



Welcome to V.I.P. System BASE I Technical Specifications, Volume 1

The *BASE I Technical Specifications* manual has been updated. It includes changes from June 2000 including biannual Business Enhancements and individual changes requested by Visa technical and service management personnel.

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V.I.P. System

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About This Manual

The *BASE I Technical Specifications* manual contains detailed technical specifications for the VisaNet Integrated Payment (V.I.P.) System, Visa's main transaction processing system. The V.I.P. System, often called simply V.I.P., is a major system component of the VisaNet network, which receives and processes cardholder transactions for Visa products and services, as well as for other proprietary cards.

Specifically, this manual documents the technical details of V.I.P. transaction processing in the BASE I System environment. The manual contains detailed specifications for BASE I message formats, field descriptions, codes, and files.

The manual is designed to be used with its companion, *V.I.P. System BASE I Processing Specifications*. This volume describes the BASE I System message field requirements and related codes.

Audience

This manual is intended for technical staff and managers and customer support personnel who help members solve system and production problems.

Organization of This Manual

The *V.I.P. System BASE I Technical Specifications* manual is organized as follows:

Chapter 1, Message Matching—This chapter provides an overview of the message matching concept, describes the types of transaction sets, and identifies the key data fields used in the matching process.

Chapter 2, Message Structure—This chapter contains VisaNet and ISO data field reference tables.

Chapter 3, Header Fields—This chapter specifies header field formats, describes header field contents and use, and gives the reject code that signifies invalid data in a particular header field.

Chapter 4, Data Field Descriptions—This chapter contains the data field descriptions for V.I.P. online messages.

Chapter 5, Message Charts—This chapter contains the BASE I message charts.

Appendix A, CPS Program Key Field Edit Criteria—This appendix contains Custom Payment Service (CPS) processing requirements.

Appendix B, CRS Reason Codes—This appendix contains Chargeback Reduction Service (CRS) reason codes.

Appendix C, File Maintenance Error Codes—This appendix lists error codes that are used by the system to describe errors in the content of file maintenance messages.

Appendix D, Reject Codes—This appendix lists reject codes that are used by the system to describe errors in message content.

Appendix E, GMT Conversion—Appendix E explains how to convert GMT (Greenwich mean time) to a local date and time.

Appendix F, Country and Currency Codes—This appendix contains the valid combined country and currency codes used for V.I.P. messages.

Appendix G, Batch File Maintenance—Batch file maintenance can be used to change a large number of records in the user-maintained files at the VIC.

Appendix H, Electronic Reporting—This appendix describes the various methods that are available to receive electronic report information for BASE I and POS (point of sale or point of service).

Document Conventions

[Table 1](#) shows the document conventions used in this manual.

Table 1: Document Conventions

Document Convention	Purpose in This Guide
ALL UPPERCASE LETTERS	Drive letters, subdirectory names, file names; also system names, statuses, modes, and states.
EXAMPLE	Identifies an example of what the accompanying text describes or explains.
IMPORTANT	Highlights important information in the text.
<i>italics</i>	Document titles; emphasis; variables.
"text in quote marks"	Section names referenced in a chapter.
NOTE:	Provides more information about the preceding topic.

VI.P. System Documentation Descriptions for Visa International

The first three manuals in this series, *V.I.P. System Overview*, *V.I.P. System Services*, and *V.I.P. System Reports*, apply to both BASE I and SMS processing.

The next two manuals are specific to the BASE I System: *BASE I Processing Specifications* and *BASE I Technical Specifications*.

For the Single Message System, the U.S. processing specifications for ATM, Interlink and POS have been consolidated in one manual, *V.I.P. System SMS Processing Specifications (U.S.)*. For the international audience, there are separate processing specifications for ATM, Interlink, and POS.

[Table 2](#) shows the description of V.I.P. System manuals.

Table 2: Description of V.I.P. System Manuals (1 of 4)

General Information	<p>V.I.P. System Overview</p> <p>Provides basic descriptions of the VisaNet network and its components, connections, processing concepts, requirements, and options. Contains descriptions of V.I.P., access methods, BASE I and Single Message Systems, issuer and acquirer responsibilities, and Visa Interchange Center operations. Also provides a brief introduction to V.I.P. services.</p> <p>Doc ID 0851-02</p>
	<p>V.I.P. System Reports, Volume 1</p> <p>Provides sample reports for V.I.P. System services, BASE I, and Single Message System processing.</p> <p>Doc ID 0852A-02</p>
	<p>V.I.P. System Reports, Volume 2</p> <p>Provides sample reports for V.I.P. System services, BASE I, and Single Message System processing.</p> <p>Doc ID 0852B-02</p>
	<p>V.I.P. System Services, Volume 1</p> <p>Provides complete information about V.I.P. System services available for BASE I and SMS users. Service descriptions include basic information, processing requirements, options, features, key message fields, and message flows.</p> <p>Volume 1 contains the following parts:</p> <p>Part 1: V.I.P. Basics</p> <p>Part 2: Routing Services</p> <p>Part 3: Risk Management Services</p> <p>Part 4: Visa Secure Electronic Commerce (VSEC) Services</p> <p>Part 5: Chip Card Services</p> <p>Doc ID 0853A-02</p>
	<p>V.I.P. System Services, Volume 2</p> <p>Provides complete information about V.I.P. System services available for BASE I and SMS users. Service descriptions include basic information, processing requirements, options, features, key message fields, and message flows.</p> <p>Volume 2 contains the following parts:</p> <p>Part 6: Authorization Database Files and Services</p> <p>Part 7: Authorization Services</p> <p>Doc ID 0853B-02</p>

Table 2: Description of V.I.P. System Manuals (2 of 4)

BASE I	V.I.P. System BASE I Processing Specifications Describes V.I.P. transaction processing in the BASE I System environment, including message types, processing considerations, security responsibilities, related services, and connection options. Doc ID 0847-02
	V.I.P. System BASE I Technical Specifications, Volume 1 Documents technical specifications of V.I.P. transaction processing in the BASE I System environment. This companion volume to the <i>V.I.P. System BASE I Processing Specifications</i> describes the fields for BASE I. Doc ID 0844A-02
	V.I.P. System BASE I Technical Specifications, Volume 2 Documents technical specifications of V.I.P. transaction processing in the BASE I System environment. This companion volume to the <i>V.I.P. System BASE I Processing Specifications</i> describes the message formats and file specifications for BASE I. Doc ID 0844B-02
Interlink	V.I.P. System SMS Processing Specifications (U.S.) Contains information about the Single Message System, including message types, processing considerations, connection options, security responsibilities, and related services for Visa/Plus ATM, Interlink, Visa POS, and Visa Electron. Doc ID 0857-02
	V.I.P. System SingleConnect Service SMS Interlink Processing Specifications Contains information about Interlink, including message types, processing considerations, connection options, security responsibilities, related services, and reports. Doc ID 0837-02
	V.I.P. System SMS Interlink Technical Specifications Companion volume to the <i>V.I.P. System SMS Processing Specifications (U.S.)</i> and the <i>V.I.P. System SingleConnect Service SMS Interlink Processing Specifications</i> . Describes message formats, field descriptions, and file specifications for Interlink. Doc ID 0866-01

Table 2: Description of V.I.P. System Manuals (3 of 4)

SMS ATM	V.I.P. System SMS Processing Specifications (U.S.) Contains information about the Single Message System, including message types, processing considerations, connection options, security responsibilities, and related services for Visa/Plus ATM, Interlink, Visa POS, and Visa Electron. Doc ID 0857-02
	V.I.P. System SingleConnect Service SMS ATM Processing Specifications Contains information about Single Message System ATM processing, including message types, processing considerations, connection options, security responsibilities, and related services. Doc ID 0839-02
	V.I.P. System SMS ATM Technical Specifications, Volume 1 Companion volume to the <i>V.I.P. System SMS Processing Specifications (U.S.)</i> and the <i>V.I.P. System SingleConnect Service SMS ATM Processing Specifications</i> . Contains information about field descriptions for ATM. Doc ID 0868A-01
	V.I.P. System SMS ATM Technical Specifications, Volume 2 Companion volume to the <i>V.I.P. System SMS Processing Specifications (U.S.)</i> and the <i>V.I.P. System SingleConnect Service SMS ATM Processing Specifications</i> . Contains information about message formats and file specifications for ATM. Doc ID 0868B-01

Table 2: Description of V.I.P. System Manuals (4 of 4)

SMS POS	V.I.P. System SMS Processing Specifications (U.S.) Contains information about the Single Message System, including message types, processing considerations, connection options, security responsibilities, and related services for Visa/Plus ATM, Interlink, Visa POS, and Visa Electron. Doc ID 0857-02
	V.I.P. System SingleConnect Service SMS POS (Visa & Visa Electron) Processing Specifications Contains information about Single Message System POS processing, including message types, processing considerations, connection options, security responsibilities, related services, and reports. Doc ID 0835-02
	V.I.P. System SMS POS (Visa & Visa Electron) Technical Specifications, Volume 1 Companion volume to the <i>V.I.P. System SMS Processing Specifications (U.S.)</i> and the <i>V.I.P. System SingleConnect Service SMS POS (Visa & Visa Electron) Processing Specifications</i> . Describes the fields for Visa POS and Visa Electron. Doc ID 0854A-02
	V.I.P. System SMS POS (Visa & Visa Electron) Technical Specifications, Volume 2 Companion volume to the <i>V.I.P. System SMS Processing Specifications (U.S.)</i> and the <i>V.I.P. System SingleConnect Service SMS POS (Visa & Visa Electron) Processing Specifications</i> . Describes message formats and file specifications for Visa POS and Visa Electron. Doc ID 0854B-02

Sources of Information for These Specifications

This section lists the primary sources for the information contained in these technical specifications. The information from those sources has been analyzed, rewritten, and reorganized, when necessary. Technical staff and service experts reviewed and verified these updates. In addition, this new manual incorporates all comments received from members and Visa staff, where appropriate.

Technical Letters

These technical specifications include information from the following technical letters:

April 1999 VisaNet Business Enhancements,
Publication DS-9810095, including Update Bulletins

June 2000 *VisaNet Business Enhancements, Technical Letter*;
Publication 4301-01, including Update Bulletins

October 2000 *VisaNet Business Enhancements, Technical Letter*;
Publication 4602-03, including Update Bulletins

April 2001 *VisaNet Business Enhancements, Technical Letter*;
Publication 4602-03, including Update Bulletins

October 2001 *VisaNet Business Enhancements, Technical Letter*;
Publication 80001-03, including Update Bulletins

April 2002 *VisaNet Business Enhancements, Technical Letter*;
Publication 80007-02, including Update Bulletins

Obtaining Report Samples

Visa offers a variety of reports to members. Many of these reports clarify and track service processing. The following documents provide report samples:

V.I.P. System Reports

VisaNet Settlement Service (VSS) Reference Guide, Volume 2, Reports

VisaNet Settlement Service (VSS) User's Guide, Volume 2, Reports

Members can contact their Visa representatives to discuss reporting options or to obtain additional samples.

For More Information

Visa provides documentation to support Visa products and services. For many of the services described in this manual, Visa has developed implementation guides that contain region-specific details about signing up for a service, selecting options, and installing, testing, and operating the service. Members can ask their Visa representatives for regional guides.

Related Publications

The publications listed in this section provide information about Visa systems, regulations, and additional services not covered in this manual. Use the following guide to receive any of the listed publications, to be added or removed from distribution lists, or to inquire about other publications:

- U.S. members and third-party processors can contact the Visa U.S.A. Member Publications department by sending an e-mail to puborder@visa.com.
- Members and third-party processors in all other Visa regions can contact their Visa representatives.

- U.S.-based Visa staff (except those in Miami) can send an e-mail request to Docline. Docline distributes VisaNet documentation and attempts to locate other publications distributed elsewhere within Visa.
- Visa staff located in Miami and outside of the U.S. can contact their regional representatives.

To inquire about VisaNet documentation or submit changes and additions, contact Technical Communication Services by sending an e-mail to buspubs@visa.com. Visa staff can send an e-mail directly to Business Publications.

Operating Regulations

Operating regulations for the six Visa regions are published in the following manuals:

Visa International Operating Regulations

The *Visa International Operating Regulations* consists of five volumes of operating regulations covering all Visa regions *except* the U.S. region, namely:

- Volume I—General Rules
- Volume II—Dispute Resolution Rules
- Volume III—Card and Marks Specifications
- Volume IV—Interlink Program Operating Regulations
- Volume V—Visa Cash Program Operating Regulations

The *Visa Regional Operating Regulations* refers to operating regulations for each of the Visa regions *except* the U.S. region, namely:

- Visa Regional Operating Regulations—Asia-Pacific
- Visa Regional Operating Regulations—Canada
- Visa Regional Operating Regulations—CEMEA (Central and Eastern Europe, Middle East and Africa)
- Visa Regional Operating Regulations—European Union (EU)
- Visa Regional Operating Regulations—Latin America and Caribbean

Visa U.S.A. Inc. Operating Regulations and By-Laws

The *Visa U.S.A. Inc. Operating Regulations* consists of two volumes of operating regulations for the U.S. region only:

- Volume I—General Rules
- Volume II—Dispute Resolution Rules

The U.S. region is also governed by the *Visa U.S.A. Inc. By-Laws*.

BackOffice Adjustment System (BOAS)—DOS Version

For information on BOAS, refer to:

BOAS Administration and Technical Guide

Using BOAS With the BASE II System

Using BOAS With the Single Message System

BackOffice Adjustment System (BOAS) OnLine

For information on BOAS OnLine, refer to:

BOAS OnLine Conversion Guide—Legacy Members

BOAS OnLine Member System Administrator's Guide

BOAS OnLine User's Guide

DCAF Service

For more information about DCAF, refer to *V.I.P. System Services*.

Risk Management Services

For more information on risk management services, refer to:

Card Recovery Bulletin Service User's Guide

Fraud Reporting System User's Manual

Issuer's Clearinghouse Service User's Guide

National Merchant Alert Service User's Guide

Risk Identification Service User's Manual

Risk Management Database User's Guide

Cardholder Risk Identification Service (CRIS):

For information about CRIS, CRIS OnLine, and CRIS NS OnLine and CRIS NS Scoring, refer to:

Cardholder Risk Identification Service User's Guide

CRIS OnLine Version 2.0 User's Guide

CRIS National Solution (CRIS NS) Hardware & System Software Specifications

CRIS National Solution (CRIS NS) OnLine Administrator's Guide

CRIS National Solution (CRIS NS) OnLine Installation and Systems Guide

CRIS National Solution (CRIS NS) OnLine Operator's Guide

CRIS National Solution (CRIS NS) Scoring Administrator's Guide

CRIS National Solution (CRIS NS) Scoring Installation and Systems Guide

CRIS National Solution (CRIS NS) Scoring Operator's Guide

Security

For information on data and system security, refer to the following documents:

Card Technology Standards Manual

Introduction to Cryptography and PIN Security

PIN Security Program: Auditor's Guide

PIN Security Requirements

Visa Image Exchange Workstation (VIEW)

For information about VIEW and VIEW OnLine, refer to:

Visa Image Exchange Workstation (VIEW) Administrator's Guide

Visa Image Exchange Workstation (VIEW) Installation Guide

Visa Image Exchange Workstation (VIEW) User's Guide

Visa Image Exchange Workstation (VIEW) OnLine Thick Client User's Guide

Visa Image Exchange Workstation (VIEW) OnLine Thick Client Member Implementation Guide

Visa Image Exchange Workstation (VIEW) OnLine Thin Client User's Guide

Visa Image Exchange Workstation (VIEW) OnLine Thin Client Member Implementation Guide

VisaNet Access Points (VAPs)

For information about VisaNet Access Points (VAPs), refer to appropriate sets of documentation listed below. The VAP Release 10.23 documentation is for PS/2 architecture; the VAP Release 11 documentation is for PCI and ISA architecture.

VAP Release 10.23 Documentation

VAP Computer-Based Training User's Guide

VAP Interface Specifications: BASE II and Other File Processing

VAP Interface Specifications: V.I.P. Processing

VAP Messages and Troubleshooting

VAP Operator's Guide

VAP Software Library

VAP Systems Guide

VAP Release 11 Documentation

VAP Release 11 Interface Specifications: BASE II and Other File Processing

VAP Release 11 Interface Specifications: V.I.P. Processing

VAP Release 11 Maintenance, Messages, and Troubleshooting Guide

VAP Release 11 Operator's Guide

VisaNet Copy Request and Fulfillment Service (VCRFS)

For information about VisaNet Copy Request and Fulfillment Service (VCRFS), refer to:

VCRFS Fax Gateway User's Guide

VCRFS Processing Guide

VisaNet Image Gateway Image Interface Technical Specifications

VisaNet Image Gateway User's Guide

Visa Smart Debit and Visa Smart Credit (VSDC)

For information about VSDC, refer to:

Visa Smart Debit and Visa Smart Credit Service Description—This manual provides a high-level description of the features and benefits of a VSDC program.

Visa Smart Debit and Credit Planning Guide—This manual assists members in planning their VSDC program and migration strategy to competitively position themselves for the future.

Visa Smart Debit and Credit Member Implementation Guide for Issuers—This manual provides guidelines for issuers involved in the implementation of new VSDC programs.

Visa Smart Debit and Credit Member Implementation Guide for Acquirers—This manual provides guidelines for acquirers involved in the implementation of new VSDC programs.

Visa Smart Debit/Visa Smart Credit System Technical Manual—This manual provides information for members and Visa staff responsible for the implementation and operation of a VSDC program.

Miscellaneous Systems and Services

For more information on miscellaneous systems and services relevant to V.I.P., refer to:

Visa/Plus International ATM Member Guide—This manual contains information about the Visa/Plus International ATM Program. It includes an overview of the program, its business requirements, optional services, risk management, processing options, certification procedures, and back office management.

Address Verification Service (AVS) User's Guide April 2001

Cardholder Verification Value Reporting User's Guide Version 4.1

Cardholder Reporting System User's Guide

Visa Information System User's Guide

VisaNet Settlement Service (VSS) Reference Guide, Volume 1, Specifications

VisaNet Settlement Service (VSS) Reference Guide, Volume 2, Reports

VisaNet Settlement Service (VSS) User's Guide, Volume 1, Specifications

VisaNet Settlement Service (VSS) User's Guide, Volume 2, Reports

Visa Test System (Sapphire Edition) User's Guide

Message Matching

1

V.I.P. System messages generally consist of a pair of messages: a request message followed by a response message. The V.I.P. System compares information in key data fields to match messages into a transaction set. Message matching is one of the most important concepts in V.I.P. transaction processing. This chapter provides an overview of the message matching concept, describes the types of transaction sets, and identifies the key data fields used in the matching process.

NOTE: *Except for their message designator, repeat (or duplicate) requests (for example, 0101 or 0401 messages) or advices are exact replicas of their originals. Because of this, repeat messages are not uniquely identified or referenced in this manual. Repeat messages and their key fields are discussed in this chapter in the section titled “Repeat Messages and their Key Fields.” They are also discussed in BASE I Processing Specifications, Chapter 3.*

Key Data Fields

Key data fields enable V.I.P. to match a response to the message initiator's request. They also enable V.I.P. to associate a subsequent request or advice (and its responses) with the original request message.

Subsequent requests are submitted when the acquirer or issuer has identified a transaction that was processed or posted incorrectly to a cardholder's account. A correction can be generated at different times in a transaction life cycle. For example, the acquirer's system or the POS device itself can generate a reversal.

This chapter describes key data fields for message matching that relate to the following transactions:

- Authorization, reversal and balance inquiry messages

- Administrative text messages, including Cardholder Risk Identification Service (CRIS) alert advices
- File maintenance messages
- Network Management

The tables in this section show whether the values in the key data fields must match those in previous messages or if new values must be assigned to clearly indicate that a given message is not part of a previous group of messages. The shaded cells in the tables indicate that the values are taken from a previous message. Members can use additional fields to match messages.

BASE I uses the Intertask Table (ITT) to match key fields between messages. BASE I does not use Field 7—Transmission Date and Time, or Field 11—System Trace Audit Number, *to build a transaction's Intertask Table (ITT) for key field matching*, although the two fields may in fact be required in BASE I message format or V.I.P. message format messages. Key field information for a transaction is retained in the ITT until a response has been sent from the issuer or STIP.

Authorization Messages

Authorization messages contain originals, reversals, and balance inquiries. Shaded areas in [Table 1–1](#) represent subsequent messages.

Originals

The standard 0100 authorization message contains a request and a response. Original authorization transactions include POS purchases, ATM cash disbursements, and balance inquiries. [Table 1–1](#) shows how to use key data fields to match a response to its request.

Table 1–1: Original Authorization Messages

Message Type	Field 32—Acquirer BIN	Field 37—Retrieval Reference Number	Field 41—Card Acceptor Terminal ID	Field 42—Card Acceptor ID
Original Authorization Request: 0100	Use the value for the entity that signed the merchant or dispensed cash.	Assign a new value for this cardholder transaction.	Use the value from the terminal, if applicable.	Use the value that identifies the point of service.
Response: 0110	Use the value from the 0100.	Use the value from the 0100.	Use the value from the 0100.	Use the value from the 0100.
Confirmation: 0102	Use the value from the 0100.	Use the value from the 0100.	Use the value from the 0100.	Use the value from the 0100, if present.

Reversals

An acquirer creates a reversal to notify V.I.P. and the issuer of an error condition regarding an earlier-approved financial transaction. Error conditions include:

- An approved transaction is cancelled at the ATM or by the merchant.
- The acquirer does not receive a response to an authorization request.
- The acquirer cannot send an approved response to the ATM.
- The acquirer does not receive a completion or acknowledgment message from the ATM.

[Table 1–2](#) shows how to use key data fields to match a response to its request.

Table 1–2: Reversal Messages

Message Type	Field 32—Acquirer BIN	Field 37—Retrieval Reference Number	Field 41—Card Acceptor Terminal ID	Field 42—Card Acceptor ID
Reversal of 01xx: 0400	Use the value from the original 0100.	<i>BASE I format:</i> Use the original 0100 value, if possible. <i>V.I.P. format:</i> Use the value from the original 0100.	Use the value from the terminal, if applicable.	Use the value that identifies the point of service or point of sale.
Reversal Response: 0410	Use the value from the 0400.	Use the value from the 0400.	Use the value from the 0400.	Use the value from the 0400.

Balance Inquiries

[Table 1–3](#) shows the key fields for balance inquiries. Only a request and a response message are valid for balance inquiries.

Table 1–3: Balance Inquiry Messages

Message Type	Field 32—Acquirer BIN	Field 37—Retrieval Reference Number	Field 41—Card Acceptor Terminal ID	Field 42—Card Acceptor ID
Balance Inquiry: 0100	Use the value for the terminal that dispensed cash.	Assign a new value for this cardholder transaction.	Use the value from the terminal, if applicable.	Use the value that identifies the point of service.
Response: 0110	Use the value from the 0100.	Use the value from the 0100.	Use the value from the 0100.	Use the value from the 0100.

Repeat Messages and Their Key Fields

V.I.P. considers a request to be a repeat (or duplicate) of a previous message if the key field values (ITT field values for fields 32, 37, 41, and 42) are the same in both—the only difference is that the message designator for a repeat always ends in 1, (for instance, 0101 or 0401 messages).

NOTE: *Repeats are not allowed for BASE I ATM transactions. They are also not allowed for any SMS POS or ATM transactions.*

V.I.P. responds to repeat messages with the same field 39 response code that was in the original if:

- The repeat message arrives at the same VIC as the original *within* ten seconds of the original; and
- The original message was approved (field 39 = 00) either by STIP or by the issuer.

If these conditions are met, the cardholder's open-to-buy is not affected by the repeat (repeats as well as originals can affect the cardholder's activity records when STIP processes the transaction). Also, duplicates are discarded if the original is still being processed; that is, the system does not pass the duplicate to the output message editor. (Refer to Appendix C, System Reject and Reason Codes, for a list of discard message reason codes.)

However, if the ten-second time limit is met but the response code was other than an approval, V.I.P. forwards the request to the issuer for the approval or decline decision. If the issuer is not available, STIP responds with the default response code assigned by the issuer for issuer unavailable conditions.

Acquirers should send 0101 repeat requests when they do not receive a response to the original 0100 request. Visa recommends limiting repeat message submissions to three per request.

NOTE: *If a request has timed out, acquirers must wait at least 60 seconds before initiating 0101 repeat messages because 60 seconds is the minimum default ATR time-out for issuers that are not participating in Assured Transaction Response (ATR). Also, if acquirers receive an 0110 response after they have timed-out the corresponding request, they should use an 0400 reversal request to ensure that the transaction is properly voided.*

Refer to *BASE I Processing Specifications* for more information about repeat messages, timed-out conditions, and retrieval reference numbers in field 37.

Discard Message Reason Codes

Discarded messages are those that are identified as not requiring further processing. For a further explanation of how discarded message reason codes function and for a list of the codes themselves, refer to Appendix C of the *BASE I Technical Specifications* manual.

Administrative Text Messages

BASE I uses administrative text messages (0600) to send an unformatted message to a member.

- For BASE I message format members, no 0610 responses are involved.
- For V.I.P. message format 0610 messages generated by BASE I in response to issuer-generated 0600 messages, BASE I returns the field 7 and field 11 values from the 0600 message for key field matching.
- For communicating information about chip-based transactions, BASE I sends 0620 advices to issuers. No response is involved.

V.I.P. System services that use 06xx administrative messages include AdvanceBK (bankruptcy alerts) and Cardholder Risk Identification Service (CRIS).

File Maintenance Messages

File maintenance messages are used by acquirers to update and query the VIC-maintained Merchant Central File and by issuers to update or query the VIC-maintained Cardholder Database files.

Merchant Central File

Acquirers use format 2, 0300 file maintenance request messages to query or update the Merchant Central File. BASE I returns 0310 responses indicating whether the requested action was performed. The 0310 response contains the fields 7, 11 and 37 values from the 0300 message. Only field 37 is stored in the ITT as a key field.

Cardholder Database

Issuers use format 1 or format 2, 0302 file maintenance request messages to access various Cardholder Database files. V.I.P. responds with 0312 responses indicating whether the requested action was performed.

V.I.P. supports the following format 1 files:

- Exception file
- PIN Verification file

V.I.P. supports the following format 2 files:

- Address Verification file
- Cardholder ID file
- Exception file
- Full Authorization file
- PIN Verification
- Risk Level file
- Telecode Verification file

Issuers can use [Table 1–4](#) to identify how to use key data fields to build a file maintenance message and how to match a response to the corresponding file maintenance request.

Table 1–4: Cardholder Database File Messages: Formats 1 and 2

Message Type	Field 37—Retrieval Reference Number
File Query or Update: 0302	Assign a new value for this transaction.
Response: 0312	Use the value from the 0302.

Issuers determine which file maintenance advice type to use: 0120 advices or 0322 advices. This choice then applies to all file maintenance-related activity involving advices. V.I.P. puts advices in the advice queue for issuer retrieval. No 0120 or 0322 responses are allowed, but members can use fields 7 and 11 to match the 0120 or 0322 advices with their original 0110 responses.

Automatic Cardholder Database Update (Auto-CDB) Service

V.I.P. uses 0120 or 0322 file maintenance messages to notify an Automatic Cardholder Database Update (Auto-CDB) Service participant that file maintenance was completed because of a card pickup response. The 0120 advice merely notifies the issuer that an update was made. The 0322 advice is used in the Enhanced Auto-CDB Service and includes the updated record content. Participating issuers must be certified for the Auto-CDB service.

Network Management Messages

Network management messages are used for:

- Signing on to and signing off from the system.
- Advice recovery control.
- Suppress Inquiry (SI) mode control.

Acquirers, issuers, and V.I.P. initiate Network Management messages. V.I.P. initiates them for echo tests. Members must be able to respond to VisaNet's originated messages. [Table 1-5](#) shows the key data fields. Members can also use Field 70—Network Management Information Code to match messages.

Table 1-5: Network Management Messages

Message Type	Field 37—Retrieval Reference Number	Field 70—Network Management Information Code
Member-Initiated Network Management		
Message: 0800	Assign a new value for this transaction	Assign a new value for this transaction
BASE I returns: 0810	Value from 0800	Value from 0800
VisaNet-Initiated Echo Test Message		
Message: 0800	Assign a new value for this transaction	Assign a new value for this transaction
Response: 0810	Value from 0800	Value from 0800

Message Identification

This section contains the Message Type Identifiers and specific field values that define the various types of messages supported by V.I.P. It also defines the various types of customer and center transactions that V.I.P. can process.

