invalid.
	IS	System unavailable or time-out.
	IA	International street address and postal code match (International Only).
	IB	Street address match. Postal code not verified due to incompatible formats (both were sent).
	IC	Street address and postal code not verified due to incompatible format (both were sent).
	IP	Postal code match. Street address not verified due to incompatible formats (both were sent).
	A1	Accountholder name matches.
	A3	Accountholder name, billing address and postal code match.
	A4	Accountholder name and billing postal code match.
	A7	Accountholder name and billing address match.
	B3	Accountholder name incorrect, billing address and postal code match.
	B4	Accountholder name incorrect, billing postal code matches.
	B7	Accountholder name incorrect, billing address matches.
	B8	Accountholder name, billing address and postal code are all incorrect.
	R3	Restricted – Accountholder locale and postal code match.
	R8	Restricted – Accountholder locale and/or postal code do not match.

Continued on next page

APPENDIX B: ADDRESS VERIFICATION (Continued)

**AVS
Response
Codes,
(Continued)**

	Zip/Postal	Plus-4	Locale
I1	Match	Match	Match
I2	Match	Match	No Match
I3	Match	No Match	Match
I4	Match	No Match	No Match
I5	No Match	Match	Match
I6	No Match	Match	No Match
I7	No Match	No Match	Match
I8	No Match	No Match	No Match

Notes: A1-B8 are only returned for American Express transactions that use formatted address information.

R3 and R8 are only returned for RevolutionCard transactions.

Shaded codes in the preceding AVS Response Codes table are not provided by Visa. Visa does not distinguish between Zip and Zip+4.

**AVS
Response
Key**

Item	Definition
ZIP/Postal	Zip/Postal code
Plus-4	4 digit portion of a 9-digit U.S. zip code
Locale	Street address, PO Box, or other local delivery destination
A, B, I, R	Responses from the Issuer or Network
N	Responses from Chase Paymentech
Match	Information presented in the record field matches the information stored on the card Issuer's file
No Match	Information presented in the record field does not match the information stored on the card Issuer's file.

Continued on next page

APPENDIX B: ADDRESS VERIFICATION (Continued)

Postal Code Format	U.S. Postal Code Format	Canadian Postal Code Format	United Kingdom Postal Code Format
	NNNNN NNNNN–NNNN	ANA NAN ANANAN	AN NAA ANA NAA ANN NAA AAN NAA AANN NAA AANA NAA

N = Numeric
A = Alpha

- Notes:** U.S. issued cards Address Verification is supported by:
American Express, Discover, Discover Diners, JCB, MasterCard, RevolutionCard, and Visa.
- Canadian issued cards Address Verification is supported by:
American Express, MasterCard, and Visa.
- United Kingdom (UK/GB) issued cards Address Verification is supported by:
American Express, International Maestro, MasterCard, UK Domestic Maestro, and Visa.
- International issued cards Address Verification is supported by:
American Express when using formatted address records.

APPENDIX D: INTERNATIONAL PROCESSING

Introduction	<p>Chase Paymentech supports two types of international processing.</p> <p>Multi-currency processing allows a merchant to collect payments from customers and receive settlement proceeds in the same currency.</p> <p>Cross-currency processing allows a merchant to collect payments from customers in one currency and receive settlement proceeds in a different currency.</p>
Contractual Agreement	<p>The merchant is required to establish a separate contractual agreement with Chase Paymentech. Contractual agreements vary by country.</p>
Transaction Division Numbers	<p>Chase Paymentech assigns a unique transaction division number to process each international currency. A single transaction division number can support different transaction types and methods of payment in the same currency.</p>
Zero Decimal Currency Example	<p>Certain international currencies have zero decimals.</p> <p>Since the amount field is two decimal implied:</p> <ul style="list-style-type: none">– to represent one Japanese Yen, (1=000000000100)– to represent one hundred Japanese Yen, (100=000000010000)

Continued on next page

APPENDIX D: INTERNATIONAL PROCESSING (Continued)

Multi-Currency Processing

Multi-currency processing allows a merchant to collect payments from customers and receive settlement proceeds in the same currency. This product is ideally suited for multi-national enterprises, or companies that have foreign currency requirements, desire to in-source foreign exchange management, or have foreign operations/obligations to fund.

Example: Merchant A markets a product/service in Australian Dollars, bills the customer in Australian Dollars, and receives an Australian Dollar settlement from Chase Paymentech.