The transaction messages are listed in alphabetical order within the following categories:

- Customer Transaction-Related VisaNet Messages
- Customer Transaction Types, including electronic commerce
- Center Function Messages
- Advices

Not all of the requirements provided in [Table 1–6](#) are subject to system edits; they represent what is needed to accomplish the intended function.

Customer Transaction-Related VisaNet Messages

[Table 1–6](#) lists the key fields for customer transaction-related BASE I messages.

Table 1–6: Customer Transaction-Related Message Key Fields (1 of 4)

Transaction	Key Field Requirement
Account Verification-Only Request	Processing Code must indicate a purchase transaction. Field 3 must be 000000.
	The transaction amount in field 4 must be zero.
	Merchant type must be appropriate to a purchase transaction. Field 18 must not be 6010, 6011, or a quasi-cash code (Merchant type codes for quasi-cash transactions are 4829, 6051, and 7995).
	The POS Condition Code must indicate account verification. Field 25 must be 51.
	Address verification data may not be present. Field 123 must not be included.
	Account verification request is always routed to BASE I STIP.
Address Verification-only Request	Processing Code should indicate a purchase transaction. Field 3 should be 000000.
	The transaction amount in field 4 must be zero.
	Merchant type can be any valid code for a card present or card-not-present transaction.
	The POS Condition Code must indicate account verification. Field 25 must be 51.
	Address data must be present in field 123.
	Field 39 should be 85—No Reason to Decline.
ATM Confirmation 0102 Message Type BASE I acquirer to BASE I issuer NonU.S. BASE I acquirer to U.S. BASE I issuer	Processing Code must indicate a cash transaction. Field 3 must be 01xxxx.
	Field 22—POS Entry Mode Code, must not be present.
	The card acceptor name is required. Field 43—Card Acceptor Name/Location, must be present.
	Partial dispense amounts must be shown. Field 61.1—Other Amounts, Transaction, must be present if the amount is partial.
	Message type 0102 is not used by U.S. processors for a Visa card transaction, but U.S. issuers can receive 0102 messages from non-U.S. acquirers.

Table 1–6: Customer Transaction-Related Message Key Fields (2 of 4)

Transaction	Key Field Requirement
Authorization Request BASE I or telephone carrier acquirer to BASE I issuer	Processing Code may indicate a purchase, cash transaction, or quasi-cash. Field 3 must be 00xxxx (purchase), 11xxxx (quasi-cash), or 01xxxx (cash) if field 18 is 6010 or 6011.
	Expiration date is optional. Omit field 14 if not known.
	Field 18 may contain any valid code.
	POS Condition Code must be appropriate to the customer transaction.
	Must not indicate account or address-only verification. Field 25 must not be 51.
	For POS transactions only, if Magneprint data is included in the request, the field 125 (usage 2) TLV length cannot exceed 256 bytes, and the content data must be 54 bytes.
Authorization Request with Address Verification BASE I or telephone carrier acquirer to BASE I issuer	Processing Code should indicate a card-present or card-not-present purchase transaction. Field 3 should be 00xxxx.
	Expiration date is optional. Omit field 14 if not known or if track data is present.
	Merchant type must be valid for a card-present or card-not-present transaction.
	The POS Condition Code may indicate normal or mail/phone purchase. Field 25 must be 00 or 08.
	Address verification data must be present. Field 123 must be included.
	The response includes an Address Verification Result Code in field 44.2.
Authorization Request with CVV/iCVV Validation BASE I or telephone carrier acquirer to BASE I issuer	Expiration date must match that in magnetic stripe.
	The POS Entry Mode Code must indicate that the entire unaltered magnetic stripe contents are included. Field 22 must be 90xx.
	The entire unaltered magnetic stripe contents (field 35 or field 45) must be included.
Authorization Request with CVV2 Validation BASE I or telephone carrier acquirer to BASE I issuer	Card-not-present transaction only.
	Processing code should indicate purchase. Field 3 must be 00xxxx.
	Expiration date must be valid.
	The request must not include magnetic stripe data; field 35 or 45 must not be present.
	CVV2 information must be included. Field 126.10 is required and must at least include the CVV2 presence indicator (position 1), the response type (position 2), and the CVV2 value (position 3).
	The response includes the CVV2 result code in field 44.10.

Table 1–6: Customer Transaction-Related Message Key Fields (3 of 4)

Transaction	Key Field Requirement
Authorization Request with PIN Verification BASE I or telephone carrier acquirer to BASE I issuer	Field 18—Merchant's Type; cannot be mail or telephone order. Field 18 cannot be 4761.
	Field 25—Point-of-Service Condition Code; cannot be mail order or telephone order. Field 25 cannot be 01, 05, 08 or 51
	Field 26—Point-of-Service PIN Capture Code; maximum PIN-read capacity is included.
	Field 52—Personal Identification Number (PIN) Data must be present.
	Field 53—Security Related Control Information must be present.
	Track 1 or 2 must be present.
Balance Inquiry BASE I acquirer to BASE I issuer or SMS issuer (0100 message converted to 0200)	Card Program: Processing Code must indicate a balance inquiry. Field 3 must be 30xxxx.
	There is no amount in the request. Field 4 is omitted.
	POS Entry Mode coding is magnetic stripe-read and PIN-entry possible. Field 22 must be 0210 or 9010.
	Field 18 must be 6011.
	Field 49—Currency Code, Transaction, is required.
	A PIN is required. Fields 52 and 53 must be present.
Check Acceptance Request BASE I acquirer to check acceptance vendor	The balance amount is returned in field 54 of the response.
	Customer ID must be in field 102.
	Processing Code must indicate check acceptance. Field 3 must be 030000.
	Merchant type may be anything but cash. Field 18 must not be 6010, 6011, or a quasi-cash code.
	Acquirer country must be U.S. Field 19 must be 840.
	POS Condition Code should indicate a normal transaction. Field 25 must be 00, 03, or 10.
	Additional POS information should not indicate unattended terminal. The value in Field 60, position 1 should not be 2.
	Check vendor identification must be in field 100.

Table 1–6: Customer Transaction-Related Message Key Fields (4 of 4)

Transaction	Key Field Requirement
Reversal BASE I acquirer (or V.I.P.) to BASE I issuer	Processing Code must indicate a purchase, cash transaction, quasi-cash, or adjustment. Field 3 must be 00xxxx, 01xxxx, or 11xxxx.
	Field 18 may be any valid code.
	Field 38 must be present.
	The original message type is provided. Field 90 = 0100.
	For reversals only. Field 95—Replacement Amounts must be present.
	For multicurrency participants, if field 95 is present, field 61.3 must also be present.
Status Check BASE I acquirer to BASE I issuer	Processing Code must indicate a purchase. Field 3 must be 00xxxx.
	The amount must be one whole unit of currency, including implied decimals. Field 4 must be 000000000100.
	The MCC cannot be 6011. Status checks are typically initiated by lodging facilities or automated fuel dispensers; field 18 contains a valid lodging code or 5542 (AFD). Note: Status check requests that do not meet these requirements are treated as regular transactions and are subject to currency conversion.
Telecode Verification Request Telephone carrier acquirer to BASE I issuer	Processing code must indicate a purchase. Field 3 must be 000000.
	The amount is zero. Field 4 should be 000000000000.
	Merchant type must indicate VisaPhone. Field 18 must be 4815.
	POS Condition Code must indicate telecode verification request. Field 25—POS Condition Code, must be 55.
	Field 48 must contain the number sign (#) followed by the 4-digit telecode to be verified.

Customer Transaction Types

[Table 1–7](#) lists the key fields for customer transaction types.

CPS transactions are not included in this table. Refer to Appendix A, CPS Processing, for CPS transaction key field requirements.

Table 1–7: Customer Transaction Type Key Fields (1 of 6)

Transaction Type	Key Field Requirement
Automated Dispensing Machine (ADM) Transaction	Processing Code must indicate a purchase. Field 3 must be 004000.
	Merchant type must be valid for a purchase transaction. Field 18 must not be 6010, 6011, or a quasi-cash code.
	Magnetic stripe captured and PIN provided. Field 22 must be 0210 or 9010.
	Field 25 must be 02. Field 60 must be 3x (typically 32). Field 60.2 must be 1, 2, or 3.
	A PIN is required. Fields 52 and 53 must be present in the original request.
	Track 1 or Track 2 is required. Field 45 or 35 must be present.
Airline Transaction	Processing Code indicate a purchase. Field 3 must be 00xxxx.
	Merchant type must be that of an airline. Field 18 must be 3000–3299 or 4511.
ATM Cash Transaction or Automated Cash Transaction	Processing Code must indicate a cash transaction. Field 3 must be 01xxxx.
	Merchant type must indicate automated cash. Field 18 must be 6011.
	Card number was read from a magnetic stripe; a PIN is provided. Field 22 must be 0210 or 9010.
	Transaction occurs at an ATM. Field 25 must be 00 or 02. Field 60 must be 2x (typically 22).
	A PIN is required. Fields 52 and 53 must be present in the original request.
	Track 1 or Track 2 is required. Field 45 or 35 must be present
Cash Transaction, Manual	Processing Code must indicate a cash transaction. Field 3 must be 01xxxx.
	Merchant type must indicate manual cash. Field 18 must be 6010.
	This is an in-person cash disbursement at a member location. The teller may or may not use an authorization terminal. Field 25 should not be 08.
	Transaction does not occur at an ATM. Field 25 must not be 02. Field 60 must not be 2x.
	No track data is required. Field 45 or 35 must not be present.
	No PIN is required. Fields 52 and 53 must not be present.

Table 1–7: Customer Transaction Type Key Fields (2 of 6)

Transaction Type	Key Field Requirement
Electronic-commerce	Processing Code must indicate purchase of goods or services. Field 3 must be 00xxxx.
	The point-of-service condition must indicate e-commerce. Field 25 must be 59.
	The Electronic Commerce Indicator must indicate the transaction's level of security. Field 60, positions 9–10, must be 05, 06, 07, or 08.
	If the transaction is submitted according to VSEC SET Secure Electronic Commerce Transaction™ protocol, merchant and cardholder certificate serial numbers and the transaction ID supplied by the merchant must be included along with the TransStain. If required, fields 126.6, 126.7, 126.8, and 126.9 must be present.
	If the transaction is submitted according to the VSEC Three-Domain Secure (3-D Secure) protocol, the Transaction ID in field 126.8 and CAVV data in field 126.9 must be included. CAVV validation is always performed if field 126.9 is present; if field 126.9 is present, field 44.13 is added to the response. VSEC fields 126.6 and 126.7 are not included.
	Online gambling requests are identified by field 18 = 7995 and field 25 = 59
Limited Amount Terminal Transaction	Processing Code must indicate a purchase transaction. Field 3 must be 00xxxx.
	The transaction occurs at a limited-amount terminal. Position 1 of Field 60 must be 1.
Mail or Phone Order Transaction	Processing Code must indicate a purchase transaction. Field 3 must be 00xxxx (cannot be 11xxxx).
	Field 18 must contain an MCC which is listed in the MOTO Merchant Category Group (MCCs are listed in the Operating Regulations)
	POS Condition Code must indicate mail or phone order. Field 25 must be 08.
	The request must not include a PIN. Fields 52 and 53 must not be included.
	This transaction type also applies to recurring transactions and any remote purchase (for example, from a fax machine, home computer, and so forth).
	Address verification data is required. Field 123 must be present.
Purchase Transaction or POS Transaction	Processing Code must indicate purchase of goods or service. Field 3 must be 00xxxx.
	Expiration date is optional. Omit if not known or if track data is present.
	Merchant type must be appropriate to a purchase transaction. Field 18 must not be 6010, 6011, or a quasi-cash code.
	If Magneprint data is included in the request, the TLV length and the content data must be correct. If Field 125 (Usage 2) is present, its length cannot exceed 256 bytes and the TLV data element must be 54 bytes.
	See also “CPS transaction” in this table.

Table 1–7: Customer Transaction Type Key Fields (3 of 6)

Transaction Type	Key Field Requirement
Quasi-Cash Transaction	Primary Account Number must be a Visa card. Field 2 must be valid Visa card number.
	Processing Code must indicate a quasi-cash transaction. Field 3 must be 11xxxx.
	Merchant type can be anything including quasi-cash codes. Field 18 can be any valid code except 6010 or 6011. (It is 4829 or 6051 for a quasi-cash-only merchant.)
	The transaction does not occur at an ATM. Field 60, position 1, must not be 2.
	No PIN is required. Fields 52 and 53 are not present.
Self-Service Terminal Transaction	Processing Code must indicate purchase of goods or service. Field 3 must be 00xxxx.
	Merchant type must be appropriate to a purchase transaction. Field 18 must not be 6010, 6011, or a quasi-cash code.
	The terminal does not support PIN capture. Position 3 of field 22 must be 2.
	The terminal is an unattended acceptance terminal (UAT). Position 1 of field 60 must be 3.
	International transaction amount is limited to US\$100.
	The U.S. transaction amount is limited to US\$50.
Travel and Entertainment (T&E) Transaction	Processing Code must indicate purchase of goods or service. Field 3 must be 00xxxx.
	<p>Following Visa clearing rules (SMS and BASE II), merchant type must be an airline, a car rental company, a lodging concern such as a hotel, a cruise ship, or a railroad.</p> <ul style="list-style-type: none"> For an airline transaction, field 18 must be 3000–3299 or 4511. For a car rental transaction, field 18 must be 3000–3500 or 7512. For a lodging transaction, field 18 must be 3501–3999 or 7011. For a cruise ship transaction, field 18 must be 4411. For a passenger rail transaction, field 18 must be 3079. <p>According to BASE I Positive Cardholder Authorization Service (PCAS) processing rules, merchant type might also be a restaurant if the issuer sets unique processing limits for restaurants.</p> <ul style="list-style-type: none"> For a restaurant transaction, field 18 must be 5811 or 5812.
Visa Commerce	Processing Code must indicate purchase of goods or services. Field 3 must be 00xxxx.
	E-commerce processing requirements must be met. Field 25 must be 59. Field 60, positions 9–10 must be 05, 06, 07, or 08. If required, VSEC fields 126.6, 126.7, 126.8, and 126.9 must be present.
	Field 48 must be present. Usage 16, Visa Commerce-specific data, must be present.
	Field 126.14 must be present. Field must be either 1 or 2.

Table 1–7: Customer Transaction Type Key Fields (4 of 6)

Transaction Type	Key Field Requirement
Visa Cash	Field 3, Processing Code: <ul style="list-style-type: none"> For funds requests, field 3 must be 01xx60 (reloadable card) or 01xx67 (disposable card). For linked load, field 3 must be 62xx60. For currency exchange, field 3 must be 646060. For transaction completion, field 3 must be 63xx60.
	Field 18, Merchant Type: for all Visa Cash, field 18 must be 6011.
	Field 22, POS Entry Mode Code: <ul style="list-style-type: none"> For linked load, field 22 must be 05. For currency exchange and transaction completion, field 22 must be 051.
	Fields 52 and 53: for linked load, the PIN is required.
	Field 55, Usage 1: Visa Cash TLV Format: for linked load, currency exchange and transaction completion, field 55 must be present with CEPS data.
	Field 90, Original Data Elements, is present in a transaction completion message.
Visa Cash Back	Card-present POS transaction with a debit card. Transaction must be domestic (merchant, acquirer, issuer all in same country). Current countries are U.K. and U.S. Note: Issuers cannot partially approve or respond with a referral request for cashback transactions. Additionally, issuers must reply with a single response that covers both the purchase amount and the cashback amount. Issuers cannot reply to a cashback request with two responses, one for the purchase amount and another for the cashback-only amount.
	U.K: Valid only with Visa Electron card. Field 61.1 must be present and cashback amount must be less than total amount in field 4. Note: Refer to your regional representative for more information about Visa Cash Back with the Visa Electron card.
	U.S: Valid only with Visa Check Card II service. Acquirers must participate in CPS and CVV. Field 3, Processing Code, must be 00xxxx to indicate purchase of goods or service. Field 18 must contain 5411. Field 22, POS Entry Mode Code, must be 90 to indicate that track data reliability supports possible CVV check. Field 52 and 53 must be present with PIN data. Cashback amount in field 61.1 cannot exceed \$200. Transaction must qualify for CPS and receive E in field 62.1 in response. Merchant name and location must be included in request. Field 43 and field 42 must be present. Note: Refer to your regional representative for more information about Visa Cash Back with the Visa Check Card II Service.

Table 1–7: Customer Transaction Type Key Fields (5 of 6)

Transaction Type	Key Field Requirement
Visa Horizon-COPAC format 0100 Authorization—ATM or Purchase BASE I acquirer to BASE I issuer Note: See the VSDC entry for the key field requirement when submitting a Visa Horizon request through a VSDC terminal.	Processing Code must indicate a “from” spending power account: Field 3 must be 68xx64 for a preauthorization request, and 016400 for an ATM cash disbursement request (“xx” represents any valid account type in positions 3–4).
	A valid expiration date is required. Field 14 must be present.
	POS Entry Mode code must be present. Field 22 must be 00.
	Field 54—Additional Amounts is required. The field must indicate a spending power account, amount type, and positive code. <ul style="list-style-type: none"> Field 54.1 must match field 3, positions 3–4. Field 54.2 must be 02. Field 54.4 must be C. Field 54.5 must be the spending power balance on the card, after the field 4 amount is applied.
	Field 60.6, Chip Transaction Indicator (position 7), and Field 60.7, Chip Authentication Reliability Indicator (position 8), must be zero-filled.
	Chip card data must be supplied. Fields 133, 134.1, 134.2, 134.3, 136, 144, 146, 147, and 148 must all be present. Field 134.2 must be “01” for CVN 01. Field 135 is optional. Field 139 is required in the response. Field 142 is optional in the response.
	Fields 150 and 151 must be present.

Table 1–7: Customer Transaction Type Key Fields (6 of 6)

Transaction Type	Key Field Requirement
VSDC POS or ATM transaction 0100 Message Type Note: <i>Visa Horizon—VSDC Format: Participating acquirers and issuers must be certified for VSDC FULL Data Option.</i>	Card type must be Visa card. Field 2 must contain a Visa card number.
	Processing Code must indicate purchase of goods or services, or cash transaction. Field 3 must be 00xxxx or 01xxxx.
	Visa Horizon: The field 3 processing code is 006400.
	The transaction must indicate the terminal's ability to reliably transmit chip data including the CVV or iCVV and the service code. Field 22 must be either 05 (terminal-read data considered reliable) or 95 (terminal-read data may be unreliable).
	If required, the transaction must include a chip card sequence number when two or more separate cards have the same account number. Field 23 must contain a valid number.
	If the magnetic stripe is read at the point of service, the complete, unaltered track 2 content must be included; field 35 is present. If an alternate CVV (iCVV) is present, field 22, positions 1–2, must be 05 or 95.
	For ATM transactions only, the card acceptor name, location, identification code, and (if necessary) terminal ID must be included. Field 43, field 42, and, (if necessary) field 41 must be present.
	Transaction must include terminal entry capability, magnetic stripe read status, chip transaction indicator, and card authentication reliability. Field 60.2 must be 05. Field 60.3 must be 0, 1, or 2. Field 60.6 must be 1. Field 60.7 must be 0, 1, 2, or 3.
	The third bit map fields must be present. The following fields must contain valid values: 130, 131, 132, 134, 136, 137, 138, 144–148. If the transaction includes cash back, field 149 must contain the amount.
	Visa Horizon: Field 134.2 must be 0F for CVN 15.
	For ATM confirmations: Refer to the ATM Confirmation information in Table 1-6. The ATM confirmation message must include the field 137 transaction counter value from the 0100 request.
VisaPhone Call	Processing Code must indicate purchase. Field 3 must be 000000. Field 18 must be 4815.

Network Management and File Maintenance Messages

[Table 1–8](#) lists the key fields for BASE I network management and file maintenance messages.

Table 1–8: Center Function Message Key Fields (1 of 5)

Function	Key Field Requirement
Echo Test 0800 Message Type	Source must be a Common Interface BASE I but not a BASE I Format-only station.
	The message must be identified as an echo test. Field 70 must be 301.
	A BASE I station must respond to the VisaNet Interchange Center (VIC) with an 0810 response to an echo test.
File Inquiry for Address Verification Data 0302 Message Type from issuer	The cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The message must be identified as an inquiry. Field 91 must be 5.
	The file name must specify AVS data in the Address Verification File. Field 101 must be A2. Existing centers may still query the Cardholder ID File. See “File Inquiry for PVS and AVS Data” in this table.
	No cardholder-specific data is required in the request (for example, purge date or action code). Fields 73 and 127 must not be included.
File Inquiry for Exception Record 0302 Message Type from issuer	The cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The message must be identified as an inquiry. Field 91 must be 5.
	The file name must be that of the BASE I Exception File. Field 101 must be E2, E9, or V.CH.EXP. File name E3 is used to access both the BASE I and SMS Exception files using format 2.
	No cardholder-specific data is required in the request (for example, purge date or action code). Fields 73 and 127 must not be included.
File Inquiry for Full Authorization Data Record 0302 Message Type from issuer	The cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The message must be identified as an inquiry. Field 91 must be 5.
	The file name must be that of the Full Authorization File. Field 101 must be F2.
	No cardholder-specific data is required in the request (for example, purge date or action code). Fields 73 and 127 must not be included.

Table 1–8: Center Function Message Key Fields (2 of 5)

Function	Key Field Requirement
File Inquiry for Merchant Central File Record 0300 Message Type from acquirer	The message must be identified as an inquiry. Field 91 must be 5.
	The file must be identified as the Merchant Central File. Field 101 must be M9.
	No cardholder-specific data is required in the request (for example, purge date or action code). Fields 73 and 127 must not be included.
File Inquiry for PIN Verification Data 0302 Message Type from issuer	The cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The message must be identified as an inquiry. Field 91 must be 5.
	The file name must specify PVS data in the PIN Verification File. Field 101 must be P2 or V.CH.PVV. (An existing center may still query the Cardholder ID File. See explanation under “File Inquiry for PVF and AVS Data” in this table.)
	No cardholder-specific data is required in the request (for example, purge date or action code). Fields 73 and 127 must not be included.
File Inquiry for PVS And AVS Data (Cardholder ID File) 0302 Message Type from issuer	This old mode of access should not be implemented by a new center. The current concept is to process AVS and PVS data separately.
	The cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The message must be identified as an inquiry. Field 91 must be 5.
	The file name must be that of the BASE I Cardholder ID File. Field 101 must be C2.
	No cardholder-specific data is required in the request (for example, purge date or action code). Fields 73 and 127 must not be included.
File Inquiry for Risk Level Data 0302 Message Type from issuer	Cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The message must be identified as an inquiry. Field 91 must be 5.
	The file name must be that of the Risk Level File. Field 101 must be R2.
	No cardholder-specific data is required in the request (for example, purge date or action code). Fields 73 and 127 must not be included.
File Inquiry for Telecode Verification File 0302 Message Type from issuer	The cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The message must be identified as an inquiry. Field 91 must be 5.
	The file name must be that of the Telecode Verification File. Field 101 must be S2.
	No cardholder-specific data is required in the request (for example, purge date or action code). Fields 73 and 127 must not be included.

Table 1–8: Center Function Message Key Fields (3 of 5)

Function	Key Field Requirement
File Update for the Address Verification File 0302 Message Type from issuer	The cardholder account number must be included. Field 2, 102, or 103 must contain a valid account number.
	The type of update must be specified. Field 91 must be 1, 2, or 3.
	The file name must be that of the BASE I Address Verification File. Field 101 must be A2.
	(An existing center may still update address verification data in the Cardholder ID File. See explanation under “File Update of Both PVS and AVS Data” in this table.)
	Cardholder-specific data (for example, purge date or action code) is required to add or change. Fields 73 and 127 must be included if field 91 is 1 or 2.
File Update for the BASE I Exception File 0302 Message Type from issuer	The cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The type of update must be specified. Field 91 or field 127.1 must be 1, 2, 3, or 4.
	The file name must be that of the BASE I Exception File. Field 101 must be E2, E9, or V.CH.EXP. File name E3 is used to access both the BASE I and SMS Exception files using format 2.
File Update for the Full Authorization File 0302 Message Type from issuer	The cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The type of update must be specified. Fields 91 must be 1, 2, 3, or 4.
	The file must be identified as the Full Authorization File or the Full Authorization Adjustment File. Field 101 must be F2 or I2.
	Cardholder-specific data (for example, purge date or action code) is required to add or change. Fields 73 and 127 must be included if field 91 is 1 or 2.
File Update for the Merchant Central File 0300 Message Type from acquirer	The type of update must be specified. Field 91 must be 1, 2, 3, or 4.
	The file must be identified as the Merchant Central File. Field 101 must be M9.

Table 1–8: Center Function Message Key Fields (4 of 5)

Function	Key Field Requirement
I File Update for PIN Verification Data 0302 Message Type from issuer	The cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The type of update must be specified. Fields 91 or 127.1 must be 1, 2, 3, or 4.
	<p>The file name must be that of the BASE I PIN Verification File.</p> <p>Format 1 update—Field 101 must be V.CH.PVV. (An existing center may still update PIN verification data in the Cardholder ID File (See “File Update of Both PVS and AVS Data” in this table.)</p> <p>Format 2 update—Field 101 must be P2.</p>
	Cardholder-specific data is required to add or change. Fields 73 and 127 must be included if field 91 is 1 or 2.
I File Update of Both PVS And AVS Data (BASE I Cardholder ID File) 0302 Message Type from issuer	This old mode of updating should not be implemented by a new center. The current concept is to process AVS and PVS data separately.
	The cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The type of update must be specified. Field 91 must be 1, 2, 3, or 4.
	<p>The file name must be the BASE I Cardholder ID File. Field 101 must be C2.</p> <p>Cardholder-specific data is required to add or change. Fields 73 and 127 must be included if field 91 is 1 or 2.</p>
I File Update for the Risk Level File 0302 Message Type from issuer	The cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The type of update must be specified. Field 91 must be 1, 2, 3, or 4.
	The file name must be that of the Risk Level File. Field 101 must be R2.
	Cardholder-specific data is required to add or change. Fields 73 and 127 must be included if field 91 is 1 or 2.
I File Update for Telecode Verification File 0302 Message Type from issuer	The cardholder account number must be included. Fields 2, 102, or 103 must contain a valid account number.
	The type of update must be specified. Field 91 must be 1, 2, 3, or 4.
	The file name must be that of the Telecode Verification File. Field 101 must be S2.
	Cardholder-specific data is required to add or change. Field 127 must be included if field 91 is 1 or 2.

Table 1–8: Center Function Message Key Fields (5 of 5)

Function	Key Field Requirement
Prompt for Next BASE I Advice	This function applies to BASE I advices only. Source station must be a BASE I or Common Interface station.
0800 Message Type from acquirer or issuer	The prompt code must be provided. Field 70 is 066.
Sign Off of SI Mode	Source station must be a BASE I or Common Interface station.
0800 Message Type from acquirer or issuer	The message must be identified as a request to exit SI Mode. Field 70 must be 063.
Sign On to SI Mode	Source station must be a BASE I or Common Interface station.
0800 Message Type from acquirer or issuer	The message must be identified as a request to enter SI Mode. Field 70 must be 062.
Start Advice Transmission	Request may be initiated by any station.
0800 Message Type from acquirer or issuer	The message must be identified as a request to start advice delivery. Field 70 must be 068 or 078.
Stop Advice Transmission	Request may be initiated by any station.
0800 Message Type from acquirer or issuer	The message must be identified as a request to stop advice delivery. Field 70 must be 069 or 079.
System Signoff	Request may be initiated by any station.
0800 Message Type from acquirer or issuer	The message must be identified as a request to signoff. Field 70 must be 002 or 072.
Members should signoff VisaNet before shutting their stations down.	
System Signon	Request may be initiated by any station.
0800 Message Type from acquirer or issuer	The message must be identified as a request to signon. Field 70 must be 001 or 071.
Members without Auto Sign-on should sign on their systems to recover from maintenance.	

Advices

[Table 1–9](#) lists the key fields for BASE I advice messages.

Table 1–9: Advice Types (1 of 2)

Function	Message Features
IARS Authorization Advice 0120 Message Type from V.I.P. to issuer	Field 18 is 9700. Field 38 has a 6-position code ending in “R.” Field 44.1 has a Response Source Code of 9.
Authorization/AVS Processing by STIP 0120 Message Type from V.I.P. to issuer	Field 44.1 has a Response Source Code of 1, 2, 3, or 4, and there is a nonspace AVS Result Code in field 44.2. Field 63 is not present. Field 120 contains 0100 or repeat message number.
Authorization Processing by BASE I STIP 0120 Message Type from V.I.P. to issuer	The Response Source Code in field 44.1 is 1, 2, 3, or 4. Fields 44.6 and 44.7 may or may not be present. If they are, field 44.2 is a space. Field 63 is not present. Field 120 contains 0100 or 0101. Fields 44.6 and 44.7 are present if Positive Authorization Capacity Management Service (PACM) processing is performed by STIP and issuers choose to receive them. Field 44.6 contains the PACM diversion level, and field 44.7 contains the PACM reason code.
AdvanceBK Alert 0620 Message Type from V.I.P. to issuer	Field 48 contains alert data. Field 70 is 0173 (AdvanceBK alert).
CRIS Alert 0620 Message Type from V.I.P. to issuer	Field 48 contains alert data. Field 70 is 0174.
Exception File Update by Visa (Notice of Action Only) 0120 Message Type from V.I.P. to issuer	The Authorization Source Code in field 44.1 is 0. Field 63 is not present. The BIN in field 32 identifies the service that initiated the file update.
Exception File Update by Visa (Notice of Action and File Result) 0322 Message Type from V.I.P. to issuer	File Name in field 101 is E2 or E9. File name E3 is used to access both the BASE I and SMS Exception files using format 2. Field 63 is not present in BASE I advices, but it is present in SMS advices. The BIN in field 32 identifies the service that initiated the file update.

Table 1–9: Advice Types (2 of 2)

Function	Message Features
Telecode Verification File Update by Visa (Notice of Action Only) 0120 Message Type from V.I.P. to issuer	Field 25 is 00. The Authorization Source Code in field 44.1 is "T," "U," or "V." Field 63 is not present.
Telecode Verification File Update by Visa (Notice of Action and File Result) 0322 Message Type from V.I.P. to issuer	Field Name in field 101 is S2. Field 63 is not present.

Differences Between BASE I Format and V.I.P. Format Messages

BASE I Message Format messages support BASE I processing only. V.I.P. format messages can be used for both BASE I and SMS processing. V.I.P. automatically converts the formats as required before messages are delivered. New members must use the V.I.P. message format. [Table 1–9](#) shows which BASE I messages are BASE I format and which are V.I.P. format.

Table 1–10: Messages Supported by V.I.P. or BASE I Formats (1 of 2)

Message Type	Message Name/Function	V.I.P. Format (valid for both BASE I and SMS)	BASE I Format Only
0100	Authorization Request/Verification Request	✓	
0102	ATM Confirmation		✓
0110	Authorization/Verification Response	✓	
0120	Authorization	✓	
0120	Exception File Update Advice		✓
0120	IARS Advice (Reserved for Visa use)	✓	
0120	Telecode Update Advice		✓
0300	Acquirer File Request		✓
0310	Acquirer File Request Response		✓
0302	Issuer File Request: Format 1		✓
	Format 2	✓	

Table 1–10: Messages Supported by V.I.P. or BASE I Formats (2 of 2)

Message Type	Message Name/Function	V.I.P. Format (valid for both BASE I and SMS)	BASE I Format Only
0312	Issuer File Request Response: Format 1		✓
	Format 2	✓	
0322	File Update Advice	✓	
0332	File Update Advice Response	✓	
0400	Authorization Reversal	✓	
0410	Authorization Reversal Response	✓	
0420	Authorization Reversal Advice	✓	
0420	Authorization Reversal Advice	✓	
0600	Administrative Request	✓	
0620	CRIS or AdvanceBK Alert	✓	
0800	Network Request: Sign on and sign off	✓	
	Advice Delivery Control	✓	
	Echo Test	✓	
0810	0800 Response: Sign on and sign off	✓	
	Advice Delivery Control	✓	
	Echo Test	✓	
	Encryption Key Exchange	✓	

Field Requirement Differences Between BASE I and V.I.P. Message Formats

[Table 1–11](#) summarizes the differences between the field requirements for V.I.P. and BASE I message formats. All fields affected by V.I.P. message format specifications are listed, even when there is no format difference. An example of this is field 22, shown in the table.

Table 1–11: Field Requirement Differences Between BASE I and V.I.P. Message Formats (1 of 2)

Field	BASE I Processing	
	BASE I Format	V.I.P. Format
Field 3—Processing Code	Required in 0100 and 0400 requests. May be used in responses.	Required in 0100 and 0400 requests and responses.
Field 4—Amount, Transaction	Not used in balance inquiry requests or responses. Required in 0100 and 0400 requests but required in their responses only when field 39 is 00 or 85.	Not used in balance inquiry requests or responses. Required in 0100 and 0400 requests and responses. Response-request values must match.
Field 7—Transmission Date and Time	Required in all messages. Response and request value may match.	Required in all messages. Response and request values must match, and 0400 reversal value must match that in the original 0100.
Field 11—Systems Trace Audit Number	Optional.	Required in all messages (including an 0102).
Field 19—Acquiring Institution Country Code	Required in 0100 and 0400 requests. Not used in responses.	Required in 0100 and 0400 requests and responses. Response-request values must match.
Field 22—POS Entry Mode Code	Required in 0100 and 0400 requests only if electronic terminal is used at the point of service. If field 22 is present, value must be valid.	Required in 0100 and 0400 requests only if electronic terminal is used at the point of service or point of sale. If field 22 is present, the value must be valid.
Field 25—POS Condition Code	Required in 0100 and 0400 requests. Not used in responses.	Required in 0100 and 0400 requests and responses. Response and request values must match.
Field 37—Retrieval Reference Number	Required in all common messages. The 0400 reversal value should match that in original 0100.	Required in all common messages except 0800 and 0810. The 0400 reversal value should match that in original 0100. First 4 digits should be yddd transaction date.
Field 39—Response Code	Any code defined for BASE I use.	BASE I issuer can use code subset defined for BASE I and SMS processing.

Table 1–11: Field Requirement Differences Between BASE I and V.I.P. Message Formats (2 of 2)

Field	BASE I Processing	
	BASE I Format	V.I.P. Format
Field 59—National POS Geographic Data	State code is required in U.S. ATM transactions and for incentive reimbursement rates.	Every U.S. and Canada request must have state or province code. Required for incentive reimbursement rates.
Field 63—V.I.P. Format Private-Use Field	Not used.	Optional in 0100 and 0400 requests.
Field 90—Original Data Elements	Required in 0400 requests. Optional in 0410 responses. If field 90 is present in response, the value must match that in the 0400.	Required in 0400 requests. Optional in responses. If field 90 is present in response, the value must match that in the 0400.
Field 101—File Name	Any defined BASE I processing code is valid.	Any defined BASE I processing code is valid.

Message Structure and Header Fields 2

This chapter contains information about the VisaNet data message structure, including ISO compliance and variations, and specifications about message type, bit maps, and Visa programming rules.

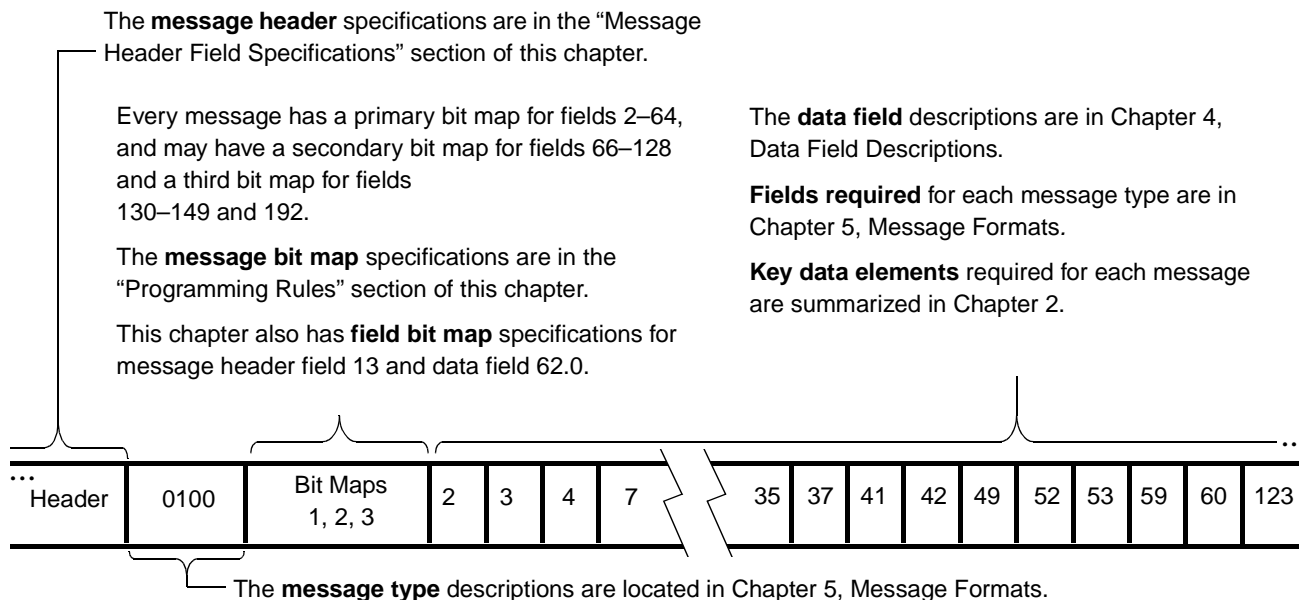
VisaNet Data Message Structure

V.I.P. online messages are based on *Bank Card Organizational Messages—Interchange Message Specifications—Content for Financial Transactions*, International Organisation for Standardisation (ISO) 8583; 1987 (E). V.I.P. online messages have four basic components:

Component	Content
Message Header	Contains basic system ID and routing information, message processing control codes and flags. The content is defined by Visa.
Message Type ID	Highest level message type definition. First data element is ISO 8583 message. Specifies general message category (for example, financial or administrative).
Bit Map	Specifies which data fields are present. The format is defined by ISO 8583: Bit map 1 = Fields 2–64 Bit map 2 = Fields 65–128 Bit map 3 = Fields 129–192
Data Fields	Comprise the specific message. Majority of fields are defined by ISO 8583. Other fields are defined by Visa or are used nationally and adopted by Visa. See Chapter 4 for field requirements.

[Figure 2-1](#) offers another view of the V.I.P. message structure and also tells where to look for more information about message components.

Figure 2-1: Anatomy of a Message



Header and Data Field Usage Guidelines

This section contains ISO field compliance and variations. It also includes a guide for reading the field descriptions, followed by the definitions and programming specifications for all message data fields transmitted to, from, and within the V.I.P. System. The overall structure of a message looks like this:

Message Header	Message Type ID	Bit Maps	Data Fields
----------------	-----------------	----------	-------------

Bit map 1 = Fields 2–64

Bit map 2 = Fields 65–128

Bit map 3 = Fields 129–192

Visa primarily uses fields defined in ISO 8583, but also defines and uses national-use and private-use fields. All acquirers and issuers must certify that they can receive all ISO 8583 fields, even though Visa does not currently use them all or support every value for every ISO-defined field.

Visa Implementation of ISO 8583

The specifications documented here are based on ISO 8583, dated August 1987. Visa uses this standard for bank card and nonbankcard transactions. For example, Visa uses it for transactions on private label, proprietary, and travel and entertainment (T&E) cards, and for transactions requiring check acceptance authorization. [Table 2-1](#) and [Table 2-2](#) identify where Visa varies from ISO 8583 and which fields have Visa-unique specifications.

Table 2-1: Visa Variations From ISO 8583

Variation	Description
Variable length fields	They have a one-byte length subfield and have a maximum length of 255 bytes.
International currencies	Currencies that Visa supports are listed in Appendix E of this manual.
Message header	Visa has developed message headers for online V.I.P. messages.
Field 3—Processing Code	Required in BASE I format request responses only for balance inquiries or when the issuer specifies a different account type.
Field 4—Amount, Transaction	Required in BASE I format response messages if the customer transaction is being approved or there is no reason to decline a verification request.
Field 20—PAN Extended, Country Code	Field 20 is used by Visa for such information as identifying the issuer country for the acquirer.
Field 27—Authorization Identification Response Length	Field 27 is omitted because Visa does not support variable-length approval codes.
Field 44—Additional Response Data	Can be used in forwarding requests as well as in response messages.
Field 73—Date, Action	Field 73 requires the ISO-defined format yymmdd only in 03xx file updates and inquiries. In other messages, this field can contain a numeric date in any format.

See [Table 2-2](#) for Visa-unique specifications.

Table 2-2: Visa-Unique Specifications (1 of 2)

Field	Description
Field 19—Acquiring Institution Country Code	This field is required in all authorization requests for bankcard transactions and related reversals and advices.
Field 41—Card Acceptor Terminal Identification	This field is used in authorization requirements for technology migration programs (for example, CPS/Retail).
Field 42—Card Acceptor Identification Code	This field is used for the name of the acquirer institution owning the ATM.

Table 2–2: Visa-Unique Specifications (2 of 2)

Field	Description
Field 43—Card Acceptor Name/Location	This field is used for the merchant location, city, and country.
Field 53—Security Related Control Information	This field is used in messages containing a PIN (field 52). It describes the PIN block format used by the acquirer or issuer.
Field 63—V.I.P. Format Private-Use Field	This field is used in messages to convey a variety of acquirer and issuer information.
Field 102—Account Identification 1	This field is used for all check acceptance messages, even when the customer ID is an account number. This field is also used for nonstandard account numbers that do not meet the requirements for Field 2—Primary Account Number.

National-Use and Private-Use Fields

[Table 2–3](#) lists the fields defined specifically by Visa for national (domestic) and private (*according to Visa requirements*) use.

Table 2–3: National/Private-Use Fields (1 of 2)

Field	National Use	Private Use
Field 48—Additional Data—Private		✓
Field 59—National Point-of-Service Geographic Data ¹	✓	
Field 60—POS Terminal Entry Capability Code		✓
Field 61—Other Amount		✓
Field 62—Custom Payment Service Fields		✓
Field 63—V.I.P. Format Private-Use Field		✓
Field 118—Intra-Country Data	✓	
Field 120—Original Message Type ID		✓
Field 121—Issuing Institution Identification Code		✓
Field 122—Remaining Open-To-Use		✓
Field 123—Address Verification Data		✓
Field 124—Free-Form Text—Japan		✓
Field 125—Supporting Information		✓

Table 2–3: National/Private-Use Fields (2 of 2)

Field	National Use	Private Use
Field 126—Visa Private Use Fields		✓
Field 127—File Records—Action and Data		✓
Fields 130—149, Visa Smart Debit and Visa Smart Credit (VSDC)		✓
Field 150—COPAC Cardholder Card Scheme Cryptogram		✓
Field 151—COPAC Negative File Version and Audit Trace Number		✓

¹ Visa has adopted the American National Standards Institute (ANSI) definition for Field 59—National Point-of-Service Geographic Data, for messages that originate at a point of sale or service within the United States and Canada.

Programming Rules

This section specifies the Visa rules concerning encoding and transmitting data messages and bit map specifications.

Message Length

A message cannot exceed 800 bytes. Incoming reject messages created by VisaNet can be longer because of the header. See the description of Header Field 4—Total Message Length for more information.

Data Representation

VisaNet treats ISO 8583 numeric fields as 4-bit BCD (unsigned packed) fields. In this specification they are shown as:

n N, 4-bit BCD (unsigned packed)
fixed length, x bytes

VisaNet treats ISO 8583 alphanumeric (AN) fields as EBCDIC (character) fields. In this specification they appear as:

n AN, EBCDIC
fixed length, x bytes

In some cases, even though the field is defined as alphanumeric, the actual field content may be limited to numeric values, as is the case for Field 37—Retrieval Reference Number.

Alphanumeric fields labeled ANS means that special characters such as dash, slash, and so on are also allowed in addition to alphabetic and numeric characters.

NOTE: *Japan uses an extension of the EBCDIC character set called EBCDIC-K. The “K” refers to the EBCDIC 7 bit code definition for Japanese Katakana characters which are used to describe names, places and words of non-Japanese origin. Field F118 is used for Japan Domestic transactions and can contain EBCDIC-K characters.*

Field Alignment

All fields are aligned on a byte boundary. Some fields, such as Field 90—Original Data Elements, have subfields with lengths that involve half-bytes.

Field Lengths

No field can exceed 255 positions. This requirement is a variation from the ISO standard, in which variable-length fields can be up to 999 positions long. The field descriptions in this specification give the maximum length in bytes of each variable-length field. Length restriction applies to the entire field, that is, it covers both the length subfield as well as the data subfields that follow.

All length subfields must be encoded in 1-byte binary code. The value in a length subfield never includes its own length. Length subfields are referenced as position 0, and data subfields begin with position 1.

How length is specified depends on the type of field, as follows:

ISO-Defined Field: The length is determined by the number of positions in the field. Positions can be characters, digits, or bits depending on the attributes of the field. The leading zero needed to pad the first half-byte of an odd-length, 4-bit BCD value is *not* counted in the length.

ISO-Defined TLV (Tag-Length-Value) Field: Refer to *The Tag-Length-Value Format* later in this chapter.

Private-Use Field: The length is determined by the number of bytes in the field. This convention permits other networks and systems to bypass these fields correctly. Private-use fields are those associated with bits 48, 60–63, and 120–127.

All bit-string fields (for example, bit map and PIN), must be constructed according to the appropriate bit string, which is always an integral number of 8-bit bytes. All binary fields have lengths that are integrals of full bytes.

EXAMPLE

This is an example of an ISO-defined numeric field. In the field descriptions, this length information is given for Field 2—Primary Account Number.

Attributes

1 byte, binary +
up to 19 N, 4 bit BCD
maximum: 11 bytes

Because account number digits are encoded as 4-bit BCD values, a 19-digit account number would require 11 bytes, but these bytes would be shown in the length subfield as 19 for the number of positions.

Byte:	1	2	3	4	5	6	7	8	9	10	11
	19	01	23	45	67	89	01	23	45	67	89

- Byte 1 for the length (the binary representation of 19)
- Bytes 2 through 11 for the account number with a leading zero to pad the first unused half-byte

A 16-digit account number would require 9 bytes.

Byte:	1	2	3	4	5	6	7	8	9
	16	12	34	56	78	90	12	34	56

- Byte 1 for the length (the binary representation of 16)
- Bytes 2 through 9 for the account number

EXAMPLE

This is an example of an ISO-defined character field. In the field descriptions, this length information is given for Field 44—Additional Response Data, Private.

Attributes

variable length
1 byte, binary +
up to 25 ANS, EBCDIC
maximum: 26 bytes

When a request includes a CVV or iCVV Results Code (field 44.5), but none of the other field 44 subfields, this field requires 5 bytes.

Byte:	1	2	3	4	5
					2

- Byte 1 for the length (the binary representation of 5)
- Bytes 2 through 4 are blank; not applicable
- Byte 5 for the CVV or iCVV Results Code

EXAMPLE

This is an example of a Private-Use Numeric Field.

In the field descriptions, this length information is given for Field 60—Additional POS Information.

Attributes

variable length

1 byte, binary +

2N, 4-bit BCD (unassigned packed); 2 bytes total

When an acquirer generates this field for an 0200 request, 2 bytes are required. The length subfield value is the number of bytes, not positions.

Byte:	1				
	<table border="1"> <tr> <td>Pos 1</td><td>Pos 2</td></tr> <tr> <td>2</td><td>2</td></tr> </table>	Pos 1	Pos 2	2	2
Pos 1	Pos 2				
2	2				

- One byte for the length (the binary representation of 1)
- One byte for the terminal type and terminal capability

Padding Unused Positions

These conventions apply to fixed-length fields when the data entered does not fill the field:

- If the field is numeric, left zero-fill is required.
- If the field is *not* numeric, right space-fill is required.

Odd-length numeric values in both fixed and variable-length fields must contain a leading zero. The exception is the coding in Field 22—POS Entry Mode Code, which has a trailing rather than a leading zero.

Message Transmission

Messages are encoded in a combination of binary, 4-bit BCD (unsigned packed), and EBCDIC characters; therefore, all messages must be transmitted in EBCDIC transparent mode. Any processor communicating with V.I.P. must use a transparent communication protocol.

Fields With Optional Subfields

Some fields are divided into subfields. Not all of them may be required in a message. The presence or absence of a subfield is identified in the field's bit map. The field's bit map must be present if any of the field's subfields are required.

Message Header Field Specifications

This section describes the message header that Visa developed, required in all online messages processed by VisaNet.

Message Header	Message Type ID	Bit Map	Data Fields
----------------	-----------------	---------	-------------

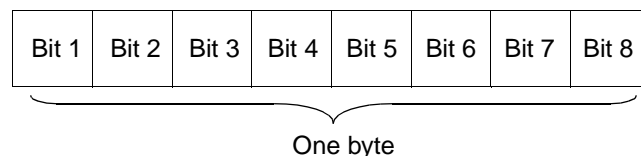
Bit map 1 = Fields 2–64

Bit map 2 = Fields 65–128

Bit map 3 = Fields 129–192

This header length is variable. It contains 12 mandatory, fixed-length header fields, plus a bit map in the 13th header field that specifies the number of fields present after that bit map. Currently, only one optional header field has been defined, reserved for Visa use in reject headers.

A standard header contains 12 header fields (22 bytes) that specify lengths, routing IDs, and other system-related processing data. Visa counts bits from left to right, starting with 1.

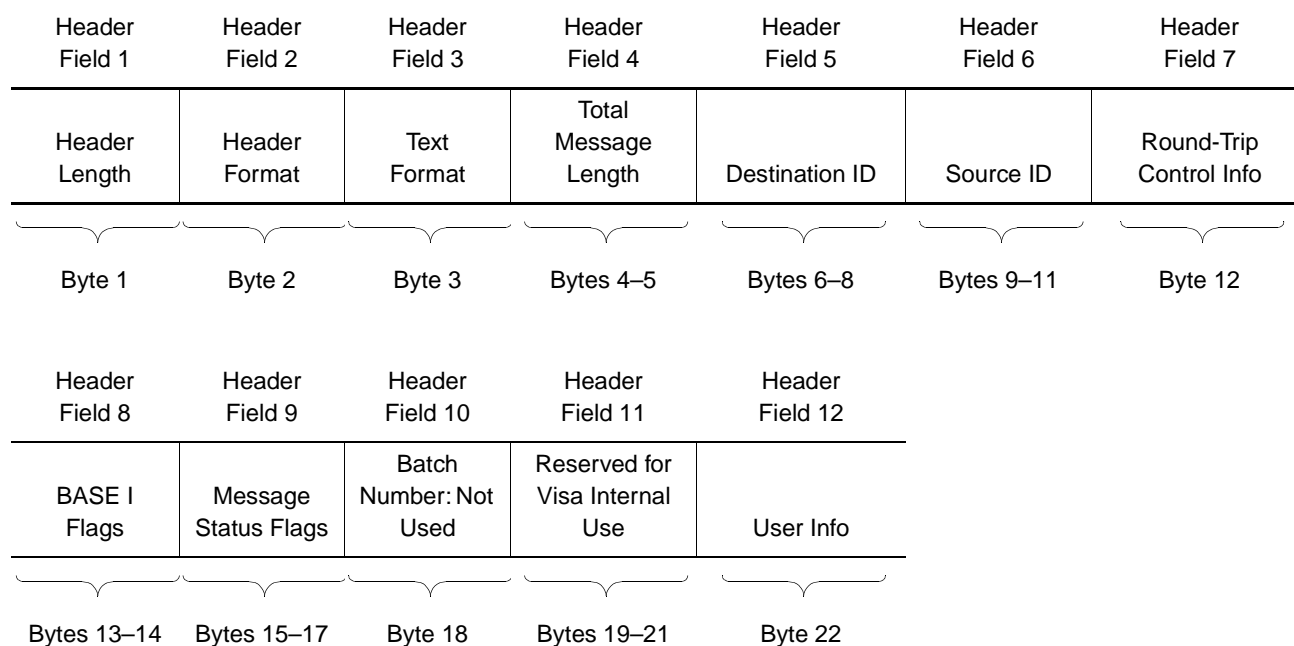


A reject message header, generated only by VisaNet, contains 14 header fields (26 bytes). This includes the 22-byte standard header plus four additional bytes for the bit map and reject information. Visa may modify the header at any time to accommodate new flags for use by VisaNet. *Under no circumstance should a processor adopt for its own use what may appear to be an unused bit in the header.*

Standard Message Header

[Figure 2-2](#) illustrates the standard message header fields. The processor generates this header for all outgoing messages.

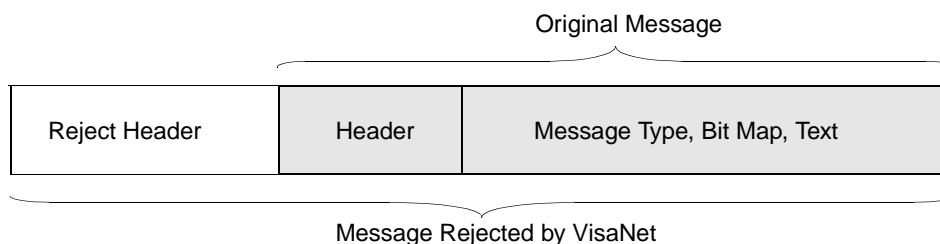
Figure 2-2: Standard Message Header Fields



Reject Message Header

VisaNet generates the reject message header when V.I.P. finds a syntax or message-construction error. An incoming rejected message contains the reject message header followed by the original message header and data, as shown in [Figure 2-3](#).

Figure 2-3: Reject Message Structure



The reject message header has two extra header fields: a bit map, and a reject data group field that contains a 4-digit reject code describing the error. To determine if an incoming message contains a reject message header, the processor must check two header fields as follows:

- Header field 1 length must be 26 or higher.
- Header field 13 bit one must be **1** (which means that the header includes Header field 14).

A processor never creates a reject header but should be prepared to receive it in incoming messages. Although the Plus Switch can reject transactions to SMS, the reject header is not used. [Figure 2-4](#) illustrates the reject message header fields.

Figure 2-4: Reject Message Header Fields

Header Field 1	Header Field 2	Header Field 3	Header Field 4	Header Field 5	Header Field 6	Header Field 7
Header Length	Header Format	Text Format	Total Message Length	Destination ID	Source ID	Round-Trip Control Info
Byte 1	Byte 2	Byte 3	Bytes 4-5	Bytes 6-8	Bytes 9-11	Byte 12
Header Field 8	Header Field 9	Header Field 10	Header Field 11	Header Field 12	Header Field 13	Header Field 14
BASE I Flags	Message Status Flags	Batch Number: Not Used	Reserved	User Info	Bit Map	Reject Data Group
Bytes 13-14	Bytes 15-17	Byte 18	Bytes 19-21	Byte 22	Bytes 23-24	Bytes 25-26

This header is followed by the header from the original message which was rejected.

Constructing Message Headers

The message header is built using the information appropriate to the data message being sent. When a processor receives a request or advice, it must preserve certain information in the header and return in the response. This involves header fields 5, 6, 7, 9, 10, 11, and 12.

Header information from the incoming request or advice must be returned in the response (or advice response) as follows:

- Switch the information in Header Field 5—Destination Station ID and Header Field 6—Source Station ID—unless the reply is being returned from a station other than the one that received the request. In that case, Header Field 6—Source Station ID must contain the ID of the station that actually transmits the reply.

- Return the following header fields unchanged:
 - Header Field 7—Round-Trip Control Information
 - Header Field 10—Batch Number
 - Header Field 11—Reserved
 - Header Field 12—User Information
- Return the settings of all bits in Header Field 9—Message Status Flags unchanged.

The processor must also create the values for the remaining header fields.

Message Data Field Specifications

This section describes the message type identifier and explains how message types are used.

Message Header	Message Type ID	Bit Map(s)	Data Fields
----------------	-----------------	------------	-------------

Bit map 1 = Fields 2–64
 Bit map 2 = Fields 66–128
 Bit map 3 = Fields 129–192

The message type identifier is four BCD digits (two bytes) long. It is required in every message and is located between the message header and the primary bit map.

Visa-Unique Specifications

ISO message types are defined in terms of sources and destinations. The ISO standard applies to acquirer messages going to an issuer and issuer messages going to an acquirer.

The ISO standard does not take into account systems (such as VisaNet), which act as an intermediary between end points. To bridge this gap, Visa uses ISO-defined message types as follows:

- Message type 0100 is a message from an acquirer to a card issuer. Visa uses this for authorization and verification requests to be routed from the acquirer either to the card issuer or to STIP. Visa also uses 0100 messages for BASE I balance inquiries.
- Message type 0120 is a message from an acquirer to a card issuer. Visa uses this for authorization advices and balance inquiry advices.