Presentment/Settlement Currencies	ISO Currency Code	Currency Decimals
Australian Dollar	036	2
British Pound	826	2
Canadian Dollar	124	2
Danish Krone	208	2
Euro	978	2
Hong Kong Dollar	344	2
Japanese Yen	392	0
New Zealand Dollar	554	2
Norwegian Krone	578	2
South African Rand	710	2
Swedish Krona	752	2
Swiss Franc	756	2
U.S. Dollar	840	2

Notes: Bold Presentment Currencies have test divisions available.

Continued on next page

APPENDIX D: INTERNATIONAL PROCESSING (Continued)

Cross-Currency Processing

Cross-currency processing allows a merchant to collect payments from customers in one currency and receive settlement proceeds in a different currency. This product is ideally suited for merchants who are only domiciled in a single country (primarily the USA) and need to consolidate foreign currency settlement.

Example: Merchant B markets a product/service in Australian Dollars, bills the customer in Australian Dollars, and receives a U.S. Dollar settlement from Chase Paymentech.

Presentment Currencies

The following chart lists all presentment currencies, ISO currency codes, and currency decimals.

For American Express, all currencies are nine bytes in length unless they have an asterisk (*). Currencies with an * are only seven bytes in length. The Euro can be either seven or nine bytes in length depending on the country. See the American Express - Euro - Byte Lengths section for details.

Note: Please contact your Chase Paymentech Representative for supported Methods of Payment and settlement currencies.

Presentment Currencies by Country	ISO Currency Codes	Currency Decimals
Algerian Dinar	012	2
Argentine Peso	032	2
Armenian Dram	051	2
Aruban Guilder*	533	2
Australian Dollar	036	2
Azerbaijani Manat*	944	2
Bahamian Dollar*	044	2
Bangladeshi Taka	050	2
Barbados Dollar*	052	2
Belarussian Ruble*	974	0
Belize Dollar*	084	2
Bermudian Dollar*	060	2
Bolivian Boliviano*	068	2
Botswana Pula*	072	2

Continued on next page

APPENDIX D: INTERNATIONAL PROCESSING (Continued)

**Presentment Currencies,
(Continued)**

Presentment Currencies by Country	ISO Currency Codes	Currency Decimals
Brazilian Real*	986	2
British Pound	826	2
Brunei Dollar	096	2
Bulgarian Lev	975	2
Burundi Franc*	108	0
CFA Franc BCEAO*	952	0
CFA Franc BEAC*	950	0
CFP Franc	953	0
Canadian Dollar	124	2
Cambodian Riel	116	2
Cape Verdi Escudo*	132	2
Cayman Islands Dollar*	136	2
Chilean Peso	152	2
Chinese Yuan Renminbi*	156	2
Colombian Peso	170	2
Comoro Franc*	174	0
Costa Rican Colon	188	2
Czech Koruna	203	2
Danish Krone	208	2
Djibouti Franc*	262	0
Dominican Peso	214	2
East Caribbean Dollar*	951	2
Egyptian Pound	818	2
El Salvador Colon	222	2
Estonian Kroon	233	2
Ethiopian Birr*	230	2
Euro	978	2

Continued on next page

APPENDIX D: INTERNATIONAL PROCESSING (Continued)

Presentment Currencies, (Continued)	Presentment Currencies by Country	ISO Currency Codes	Currency Decimals
	Falkland Islands Pound*	238	2
	Fiji Dollar*	242	2
	Gambian Dalasi*	270	2
	Georgian Lari	981	2
	Ghanaian Cedi*	288	2
	Gibraltar Pound	292	2
	Guatemala Quetzal	320	2
	Guinea Franc*	324	2
	Guinea-Bissau Peso*	624	2
	Guyanese Dollar*	328	2
	Haitian Gourde*	332	2
	Honduras Limpera	340	2
	Hong Kong Dollar*	344	2
	Hungarian Forint	348	2
	Iceland Krona	352	2
	Indian Rupee*	356	2
	Indonesian Rupiah	360	2
	Israeli New Shekel	376	2
	Jamaican Dollar*	388	2
	Japanese Yen*	392	0
	Kazakhstan Tenge	398	2
	Kenyan Shilling*	404	2
	Kyrgyzstan Som*	417	2
	Laos Kip*	418	0
	Latvian Lats	428	2
	Lebanese Pound	422	2
	Lithuanian Litas	440	2
	Macau Pataca	446	2

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APPENDIX D: INTERNATIONAL PROCESSING (Continued)