- Message types 0302 and 0322 are messages passed between an issuer and an acquirer. Visa has adopted these file-related messages for use between an issuer and the VIC file management function.
- Message type 0600 is one that can be exchanged between any two communicating parties. Visa also uses 06xx messages for CRIS and for AdvanceBK alerts.

The message type identifier precedes the primary bit map and the data fields of a message and immediately follows the message header. See [Table 2-4](#) for the message type identification structure.

Table 2-4: Message Type Identifier Structure

Attributes	4 N, 4-bit BCD (unsigned packed) fixed length, 2 bytes
Description	The message type identifies the highest level identifier of the type of message and its processing requirements and is an indicator of the content of the message.
Usage	This message component must be present in every message. The value used in any one message must comply with the requirements described here and detailed in the <i>BASE I Processing Specifications</i> manual.
Field Edits	The message type identifier must be numeric and must be one of the codes defined in the <i>BASE I Processing Specifications</i> manual.
Reject Codes	0005 = Invalid value 0270 = Field missing 0400 = Parse error (for example, invalid length, missing code)

Bit Map Specifications

The message text segment of all VisaNet messages is variable length. Bit maps specify which fields are present and which are not.

Message Header	Message Type ID	Bit Map(s)	Data Fields
----------------	-----------------	------------	-------------

Bit map 1 = Fields 2-64
Bit map 2 = Fields 65-128
Bit map 3 = Fields 129-192

Every message contains one or more of the three bit maps currently available. The valid combinations of bit maps in a VisaNet message are:

- The first bit map
- The first and second bit map
- The first, second and third bit map

The header field 13 bit map and the data field 62 bit map, which indicate which information is present in those fields, are also explained in this section.

First, or Primary, Bit Map

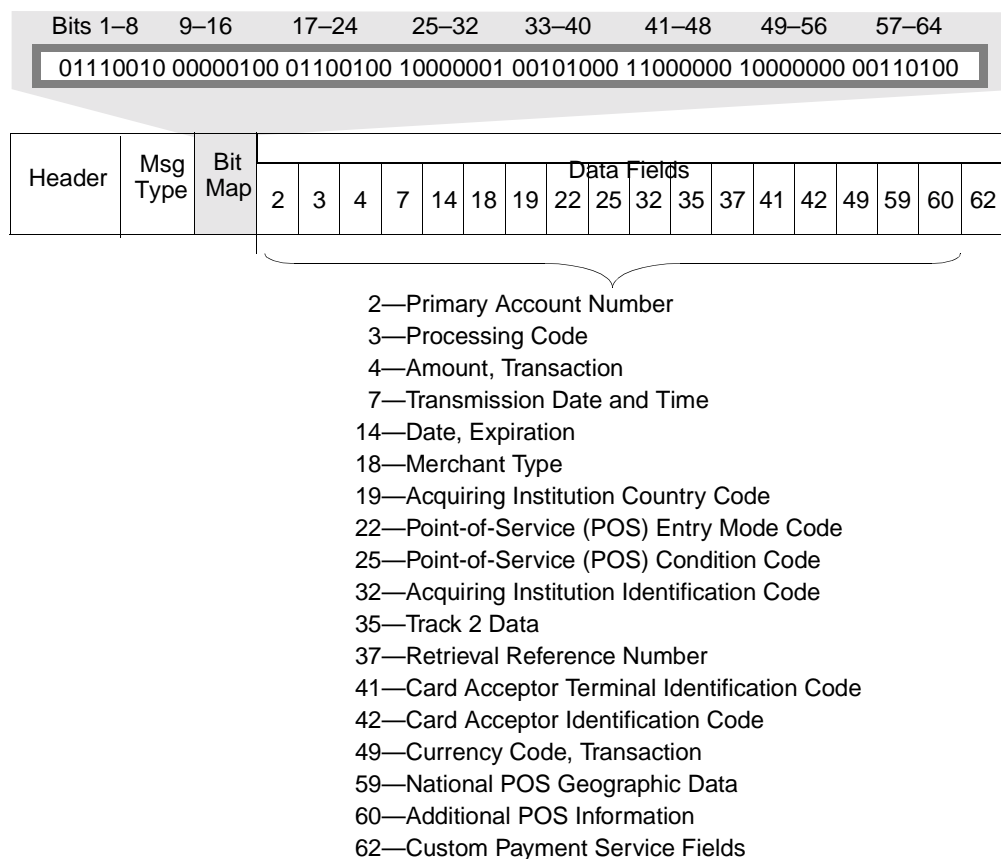
Every message includes the first bit map. It is a control field consisting of 64 bits (8 bytes) located after the message type identifier. Except for the first bit, each bit relates to the corresponding data field (fields 2–64). The value in the bit indicates whether the data field is present in the message:

- If a bit is 0, the field related to that bit *is not present* in the message.
- If a bit is 1, the field related to that bit *is present* in the message.

Data field number 1 does not exist. The first bit of the primary map is used to indicate if another bit map, called the second bit map (see the next section) immediately follows this primary one.

[Figure 2–5](#) illustrates the location and function of the primary bit map. In this example, the first bit is 0, meaning that no bit map follows. The second, third, and fourth bits are 1, meaning that fields 2, 3, and 4 are present in the message. The fifth and sixth bits are 0, meaning that fields 5 and 6 are not present. The seventh bit is 1, meaning that field 7 is present, and so forth.

Figure 2–5: Primary Bit Map Example



Second Bit Map

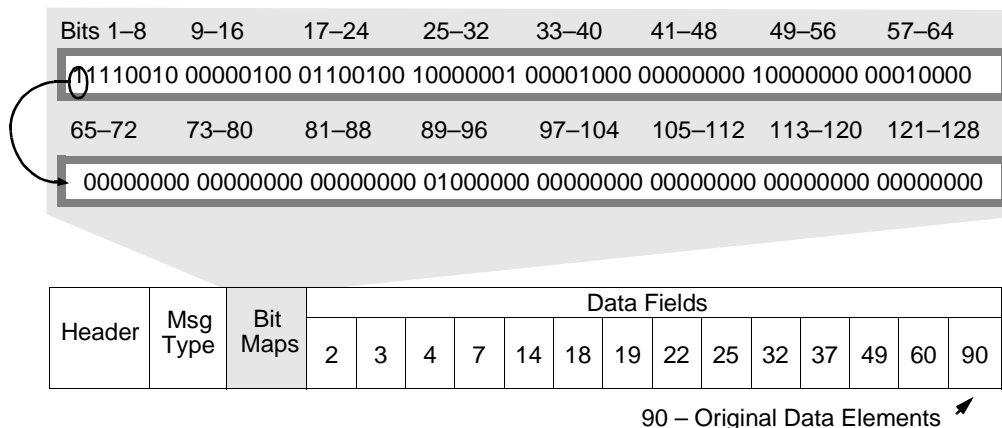
The first bit of the first bit map indicates the presence or absence of a second map called the second bit map.

Like the primary map, the secondary map is a control field consisting of 64 bits (8 bytes). It can be considered an extension of the primary map because it is associated with fields 66 through 128. Data field 65 does not exist. This position, like that of field 1 in the primary map, is used to indicate the presence of another bit map. A 1 in this position indicates the presence of a third bit map.

The second bit map is present only when the message contains information in any field from 66 through 128. When present, the secondary map immediately follows the primary bit map and precedes the data fields.

[Figure 2-6](#) illustrates the location and function of the secondary bit map. In this example, the message includes field 90, in addition to those shown in [Figure 2-5](#). The first bit of the first map is 1, meaning that another map follows. In the second map, the bit in position 90 is 1, meaning that field 90 is present.

Figure 2-6: Secondary Bit Map Example



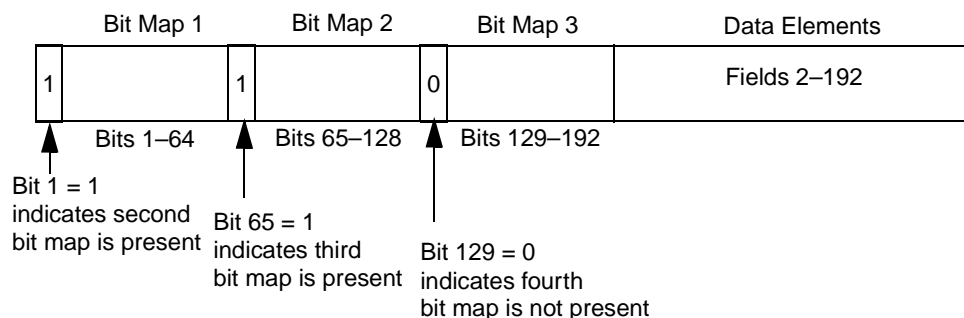
Third Bit Map

The third bit map is for VSDC processing and includes fields 130 through 149 and field 192. This new data, referred to as the audit trail, includes cryptograms and the fields required to generate them.

The third bit map also includes Field 150—COPAC Cardholder Card Scheme Cryptogram, and Field 151—COPAC Negative File Version and Audit Trace Number.

A 1 in the first bit of the second bit map (bit 65) indicates the presence of the third bit map. The third bit map is aligned at the beginning of the message, directly following the current two bit maps. The data elements follow the bit maps.

Figure 2-7: Third Bit Map Example



Field Bit Maps

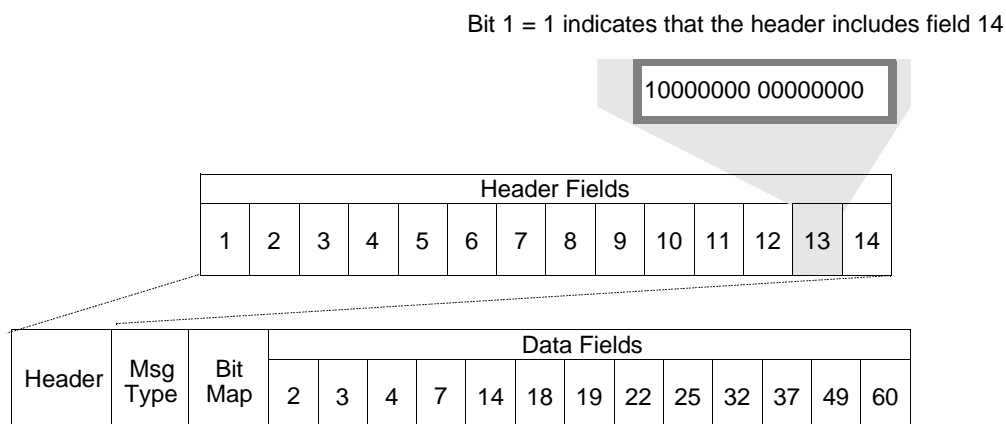
Bit maps can be used also to describe the content of a field within the message. BASE I currently includes two bit map fields, header field 13, and data field 62 for message text.

Header Field 13

Field 13 of the Message Header is defined as a bit map consisting of 16 bits (2 bytes). This bit map indicates how many optional header fields follow the map. Currently, only one optional field (Header Field 14—Bit Map, Reject Code) has been established.

[Figure 2-8](#) illustrates the location and function of the bit map. This bit map and the field after it are system-generated. Users may not insert this information in message headers. Only VisaNet can create reject messages.

Figure 2-8: Header Field 13 Bit Map



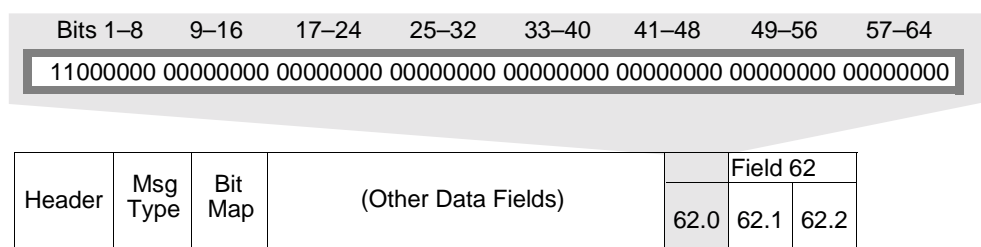
Data Field 62.0

Field 62—Custom Payment Service Fields is a variable length field consisting of two or more fixed-length subfields for a 13-byte total length. Each subfield has its own number and its presence or absence is indicated through a bit map in field 62.0, which contains 64 bits and is 8 bytes in length.

[Figure 2–9](#) illustrates the bit map location and function. This field is required in every Custom Payment Service message.

Figure 2–9: Field 62 Bit Map Example

Bit 1 and Bit 2 indicate that subfields 62.1 and 62.2 are present



Data Field 63

Field 63—V.I.P. Format Private-Use Field is a variable-length field consisting of 256 bytes maximum. There is a length subfield and a bit map, and each subsequent subfield has its own number.

Data Field 130

Field 130—Terminal Capability Profile is a fixed-length VSDC field consisting of 3 bytes. Each byte contains several subfields. For details, see the “Field 130” field description in this book.

Data Field 131

Field 131—Terminal Verification Results is a fixed-length VSDC field consisting of 5 bytes. Each byte contains several subfields. For details, see the “Field 131” field description.

Data Field 134.3

Field 134.3—Card Verification Results (CVR) is a variable-length VSDC bit map subfield with a maximum of 4 bytes. Each byte contains several subfields. For details, see the “Field 134.3” field description.

Data Field 138

Field 138—Application Interchange Profile is a fixed-length VSDC field consisting of 2 bytes. Each byte contains several subfields. For details, see the “Field 138” field description.

Data Field 143

Field 143—Issuer Script Results is a variable-length VSDC field with a maximum of 21 bytes. The length subfield specifies the number of bytes present in this field, and each byte contains one or more subfields. For details, see the “Field 143” field description.

The ISO TLV Format

The fixed format called Basic Encoding Rules (BER), Tag-Length-Value (TLV) (“TLV”) is an ISO convention that treats field content as datasets. TLV is based on ISO 8583, 2001 version, and ISO 8825, ASN.1.

An example of a TLV dataset used in address verification is shown below. The example address is 800 Acorn, CA, 94123.

F123 Length	Dataset ID	Dataset length	Postal TLV			Address TLV		
			Tag Postal Code	Length	Value	Tag address	Length	Value
15	66	0012	C0	05	F9F4F4F0F4	CF	09	F8F0F040D4C5E3D9D6

Values of the fields in this example are:

Length: one byte binary value 21

Dataset ID: one byte binary value 66

Dataset length: 2 bytes binary value 18

Tag Postal Code: one byte binary value C0

Length: one byte binary value 5

Value: 5 bytes hex value F9F4F4F0F4

Tag Address: one byte binary value CF

Length: one byte binary value 9

Value: 9 bytes hex value F8F0F040D4C5E3D9D6

The TLV format is designed for flexibility. The format illustrated above is only an example. TLV dataset structures can be constructed in simple “tokenized” or abbreviated form. For example, Field 48, Usage 16 (Visa Commerce Data), contains the dataset ID subfield and the TLV elements subfield but not the dataset length subfield.

Current VisaNet BER-TLV Applications

The following fields support the TLV format:

- Field 48—Additional Data, Private, Usage 16. This field usage applies to Visa Commerce data
- Field 55—BER-TLV Chip Data:
 - Usage 1: This field usage applies to Visa Cash data.
- Field 123—Address Verification Data.
- Field 125—Supporting Information, Usage 2. This field usage applies to Magneprint anti-skimming measures.

Header Fields

This section specifies header field formats, describes header field contents and use, and gives the reject code that signifies invalid data in a particular header field. The values for certain header fields are set by the user; values for other header fields are determined by Visa.

All header fields are fixed length fields.

- Header fields 1 through 12 are mandatory.
- Header fields 13 and 14 are conditional.

Refer to the following information for descriptions of header fields 1–14.

Header Field 1—Header Length

Attributes

1B (binary)
1 byte

Generated by

Header field 1 is generated by the processor, V.I.P., or a VAP.

Description

Header field 1 specifies the number of bytes in this header in hexadecimal.

Usage

Rather than coding header lengths explicitly, such as 22 or 26, users should always check the value in this field to find the start of the message text. This practice permits future expansion of the header with minimal software impact.

NOTE: *Do not assume that this header field is a reject header based on the content of this field alone. In a reject header, the length must be 26 or higher, and the first bit of header field 13 must be 1.*

Field Edits

The field edits must be between 22 and 32 bytes.

Reject Codes

The reject codes for header field 1 are:

0012 = Invalid value

Valid Values

The valid values are:

16 = Normal message header

1A = Reject message header

Header Field 2—Header Flag and Format

Attributes

8 N, bit string
1 byte

Generated by

Header field 2 is generated by the processor, V.I.P., or a VAP.

Description

Header field 2 specifies the presence or absence of a message header following this header field, and the format of this message header.

The first bit is a flag:

- 0 = No header follows this one
- 1 = Another header follows this one

The last seven bits contain a binary value that identifies the format of this message header:

- 1 = The VisaNet format, as specified in this chapter. (Additional codes may be assigned by Visa, if necessary.)

Field Edits

In all processor-generated outgoing messages, field 2 must be the binary value 0000 0001.

In an incoming reject message, field 2 must be the binary value 1000 0001.

Reject Codes

The reject codes for header field 2 are:

- 0013 = Invalid value
- 0519 = Invalid header format

Header Field 3—Text Format

Attributes

1B (binary)
1 byte

Generated by

Header field 3 is generated by the processor, V.I.P., or a VAP.

Description

Header field 3 is a code that specifies the message data field format. Current codes are listed in [Table 2–5](#). Acquirers and issuers must be certified for field 62 bit map format (flag value = 2). The bit map format can be used for CPS authorization and reversal requests, and responses and repeats whether or not field 62 is present.

Field Edits

The header field value must contain 2 if the header is in bit map format, field 62 is present, or both.

Reject Codes

The reject codes for header field 3 are:

0015 = Invalid value

Valid Values

[Table 2–5](#) describes the text format codes for header field 3.

Table 2–5: Header Field 3 Text Format Codes (1 of 2)

Code	Definition
1	Visa implementation of the ISO standard format: <ul style="list-style-type: none">• Fixed field format• Field 62 fixed format (or not present)
2	Visa implementation of the ISO standard format: <ul style="list-style-type: none">• Bit-mapped field format• Field 62 bit-mapped format (or not present)
3	MasterCard ISO format
4	Reserved for Visa use (Plus format)

Table 2–5: Header Field 3 Text Format Codes (2 of 2)

Code	Definition
5	Reserved for Visa use (Honor format)
8	Reserved for Visa use (Inter-VIC/VAP format)
9	Reserved for Visa use (Intra-BASE I format)
A	American Express format

Header Field 4—Total Message Length

Attributes

2B (binary)
2 bytes

Generated by

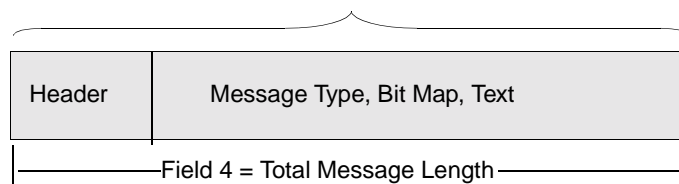
Header field 4 is generated by the processor, V.I.P., or a VAP.

Description

Header field 4 specifies the total number of bytes in this message.

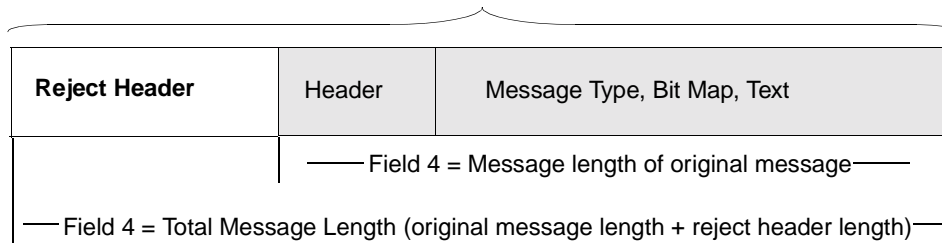
Header field 4 reflects the length of this message from the start of this header to the end of the message, as shown below.

Original Outgoing Message



If this is a reject message header (followed by the original standard message header and text), header field 4 of the reject message header reflects the length of the entire message. The value in header field 4 in the original message header reflects the original length.

Incoming Rejected Message



Field Edits

In standard VisaNet (nonreject) messages, the value must be greater than 32 and not more than 800. The following format requirements also apply:

- For BASE I message format, the value must not be more than 500.
- For V.I.P. message format, the value must not be more than 800.

An incoming reject message can be longer and up to $n + 26$, where n is the original outgoing message length and 26 is the length of the reject header created by VisaNet.

Reject Codes

The reject codes for header field 4 are:

0016 = Invalid value

Header Field 5—Destination Station ID

Attributes

6 N, 4-bit BCD (unsigned packed)
3 bytes

Generated by

The header field 5 is generated by the processor, V.I.P., or a VAP.

Description

Header field 5 identifies the station to which the message is routed.

Usage

When a processor creates a request or advice, it zero-fills this field. The member's VAP, along with VisaNet, replaces the zeros with the station ID.

When a processor replies to a request or advice, the processor inserts the ID from Header Field 6—Source Station ID, of the incoming message.

When a VAP returns a message to VisaNet as undeliverable, fields 5 and 6 must not be switched.

Field Edits

In outgoing user-created requests and advices, the value must be zeros.

In all responses and advice responses, the field must contain a valid station ID.

Reject Codes

The reject codes for header field 5 are:

0003 = Invalid value

0163 = VCMS reject: at least one station specified in a loopback router sign on request is not a VCMS-only station

Header Field 6—Source Station ID

Attributes

6 N, 4-bit BCD (unsigned packed)
3 bytes

Generated by

Header field 6 is generated by the processor, V.I.P., or a VAP.

Description

Header field 6 identifies the station that introduced the message into the network. The station may or may not be the station that initially collected the transaction data.

Usage

Normally, when the station receiving an incoming request or advice creates a reply, the ID in Header Field 5—Destination Station ID is preserved as the source station ID in the reply.

If a different station is creating the reply, header field 6 contains the source station ID of the station creating the reply. In this instance, however, the ID from header field 5 of the request is not used.

Field Edits

Every outgoing message must contain a valid ID that reflects the station that is the last one polled by VisaNet. The source station must be signed on. If the source station ID does not identify a valid network endpoint, the message is logged and no further processing occurs.

Reject Codes

The reject codes for header field 6 are:

0004 = Invalid value; source station ID in header

0163 = VCMS reject: at least one station specified in a loopback router sign-on request is not a VCMS-only station

0164 = VCMS reject: source station in loopback router sign-on or sign-off not found in the BASE I system tables

Header Field 7—Round Trip Control Information

Attributes

8 N, bit string
1 byte

Generated by

Header field 7 is generated by V.I.P. or a VAP only.

Description

Header field 7 is reserved for Visa use and is set by VisaNet or a VAP. It contains additional information that must be returned in a reply.

Usage

The processor does not code this header field when it generates a request or advice. When a request or advice is received, the center *must preserve the value received in this field and return that value unchanged* in the response message. If the values in a response are zeros rather than the value received, the message is not rejected, but it cannot be routed back to the requestor.

In an incoming request or advice, this field identifies where the request originated.

Field Edits

In center-generated outgoing requests and advices, the value must be zeros.

Reject Codes

The reject codes for header field 7 are:

0022 = Invalid value in request

Header Field 8—BASE I Flags

Attributes

16 N, bit string
2 bytes

Generated by

Header field 8 is generated only by V.I.P. or a VAP.

Description

As defined and used by V.I.P. BASE I.

Usage

Header field 8 is required in all outgoing center-generated messages. The value must be all zeros.

Reject Codes

The reject codes for header field 8 are:

0023 = Invalid value

0259 = Field missing

Header Field 9—Message Status Flags

Attributes

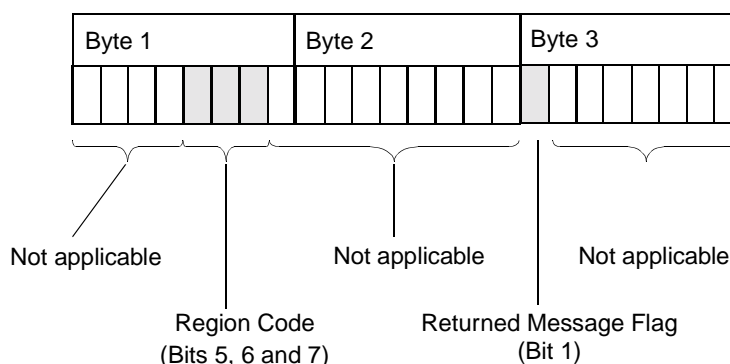
24-bit string
3 bytes

Generated by

Header field 9 is generated by the processor, V.I.P. or a VAP.

Description

Header field 9 is used to control processing of the message. The flags (currently defined) are shaded in the illustration below. All other bits are reserved for future use or are under VisaNet control.



Byte 1, Bits 5, 6 and 7, Corporate Region Code: V.I.P. sets these bits to the acquirer's region code in any message routed to or from a BASE I endpoint. The region code is used in computing currency conversion fees.

Byte 3, Bit 1, Returned Message Flag: This flag is set to 1 by a VAP or V.I.P. to identify a message being returned because the destination is unavailable.

Usage

When a processor generates a normal request message, it sets this entire field to zeros. When a processor originates a normal response message, the following applies.

BASE I Message Format: The values received in this field must not be returned, that is, all bits must be set to zeros in the response.

V.I.P. Message Format: The values received in this field of the request must be preserved and returned unchanged in the response. For this field to be present in a response, the source station must be set to V.I.P. format.

Field Edits

Header field 9 is required in all processor-generated messages.

The value must be all zeros.

Reject Codes

The reject codes for header field 9 are:

0025 = Invalid value

0260 = Field missing

Header Field 10—Batch Number

Attributes

1B (binary)
1 byte

Generated by

Header field 10 is generated by V.I.P. only.

Description

Header field 10 does not apply to BASE I.

Header Field 11—Reserved

Attributes

3B (binary)
3 bytes

Generated by

Header field 11 is generated only by V.I.P. or a VAP.

Description

Header field 11 is used internally by VisaNet. Byte 1, bits 2 through 8, are used for routing information. Bytes 2 and 3 are used by the VAP.

Usage

When a processor generates any outgoing request or advice, this field is set to zeros.

The value received in this field of the request or advice must be preserved and returned unchanged in the response.

Field Edits

In processor-generated requests, this field must be zero-filled.

In a processor-generated response, this field *must* contain exactly those values received in the corresponding request.

Reject Codes

| There are no reject codes for header field 11.

Header Field 12—User Information

Attributes

1B (binary)
1 byte

Generated by

Header field 12 is generated by the processor.

Description

Header field 12 is an acquirer-defined value that can be used, as needed, to facilitate member center processing. For example, this value could identify the specific source of a request such as a CPU identifier or a dial-up line identifier.

This value is for internal use only by the processor. The value has no meaning in the network or for other processors.

Usage

In an outgoing request, this field contains the user-defined value at the processor's discretion. If user information is not required, this field must be zero-filled. For an outgoing response, a processor must preserve this field from the request and return it unchanged in the response.

Field Edits

There are no field edits for header field 12.

Reject Codes

There are no reject codes for header field 12.

Header Field 13—Bit Map

Attributes

16 N, bit string
2 bytes

Generated by

Header field 13 is generated only by V.I.P. or a VAP.

Description

If header field 13 is present in a reject message header, then header field 14 is present and contains the reject code.

Header field 13 is included only in Visa-generated reject message headers. When present, bit 1 is set to **1**, indicating that header field 14 follows.

Usage

Processors must omit this field in all outgoing messages.

Field Edits

There are no field edits for header field 13.

Reject Codes

There are no reject codes for header field 13.

Header Field 14—Bit Map, Reject Code

Attributes

4 N, 4-bit BCD (unsigned packed)
2 bytes

Generated by

Header field 14 is generated only by V.I.P. or a VAP.

Description

When an error in a message prevents it from being sent to its usual destination, the message is returned to the originator, and this field is used to identify the reason for the return.

When a header includes this header field (header field 14), the text after the header consists of the original message header and message text in error. Header field 2 of the reject message header must indicate that another message header follows.

Reject reason codes as well as in their applicable field descriptions are listed in Appendix C.

Field Edits

There are no field edits for header field 14.

Reject Codes

There are no reject codes for header field 14.

Field Description Components and Message Field Summaries

3

This chapter summarizes the information components and topics for the header and data field descriptions. It also includes tables that list header and data fields in alphabetical order and ascending numerical sequence with attributes.

Header and Data Field Descriptions

Each field description contains several information components and topics within those components. [Table 3–1](#) describes the main component labels.

Table 3–1: Field Description Information Components (1 of 2)

Component	Type of Information
Attributes	Field length and format.
Generated by	Entities that can set nonzero values for the field: a processor bit map or Visa.
Description	Field content and code definitions when applicable.
Usage	Special field processing considerations.
Message Format	Requirements that vary by message format <i>in addition</i> to those previously stated for the field: <i>BASE I message format:</i> specifications unique to BASE I. <i>V.I.P. message format:</i> specifications that apply to BASE I messages that conform to the more recent VisaNet-level message format.
Comments	Additional information.

Table 3–1: Field Description Information Components (2 of 2)

Component	Type of Information
Field Edits	Field content and presence rules; failure to comply results in message rejection.
Reject Code	Codes that appear in reject message headers when this field is in error.
Decline Response	STIP responses.
Valid Values	Allowable field values.
File Edits	Formats 1 and 2 file maintenance field content and presence rules.
File Error Codes	Content error codes for Formats 1 and 2 file maintenance messages.

[Table 3–2](#) lists the different topic labels.

Table 3–2: Field Description Topic Labels (1 of 2)

Topic	Definition
Auto-CDB	Specifies Auto-CDB-only processing requirements.
AdvanceBK	Specifies Bankruptcy Risk Prediction Service-only processing requirements.
Check Acceptance	Specifies check acceptance-only processing requirements.
CPS	Specifies Custom Payment Service (CPS)-only processing requirements.
CRIS	Specifies Cardholder Risk Identification Service (CRIS)-only processing requirements.
CVV	Specifies magnetic stripe-based Card Verification Value (CVV)-only processing requirements.
CVV2	Specifies Card Verification Value 2 (CVV2)-only processing requirements.
iCVV	Specifies chip-based Card Verification Value-only processing requirements (Alternate chip CVV)
E-commerce	Specifies e-commerce transactions over an open or public network, for example, the Internet, that include the VSEC SET or 3-D Secure processing requirements.
Enhanced Auto-CDB Response (EAR)	Specifies Enhanced Auto-CDB Response (EAR)-only processing requirements for 0110 messages.
File Processing	Specifies file update-only processing requirements.
MasterCard	Specifies U.S. MasterCard-only purchase transaction processing requirements. Note: MasterCard identifies its message fields as “data elements” (DE) and “subelements.” They mean the same thing as “field” and “subfield.”

Table 3–2: Field Description Topic Labels (2 of 2)

Topic	Definition
Plus	Specifies Plus Switch-only ATM transactions processing requirements.
Verification Services	Specifies verification processing requirements. If no specific service (for example, Account Verification) is listed, the statement is assumed to apply to all the BASE I verification services: Address, Account, PIN, and Telecode.
Visa Card	Specifies Visa card-only and Visa check card II-only transaction processing requirements. These rules do not apply to non-Visa cards processed according to Visa rules (for example, MasterCard).
Visa Cash	Specifies Visa Cash transaction processing requirements.
Visa Cash Back	Specifies Visa Cash Back service-only transaction processing requirements.
Visa check card II	Specifies Visa check card II-only transaction processing requirements.
Visa Horizon—COPAC and VSDC Formats	Specifies processing requirements for a chip-based, pre-authorized debit product that can be processed using either the Chip Offline Preauthorized Card (COPAC) or VSDC transaction processing technologies.
Visa Horizon—COPAC Format	Specifies Chip Offline Preauthorized Card (COPAC)-format only processing requirements. (Visa Horizon transactions initiated via VSDC format are the same as non-Horizon VSDC transactions except for the field 134.2 value).
VisaNet	Specifications for transactions on Visa and on other cards processed according to Visa card rules.
VSDC	Specifies Visa Smart Debit and Visa Smart Credit chip card processing requirements.

[Table 3–3](#) lists message type field requirement labels.

Table 3–3: Message Type Field Requirement Labels

Advice Type	Requirement
STIP and Switch advices	Specifies field presence.
0120 file update advices	Specifies field presence and identifies file content.
0322 file update advices	Specifies field presence and identifies file content.
IARS Advices	Specifies field presence in Automated Referral System advices.

The following terms have special, precise meaning in the context of the field descriptions that appear in Chapter 3 and Chapter 4.

Key Word Or Phrase	Meaning
Positions	When this word is used to describe the length of a subfield or some part of a field, it refers to digits, characters, or bits, as appropriate to the field format.
Verification Services	These BASE I verification services: Address, Account, PIN, Telecode.
Domestic Transaction	A transaction in which the merchant, acquirer, and issuer are all within the same country or political boundary (for example, U.S. domestic)

Data Elements

This section contains VisaNet message data elements, including header and data fields. They are listed in the following tables:

- [Table 3-4](#), Message Header and Data Fields—Alphabetical Order, lists current VisaNet header and data elements in alphabetical order. Header fields are identified by “Header.” This table includes subfield names for all fields except field 127.
- [Table 3-5](#), Field 127 Subfields—Alphabetical Order, lists the subfields of field 127 in alphabetical order. Field 127 is a Visa-defined private-use field for file maintenance messages.
- [Table 3-6](#), Field Attributes, lists the header and data field attributes used by Visa. It also includes fields defined by ISO 8583 but not yet used by Visa. Fields defined by ISO 8583 do not include subfields; attributes are defined at the field level.

[Table 3-4](#) identifies the message header and data fields in alphabetical order.

Table 3-4: Message Header and Data Fields—Alphabetical Order (1 of 9)

Field/Data Name	Field Number
Account Identification 1	102
Account Identification 2	103
Account Number (Format 1 File response)	48, Usage 1a

Table 3–4: Message Header and Data Fields—Alphabetical Order (2 of 9)

Field/Data Name	Field Number
Account Number Length	48, Usage 1a
Account Type	54.1
Account Type (From)	3
Account Type (To)	3
Acquiring Institution Country Code	19
Acquiring Institution Identification Code	32
Actual Amount, Transaction	95.1
Actual Amount, Settlement	95.2
Actual Amount, Settlement Fee	95.3
Actual Amount, Transaction Fee	95.4
Additional Amounts	54
Additional POS Information	60
Additional Data— Private	48
Additional Response Data	44
Address Verification Data (Postal Code and Street Address)	123
Address Verification Result Code	44.2
Administrative Message	48, BASE I, Usage 4
Amount (field 54 balance)	54.5
Amount, Cardholder Billing	6
Amount, Sign	54.4
Amount, Transaction	4
Amount, Transaction Fee	28
Amount Type	54.2
Application Interchange Profile	138
Application Transaction Counter	137
Authorization Response Cryptogram (ARPC) and Code	139
Authorization Identification Response	38

Table 3–4: Message Header and Data Fields—Alphabetical Order (3 of 9)

Field/Data Name	Field Number
Authorization Characteristics Indicator	62.1
AdvanceBK Risk Alert	48, Usage 13
BASE I Flags	Header Field 8
Batch Number (not used)	Header Field 10
Bit Map, Reject Message Header	Header Field 13
Bit Map, Returned Message	Header Field 14
Billing/Reporting/Other Data for Visa Use	48, Usage 7
Bit Map for field 62	62.0
Card Acceptor City Name	43
Card Acceptor Country code	43
Card Acceptor Identification Code	42
Card Acceptor Name (ATM)	43
Card Acceptor Name/Location	43
Card Acceptor Province/State Code	59
Card Acceptor Terminal Identification	41
Card Acceptor (U.S.) County Code	59
Card Acceptor (U.S.) ZIP Code	59
Card Authentication Reliability Indicator	60.7
Card Authentication Results Code	44.8
CAVV Data (3-D Secure)	126.9, Usage 2
CAVV Results Code	44.13
CVV2 Authorization Request Data	126.10
Card Product Type (IARS)	44.4
Card Sequence Number	23
Card Verification Results (CVR)	134.3
Cardholder SET Certificate Serial Number (VSEC)	126.6
Check Acceptance Information	48, Usage 6

Table 3–4: Message Header and Data Fields—Alphabetical Order (4 of 9)

Field/Data Name	Field Number
Check Acceptance Error Reason	48, Usage 3
Check Settlement Code	44.12
Chip Authentication Reliability Indicator	60.7
Chip Condition Code	60.3
Commercial Card Type Request	48, Usage 11
Conversion Rate, Cardholder Billing	10
COPAC Cardholder Card Scheme Cryptogram	150
COPAC Negative File Version and Audit Trace Numbers	151
CRIS Alert, Part 1	48, Usage 14
CRIS Alert, Part 2	125, Usage 1
Cryptogram	136
Cryptogram Amount	147
Cryptogram Cashback Amount	149
Cryptogram Currency Code	148
Cryptogram Transaction Type	144
Cryptogram Version Number	134.2
Currency Code	54.3
Currency Code, Cardholder Billing	51
Currency Code, Transaction	49
Custom Payment Service Fields	62
CVV/iCVV Results Code	44.5
CVV2 Result Code	44.10
Date, Action	73
Date, Expiration	14
Date, Local Transaction	13
Derivation Key Index	134.1
Destination Station ID	Header Field 5

Table 3–4: Message Header and Data Fields—Alphabetical Order (5 of 9)

Field/Data Name	Field Number
Dial Terminal Information	48, BASE I, Usage 5
Duration	62.5
Error codes in 0310/0312 responses or 0322 advices, Format 2	48, Usage 1b
Error codes in 0312 responses, Format 1	48, Usage 1a
Error Reason Text in Check Acceptance Responses	48, Usage 3
Field 126 Bit Map	126
Field Identifier	48, usages 2, 3, 4, 5, 6, 7, 8, 9, 10,12
File Name	101
File Records—Action and Data	127
File Security Code	92
File Update Code	91
Forwarding Institution Country Code	21
Forwarding Institution Identification Code	33
Free-Form Text—Japan	124
Header Flag and Format	Header Field 2
Header Length	Header Field 1
IGOTS Transaction Description	126.11
Intra-Country Data	118
Intra-Country Data—Korea	118, BASE I, Usage 2
Intra-Country Data—Japan	118, BASE I, Usage 1
Issuer Discretionary Data	135
Issuer Script	142
Issuer Script Results	143
Issuing Institution Identification Code	121
LA Additional Response Data	44.9
Magneprint Data	125, Usage 2
Mail Order/Telephone Order/Electronic Commerce Indicator (MOTO/ECI)	60.8

Table 3–4: Message Header and Data Fields—Alphabetical Order (6 of 9)

Field/Data Name	Field Number
Market-Specific Data Identifier	62.4
MasterCard Corporate Fleet Card Data	48, Usage 10
MasterCard Interchange Compliance Information	62.17
Merchant Group Indicator	60.5
Merchant SET Certificate Serial Number (VSEC)	126.7
Merchant Type	18
Message Authentication Code	64 or 128 or 192
Message Status Flags	Header Field 9
National Point-of-Service Geographic Data	59
Network Management Information Code	70
Original Acquirer ID and Original Forwarding Institution ID	90.4
Original Data Elements	90
Original Message Type	90.1
Original Message Type Identifier	120
Original Response Code	44.11
Original Trace Number	90.2 or 125, Usage 1
Original Transmission Date and Time	90.3 or 125, Usage 1
Other Amount, Cardholder Billing	61.2
Other Amount, Replacement Billing	61.3
Other Amount, Transaction	61.1
Other Amounts	61
PACM Diversion Level	44.6
PACM Diversion Reason Code	44.7
PAN and Date Entry Mode	22.1
PAN Extended, Country Code	20
Payment Guarantee Option Indicator	126.14
Personal Identification Number (PIN) Data	52

Table 3–4: Message Header and Data Fields—Alphabetical Order (7 of 9)

Field/Data Name	Field Number
PIN Block Format Code	53.3
PIN Encryption Algorithm ID	53.2
PIN Entry Capability	22.2
Point-of-Service Condition Code	25
Point-of-Service Entry Mode Code	22
Point-of- Service PIN Capture Code	26
Prestigious Property Indicator	62.6
Primary Account Number (PAN)	2
Processing Code	3
Purchasing Card—Fleet Service	48, Usage 12
Receiving Institution Country Code	68
Receiving Institution Identification Code	100
Remaining Open-to-Use	122
Replacement Amounts	95
Reporting Information	48, Usage 7
Reserved for Visa	Header Field 11 Data Fields 44.4, 53.5, 60.4, 63.9, and 63.10
Response Code	39
Response Indicator	93
Response Source/Reason Code	44.1
Retrieval Reference Number	37
Round Trip Control Information	Header Field 7
Security Format Code	53.1
Security Related Control Information	53
Service Indicators	126.12
Service Restriction Code	40
Source Station ID	Header Field 6

Table 3–4: Message Header and Data Fields—Alphabetical Order (8 of 9)

Field/Data Name	Field Number
Special Condition Indicator—Existing Debt	60.4
Supporting Information	125
Systems Trace Audit Number	11
Telecode	48, Usage 8
Telecode Verification Result Code	44.3
Terminal Capability Profile	130
Terminal Country Code	145
Terminal Entry Capability	60.2
Terminal Information	48, Usages 5 and 6
Terminal Serial Number	133
Terminal Transaction Date	146
Terminal Type	60.1
Terminal Verification Results	131
Text for Network or Administrative Message	48, Usage 4
Text Format	Header Field 3
Text in Authorizations/Reversals/BASE I Responses	48, Usage 2
Time, Local Transaction	12
Timeout Station ID	48, Usage 9
Total Message Length	Header Field 4
Track 1 Data	45
Track 2 Data	35
Transaction Description	104
Transaction ID (VSEC)	126.8
Transaction Identifier	62.2
Transaction Indicator	60.6
Transaction Type	3
Transmission Date and Time	7

Table 3–4: Message Header and Data Fields—Alphabetical Order (9 of 9)

Field/Data Name	Field Number
TransStain/CAVV Data (VSEC)	126.9
TransStain (SET)	126.9, Usage 1
Unformatted Text (for authorizations, reversals, network, administrative)	48, Usages 2, 4
Unformatted Text (for responses from BASE I or error reasons in check acceptance responses)	48, SMS, Usages 2, 3
Unpredictable Number	132
User Information	Header Field 12
Validation Code	62.3
VAS Billing Information	48, Usage 7
V.I.P. Format Private-Use Field	63
Visa Cash BER-TLV CEPS Data	55, Usage 1
Visa Commerce Data	48, Usage 16
Visa Discretionary Data (VSDC)	134
Visa Private-Use Bit Map	126.0
Visa Private-Use Fields	126
Zone Key Index	53.4

Field 127 Subfields

[Table 3–5](#) lists the field 127 subfields in alphabetical order.

Table 3–5: Field 127 Subfields—Alphabetical Order (1 of 3)

Field Name	Format 1 Field Number	Format 2 Field Number
Account Number	127.2	n/a
Action Code	127EF.4	127E.1
Address Verification Value	n/a	127A.2 or 127C.3
Algorithm Identifier	127.PVV4	Fields 52 and 53 (PIN verification data)

Table 3–5: Field 127 Subfields—Alphabetical Order (2 of 3)

Field Name	Format 1 Field Number	Format 2 Field Number
ATM Cash Activity Limit (issuer available)	n/a	127R.22
ATM Cash Activity Limit (issuer unavailable)	n/a	127R.23
Auto Rental Activity Limit (issuer available)	n/a	127R.10
Auto Rental Activity Limit (issuer unavailable)	n/a	127R.11
Cash Adjustment Amount	n/a	127I.2
Cash Daily Spending Limit (issuer available)	n/a	127R.4
Cash Daily Spending Limit (issuer unavailable)	n/a	127R.5
Cash Monthly Open-to-Use	n/a	127F.3
Cash Verification Amount (for adjustment)	n/a	127I.4
Cash Verification Amount	n/a	127F.5
File Update Code	127.1	n/a
Lodging Activity Limit (issuer available)	n/a	127R.8
Lodging Activity Limit (issuer unavailable)	n/a	127R.9
Mail/Telephone Activity Limit (issuer available)	n/a	127R.14
Mail/Telephone Activity Limit (issuer unavailable)	n/a	127R.15
Merchant Data 1	n/a	127M.2
Merchant Data 2	n/a	127M.3
Merchant Record Type	n/a	127M.1
Non-Cash Adjustment Amount	n/a	127I.1
Non-Cash Daily Spending Limit (issuer available)	n/a	127R.2
Non-Cash Daily Spending Limit (issuer unavailable)	n/a	127R.3
Non-Cash Monthly Open-to-Use	n/a	127F.2
Non-Cash Verification Amount (for adjustment)	n/a	127I.3
Non-Cash Verification Amount	n/a	127F.4

Table 3–5: Field 127 Subfields—Alphabetical Order (3 of 3)

Field Name	Format 1 Field Number	Format 2 Field Number
PIN Verification Data	Fields 127.PVV4 and 127.PVV5 (Algorithm Identifier and Security Data)	127C.1 (Algorithm Identifier and Security Data: PVKI and PVV)
Postal Code (Address Verification)	n/a	127A.1 or 127C.2
Purge Date	127.3	n/a
Refresh Day	n/a	127F.1
Region Coding	127.EF5	127E.2
Restaurant Activity Limit (issuer available)	n/a	127R.12
Restaurant Activity Limit (issuer unavailable)	n/a	127R.13
Risk Level	n/a	127R.1
Risky Purchase Activity Limit (issuer available)	n/a	127R.16
Risky Purchase Activity Limit (issuer unavailable)	n/a	127R.17
Security Data	127.PVV5	127.C1 (PVKI and PVV)
Telecode	n/a	127S.1
Total Cash Activity Limit (issuer available)	n/a	127R.20
Total Cash Activity Limit (issuer unavailable)	n/a	127R.21
Total Purchase Activity Limit (issuer available)	n/a	127R.18
Total Purchase Activity Limit (issuer unavailable)	n/a	127R.19
Travel Activity Limit (issuer available)	n/a	127R.6
Travel Activity Limit (issuer unavailable)	n/a	127R.7

Field Attributes

[Table 3–6](#) lists header and data field attributes for BASE I messages. ISO fields that are listed as “not used” do not appear in BASE I messages. SMS fields are not included.

Issuer and acquirer centers processing BASE I messages are required to certify for all ISO fields, not just those currently in use.

For the tables in this section, the three columns under the Type, Length, and Attributes headings provide the following information:

Field type	<p><i>F</i> indicates a fixed-length field.</p> <p><i>V1</i> indicates a variable-length BCD field where the length subfield specifies the number of real digits that follow. The lead zero, required when the first half byte of a 4-bit BCD field is not used, is not included in the length count.</p> <p><i>V2</i> indicates a variable-length EBCDIC, AN, or ANS field where the length subfield specifies the number of bytes that follow.</p>
Field length	The number of bytes for this field. The maximum number of bytes allowed for V1 and V2 fields, including the length subfield. For F fields, this number is the fixed length of the field.
Attributes	<p>For V1 and V2 fields, the first byte is always a binary value specifying the length of data. This length subfield is shown in the table as "1 B." The remainder of the specification gives the format of the actual data and the maximum number of positions (digits, characters, bits, and so on) allowed.</p> <p>For F fields, this is the format and number of positions required. For all fields, the format can be:</p> <p>AN (alphanumeric, no special characters; EBCDIC)</p> <p>ANS (alphanumeric and special characters; EBCDIC)¹</p> <p>B (binary value)</p> <p>BCD (numeric, four-bit BCD = unsigned packed)</p> <p>Bit String</p> <p>N (numeric, one byte per character)</p>

¹ Or BCDIC-K which is used in Japan and is the EBCDIC 7 bit code definition for Japanese Katakana characters.

NOTE: *Special characters include characters such as commas (,), slashes (/), and dashes (-).*

Table 3–6: Field Attributes (1 of 11)

Field Number	Field Name	Type	Length	Attributes
Not Applicable	Message Type Identifier	F	2	4 BCD
Not Applicable	Bit Map, Primary	F	8	64-bit string
Not Applicable	Bit Map, Secondary	F	8	64-bit string
Not Applicable	Bit Map, Third	F	8	64-bit string
H1	Header Length	F	1	binary
H2	Header Flag and Format	F	1	8-bit string
H3	Text Format	F	1	binary

Table 3–6: Field Attributes (2 of 11)

Field Number	Field Name	Type	Length	Attributes
H4	Total Message Length	F	2	binary
H5	Destination Station ID	F	3	6 BCD
H6	Source Station ID	F	3	6 BCD
H7	Round Trip Control Information	F	1	binary
H8	BASE I Flags	F	2	16-bit string
H9	Message Status Flags	F	3	24-bit string
H10	Batch Number (not used)	F	1	binary
H11	Reserved	F	3	binary
H12	User Information	F	1	binary
H13	Bit Map	F	2	16-bit string
H14	Bit Map	F	2	4 BCD
2	Primary Account Number (PAN)	V	≤ 11	1 B + up to 19 BCD ¹
3	Processing Code	F	3	6 BCD
4	Amount, Transaction	F	6	12 BCD
6	Amount, Cardholder Billing	F	6	12 BCD
7	Transmission Date and Time	F	5	10 BCD
8	Amount, Cardholder Billing Fee (not used)	F	4	8 BCD
10	Conversion Rate, Cardholder Billing	F	4	8 BCD
11	Systems Trace Audit Number	F	3	6 BCD
12	Time, Local Transaction	F	3	4 BCD
13	Date, Local Transaction	F	2	4 BCD
14	Date, Expiration	F	2	4 BCD
17	Date, Capture (not used)	F	2	4 BCD
18	Merchant Type	F	2	4 BCD
19	Acquiring Institution Country Code	F	2	3 BCD ¹
20	PAN Extended, Country Code	F	2	3 BCD ¹

Table 3–6: Field Attributes (3 of 11)

Field Number	Field Name	Type	Length	Attributes
21	Forwarding Institution Country Code	F	2	3 BCD ¹
22	Point-of-Service Entry Mode Code	F	2	4 BCD
23	Card Sequence Number	F	2	3 BCD
24	Network International Identifier (not used)	F	2	3 BCD ¹
25	Point-of-Service Condition Code	F	1	2 BCD
26	Point-of-Service PIN Capture Code	F	1	2 BCD
27	Authorization Identification Response Length (not used)	F	1	1 BCD ¹
28	Amount, Transaction Fee	F	9	9 AN
29	Amount, Settlement Fee (not used)	F	9	9 AN
30	Amount, Transaction Processing Fee (not used)	F	9	9 AN
31	Amount, Settlement Processing Fee (not used)	F	9	9 AN
32	Acquiring Institution Identification Code	V	≤ 7	1 B + up to 11 BCD ¹
33	Forwarding Institution Identification Code	V	≤ 7	1 B + up to 11 BCD ¹
35	Track 2 Data	V	≤ 20	1 B + up to 37 BCD ¹ and hexadecimal “D”
36	Track 3 Data (not used)	V	≤ 53	1 B + up to 104 BCD
37	Retrieval Reference Number	F	12	12 AN ²
38	Authorization Identification Response	F	6	6 AN
39	Response Code	F	2	2 AN
40	Service Restriction Code	F	3	3 AN
41	Card Acceptor Terminal Identification	F	8	8 ANS
42	Card Acceptor Identification Code	F	15	15 ANS
43	Card Acceptor Name/Location	F	40	40 ANS
44	Additional Response Data	V	≤ 26	1 B + up to 25 ANS ³
44.1	Response Source/Reason Code	F	1	1 AN

Table 3–6: Field Attributes (4 of 11)

Field Number	Field Name	Type	Length	Attributes
44.2	Address Verification Result Code	F	1	1 AN
44.3	Telecode Verification Result Code	F	1	1 AN
44.4	Card Product Type (IARS)	F	1	1 AN
44.5	CVV/iCVV Results Code	F	1	1 AN
44.6	PACM Diversion Level	F	2	2 AN
44.7	PACM Diversion Reason Code	F	1	1 N
44.8	Card Authentication Results Code	F	1	1 AN
44.9	LA Response Code	F	1	1 N
44.10	CVV2 Result Code	F	1	1 AN
44.11	Original Response Code	F	2	2 ANS
44.12	Check Settlement Code	F	1	1 ANS
44.13	CAVV Results Code	F ¹	1	1 AN
1 AN	Track 1 Data	V	≤ 77	1 B + up to 76 ANS
46	Additional Data—ISO (not used)	V	≤ 256	1 B + up to 255 ANS
47	Additional Data—National (not used)	V	≤ 256	1 B + up to 255 ANS
48	Additional Data—Private	V	≤ 256	1 B + up to 255 ANS ⁴
49	Currency Code, Transaction	F	2	3 BCD ¹
51	Currency Code, Cardholder Billing	F	2	3 BCD ¹
52	Personal Identification Number (PIN) Data	F	8	64-bit string
53	Security Related Control Information	F	8	16 BCD
54	Additional Amounts	V	≤ 121	1 B + up to 120 ANS
55	Visa Cash BER-TLV CEPS Data	V	≤ 256	1 B + up to 255 ANS
56	Reserved—ISO (not used)	V	≤ 256	1 B + up to 255 ANS
57	Reserved—National (not used)	V	≤ 256	1 B + up to 255 ANS
58	Reserved—National (not used)	V	≤ 256	1 B + up to 255 ANS
59	National POS Geographic Data	V	≤ 15	1 B + up to 14 ANS

Table 3–6: Field Attributes (5 of 11)

Field Number	Field Name	Type	Length	Attributes
60	Additional POS Information	V	≤ 6	1 B + up to 6 BCD
60.1	Terminal Type	F	1/2	1 N, 4 bit BCD
60.2	Terminal Entry Capability	F	1/2	1 N, 4 bit BCD
60.3	Chip Condition Code	F	1/2	1 N, 4 bit BCD
60.4	Special Condition Indicator—Existing Debt	F	1	1 N, 4 bit BCD
60.5	Merchant Group Indicator	F	1	2 N, 4 bit BCD
60.6	Transaction Indicator (position 1)	F	1/2	1 N, 4 bit BCD
60.7	Card Authentication Reliability Indicator (position 2)	F	1/2	1 N, 4 bit BCD
60.8	Mail Order/Telephone Order/Electronic Commerce Indicator	F	1	2 N, 4 bit BCD
61	Other Amounts	V	≤ 19	1 B + 12, 24, 36 BCD
61.1	Other Amount, Transaction	F	6	12 BCD
61.2	Other Amount, Cardholder Billing	F	6	12 BCD
61.3	Other Amount, Replacement Billing	F	6	12 BCD
62	Custom Payment Service Fields	V	≤ 32	1 B + up to 59 bytes
62.0	CPS Fields Bit Map	F	8	64-bit string
62.1	Authorization Characteristics Indicator	F	1	1 AN
62.2	Transaction Identifier	F	8	15 BCD ¹
62.3	Validation Code	F	4	4 AN
62.4	Market-Specific Data Identifier	F	1	1 AN
62.5	Duration	F	1	2 BCD
62.6	Prestigious Property Indicator	F	1	1 AN
62.17	MasterCard Interchange Compliance Information	F	15	15 EBCDIC
63	V.I.P. Format Private-Use Field	V	≤ 256	1 B + up to 255 bytes
64	Message Authentication Code	F	8	64-bit string
67	Extended Payment Code (not used)	F	1	2 BCD

Table 3–6: Field Attributes (6 of 11)

Field Number	Field Name	Type	Length	Attributes
68	Receiving Institution Country Code	F	2	3 BCD ¹
70	Network Management Information Code	F	2	3 BCD ¹
71	Message Number (not used)	F	2	4 BCD
72	Message Number Last (not used)	F	2	4 BCD
73	Date, Action	F	3	6 BCD
78	Transfer, Number (not used)	F	5	10 BCD
79	Transfer, Reversal Number (not used)	F	5	10 BCD
80	Inquiries, Number (not used)	F	5	10 BCD
81	Authorizations, Number (not used)	F	5	10 BCD
82	Credits, Processing Fee Amount (not used)	F	6	12 BCD
83	Credits, Transaction Fee Amount (not used)	F	6	12 BCD
84	Debits, Processing Fee Amount (not used)	F	6	12 BCD
85	Debits, Transaction Fee Amount (not used)	F	6	12 BCD
90	Original Data Elements	F	21	42 BCD
91	File Update Code	F	1	1 N
92	File Security Code	F	2	2 AN
93	Response Indicator	F	5	5 AN
94	Service Indicator (not used)	F	7	7 AN
95	Replacement Amounts	F	42	42 AN
98	Payee (not used)	F	25	25 AN
100	Receiving Institution Identification Code	V	≤ 7	1 B + up to 11 BCD ¹
101	File Name	V	≤ 18	1 B + up to 17 ANS
102	Account Identification 1	V	≤ 29	1 B + up to 28 ANS
103	Account Identification 2	V	≤ 29	1 B + up to 28 ANS
104	Transaction Description ⁵	V	≤ 101	1 B + up to 100 ANS
105	Reserved ISO (not used)	V	≤ 256	1 B + up to 255 ANS