Presentment Currencies, (Continued)	Presentment Currencies by Country	ISO Currency Codes	Currency Decimals
	Malagasy Ariary	969	0
	Malawi Kwacha*	454	2
	Malaysian Ringgit	458	2
	Maldive Rufiyaa	462	2
	Mauritania Ouguiya	478	2
	Mauritius Rupee	480	2
	Mexican Peso*	484	2
	Moldovan Leu*	498	2
	Mongolia Tugrik	496	2
	Moroccan Dirham*	504	2
	Mozambique Metical*	943	2
	Namibia Dollar*	516	2
	Nepalese Rupee*	524	2
	Netherlands Antillean Guilder*	532	2
	New Guinea Kina*	598	2
	New Zealand Dollar*	554	2
	Nicaraguan Cordoba Oro	558	2
	Nigerian Naira*	566	2
	Norwegian Krone	578	2
	Pakistan Rupee	586	2
	Panamanian Balboa	590	2
	Paraguay Guarani	600	0
	Peruvian Nuevo Sol	604	2
	Philippines Peso	608	2

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APPENDIX D: INTERNATIONAL PROCESSING (Continued)

Presentment Currencies, (Continued)	Presentment Currencies by Country	ISO Currency Codes	Currency Decimals
	Polish Zloty	985	2
	Qatari Rial	634	2
	Romania Leu	946	2
	Russian Ruble	643	2
	Rwanda Franc*	646	0
	St. Helena Pound*	654	2
	Samoan Tala*	882	2
	Sao Tome & Principe Dobra*	678	2
	Saudi Riyal	682	2
	Seychelles Rupee*	690	2
	Sierra Leonean Leone*	694	2
	Singapore Dollar*	702	2
	Solomon Islands Dollar*	090	2
	Somali Shilling	706	2
	South African Rand	710	2
	South Korean Won	410	0
	Sri Lanka Rupee	144	2
	Swaziland Lilangeni*	748	2
	Swedish Krona	752	2
	Swiss Franc	756	2
	Taiwan Dollar (New)*	901	2
	Tanzanian Shilling	834	2
	Thai Baht*	764	2
	Tonga Pa'anga*	776	2
	Trinidad & Tobago Dollar*	780	2

Continued on next page

APPENDIX D: INTERNATIONAL PROCESSING (Continued)

Presentment Currencies, (Continued)	Presentment Currencies by Country	ISO Currency Codes	Currency Decimals
	Turkish Lira (New)	949	2
	Uganda Shilling*	800	2
	Ukrainian Hryvnia	980	2
	United Arab Emirates Dirham	784	2
	Uruguayan Peso	858	2
	U.S. Dollar	840	2
	Uzbekistan Sum*	860	2
	Vanuatu Vatu*	548	0
	Venezuelan Bolivar*	937	2
	Vietnamese Dong	704	2
	Yemeni Rial	886	2
	Zambia Kwacha*	894	2
	Zimbabwe Dollar*	716	2

Notes: Bold Presentment Currencies have test divisions available.

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APPENDIX D: INTERNATIONAL PROCESSING (Continued)

American Express - Euro - Byte Lengths

Seven Byte Euro Countries	Nine Bytes Euro Countries
American Samoa	Aland Islands
Ethiopia	Andorra
French Guiana	Austria
French Southern Territories	Belgium
Luxembourg	Croatia
Mayotte	Cyprus
St. Barthelemy	Finland
St. Martin	France
St. Pierre	Germany
Miquelon	Greece
	Guadaloupe
	Ireland
	Italy
	Malta
	Martinique
	Monaco
	Montenegro
	Netherlands
	Portugal
	Reunion
	San Marino
	Slovakia
	Slovenia
	Spain

APPENDIX W: AMERICAN EXPRESS

Introduction For merchants domiciled in the U.S. and Canada, processing U.S. and Canadian currency, Chase Paymentech supports American Express Card Acceptor Network (CAPN).

For merchants domiciled in Canada, processing in Canadian currency, Chase Paymentech supports American Express Card Acceptor Network (CAPN) and Transaction Advice Addendum (TAA) for retail transactions.

For merchants processing in other currencies, Chase Paymentech supports American Express Transaction Advice Addendum (TAA).

Card Acceptor Network (CAPN) For merchants domiciled in the U.S. and Canada, processing U.S. and Canadian currency, Chase Paymentech supports American Express Card Acceptor Network (CAPN). Merchants have the ability to send more detailed information for transactions processed by American Express. This allows for more detailed information to be reported by American Express on accountholder statements and reports provided by American Express.

For American Express CAPN transactions, see *Appendix T: Soft Merchant Information and Merchant Descriptor* for more information.

American Express requires extended authorization data at deposit time. For merchants that authorize with Chase Paymentech, the extended authorization data is stored at Chase Paymentech and is used at deposit time. For merchants who authorize elsewhere, Extension Record: American Express 3 (EAX003) must be sent at deposit time.