Table 3–6: Field Attributes (7 of 11)

Field Number	Field Name	Type	Length	Attributes
106	Reserved ISO (not used)	V	≤ 256	1 B + up to 255 ANS
107	Reserved ISO (not used)	V	≤ 256	1 B + up to 255 ANS
108	Reserved ISO (not used)	V	≤ 256	1 B + up to 255 ANS
109	Reserved ISO (not used)	V	≤ 256	1 B + up to 255 ANS
110	Reserved ISO (not used)	V	≤ 256	1 B + up to 255 ANS
111	Reserved ISO (not used)	V	≤ 256	1 B + up to 255 ANS
112	Reserved National (not used)	V	≤ 256	1 B + up to 255 ANS
113	Reserved National (not used)	V	≤ 256	1 B + up to 255 ANS
114	Reserved National (not used)	V	≤ 256	1 B + up to 255 ANS
116	Reserved National (not used)	V	≤ 256	1 B + up to 255 ANS
117	Reserved National (not used)	V	≤ 256	1 B + up to 255 ANS
118	Intra-Country Data	V	≤ 256	1 B + 3 BCD ¹ + up to 253 ANS
120	Original Message Type Identifier	V	3	1 B + 4 BCD
121	Issuing Institution Identification Code	V	≤ 12	1 B + 3 to 11 AN
122	Remaining Open-to-Use	V	14	1 B + 13 AN
123	Address Verification Data	V	≤ 30	1 B + up to 29 ANS
124	Free-Form Text—Japan	V	≤ 136	1 B + up to 135 ANS
125	Supporting Information	V	≤ 256	1 byte, binary + up to 255 ANS, EBCDIC
126	Visa Private-Use Fields	V	≤ 256	1 B + up to 255 ANS
126.0	Visa Private-Use Bit Map	V	8	64-bit string
126.1	Reserved	V	25	unassigned
126.2	Reserved	V	57	unassigned
126.3	Reserved	V	57	unassigned
126.4	Reserved	V	18	unassigned
126.5	Reserved	V	6	unassigned

Table 3–6: Field Attributes (8 of 11)

Field Number	Field Name	Type	Length	Attributes
126.6	Cardholder Certificate Serial Number (VSEC)	F	17	1 byte binary + up to 16 bytes
126.7	Merchant Certificate Serial Number (VSEC)	F	17	1 byte binary + up to 16 bytes
126.8	Transaction ID (VSEC)	F	20	20 bytes binary
126.9	TransStain/CAVV Data (VSEC)	F	20	20 bytes binary
126.10	CVV2 Authorization Request Data	F	6	6 AN
126.11	IGOTS Transaction Description	F	2	2 AN
126.12	Service Indicators	F	3	24-bit string
126.14	Payment Guarantee Option Indicator	F	1	1 ANS
128	Message Authentication Code	F	8	64-bit string
130	Terminal Capability Profile	F	3	24-bit string
131	Terminal Verification Results (TVR)	F	5	40-bit string
132	Unpredictable Number	F	4	8 hexadecimal digits
133	Terminal Serial Number	F	8	8 ANS
134	Visa Discretionary Data	V	≤ 16	1 byte binary + up to 15 bytes
134.1	Derivation Key Index	F	1	2 hexadecimal digits
134.2	Cryptogram Version Number	F	1	2 hexadecimal digits
134.3	Card Verification Results (CVR)	V	≤ 4	1 byte binary + up to 24-bit string
135	Issuer Discretionary Data	V	≤ 16	1 byte binary + up to 30 hexadecimal digits
136	Cryptogram	F	8	16 hexadecimal digits
137	Application Transaction Counter	F	2	4 hexadecimal digits
138	Application Interchange Profile	F	2	16-bit string
139	ARPC Response Cryptogram & Code	F	10	16 hexadecimal digits 2 bytes, AN

Table 3–6: Field Attributes (9 of 11)

Field Number	Field Name	Type	Length	Attributes
142	Issuer Script	V	≤ 256	1 byte + up to 510 hexadecimal digits
143	Issuer Script Results	V	≤ 21	1 byte + up to 40 hexadecimal digits
144	Cryptogram Transaction Type	F	1	2 N, 4-bit BCD (unsigned, unpacked)
145	Terminal Country Code	F	2	3 N, 4-bit BCD
146	Terminal Transaction Date	F	3	6 N, 4-bit BCD
147	Cryptogram Amount	F	6	12 N, 4-bit BCD (unsigned, unpacked)
148	Cryptogram Currency Code	F	2	3 N, 4-bit BCD
149	Cryptogram Cashback Amount	F	6	12 N, 4-bit BCD
150	COPAC Cardholder Card Scheme Cryptogram	F	8	16 hexadecimal digits
151	COPAC Negative File Version and Audit Trace Number	F	12	24 N, 4-bit BCD
192	Message Authentication Code (MAC)	F	8	64-bit string

Format 1

127	File Records—Action and Data	V	≤ 256	1 B + up to 255 bytes
127.1	File Update Code	F	1	1 AN
127.2	Account Number	V	≤ 9	1 B + 13 or 16 BCD ¹
127.3	Purge Date	F	2	4 BCD
127.EF4	Action Code	F	2	2 ANS
127.EF5	Region Coding	F	9	9 ANS
127.EF6	Filler	F	4	4 N
127.PVV4	Algorithm Identifier	F	1	2 BCD
127.PVV5	Security Data	F	10	20 BCD

Format 2

127	File Maintenance	V2	≤ 256	1 B + up to 255 bytes
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Table 3–6: Field Attributes (10 of 11)

Field Number	Field Name	Type	Length	Attributes
127A.1	Address Verification Postal Code	F	9	9 ANS
127A.2	Address Verification Value	F	5	5 ANS
127C.1	PIN Verification Data	F	22	22 AN ⁶
127C.2	Address Verification Postal Code	F	9	9 ANS
127C.3	Address Verification Value	F	5	5 ANS
127E.1	Action Code	F	2	2 AN
127E.2	Region Coding	F	9	9 ANS
127F.1	Refresh Day	F	2	2 AN
127F.2	Non-Cash Monthly Open-to-Use Amounts	F	9	9 AN
127F.3	Cash Monthly Open-to-Use Amounts	F	9	9 AN
127F.4	Previous Non-Cash Open-to-Use Verification Data	F	9	9 AN
127F.5	Previous Cash Open-to-Use Verification Data	F	9	9 AN
127I.1	Non-Cash Adjustment Amount	F	9	9 AN
127I.2	Cash Adjustment Amount	F	9	9 AN
127I.3	Previous Non-Cash Open-to-Use Verification Data	F	9	9 AN
127I.4	Previous Cash Open-to-Use Verification Data	F	9	9 AN
127M.1	Merchant Record Type	F	1	1 AN
127M.2	Merchant Data 1	F	4, 15	4 ANS or 15 ANS
127M.3	Merchant Data 2	F	1, 9	1 AN or 9 ANS
127M.4	Merchant Data 2	F	16	16 ANS
127P.1	PIN Verification Data	F	7	7 ANS
127R.1	Risk Level	F	1	1 ANS
127R.2	Non-Cash Daily Spending Limit (issuer available)	F	5	5 ANS
127R.3	Non-Cash Daily Spending Limit (issuer available)	F	5	5 ANS
127R.4	Cash Daily Spending Limit (issuer available)	F	5	5 ANS
127R.5	Cash Daily Spending Limit (issuer unavailable)	F	5	5 ANS

Table 3–6: Field Attributes (11 of 11)

Field Number	Field Name	Type	Length	Attributes
127R.6	Travel Activity Limit (issuer available)	F	5	5 ANS
127R.7	Travel Activity Limit (issuer unavailable)	F	5	5 ANS
127R.8	Lodging Activity Limit (issuer available)	F	5	5 ANS
127R.9	Lodging Activity Limit (issuer unavailable)	F	5	5 ANS
127R.10	Auto Rental Activity Limit (issuer available)	F	5	5 ANS
127R.11	Auto Rental Activity Limit (issuer unavailable)	F	5	5 ANS
127R.12	Restaurant Activity Limit (issuer available)	F	5	5 ANS
127R.13	Restaurant Activity Limit (issuer unavailable)	F	5	5 ANS
127R.14	Mail/Phone Activity Limit (issuer available)	F	5	5 ANS
127R.15	Mail/Phone Activity Limit (issuer unavailable)	F	5	5 ANS
127R.16	Risky Purchase Activity Limit (issuer available)	F	5	5 ANS
127R.17	Risky Purchase Activity Limit (issuer unavailable)	F	5	5 ANS
127R.18	Total Purchase Activity Limit (issuer available)	F	5	5 ANS
127R.19	Total Purchase Activity Limit (issuer unavailable)	F	5	5 ANS
127R.20	Total Cash Activity Limit (issuer available)	F	5	5 ANS
127R.21	Total Cash Activity Limit (issuer unavailable)	F	5	5 ANS
127R.22	ATM Cash Activity Limit (issuer available)	F	5	5 ANS
127R.23	ATM Cash Activity Limit (issuer unavailable)	F	5	5 ANS
127S.1	Telecode Verification Value	F	4	4 N

¹ Plus a leading zero to fill the unused first half-byte.

² Actual contents limited to numerics.

³ Currently, only ten positions are defined.

⁴ Format varies with message type and card program.

⁵ For BASE I usage, this field is transmitted between a VAP and a VIC only.

⁶ The last 15 bytes may be omitted if 127C.2 and 127C.3 are not present.

Data Field Descriptions

4

This chapter contains the data field descriptions for V.I.P. online messages. The field descriptions use the acronyms shown in [Table 4–1](#).

Table 4–1: Acronyms Used in Data Field Descriptions (1 of 4)

Acronym	Definition
AAC	Application Authentication Cryptogram
ACI	Authorization Characteristics Indicator
ACS	Access Control Server
ADM	Automated Dispensing Machine
AFD	Automated Fuel Dispenser
ARPC	Authorization Response Cryptogram
ARQC	Authorization Request Cryptogram
ATM	Automated Teller Machine
ATR	Assured Transaction Response
ATS	Account Tracking Service
Auto-CDB	Automated Cardholder Database Service
AVS	Address Verification Service
AWK	Acquirer Working Key
B2B	Business-to-Business
BER	Basic Encoding Rules (as in TLV format)

Table 4-1: Acronyms Used in Data Field Descriptions (2 of 4)

Acronym	Definition
BCR	BIN Control Record
BCD	Binary-Coded Decimal Notation
CAVV	Cardholder Authentication Verification Value
CEPS	Cardholder Electronic Purse Specifications
CFT	Cardholder Funds Transfer
COPAC	Chip Offline Pre-Authorized Card
CPS	Custom Payment Service
CRB	Card Recovery Bulletin
CRIS	Cardholder Risk Identification Service
CRM	Copy Request Manager
CRS	Chargeback Reduction Service
CVM	Card Verification Method
CVR	Card Verification Results
CVV	Card Verification Value
DCAF	Deferred Clearing Advice File
DDA	Dynamic Data Authentication
EAS	Enhanced Authorization Service
EDC	Electronic Data Capture
EIRF	Electronic Interchange Reimbursement Fee
EPS	Express Payment Service
GCAS	Global Customer Assistance Service
IARS	International Automated Referral Service
IAVS	International Address Verification Service
ICP	Intra Company Purchase
ICS	Interchange Control System
ICS (Fraud)	Issuer's Clearinghouse Service
iCVV	Integrated Circuit Card (iCC) CVV

Table 4-1: Acronyms Used in Data Field Descriptions (3 of 4)

Acronym	Definition
ITT	Intertask Table
IVRU	IARS Voice Response Unit
IWK	Issuer Working Key
MAC	Message Authentication Code
MCC	Merchant Category Code
MCFS'	Merchant Central File Service
MOTO	Mail Order or Telephone Order
MVI	Merchant Volume Indicator (Field 63.18)
NRI	[Card] Not Received as Issued
PACM	Positive Authorization Capacity Management
PAN	Primary Account Number
PCAS	Positive Cardholder Authorization Service
PCR	Processing Center Record
PIN	Personal Identification Number
PVKI	PIN Verification Key Index
PVS	PIN Verification Service
PVV	PIN Verification Value
RFC	Request for Copy
RIS	Risk Identification Service
SDA	Static Data Authentication
SET	SET Secure Electronic Transaction™
SI	Suppress Inquiries
SIP	Supermarket Incentive Program
SMS	Single Message Service
SRP	Stop Recurring Payment
STIP	Stand-in Processing
TC	Transaction Certificate
TLV	Tag-Length-Value (Format)

Table 4-1: Acronyms Used in Data Field Descriptions (4 of 4)

Acronym	Definition
TVR	Terminal Verification Results
T&E	Travel & Entertainment
UAT	Unattended Acceptance Terminal (old term: cardholder activated terminal)
URL	Uniform Resource Locator
VAP	VisaNet Access Point
VAS	VisaNet Authentication Service
VCRFS	VisaNet Copy Request and Fulfillment Service
VDAS	VisaNet Documentation Automation Service
VIC	VisaNet Interchange Center
V.I.P.	Visanet Integrated Payment (System)
VIP	Very Important Person
VIDS	VisaPhone Issuer Direct Service
VIEW	Visa Image Exchange Workstation
VISC	Visa International Service Center
VSDC	Visa Smart Debit and Visa Smart Credit
VSEC	Visa Secure Electronic Commerce
VSIL	Visa Information Security Line
VSS	VisaNet Settlement Service
VTSC	Visa Travel Service Center
XID	Electronic Commerce Transaction Identifier (TransStain)

Field 2—Primary Account Number

Attributes

variable length

1 byte, binary +

up to 19 N, 4-bit BCD (unsigned packed); maximum 11 bytes

NOTE: *This is the only data field measured in nibbles, not bytes.*

Description

Field 2 contains the number identifying the cardholder account or relationship. The value is a cardholder account number of up to 19 numeric digits encoded on Track 1 and Track 2 of the magnetic stripe. The length specifies the number of digits in the account number, which is right-justified. If the account number has an odd number of digits, a leading zero is required to pad the first unused half-byte of data. Because this zero is a filler and not part of the account number, it is *not* counted in the length subfield. Visa cards issued or reissued on or after 1 January 1995 must contain a 16-digit account number.

Account number lengths depend on the card program being processed.

[Table 4–2](#) provides the allowable card account number lengths.

Table 4–2: Allowable Card Account Number Lengths

Card Program and Number of Digits	
Visa Card (13 or 16 digits)	American Express (15 digits)
Plus Card (11–19 digits)	Discover (16 digits)
MasterCard (16 digits)	JCB Card (16 digits)
Cirrus (7–19 digits)	Diner's Club (14 digits)

Usage

Field 2 is required in the non-CPS message types listed below unless arrangements have been made with Visa to use other account number fields:

- 0100 authorization requests/balance inquiries and their 0110 responses
- 0120 advices
- 0102 ATM confirmations
- 0302 file maintenance inquiries, and 0312 file maintenance responses

- 0322 Enhanced Auto-CDB advices
- 0400 reversals and their 0410 responses
- 0420 reversal advice and 0430 responses.
- 0620 advices for CRIS and AdvanceBK (bankruptcy prediction)

CPS: Field 2 is required in all CPS requests; otherwise, the request is downgraded. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

CRIS Advices: The account number from the original transaction responsible for the CRIS alert is in field 48.

Check Acceptance: Field 102 instead of field 2 must be used for the cardholder ID.

0120 and 0322 File Update Advices: Field 2 is present.

STIP and Switch Advices: Field 2 is present in 0120 or 0420 advices and their responses if it was in the request.

Non-Standard Account Numbers

Members wanting to use account numbers with greater than 19 numeric digits or digits that are non-ISO standard must first consult with Visa to determine the fields to use for account number and issuer identification. The fields are:

- For account numbers with non-numeric characters, see field 102 or 103.
- For account numbers that cannot be used to determine the issuer, see field 100 or 121.

The account number may be a cardholder identification number related to one or more of the cardholder's accounts. If this field is not the account to be used for transaction posting, the issuer can optionally send the correct account number in field 102 or 103 of the response.

Field Edits

The account number in the original request is required in all subsequent messages for that cardholder transaction. If this field is present in a request or advice, it must be returned unchanged in the response.

The length subfield value must be numeric and cannot exceed 19 digits.

NOTE: *The number must be within a card number range supported by V.I.P.; otherwise, V.I.P. denies the request with a response code of 15.*

In any message related to a specific cardholder transaction, or in a format 2, 0302 request, if field 2 is present, V.I.P. ignores fields 102, and 103. The account number must be in this field if it is not in field 102, or 103.

Visa: Only during STIP does V.I.P. check 13- and 16-digit account numbers for correct length based on issuer-supplied parameters.

Reject Codes

The reject codes for field 2 are:

0001 = Invalid length

0002 = Invalid value. For VCMS rejects, the account number is associated with a Processing Center Record (PCR), which differs in the issuer's part from the partner station PCR.

0165 = VCMS reject

0251 = Field missing

0531 = Nondomestic transaction

0600 = Consistency error: the account number does not match that already in the transaction set

STIP Edits

The card number check digit is verified at the issuer's discretion. The card length must be valid for the card program.

If STIP finds that the message's account number length does not match the issuer-supplied parameters, it attempts to forward the message to the issuer for the authorization decision; for instance, if STIP encounters a 13-digit number but the issuer parameters specify 16 digits. If the issuer is unavailable, a referral (01) response is returned.

Decline Response

Decline responses are:

14 = Invalid account number (check digit or length)

File Edits

When this field is present in a format 2, 0302 request, the File Management Function at the VIC applies these additional edits:

- Account number length must be valid for the issuer BIN.

- The number must be within the issuer's range of numbers and must be under the issuer's control. (An issuer may only update records for its own cardholders, not for those of any other center unless alternate parameters have been invoked).
- For an add, the account number may not already be in the file.
- For a change or delete, the account number must already be present in the file.
- For STIP only, the modulus-10 check is optional for non-Visa card issuers.
- Modulus-10 verifications are not performed on account numbers in Exception File updates.

File Maintenance Error Codes

The file error codes for field 2 are:

0558 = Length not used by issuer

0564 = Invalid length

0565 = No record on file (change, delete, or inquiry)

0566 = Record already on file, cannot add

0570 = Invalid check digit

0571 = Account number not in range for the processing center

Field 3—Processing Code

Attributes

fixed length
6 N, 4-bit BCD (unsigned packed); 3 bytes

Description

Field 3 contains a code that identifies the cardholder transaction type and the cardholder account types, if any, that are affected by the transaction. Field 3 is a fixed-length field for three data elements as follows. The codes are in [Table 4–3](#) of the “Valid Values” section.

Positions:

1–2

3–4

5–6

transaction type	account type “from”	account type “to”
Byte 1	Byte 2	Byte 3

Positions 1–2, Transaction Type: These positions contain a 2-digit code identifying the type of cardholder transaction or center function being processed.

Positions 3–4, Account Type (From): These positions contain a two-digit code identifying the account type affected by this transaction.

Positions 5–6, Account Type (To): These positions contain a 2-digit code that identifies the account type to which an account transfer is made.

NOTE: *Visa cardholders cannot perform account transfers.*

Usage

Field 3 is used in these message types:

- 0100 authorization requests/balance inquiries
- 0110 authorization responses (subject to per-message format rules)
- 0120 advices, 0102 ATM confirmations
- 0302 file maintenance inquiries
- 0312 file maintenance responses
- 0322 Enhanced Auto-CDB advices
- 0400 reversals
- 0410 reversal responses

- 0420 reversal advice
- 0620 AdvanceBK Alert advices

How field 3 is used in responses depends on the message format.

- BASE I Message Format:
 - Field 3 is required in 0100, 0102, and 0400 requests.
 - Field 3 is required in 0110 responses if the issuer specifies an account type.
 - Field 3 is required in balance inquiry responses or when the issuer specifies a different account type.
- V.I.P. Message Format: Field 3 is required in responses and 0102 ATM confirmations.

Positions 1–2: For quasi-cash requests, the transaction type must be 11 for quasi-cash, which issuers must certify to receive. If issuers are not certified, V.I.P. converts the 11 to 01 (cash advance) before forwarding the message to the issuer.

Positions 3–4: The account type is based on cardholder specifications when the cardholder selects an account type at the point of service. The value is 00 (unspecified) unless explicitly indicated otherwise by cardholder. Acquirers should not make assumptions about account types.

For balance inquiry responses, the account type codes in field 54 of the response must match the codes in this field. See the “Field Edits” section.

CPS: Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

Visa Cash Back: The transaction must be a purchase: Positions 1–2 must be 00.

Visa Cash: This field is used in Visa Cash Load requests. It is returned unchanged in responses. [Table 4–4](#) shows the values required for different Visa Cash messages. If acquirers submit 60 or 67 in positions 5–6, V.I.P. changes them to 00 if the message is a Visa Cash funds request. The original field 3 is returned to the acquirer as logged.

Visa Commerce: Positions 1–2 must be 00.

Visa Horizon—COPAC Format: This field requires specific values in COPAC 0100 ATM cash withdrawal and preauthorization requests (the value from the original is present and unchanged in 0110 responses, and in preauthorization reversals). Values in Visa Horizon-COPAC requests are:

- Cash withdrawals require 01 in positions 1–2, 64 in positions 3–4, and 00 in positions 5–6.

- Preauthorizations require 68 in positions 1–2, any valid account type in positions 3–4, and 64 in positions 5–6.

Check Acceptance: Field 3 is required in all requests and responses. The value must be 030000.

STIP and Switch Advices: Field 3 is present.

Field Edits

The value in this field must be one of those in [Table 4–3](#) of the “Valid Values” section later in this chapter.

For Status check transactions, the value in positions 1–2 must be 00, field 4 must be one unit of currency, and the merchant category code in field 18 cannot be 6011 (ATM). Requests that do not meet these requirements are not considered status checks and are subject to currency conversion.

For quasi-cash (POS) transactions, the value in positions 1–2 must be 11.

If the value in positions 3–4 for any ATM authorization request is other than 00 (not specified), that value must be returned unaltered in the response.

For balance inquiry responses, the value in positions 3–4 must match the account type code in the first two positions of each data set in field 54.

Visa Cash: The values in field 3 positions must match according to the transaction type.

- If transaction type (positions 1–2) is 28, 62, 63, or 64, then the “to” account type (positions 5–6) must be 60; otherwise, reject code 008.
- If transaction type (positions 1–2) is 64, then the “from” account type (positions 3–4) must be 60; otherwise, reject code 008.

Verification Services: The value must be all zeros.

Check Acceptance: Field 3 is required in 0100 and 0110 messages. The value in the response must match that in the request.

Reject Codes

The reject codes for field 3 are:

0008 = Invalid value

0274 = Field missing

0528 = Invalid from account code in positions 3–4 in an 0110 Visa Cash or ATM balance inquiry response.

0529 = The first two digits of the reply are not the same as the request.

Valid Values

[Table 4-3](#) provides valid values for field 3.

Table 4-3: Field 3 Processing and Account Type Codes

Positions 1-2: Transaction Type		Positions 3-4: Account Type "from" ¹		Positions 5-6: Account Type "to"	
Code	Definition	Code	Definition	Code	Definition
00	Goods/Service Purchase POS transaction only	00	Not Applicable or Not Specified	00	Not Applicable
01	Withdrawal/Cash Advance	10	Savings Account	10	Savings Account
03	Check Acceptance	20	Checking Account	20	Checking Account
10	Account Funding	30	Credit Card Account	30	Credit Card Account
11	Quasi-Cash Transaction (POS transaction only)	40	"Universal" Account (represented by a cardholder identification number) ²	40	"Universal" Account (represented by a cardholder identification number)
28	Credit to Electronic Purse	60	Reloadable Cash Card Account (Transfer Value)	60	Reloadable Cash Card Account (Transfer Value)
30	Balance/Available Funds Inquiry	64	Spending Power Account	64	Spending Power Account
40	Cardholder Account Transfer			67	Disposable Cash Card
62	Transfer Value				
63	Administrative				
64	Currency Exchange				
68	Visa Horizon-COPAC Preauthorization				

¹ The first digit of the "from account" in the authorization request should be used in the BASE II clearing record.

² A default or universal access account is what the issuer allows a cardholder to use when the account type in the request is unspecified. Its usage by U.S. financial institutions is the same as for Default Account; the values "40" and "00" are used interchangeably.

[Table 4–4](#) provides valid values for field 3.

Table 4–4: Visa Cash Field 3 Processing and Account Type Codes

Message	Positions 1–2: Transaction Type	Positions 3–4: Account Type “from”	Positions 5–6: Account Type “to”
Unlinked Load	28	Any valid account type	60
Linked Load	62	Any valid account type	60
Currency Exchange	64	60	60
Transaction Completion	63	Any valid account type	60
Cash Funds (reloadable card)	01	Any valid account type	60
Cash Funds (disposable card)	01	Any valid account type	67

Field 4—Amount, Transaction

Attributes

fixed length
12 N, 4-bit BCD (unsigned packed); 6 bytes

Description

The POS, ATM, or Check Acceptance transaction amount either in U.S. dollars or per the currency code in field 49. The amount in an original authorization request is expressed in the local currency and excludes any transaction fees. No decimal point appears in this field; the decimal place is implied, based on the currency. Multicurrency processing applies to Visa and Plus card transactions and to others subject to VisaNet rules (for instance, American Express). It does not apply to MasterCard and Cirrus gateway transactions.

Usage

Field 4 is used in these message types:

- 0100 authorization requests and 0110 authorization responses
- 0120 advices, 0102 ATM confirmations
- 0400 reversals and 0410 reversal responses
- 0420 reversal advices

NOTE: When this field is present in a message, the transaction currency code must be present in field 49.

Field 4 is a fixed-length field; lead zero fill is always required.

For multicurrency participating issuers, this field reflects the acquirer's transaction currency submitted by the acquirer.

For nonparticipating issuers, this field contains a U.S. dollar amount.

ATM Transactions: The currency must be the currency dispensed. For non-ATM transactions, the acquirer may submit the authorization in U.S. dollars.

Visa: For a status check from an automated gas dispenser or a prestigious hotel, this field contains one whole unit of currency (for example, US\$1). If the issuer participates in multicurrency processing, the field 6 value remains one unit but the currency code in field 51 reflects the billing currency.

NOTE: *In addition to the single unit of currency requirement, status checks must have 00xxxx in field 3 and the merchant category code in field 18 cannot be 6011 (ATM). Requests that do not meet these requirements are not considered status checks and are subject to currency conversion.*

CPS: Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

This field is used for the additional amount in incremental authorization requests. It contains the difference from the initial authorization amount. For example, if the initial request was for US\$100, and the merchant anticipates an additional US\$50 in charges, this field in the incremental authorization request will contain US\$50, not US\$150.

Visa Cash Back: The amount in this field includes both the purchase amount and the cashback amount. The cashback amount itself is in field 61.1.

Visa Cash: This field is used in Cash Load requests and contains the cash load amount or purchase amount.

CRIS Advices: The amount is in field 48.

Verification-Only Requests: Field 4 should be all zeros for account or address verification-only requests. Any other value is ignored by STIP, which (if the verification request is successful), responds with response code 85 (no reason to decline).

Reversals and Partial Reversals: In an 0400 partial reversal or an 0102 confirmation with a corrected amount, this field always contains the value of the original 0100 request. The following conditions apply:

- For partial POS reversals, the corrected amount goes in field 95—Replacement Amounts. The field 95 replacement amount must be *less* than the original amount in field 4; otherwise, the reversal message will reject.

BASE I does not retain data from previous reversals. BASE I will process multiple partial reversals as long as field 95 is less than field 4 in each transaction. BASE I forwards them to issuers. If the reversal is processed in STIP, activity totals are not adjusted.

- For partial reversals of incremental authorizations, field 4 is required and must contain the total amount authorized (field 95 must contain the corrected total amount authorized).
- For ATM confirmations, the corrected amount goes in Field 61.1—Other Amounts.
- A BASE I issuer has the option of setting this field to zeros in an 0410 reversal response to indicate that it was unable to back out the transaction amount, for example, because it has no record of the original approval.

NOTE: *BASE I STIP does not set this field to zeros when it cannot back out the transaction amount from the cardholder's activity record.*

Check Acceptance: Transaction amounts must be in U.S. dollars.

0120 File Update Advices: Field 4 is present and is zero-filled.

STIP and Switch Advices: Field 4 is present in 0120 or 0420 advices if it was in the original request.

Field Edits

The value in this field must be numeric and right-justified with leading zeros. Field requirements vary by message format. Field 4 is required in all:

- 0100 requests
- 0400 requests
- 0102 ATM confirmations

Field 4 is also required in an 0110 or 0410 response if field 39 is 00 or 85. The field is optional in responses to verification-only requests or Status Checks.

[Table 4–5](#) shows transaction amount parameters in U.S. dollars for Visa card programs. Transactions with amounts in excess of the allowances are declined with response code 13 in the response.

Table 4–5: Visa Card Program Maximum Amounts

Card Program	Maximum Amounts (USD)	Comments
Visa Infinite and Signature	\$499,999.99	Amounts between US \$100,000 and \$499,999.99 are force-routed to available issuers. If issuers are unavailable, STIP returns 91 (issuer unavailable) in field 39 of the response.
Visa Commerce	\$10,000,000.00	\$10 million includes any currency conversion effect. Amounts in excess of that result in a field 39 response code of 13.
Large-Ticket; IGOTS, GSA; nongovernmental, including corporate purchase and T&E cards	Between \$100,000 and \$10 million	Large-ticket transactions must be U.S. domestic (acquirer and issuer currency codes must be 840). Cash disbursements cannot exceed \$99,999.99. Allowable MCCs for GSA Large-Ticket transactions are 3000-3999, 4112, 4411, 4511, 4722, 5812, 5814, 7011, and 7512.
Visa Check Card II	\$75.00	Preauthorization status checks are \$1.
Automated Fuel Dispenser	\$75.00	
All other Visa products	\$99,999.99	

If a currency has three decimal places, the last digit of this field must be zero.

Check Acceptance: Field 4 is required in all requests and their approval responses from the vendor.

BASE I Message Format: No further edits are required.

V.I.P. Message Format: The value in the response or advice must match that in the request.

Reject Codes

The reject codes for field 4 are:

009 = Invalid value

0189 = Currency conversion overflow

0275 = Field missing

Field 6—Amount, Cardholder Billing

Attributes

fixed length
12 N, 4-bit BCD (unsigned packed); 6 bytes

Description

Field 6 is a multicurrency field. It contains the transaction amount (field 4), converted to the currency used to bill the cardholder's account. The conversion rate is in field 10. The value in this field includes the currency conversion fee and the optional issuer fee. No decimal point appears in this field; the decimal place is implied, based on the currency. If this field is present, these fields also are required:

- Field 10—Conversion Rate, Cardholder Billing
- Field 51—Currency Code, Cardholder Billing, identifies the currency in field 6.

Usage

Multicurrency Participants: Acquirers do not provide this field. V.I.P. adds it and sends it to the issuer if the issuer is a multicurrency participant. Multicurrency issuers should not return this field in responses. For POS transactions only, V.I.P. adds it for participating acquirers if the request was referred to the issuer (field 39 response code is 01 or 02). The field is not added to ATM responses because referrals are not allowed for ATM transactions.

The number of decimal places assumed for this field depends on the currency; see Appendix E, Country and Currency Codes, for implied decimal places.

CRIS Advices: The field 6 amount from the original transaction is in field 48.

MasterCard and Cirrus: Not applicable to field 6.

Check Acceptance: Not applicable to field 6.

STIP and Switch Advices: Field 6 is present in 0120 or 0420 advices if it's in the request.

Nonmulticurrency Participants: Not applicable to field 6.

Field Edits

There are no field edits in field 6.

Reject Codes

There are no reject codes in field 6.

Field 7—Transmission Date and Time

Attributes

fixed length
10 N, 4-bit BCD (unsigned packed); 5 bytes
format: MMDDhhmmss

Description

Field 7 contains the date and time in GMT (Greenwich mean time) when the request or advice entered VisaNet. See Appendix D, GMT Conversion, for time zones.

Usage

ISO specifies transmission date and time as a key data element for matching a response to its request or advice. A transaction sender enters a new GMT date and time with each request entering the network. The receiving member saves the field and returns it in the response message.

NOTE: *V.I.P. alters the date and time supplied by the acquirer if the request is timed out by STIP.*

Field 7 is used in every message generated by acquirers and issuers and is present in every message generated by VisaNet. Field requirements for responses differ for BASE I and V.I.P. message formats. See the “Message Format” section in this field description.

CRIS Advices: This value is the date and time when the CRIS alert was added to the Advice file.

Check Acceptance: Requirements are the same as those for card transactions.

0120 and 0322 File Update Advices: Field 7 is present. If the file update was initiated by Auto-CDB, EAR, VisaPhone, or the Issuer Direct Service, this is the value from the 0110 response. If the file update was initiated by ATS, CRS, or VTSC, this field reflects the date and time the file was updated.

STIP and Switch Advices: Field 7 contains the date and time that STIP processed the message.

Message Format

The format used determines the field value.

BASE I Message Format: The value in a response *should* match that in the request. For BASE I processors using the V.I.P. message format, the value in a response *must* match that in the request.

V.I.P. Message Format: The value in any response, including those for STIP and Switch advices, *must* match the request or advice.

Field Edits

Field 7 is required in all messages. Value must be a valid date and time format:

MM must be 01–12
DD must be 01–31
hh must be 00–23
mm must be 00–59
ss must be 00–59

The DD (day) value cannot be greater than the maximum number of days for the month identified in MM (month), as shown below. Otherwise, the message will reject with 0010 Invalid value.

January = 31	April = 30	July = 31	October = 31
February = 28 (leap year = 29)	May = 31	August = 31	November = 30
March = 31	June = 30	September = 30	December = 31

Check Acceptance: No additional edits are required.

Reject Codes

The reject codes for field 7 are:

0010 = Invalid value

0276 = Field missing

Field 10—Conversion Rate, Cardholder Billing

Attributes

fixed length
8 N, 4-bit BCD (unsigned packed); 4 bytes

Description

Field 10 is a multicurrency field. It contains a calculated value that represents a factor that may be applied to the transaction amount (field 4) to obtain the cardholder billing amount (field 6). It is not the rate that Visa actually uses for currency conversion.

The transaction amount is converted using daily conversion rates for the applicable currencies. Amounts are converted through U.S. dollars or the euro for currencies that are to be replaced by the euro. Currency conversion fees and issuer optional fees are then applied to the converted transaction amount to yield the cardholder billing amount (field 6). Field 10 is then calculated from the cardholder billing amount (field 6) and the original transaction amount (field 4). The resulting field 10 value may differ from published conversion rates because it reflects conversion fees and differences resulting from rounding.

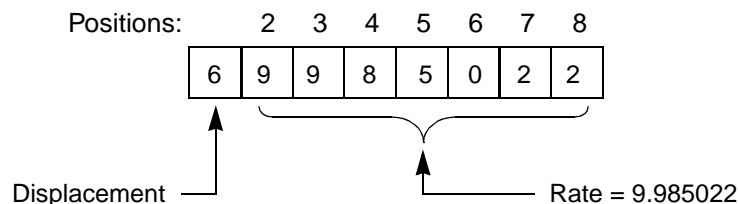
If field 10 is present, these fields are also required:

- Field 6—Amount, Cardholder Billing
- Field 51—Currency Code, Cardholder Billing, identifies the currency in field 10.

The leftmost digit denotes the number of positions the decimal separator shall be shifted from the right (allowable values are 0–9). Positions 2–8 are the actual rate.

EXAMPLE

For example, $69985022 = 9.985022$:



Usage

Multicurrency Participants: Field 10 is present in a message if Field 6—Cardholder Billing Amount, is present. It is not provided by the acquirer. The VIC adds it and delivers it to the issuer if the issuer is a multicurrency participant. For POS transactions only, V.I.P. adds it for participating acquirers if the request was referred to the issuer (field 39 response code is 01 or 02). The field is not added to ATM responses because referrals are not allowed for ATM transactions.

CRIS Advices: The field 10 rate from the transaction responsible for the alert is in field 48.

MasterCard and Cirrus: Not applicable to field 10.

Check Acceptance: Not applicable to field 10.

STIP and Switch Advices: Field 10 is included in 0120 or 0420 advices for participating users.

Nonmulticurrency Participants and Balance Inquiries: Not applicable to field 10.

Comment

For issuers using the euro currency, this field is for information only.

Field Edits

There are no field edits for field 10.

Reject Codes

There are no reject codes for field 10.

Field 11—Systems Trace Audit Number

Attributes

fixed length
6 N, 4-bit BCD (unsigned packed); 3 bytes

Description

Field 11 is a number assigned by the message initiator that uniquely identifies a cardholder transaction and all the message types (also known as *system* transactions) that it comprises, according to individual program rules. The trace number remains unchanged for all messages throughout the life of the transaction. For example, the same trace number is used in an authorization request and response, and in a subsequent reversal request and response, and in any advices of authorization or reversal.

The trace number can be used to match a response to its request or to match a message to a given cardholder transaction set.

Usage

Field usage depends on the message format.

BASE I Message Format: Field 11 is required in 0102 ATM confirmations, and in 03xx file inquiry and action requests. It is optional in authorization requests, including incremental authorization requests, and reversals; in these cases, Field 37—Retrieval Reference Number, is used instead to identify and track messages associated with a given cardholder transaction.

- If field 11 is included in an 0100 request, its value must be returned in the response and in all subsequent messages related to the transaction, including incremental authorization, reversal, or confirmation messages. An 0310/0312 response from the VIC includes field 11 if it was present in the request.
- VIC-generated 0600 or 0800 messages do not include field 11.

V.I.P. Message Format: A nonzero value in this field is required in all card transaction-related, file update, administration, and system control messages. The trace number in an 0100 request must be returned unchanged in repeats and responses, including those for confirmations and reversals.

- VIC-generated 0600 or 0800 messages include field 11.
- In 0310/0312 or 0810 VIC responses, field 11 contains the trace number from the request.

CRIS Advices: Visa assigns this number to both current and enhanced advice formats.

AdvanceBK Alerts: V.I.P. generates this value.

Check Acceptance: Field 11 is used in all messages. The response must match the request.

0120 and 0322 File Update Advices: Field 11 is present.

STIP and Switch Advices: Field 11 is present.

Field Edits

BASE I Message Format: If field 11 is present, the value must be numeric. The value in a response must match that in the request.

BASE I 0102 and 03xx Requests: Field 11 is required with a nonzero value.

Check Acceptance: Same as for card transactions.

Reject Codes

The reject codes for field 11 are:

0011 = Invalid value

0277 = Field missing

Field 12—Time, Local Transaction

Attributes

fixed length
6 N, 4-bit BCD (unsigned packed); 3 bytes
format: hhmmss

Description

Field 12 contains the time the transaction takes place, expressed in the local time of the card acceptor location. The date is in hhmmss format

where: hh = hours
 mm = minutes
 ss = seconds

Usage

Visa Cash: This field is required in Visa Cash load 0100 requests, 0400 reversal requests, and 0420 reversal advices. The value from the original authorization request is used in subsequent messages. It is not used in responses. The value in this field does not change if there is any delay in conveying the transaction to the issuer.

This field is used in combination with field 13 to create a random number for calculating the Visa Cash load request signature (S1). The BCD value is converted to hexadecimal digits for the signature calculation.

Field Edits

The value must be a valid time as follows:

where: hh = 00–23
 mm must be 00–59
 ss must be 00–59

Reject Codes

The reject codes for field 12 are:

0090 = Invalid value
0278 = Field missing

Field 13—Date, Local Transaction

Attributes

fixed length
4 N, 4-bit BCD (unsigned packed); 2 bytes
format: mmdd

Description

Field 13 contains the month and day on which the cardholder originated the transaction. For recurring payments, this field contains the cardholder-requested payment date. The date is in mmdd format

where: mm = month
 dd = day

Usage

Visa Cash: This field is required in Visa Cash load 0100 requests, 0400 reversal requests, and 0420 reversal advices. The value from the original authorization request is used in subsequent messages. It is not used in responses. The value in this field does not change if there is any delay in conveying the transaction to the issuer.

This field is used in combination with field 12 to create a random number for calculating the Visa Cash load request signature (S1). The BCD value is converted to hexadecimal digits for the signature calculation.

Field Edits

The value must be a valid date

where: mm must be 01–12
 dd must be 01–31

Reject Codes

The reject codes for field 13 are:

0091 = Invalid value

0279 = Field missing

Field 14—Date, Expiration

Attributes

fixed length
4 N, 4-bit BCD (unsigned packed); 2 bytes
format: yymm

Description

Field 14 contains the year and the month after which the card expires. The card expiration date is located in the card's magnetic stripe (field 35 or 45). The date is in yymm numeric format

where: yy = year (00–99)
 mm = month (01–12)

Usage

Field 14 must be included in authorization requests if the true expiration date is known. If present in an original request, the field is also present in advices and reversals. It is not required in responses. See the STIP Edits section in this field description for STIP-specific manual POS and MOTO/ECI requirements.

Substitute expiration dates are not allowed. Dates that cannot comply with the field format requirement must be placed in Field 73—Date, Action.

NOTE: *Issuers must use the value 4912 in the magnetic stripe track data to denote a nonexpiring card.*

CPS: This field is required in card-present authorization requests. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

Visa Horizon—COPAC Format: This field is required.

Manual Cash Advances: Field 14 is required.

Visa Cash: This field is optional in reversal requests.

CVV2: The card expiration date determines which CVV2 key to use.

File Processing: Not applicable to field 14. See the “field 73” description.

Check Acceptance: Not applicable to field 14. See the “field 73” description.

STIP and Switch Advices: Field 14 is present in 0120 or 0420 advices if it was in the request.

Field Edits

If field 14 is present, it must contain a valid numeric date in the yymm format

where: yy = year (00–99)

mm = month (01–12)

Field 14 is required in an 0400 reversal if present in the 0100 request.

In authorization requests, the date can be the current date for CVV/iCVV and for non-CVV transactions.

Visa Horizon—COPAC Format: The message will reject if this field is not present.

Check Acceptance: Not applicable to field 14.

Comments

If, during CVV/iCVV validation, a problem is detected with the expiration date in the track data, Field 14 is checked. If Field 14 is not present, the request will be rejected with reject 0280.

NOTE: *For transactions from an SMS acquirer to a BASE I issuer that lack an expiration date in field 14 but contains a magnetic stripe in field 35, V.I.P. inserts field 14 in the message using the card expiration date from the track data. Conversely, V.I.P. does not remove field 14 from requests from a BASE I acquirer to an SMS issuer that include track data.*

Determining Century: Visa determines expiration date century based on where the year (yy) falls with respect to 1949 and 1950.

- If yy equals a year between 1950 and 1999, the century is considered to be the twentieth, or the 1900s through 1999.
- If yy equals a year between 1900 and 1949, the century is considered to be the twenty-first, or year 2000 and beyond.

Reject Codes

The reject codes for field 14 are:

0014 = Invalid value

0280 = Field missing

0518 = Message type missing required field

STIP Edits

Manual POS Authorizations and STIP: STIP processes manual authorization requests (field 22 = 01) that lack field 14 expiration dates, as follows:

1. V.I.P. declines the request with response code 05 (do not honor) in field 39; field 44.1 is reset with the appropriate STIP reason code if *all* of the following conditions exist:
 - The issuer is unavailable or times out.
 - The transaction is anything other than MOTO/ECI (field 25 is not 08), or the transaction *is* MOTO/ECI (field 25 is 08), and the issuer BIN option requires that MOTO/ECI transactions include field 14.
2. V.I.P. inserts a response code 05 in field 39 and forwards the request to the issuer for approval if all of the following conditions exist:
 - The request is below the issuer limit.
 - The transaction is anything other than MOTO/ECI (field 25 is not 08), or the transaction *is* MOTO/ECI (field 25 is 08), and the issuer BIN option requires that MOTO/ECI transactions include field 14.
3. If the issuer approves the request, the issuer changes the response code accordingly.

STIP responds to the acquirer with a field 39 response code 54 if the date is greater than the maximum date allowed and less than the current date. The date 4912 is considered a nonexpiring date.

NOTE: *STIP cannot always decode the date from nonstandard magnetic stripes.*

Card-Not-Present Mail Order/Telephone Order or E-commerce transactions: Field 14 is required by STIP unless the issuer has set its BIN-level option to “no expiration dates.” If the issuer has declared that field 14 must be present in MOTO/ECI requests but the request does not contain the field:

- The request is forward-referred to the issuer, if the issuer is available.
- STIP declines the request with a field 39 response code equal to “05” if the issuer is unavailable,

Decline Responses

The decline responses for field 14 are:

05 = Issuer will not accept transaction without valid expiration date

Field 18—Merchant Type

Attributes

fixed length

4 N, 4-bit BCD (unsigned packed); 2 bytes

Description

Field 18 contains a code describing the merchant's type of business product or service, also known as the merchant category code (MCC). These codes are based on the *Merchant Classification Code Guideline* available from the Bank Card Division of the ABA. Valid codes are listed in the *Visa U.S.A. and International Operating Regulations*, as amended by additions and changes published in *VisaNet Business Enhancements* and in Technical Letters for members.

Usage

Field 18 is required in all authorization requests, balance inquiries, advices, and reversals related to a cardholder transaction. It is not used in 0102 confirmations. It is not used in responses.

If the acquirer uses the Merchant Central File Service (MCFS) to provide the correct code, this field may be omitted from the request.

For address verification, the merchant type can be any valid MCC code for card-present and card-not-present requests.

Status Checks: The code cannot be 6011 (ATM), the processing code in field 3 must be 00xxxx, and the currency must be a single unit.

NOTE: *Requests that do not meet these requirements are not considered status checks and are subject to currency conversion.*

ATM: The code must be 6011.

CPS: This field is required in all authorization requests. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

Visa Cash: The code must be 6011 for Visa Cash transactions.

Visa Cash Back: For U.K. transactions, the merchant category code must be valid. For U.S. transactions, the merchant category code must be 5411 (supermarkets).

IARS Processing: For IARS STIP processing, 6010 is used for cash advances, and 9700 is used for purchases. These MCCs appear in all 0120 advices generated by the Visa Backup Referral Center.

CRIS Advices: The field 18 merchant type from the transaction causing the alert is in field 48.

STIP and Switch Advices: Field 18 is present in 0120 or 0420 advices if it was in the request, but it is not used in advice responses.

Field Edits

The value must be a valid numeric. Refer to the codes listed in the latest edition of the *Visa U.S.A. and International Operating Regulations* and *VisaNet Business Enhancements* and Technical Letters for members.

Field 18 is required in all 0100 and 0400 requests.

Check Acceptance: If field 18 is present, the value can be any MCC.

Reject Codes

The reject codes for field 18 are:

0017 = Invalid value

0283 = Field missing

Field 19—Acquiring Institution Country Code

Attributes

fixed length

3 N, 4-bit BCD (unsigned packed); 2 bytes

Description

Field 19 contains a code that identifies the country of the acquiring institution for the merchant or ATM. The values for field 19 are the numeric codes listed in Appendix E, Country and Currency Codes. A leading zero is required to pad the first unused half-byte of this field. This zero is a filler and is *not* part of the country code.

Usage

Field 19 is required in all requests, (except check acceptance), and in advices related to a cardholder transaction. Field 19 presence in response messages depends on the message format of the sending and receiving processor. BASE I format means the processor can handle only BASE I formatted messages. VIP format means the processor can handle BASE I and SMS formatted messages.

Field 19 is **not** used in responses, for instance, 0110 and 0410 messages, from BASE I-format issuer to BASE I-format acquirer stations. Field 19 *is* required in responses, for instance, 0110 and 0410 messages, from V.I.P.-format issuer stations to V.I.P.-format acquirers.

- If a BASE I-format issuer or a V.I.P.-format issuer sends field 19 in a response to a BASE I-format acquirer, V.I.P. drops the field before the message is forwarded to the acquirer.
- If a BASE I-format issuer sends a response without field 19 to a V.I.P.-format acquirer, V.I.P. inserts the field in the response from the ITT before forwarding the response to the acquirer.

NOTE: *Although the message charts ordinarily depict like-to-like transmissions (for instance, BASE I to BASE I), because of the possible variance between sender and receiver, the BASE I format message charts depict field 19 as a Optional return (O) from the issuer and a deletion (C+) at the VIC if the field is present.*

If the card acceptor and acquiring institution are in different countries, the card acceptor country code must be placed in Field 43—Card Acceptor Name/Location.

For U.S. military bases, embassies and consulates, and overseas traveling merchants, this field must be 840. Field 43, positions 39–40, must be a valid country code, and field 59, positions 1–2, must be 99.

VisaPhone: Field 19 contains the country code of the telephone carrier, which may or may not be the country code of the phone being used.

CPS/ATM: This field does not apply to balance inquiries.

0102 ATM Confirmations: The field is present in responses regardless of whether the receiver is BASE I format or V.I.P. format.

Check Acceptance: Field 19 is optional in the 0100 request. It is not used in the 0110 response.

0120 File Update Advices: Field 19 is always present.

0322 File Update Advices: Not applicable to field 19.

STIP and Switch Advices: Field 19 is present in 0120 or 0420 advices if it was in the request.

Field Edits

Field 19 is required in all requests related to a cardholder transaction. It is dropped in responses by the VIC for BASE I-format receivers. The value must be one of the 3-digit numeric codes listed in Appendix E, Country and Currency Codes.

Reject Codes

The reject codes for field 19 are:

0033 = Invalid value

0306 = Field missing

Field 20—PAN Extended, Country Code

Attributes

fixed length
3 N, 4-bit BCD (unsigned packed); 2 bytes

Description

Field 20 contains a code in the card's magnetic stripe for Visa use such as identifying the country of the card issuer institution. A leading zero is required to pad the first unused half-byte of this field. The zero is a filler, *not* part of the country code.

Usage

When applicable, field 20 is used in the following messages:

- 0100 authorization requests or balance inquiries, 0110 authorization responses, 0120 advices, 0102 ATM confirmations
- Format 2 0302 file maintenance inquiries, 0312 file maintenance responses, 0322 Enhanced Auto-CDB advices
- 0400 reversals, 0410 reversal responses, 0420 reversal advices

CPS: This field is not used in ATM balance inquiries. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

Check Acceptance: Not applicable to field 20.

STIP and Switch Advices: Field 20 is present in 0120 or 0420 advices if it was in the 0100 or 0400 request.

Field Edits

The value must be one of the 3-digit numeric codes listed in Appendix E, Country and Currency Codes.

Reject Codes

The reject codes for field 20 are:

0035 = Invalid value

File Maintenance Error Codes

The Error Codes for field 20 are:

0586 = Invalid value

Field 21—Forwarding Institution Country Code

Attributes

fixed length
3 N, 4-bit BCD (unsigned packed); 2 bytes

Description

Field 21 contains a code that identifies the country of the forwarding institution in field 33.

Values for this field are the numeric codes listed in Appendix E, Country and Currency Codes. A leading zero is required to pad the first unused half-byte of this field. This zero is a filler, *not* part of the country code.

Usage

This field is used in customer transaction-related messages requiring field 33. Refer to the field edits.

Check Acceptance: Not applicable.

STIP and Switch Advices: This field is present in a STIP-generated 0120 or 0420 advice if it was present in the request. It is not used in the advice response.

Field Edits

The code must be one of the 3-digit numeric codes listed in Appendix E, Country and Currency Codes.

Reject Codes

Reject codes are:
0118 = Invalid value
0452 = Field missing

Field 22—Point-of-Service Entry Mode Code

Attributes

fixed length

4 N, 4-bit BCD (unsigned packed); 2 bytes

Description

Field 22 contains codes that identify the actual method used to capture the account number and expiration date when a terminal is used, and the terminal's PIN capture capability. This field is fixed-length with three subfields. The codes for each of the subfields are provided in Table 4–4 of the “Valid Values” section. The position assignments are as follows.

Positions:

1– 2

3

4

PAN/date entry mode	PIN entry capability	Fill
Byte 1	Byte 2	n/a

Positions 1–2, PAN and Date Entry Mode: A 2-digit code that identifies the actual method used to enter the cardholder account number and card expiration date. This code specifies whether the entire magnetic stripe is included in an authorization request.

Position 3, PIN Entry Capability: A 1-digit code that identifies the capability of terminal to capture PINs. This code does not necessarily mean that a PIN was entered or is included in this message. For example, the use of code 1 does not imply the presence of a PIN. If the code is 2 or 8, however, it is reasonable to assume that a PIN is not present.

An Automated Dispensing Machine (ADM) with a PIN is identified by a value of 1 (PIN entry supported), and an unattended acceptance terminal by the value 2 (PIN entry not supported).

Position 4, Fill (Unused): This 1-digit subfield is zero-filled. (This position is an exception to the general rule of using a leading zero to pad a field.)

Usage

Field 22 is used *only* if an electronic terminal is used at the point of service. It is required in electronic terminal-based 0100 authorization requests, and 0100 account verification request including VisaPhone. It is also used in 0100 cash disbursements and balance inquiries. It is not used in responses. This

field is not used in 0102 ATM confirmation messages. The value from the original authorization is included in 0120 advices, 0400 reversals, and 0410 reversal advices.

A POS Entry Mode Code is not required for telephone-based voice authorizations where a merchant calls its acquirer and reads the account number over the telephone as the acquirer enters it at a terminal. Voice authorizations also include entering card information directly into a computer through a series of digitized voice prompts (for example, VoiceTec software). The VAP then generates an authorization request. In this case, field 22 would be included (code 01).

CVV and iCVV (Alternate CVV): Field 22 must contain 90 for the CVV from the physical magnetic stripe to be validated. Validation of the CVV from the physical magnetic stripe will not occur if field 22 = 02, because the value 02 indicates the track data in field 35 or field 45 may be unreliable.

Field 22 must contain 05 for the CVV or iCVV from the chip to be validated. Validation of the CVV or iCVV residing in the chip's magnetic stripe image will not occur if field 22 = 95, because the value 95 indicates the track data in field 35 or field 45 may be unreliable.

Acquirers must be certified to send code 05 or 90 and issuers must be certified to receive them. If issuers are not certified, V.I.P. changes the values to 95 and 02, respectively.

Plus: Acquirers can enter either 02 or 90 for Plus card transactions to request CVV processing. Plus Card transactions require field 35.

NOTE: *For CVV-based requests forwarded by BASE I acquirers to SMS issuers, the acquirer BIN as indicated in field 32 of the request must have its CVV participation flag on. Otherwise, the transaction will be downgraded from 90 to 02 in field 22.*

CPS: Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

ATM: For balance inquiries, the POS entry mode code in positions 1 through 4 must be 0210 or 9010.

Visa Horizon—COPAC Format: The first two positions in a request must be 05 for COPAC-format requests.

Visa Cash: The first two positions must be 05 for cash load requests, and position 3 must be 1 to indicate that the terminal can accept PINs. For Currency Exchange and Transaction Completion requests, the first two positions must be 05.

Visa Cashback: For the U.S. only, this field must contain 90 in positions 1–2 or the transaction will be denied with field 39 = 05 (do not honor).

CRIS Advices: The first two positions of this code from the transaction causing the alert is in field 48.

MasterCard E-commerce Authorization Requests: When converting e-commerce authorization requests containing CVC2 data for MasterCard issuers, BASE I logs the field 22 value as received from the acquirer.

Check Acceptance: Not applicable to field 22.

STIP and Switch Advices: Field 22 is present in 0120 or 0420 advices if it was in the request.

Comments

The coding in this field is related to position 2 of Field 60—Additional POS Information, which describes the capability of the terminal used.

Visa performs CVV/iCVV checking on behalf of issuers only when positions 1 and 2 of this field are 90 or 05. Issuers should follow the same criteria.

Field Edits

Edit requirements depend on message format:

BASE I Message Format: If field 22 is present, the value in each subfield must be one of the codes for that subfield listed in Table 4–4. This field is not allowed in 0102 confirmation messages.

V.I.P. Message Format: Field 22 is required in all 01xx and 04xx requests and advices.

Manual (key entry) processing edits apply to all original and reversal requests if field 22 is not present in the message, or if it is present with zeros (00).

Reject Codes

The reject codes for field 22 are:

0019 = Invalid value (acquirer not certified to use code 90). This reject code applies only to Visa, not to Plus.