For American Express, Chase Paymentech supports Corporate Purchasing Solutions (CPS) Level 2 and enhanced Transaction Advice Addendum (TAA). This is not supported for Canadian transactions.

As part of CAPN, American Express has created new TAA records to allow for more detail to be passed on transactions sent to American Express with certain industry segments. The following records are used to support CAPN:

- Location Detail (Required for American Express Aggregator merchants) See *Appendix T: Soft Merchant Information and Merchant Descriptor* for more information.
 - Product Record: Soft Merchant Information 1 (PSM001)
 - Product Record: Soft Merchant Information 2 (PSM002)
- Industry Specific Detail
 - Lodging
 - Product Record: Lodging 1 (PLG001)
 - Product Record: Lodging 2 (PLG002)

Continued on next page

APPENDIX W: AMERICAN EXPRESS (Continued)

Card Acceptor Network (CAPN), (Continued)

- Insurance
 - Product Record: Insurance Information 1 (PIN001)
 - Product Record: Insurance Information 2 (PIN002)
- Entertainment/Ticketing
 - Product Record: Entertainment/Ticketing Information 1 (PET001)
 - Product Record: Entertainment/Ticketing Information 2 (PET002)
- Retail
 - Product Record: American Express Line Item Level Data Record #1 (PRA001)
 - Product Record: American Express Line Item Level Data Record #2 (PRA002)
 - Product Record: American Express Line Item Level Data Record #3 (PRA003)
- CPS Level 2 Detail (Not supported in Canada)
 - Product Record: American Express CPS Level 2 – Line Item Level Data (PP3)

Note: If this record is sent for Canadian American Express transactions, Chase Paymentech ignores it.

American Express has specific mandates in terms of what TAA records may be delivered at the time of deposit. Chase Paymentech does not allow multiple product records of the same product type and/or sequence number. For example, do not send two Product Records: Lodging 1 (PLG001) or the transaction rejects with Response Reason Code 204 (Other Error).

The following TAA record combinations can be sent to American Express:

- CPS Level 2 Detail
- Industry Specific Detail except Retail
- Location Detail

OR

- Industry Specific Detail for Retail
- Location Detail

If both CPS Level 2 Detail and Retail Information are sent, the Retail Information is **ignored**.

Only one industry specific product record type is sent to American Express. The merchant should only send one industry specific product record type that applies to the transaction division.

If any of the CAPN product records are sent for non-U.S. and non-Canadian currency transactions, they are ignored.

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APPENDIX W: AMERICAN EXPRESS (Continued)

Legacy	<p>For International and U.S. merchants, who do not wish to use the new Chase Paymentech product records, and Canadian merchants processing retail transactions, American Express allows the use of four Transaction Advice Addendum (TAA) records with each settlement item so that an American Express merchant has the ability to provide an American Express accountholder with additional detailed descriptive transaction information. Typically these four, forty byte fields are maintained within Chase Paymentech's merchant database at an American Express Service Establishment level and if present, are appended by Chase Paymentech to each settlement transaction submitted by a merchant. The implementation outlined in Extension Record: American Express 1 (EAX001) and Extension Record: American Express 2 (EAX002) allows a merchant to submit the four TAAs with each and every transaction. This allows a merchant flexibility at a transaction level rather than a Service Establishment level. If the TAAs are not submitted, Chase Paymentech utilizes the Transaction Division default values.</p> <p>For merchants domiciled in Canada, processing in Canadian currency, these TAA records can only be used for retail transactions. Only the first 19 characters of each TAA field are sent to American Express.</p> <p>The ship to postal code is required by American Express when sending these records. If ship to address is not sent, Chase Paymentech sends the Merchant's postal code to American Express.</p> <p>The ship to postal code can be sent in the Formatted Address Record: Ship To Address (HA), Address Record (AS), or Product Record: Procurement Level 2 and Line Item Level Data (PPC001).</p>
Additional References	<p><i>Appendix T: Soft Merchant Information and Merchant Descriptor</i> <i>Appendix V: Level 2 and Line Item Level Data</i></p>
Card Types / Supported Currencies	<p>U.S., Canada, and some international</p>
Authorization Response Codes	<p><i>Appendix A: Response Reason Code Description/Usage.</i></p>
To Get Started	<p>Contact your Chase Paymentech Representative.</p>

END OF THE TECHNICAL SPECIFICATION

120-Byte Batch Processing Version 3.0.0 Revision 5.1 Addendum In Support of American Express Rev. 1

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03/31/2011