0142 = Magnetic stripe data missing or acquirer not certified when field 22 = 90

0285 = Field missing

0518 = Field not allowed in message (see Appendix C, Reject Codes)

NOTE: *Reject codes that apply to magnetic stripe CVV presence also apply to the chip image's iCVV. For instance, If an acquirer sends field 22 = 90 but field 35 or 45 is missing, the system rejects the message with reject code 0142. Reject code 0142 also applies if an acquirer sends field 22 = 05 but field 35 or 45 are not present.*

Valid Values

[Table 4–6](#) provides the valid values for field 22.

Table 4–6: Field 22 POS Entry Mode Codes

Code	Definition
Positions 1–2: PAN and Date Entry Mode	
00	Unknown or terminal not used
01	Manual (key entry)
02	Magnetic stripe read. For Plus transactions, this code also means that the exact Track 2 content is included and CVV checking is possible.
03	Barcode read
04	OCR coding read
05	Integrated circuit card read; card data reliable
06	Track 1 read
90	Magnetic stripe read and exact content of Track 1 or Track 2 included (CVV check is possible)
95	Integrated circuit card; card data may be unreliable
Position 3: PIN Entry Capability	
0	Unknown
1	Terminal can accept PINs
2	Terminal cannot accept PINs
8	Terminal PIN pad is down
9	Reserved for future use
Position 4: Fill	
0	Unused

Field 23—Card Sequence Number

Attributes

fixed length

3 N, 4-bit BCD (unsigned packed); 2 bytes

Description

Field 23 contains a sequence number that differentiates separate cards having the same primary account number. A leading zero is required to pad the first unused half-byte of the field. The zero is a filler and is not part of the sequence number.

Usage

This field must only be used for chip transactions.

VSDC: Field 23 is used in authorization and reversal requests, and in balance inquiries. It is also required in responses when V.I.P. formats are used.

Field 23 is right-justified and zero-filled on the left when it contains fewer than 3 digits.

This field is present in POS and ATM 0100 authorization requests and account verifications, 0100 cash disbursements and balance inquiries, and in 0102 ATM confirmations if it was present in the chip card. If present in 0100 requests, it is returned in 0110 responses. If in the original, it is present in 0400 reversals and their 0410 responses.

File Processing: Field 23 does not apply, but its presence does not cause a message reject.

Check Acceptance: Not applicable to field 23.

STIP and Switch Advices: Field 23 is present in 0120 or 0420 advices if it was in the request.

Field Edits

If field 23 is present, the value must be numeric.

Reject Codes

The reject codes for field 23 are:

0092 = Invalid value

Field 25—Point-of-Service Condition Code

Attributes

fixed length
2 N, 4-bit BCD (unsigned packed); 1 byte

Description

Field 25 contains a code identifying transaction conditions at the point of sale or point of service. For messages that follow an original request, this code identifies the type of processing being done (for example, code 00 for balance inquiries). See Table 4–5 of the “Valid Values” section for valid codes.

Usage

Field 25 is required in all POS and ATM 0100 authorization requests and related 0400 reversals.

- For POS card-not-present authorization requests and their reversals, the code must be 08.
- For ATM (field 18 = 6011) cash withdrawals or cash advances, the code can be 00 or 02. For balance inquiries, the code must be 00.

This field is not used in 0102 confirmation messages.

Field 25 presence in response messages, including incremental authorization responses, depends on the message format of the sending and receiving station.

Field 25 is **not** used in responses, for instance, 0110 and 0410 messages, from BASE I-format issuer stations to BASE I-format acquirer stations. Field 25 **is** required in responses, for instance, 0110 and 0410 messages, from V.I.P.-format issuer stations to V.I.P.-format acquirer stations. (BASE I format means the processor can handle only BASE I formatted messages. VIP format means the processor can handle both BASE I and SMS formatted messages.)

- If a BASE I-format issuer station or a V.I.P.-format issuer station sends field 25 in a response to a BASE I-format acquirer station, V.I.P. drops the field before the message is forwarded to the acquirer station.
- If a BASE I-format issuer station sends a response without field 25 to a V.I.P.-format acquirer station, V.I.P. inserts the field in the response from the ITT before forwarding the response to the acquirer station.

Verification Requests: Address verification supports both card-present and card-not-present requests in all merchant categories with or without authorization amount requests.

- Use any valid code for authorization requests that include address verification data in field 123.
- Use code 51 for address verification-only requests (field 123 is present and field 4 contains all zeros). Code 51 is valid for Visa and MasterCard transactions only.
- Code 55 is for VisaPhone telecode verifications without authorization.

CPS: This field is required in all authorization requests. Recurring direct marketing payment transactions require code 08. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

E-commerce: Acquirers must use code 59 to indicate e-commerce over an open network, for example, the Internet. This includes Visa Commerce transactions submitted as e-commerce requests. V.I.P. processes e-commerce transactions as MOTO/ECI when field 25 = 59. V.I.P. forwards the value to issuers only if they are certified to receive it. Otherwise, V.I.P. converts the 59 to 08 and drops field 60.8 before the request is sent to the issuer. Issuers should return F25 in the response as it was received in the request.

MasterCard E-commerce Authorization Requests: If this field contains 59, field 60.8 contains an e-commerce value, and field 126.10 is present with CVC2 data, V.I.P. sets MasterCard-format message data element 22 to 81 (the converted equivalent of 59 to indicate e-commerce) before forwarding the converted message to the MasterCard issuer.

Check Acceptance: Field 25 is used in 0100 requests but is not returned in 0110 responses. Code 10 indicates that customer identity has been verified.

0120 File Update Advices: Field 25 is present. It is zero-filled for 0120 Exception File updates and is set to 55 for Telecode updates.

STIP and Switch Advices: Field 25 is present in 0120 or 0420 advices.

Comments

For Usage Situations Not Covered Above: When none of the rules above applies, the code that describes the most severe condition at the point of sale or point of service should be used.

Field Edits

The value must be numeric. See Table 4–5 of the “Valid Values” section.

Check Acceptance: Field 25 is required in all requests.

STIP Edits

Authorization requests that include a request to verify an address must include Field 123—Address Verification Data. Field 25 can contain any code except 51, and field 18 may contain any valid value. Address verification-only requests must include field 123, field 25, which must be 51, and field 18, which may contain any valid value.

Reject Codes

The reject codes for field 25 are:

0018 = Invalid value

0284 = Field missing

0647 = Value in reply not same as value in request

Valid Values

Table 4–5 lists codes for BASE I centers that acquirers should use for BASE I messages. Other codes defined by ISO 8583 are permitted by BASE I edits. Issuers should be prepared to receive *any* ISO 8583-defined code. Code 10 applies to Check Acceptance requests only.

Table 4–7: Field 25 POS Condition Codes

Code	Definition
00	Normal transaction of this type
01	Cardholder not present
02	Unattended acceptance terminal, customer operated (for example, ATM, Automated Dispensing Machine)
03	Merchant suspicious of transaction (or card)
05	Customer present, Card Not Present
08	Mail/telephone order (includes VisaPhone and recurring transactions)
10	Customer identity verified (used for Check Acceptance only)
51	Request for account number verification without authorization, or request for account number verification and address verification without authorization
55	Request for telecode verification without authorization
59	E-commerce request (through public network)
71	Card present, magnetic stripe cannot be read (key-entered)

Field 26—Point-of-Service PIN Capture Code

Attributes

fixed length
2 N, 4-bit BCD (unsigned packed); 1 byte

Description

Field 26 contains a value indicating the maximum number of PIN characters that can be accepted by the point-of-service device.

Usage

VisaNet, Plus, MasterCard, and Cirrus: Field 26 is used in requests and advices with PINs only if Field 52—PIN Data, is present, and the point-of-sale or point-of-service device cannot accept the standard maximum PIN length of 12 (as defined in ISO/TC68/SC2/WG6, draft proposal 9546/1). It is not used in responses or in advice responses.

When Visa verifies the PIN as part of the PIN Verification Service, this field is deleted from the request rather than being forwarded to the issuer.

Check Acceptance: Not applicable to field 26.

STIP and Switch Advices: Field 26 is present in a 0120 advice if it was in the request.

Field Edits

VisaNet, Plus, MasterCard, and Cirrus: If field 26 is present, the value must be 00 (unknown or unspecified), or between 04 and 12.

Reject Codes

The reject codes for field 26 are:

0070 = Invalid value

Field 28—Amount, Transaction Fee

Attributes

fixed length
1 AN, EBCDIC +
8 ANS, EBCDIC
total: 9 bytes

Description

Field 28 is used only for ATM transactions and contains an acquirer-assessed ATM transaction surcharge fee for informational purposes only. The fee amount is included in field 4. The 1 AN prefix is “C” for credit, or “D” for debit, as appropriate.

Currency

This fee is in the same currency as that used in Field 4 —Amount, Transaction. The currency code in Field 49—Currency Code, Transaction applies.

The number of decimal places assumed for this field depends on the currency. If that currency is defined with three decimal places, the last digit of field 28 must be zero. See the Appendix E, Country and Currency Codes for currency codes and implied decimal places.

Usage

Visa and Plus: Field 28 is used in 0100 ATM authorization requests. When present in the original request, it must also be present in 0400 reversal requests and 0420 advices. It is not used in responses or advice responses.

- U.S. acquirers must use field 28 when adding a surcharge to an ATM transaction. This field does not apply for acquirers in other regions. It is optional for Visa issuers, and mandatory for Plus issuers.
- For reversals, the value should be the same as that in the original, because it is the amount in field 4 that will be reversed.

MasterCard: Not applicable to field 28.

Check Acceptance: Not applicable to field 28.

STIP and Switch Advices: Field 28 is present in 0120 or 0420 advices if it was in the request.

Comments

Field 28 is for informational rather than for settlement purposes. The amount in field 28 must be added to or subtracted from the amount in field 4 in the request to determine the amount actually dispensed.

A “D” designates that the surcharge is a debit to the cardholder’s account.

EXAMPLE

A cardholder requests US\$20 and the acquirer imposes a surcharge of US\$1. Field 4 would contain US\$21, and field 28 would contain a “D” in byte 1 and US\$1 in the amount portion of the field. The cardholder receives US\$20 from the ATM but the cardholder's account is debited for US\$21.

A “C” is used in the request when the surcharge is a credit to the cardholder, such as if the acquirer is paying the cardholder as an incentive to use the ATM.

EXAMPLE

A cardholder requests US\$20 and the acquirer surcharge is a US\$1 credit. Field 4 would contain US\$19, and field 28 would contain a “C” in byte 1 and US\$1 in the amount portion of the field. The cardholder receives US\$20 but the cardholder’s account is debited for US\$19.

Field Edits

The prefix must be “C” for a cardholder account credit, or “D” for a cardholder account debit. The eight digits for the fee amount must be numeric, and zero-fill is valid.

Reject Codes

The reject codes for field 26 are:

0134 = Invalid value

0623 = Field present when not allowed

Field 32—Acquiring Institution Identification Code

Attributes

variable length
1 byte, binary +
up to 11 N, 4-bit BCD (unsigned packed); maximum 7 bytes

Description

This code identifies the financial institution acting as the acquirer of this customer transaction. The acquirer is the member or system user that signed the merchant, installed the ATM or ADM, or dispensed cash.

The ID can be a Visa BIN, a Plus PMC, or another code that identifies the financial institution. Visa BINs are usually 6 digits, but the code may be up to 11 digits long. Codes other than Visa BINs can be supported. For instance, a routing and transit number that complies with the ISO 7812 standard may be used by prearrangement with Visa.

For processing centers handling multiple acquirers, this code identifies the individual acquirer or system user, not the overall processing center.

The value specifies the number of digits in the ID code. If the ID code contains an odd number of digits, a leading zero is required to pad the first unused half-byte of data. Because this zero is a filler—and not part of the ID—it is *not* counted for the length subfield.

Usage

This acquirer BIN field is a key data element used to match a message with others in a given transaction set. The value in the original request must be the same in the response and all other messages in that set. It is used in the following messages:

- 0100 authorizations, including incremental authorizations and ATM balance inquiries; 0110 responses; 0120 advices; 0102 ATM confirmations
- Acquirer-generated 0300 Merchant Central File maintenance requests and their 0310 responses; 0322 file update advices
- 0400 reversals, 0410 responses, and 0420 advices

The value in field 32 should be the Visa BIN of the member that signed the merchant, installed the ATM/ADM, or dispensed cash.

In acquirer-generated requests involving the Merchant Central File Service, field 32 *must* contain a valid 6- to 11-digit Visa BIN as listed in the V.I.P. system tables.

PIN Processing: The BIN in field 32 identifies the one associated with the Acquirer Working Key (AWK) used to encrypt the PIN, unless the message also contains Field 33—Forwarding Institution Identification Code. Field 33 indicates the AWK originated with an acquirer processor rather than with the acquirer itself. If field 32 is present but field 33 is not, field 32 must contain a valid 6-digit Visa BIN associated with the AWK.

CVV/iCVV: Field 32 must contain the BIN of a BASE I participating acquirer or the transaction will be downgraded.

CRIS Advices: Field 48 of the CRIS alert contains the original value of field 32 from the transaction being reported.

Visa Cash: This field is present in requests and contains the Load Acquirer BIN.

File Processing: Field 32 is used in all 0300 file update and inquiry requests. The BIN in this field is a key in accessing the Merchant Central File's acquirer information. This value is returned in the 0310 response.

The acquirer originating a file update or inquiry must be the one responsible for this merchant data.

For Exception File updates, this field usually indicates which Visa service initiated the file update. In an Enhanced Authorization Response advice, this field contains the issuer ID rather than the acquirer ID from the 0100 request. The values are:

ATS or CRS = 400100

VTSC = 400085

Auto-CDB = 400004

EAR = Issuer institution ID

VisaPhone = Carrier ID

VisaPhone: Field 32 must be the BIN of the telephone carrier.

MasterCard: For 0100 authorizations, the code must be the acquirer BIN's MasterCard ICA number. If the acquirer sends in its ICA number without the number first being specified in the system tables, BASE I replaces it with a default before forwarding the request to the gateway.

Check Acceptance: Field 32 is required in the 0100 requests and 0110 responses.

0120 and 0322 File Update Advices: Field 32 is present in these advices.

STIP and Switch Advices: Field 32 is present in 0120 or 0420 advices.

Field Edits

Field 32 is required in all 01xx, 0300 and 0310, and 04xx messages. The entry cannot be all zeros. The value in the length subfield must not exceed 11 and must be numeric.

For PIN transactions, if field 33 is not present in the message, field 32 must contain a valid 6- to 11-digit Visa acquirer BIN.

Reject Codes

The reject codes for field 32 are:

0020 = Invalid length

0021 = Invalid value ¹

0287 = Field missing

0531 = Nondomestic transaction

File Edits

The value in an 0300 file update request must be a 6-to 11-digit Visa BIN valid for BASE I processing.

File Maintenance Error Codes

The error codes for field 32 are:

0807 = Invalid value

¹ If a PIN is present, the source station ID (in header field 6) must be one that is certified for PIN processing. Violation of this requirement also results in reject code 0021.

Field 33—Forwarding Institution Identification Code

Attributes

variable length
1 byte, binary +
up to 11 N, 4-bit BCD (unsigned packed); maximum 7 bytes

Description

Field 33 contains a code identifying the message originator, which is the institution forwarding a request to the VIC. The code can be a Visa BIN, a prearranged institution ID, or a Plus PMC ID. The length value specifies the number of ID code digits. If the ID code contains an odd number of digits, a leading zero is required to pad the first unused half-byte of data. Because this zero is a filler and not part of the ID, it is *not* counted for the length subfield.

In U.S. domestic-only PIN transactions for cash disbursements or balance inquiries, field 33 contains the processing center ID. It is required only when the field 32 value does not point to the Acquirer Working Key (AWK). For example, if an acquirer supports several financial institutions but uses only one AWK for outgoing PINs, the acquirer's ID used at the VIC to determine the AWK is placed in this field.

Usage

Field 33 is required in a PIN-based authorization request if the ID in field 32 cannot identify the encryption AWK source. When field 33 is present in an original request or ATM balance inquiry, it is also present in related advices and is required in any subsequent reversals and reversal advices.

CRIS Advices: This is a Visa-assigned BIN identifying CRIS as the message originator.

Check Acceptance: Not applicable to field 33.

STIP and Switch Advices: Field 33 is present in 0120 or 0420 advices.

Field Edits

The length subfield value must not exceed 11. If field 33 is present, the value must be a Visa BIN, prearranged institution ID, or a Plus PMC ID.

Reject Codes

The reject codes for field 33 are:

0033 = Field missing

0056 = Invalid length

0057 = Invalid value

Field 35—Track 2 Data

Attributes

variable length
1 byte, binary +
up to 37 N, 4-bit BCD (unsigned packed); maximum 20 bytes

Description

Field 35 contains the information encoded on Track 2 of the magnetic stripe, including field separators but excluding beginning and ending sentinels and LRC characters.

NOTE: *The Track 2 delimiter/separator character (^) must be encoded as X'D' (binary 1101).*

The length is the total number of hexadecimal digits (not bytes). If this field's Track 2 data equals an odd number of digits, a single leading zero is required in the first unused half-byte of data for padding. Note that the length indicated above includes the field delimiter but not any leading zero. See the *Visa Card Technology Standards Manual* for information about Track 2 card location and content.

Usage

Field 35 is used in original authorization requests but not in responses, advice responses, or reversals. Its presence depends on the card program, and it is present only when Track 2 data has been read at the terminal; otherwise, it must be omitted. If both Track 2 and Track 1 are present in a message, Track 1 takes precedence.

VisaNet: For ATM authorization requests, field 35 (Track 2) is preferred.

Non-Visa Card: For ATM including Plus, field 35 must be present.

Visa Card: used for magnetic stripe-based POS transactions and should always contain the entire stripe content. For all Visa card-present transactions, if field 22 = 90, field 35 or field 45 must contain the entire stripe. If the remainder of the field is zero-filled, CVV processing is invalidated.

CPS: Either this field or field 45 must be present in non-key-entered card present authorization requests. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

VSDC: If field 22 is 05 or 95, indicating a chip-based request, this field is assumed to contain the track data from the chip image, not the magnetic stripe.

CVV2: If both field 35 and field 126.10 (CVV2 data) are present in the request, field 126.10 is removed.

MasterCard: Field 35 is present only when Track 2 instead of Track 1 is read at the terminal.

Other Card Programs: Track 2 is used in magnetic stripe-based requests. Field 35 must contain Track 2 data in its entirety. Field 45 is not included in the request even if Track 1 contents also are read at the point of service.

Check Acceptance: Not applicable to field 35.

STIP and Switch Advices: Field 35 is present in a 0120 advice if it was in the request. It is not used in advice responses.

Field Edits

If field 35 is present, the value in the length subfield must not exceed 37.

If field 22 = 90 or 05, and field 35 is present rather than field 45, field 35 must contain the complete unaltered Track 2 data from the magnetic stripe or chip. If neither field 35 or field 45 is present when field 22 = 90 or 05, or if the acquirer is not certified for code 90 or 05, the request will be rejected with reject code 0142. If the track data is present and meets system requirements but the issuer is not a CVV or iCVV participant or is not certified for code 90 or 05 in field 22, code 90 or 05 is changed to code 02 or 95, respectively.

Visa Electron: This field must be present if field 52 is present and field 22 cannot be 01 (manual entry).

Track 2 Data, *except for X'D' delimiters*, must be numeric.

Visa: The Service Code must be a code that is valid for Visa cards as specified in the *Card Technology Standards Manual*. If field 14 is omitted, this field cannot be present.

Reject Codes

The reject codes for field 35 are:

0024 = Invalid length (track data too long)

0027 = Invalid track data (Service Code)

0142 = Magnetic stripe data missing or acquirer not certified when field 22 = 90

0291 = Field missing

Field 37—Retrieval Reference Number

Attributes

fixed length
12 AN [actual content limited to numerics], EBCDIC; 12 bytes
format: ydddnnnnnnnnn

Description

Field 37 contains a number used with other key data elements to identify and track all messages related to a given cardholder transaction (referred to as a transaction set). It is usually assigned by the acquirer, but it may be assigned by a merchant or by an individual electronic terminal. V.I.P. will also generate the retrieval reference number for transactions it initiates.

This field contains two parts. The first four digits are usually a yddd date (Julian date format). The date is defined to be the same day as the date in Field 7—Transmission Date and Time, of the original request. The last eight digits are a numeric transaction identification number. The value in field 37 can be based on the content of fields 7 and 11 in the original request or advice as shown in the recommendation below:

- Positions 1–4: the yddd equivalent of the field 7 date
- Positions 5–6: the hours from the time in field 7
- Positions 7–12: the value from field 11

Usage

The retrieval reference number is a key data element for matching a message to others within a given transaction set. Field 37 is mandatory in all 01xx, 03xx, 04xx, 06xx, and 08xx request and response messages. It also is required in ATM balance inquiries, ATM confirmations and 0120 and 0322 advices. Clarifications for reversals, file maintenance, administrative, and network management messages are described as follows.

NOTE: *If the field 37 value in one request is used in a new request within 10 seconds of the first one, BASE I will discard the new message containing the duplicate field 37 value—this does not apply to repeat requests (0101 messages).*

Reversals: Whether the number assigned to the original request must be present in a reversal within the transaction set depends on message format:

BASE I Message Format: A reversal should contain the value from the original request.

V.I.P. Message Format: A reversal from an acquirer must contain the value from the original request. V.I.P. issuers abiding by V.I.P. processing rules may encounter reversals where the retrieval reference number does not match that in the original. This condition occurs because it is possible for non-V.I.P. format acquirers to send a reversal containing a different number.

File Maintenance Messages: Regardless of message format, for member processing center-generated 0300 and 0302 file maintenance requests, a new number must be assigned. The same number is returned in the response.

Administrative Messages: A V.I.P.-generated value is inserted in 0600 administrative messages.

Network Management Messages: Field usage depends on message format, and the following requirements apply:

BASE I Message Format: A new number must be assigned to an 0800 network management message. This number is returned in the 0810 response.

V.I.P. Message Format: Members can return in an 0810 response the number they receive in the 0800 message, or they can assign a new one.

CRIS Advices: V.I.P. generates this value for the 0620 advice to the issuer.

AdvanceBK Alerts: V.I.P. generates this value for the 0620 advice to the issuer.

ReadyPost: Determining a probable duplicate authorization request includes the requirement that this field and field 49 in the original must match the suspected duplicate, along with fields 2, 4, 32, 41, and 42. A potential duplicate occurs when this field and field 49 do not match but the other fields do.

MasterCard: There are no special processing requirements for gateway transactions.

Check Acceptance: Field 37 is required in all messages.

0120 and 0322 File Update Advices: Field 37 is present in these advices.

STIP and Switch Advices: Field 37 is present in 0120 or 0420 advices.

Field Edits

The following edits apply.

BASE I and V.I.P. Message Formats: Field 37 is required in all requests and advices related to a cardholder transaction and their responses; the response value must match that in the request. It is also present in network management messages.

BASE I Message Format: The value in this field must be numeric but not all zeros.

V.I.P. Message Format: The first four digits should be the transaction date in yddd format (the same date as appears in field 7).

where:

y = 0–9

ddd = 001–366.

BASE I 0102 Requests: No additional edits.

Check Acceptance: Field 37 is required for all messages.

Reject Codes

The reject codes for field 37 are:

0095 = Invalid value

0310 = Field missing

Field 38—Authorization Identification Response

Attributes

fixed length
6 AN, EBCDIC; 6 bytes

Description

Issuers provide the authorization code when a transaction is approved. For successful verification-only requests, the code can indicate a “no reason to decline.” [Table 4–8](#) contains the system assumptions for code length (which is the number of significant digits, not field entry length) and format.

Table 4–8: Field 38 System Assumptions for Length and Format

Code Length and format	Program	Field Fill
6 AN	Check Acceptance MasterCard/Cirrus ATM Proprietary card JCB	Not applicable
≤6 AN	American Express	Left-justified space
6 N	Visa (Standard BASE I)	Not applicable
≤5 AN	Diners Club	Right spaces Example: NNNnn^ (where N is any digit, n is a digit or a space, and ^ is a space)

V.I.P. derives a STIP authorization code from the retrieval reference number, account number, date, and time. The algorithm can generate 99,999 unique combinations. It is therefore possible to receive identical authorization numbers for different transactions.

Usage

The issuer must provide 6 positions for field 38, even when fewer than 6 positions are meaningful. The field *should not* contain all zeros or all spaces, although acquirers must be able to receive all zeros or all spaces. No special characters are allowed.

Field 38 is required in 0110 authorization responses if field 39 is 00 or 85. This requirement includes check acceptance responses if field 39 is 00. It is also required in 0400 reversal requests and in 0102 confirmations and check

acceptance requests. It is otherwise optional. The value in reversals and original approved requests should match. Field 38 is not used in reversal responses. If this field is present, the message will be rejected.

NOTE: *BASE II requires alpha codes for requests with manually entered authorization source codes or codes inserted offline. This requirement also applies to Japan domestic transactions receiving post-authorization approvals for CAFIS-generated responses.*

Verification Requests: Field 38 is used in “no reason to decline” responses to verification requests, that is, when the response code is 85.

Address Verification: If BASE I STIP provides the authorization decision after the issuer has supplied the address verification response (as in some airline transactions) the acquirer receives the authorization code assigned by STIP, instead of the code assigned by the issuer—unless the issuer has inserted a response code in field 39 other than 00 or 85.

IARS Advices: Field 38 is present in online 0120 advices in the format nnnnR or nnnnX,

where: nnnn = numerical value

R = authorization decision by the Voice Response Unit (VRU)

X = authorization decision by the Visa Referral Center or “by acquirer under Emergency Authorization procedures; this is valid for all U.S. domestic and international POS or cash disbursement transactions under US\$300.”

CPS: Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

Visa Cash: This field is optional in reversal requests.

Check Acceptance: Field 38 is required in approval responses.

STIP and Switch Advices: Field 38 is present in 0120 and 0420 advices if it was present in the 0110 approval response or 0400 reversal request.

Field Edits

Acceptable characters are A through Z in uppercase, 0 through 9, and spaces. Field 38 should not contain all zeros or all spaces. No special characters are allowed.

Check Acceptance: Field 38 is required in an 0110 response if field 39 contains a value of 00 (approval).

Reject Codes

The reject codes for field 38 are:

0293 = Field missing

0034 = Invalid value

Field 39—Response Code

Attributes

fixed length
2 AN, EBCDIC; 2 bytes

Description

Field 39 contains a code that defines the response to a request or the message disposition. Table 4–8 in the “Valid Values” section provides valid BASE I response codes and definitions.

Code 00 indicates approval (a positive authorization decision), and acceptance (acknowledgment that a transaction or message was received). Referral response codes 01 and 02 are limited by Visa Operating Regulations.

NOTE: *Field 39 response codes are not the same response source or reason codes used in field 44.1 to identify the source of the response (the issuer or STIP). Discard message reason codes identify why message processing has been terminated (for example, a late reversal response). Discard message reason codes are found in message logprints. See Chapter 1 for more information about discard message reason codes.*

Usage

Field 39 is used in all responses except network management and confirmation messages. V.I.P. also uses field 39 in certain requests to the issuer.

CPS/ATM and Plus Transactions From a V.I.P.-Connected Member:

V.I.P. converts referrals from the Plus Switch to denials before they are sent to a Visa acquirer (referrals from the Plus Switch are not rejected).

For U.S. domestic requests (merchant, acquirer and issuer all within the U.S.), merchants or acquirers cannot convert referred responses to approvals for any amount.

V.I.P. uses reject code 0087 (Invalid value) when encountering a referral response from the issuer for certain following requests types, and performs STIP Issuer Unavailable processing if the issuer does not respond within the ATR time period. Refer to the Comments section for more information.

Field 39 is present in 0100 and 0400 “forward referrals.” Forward referrals are requests processed by STIP and then sent to the issuer for a decision if the issuer has elected to receive them. If the issuer has not elected to receive forward referrals, STIP processes them according to Issuer Unavailable limits and approves or declines, as appropriate. A forward referral response code

indicates that STIP did not respond due to a condition best handled by the issuer when it is available. Forward referral codes are flagged in Table 4–8 of the “Valid Values” section.

For all Visa cards, response code 57 (transaction not permitted to cardholder) is returned if field 18 does not contain a valid merchant type for the transaction.

Expired Cards: If STIP responds with code 54 in an authorization request, the VIC attempts to forward the message to the issuer (forward referral) for a final authorization decision.

PIN Verification: For 0100 authorization requests involving Visa PIN verification, V.I.P. inserts 00 in field 39 to inform the issuer that the PIN is correct.

CPS: All transactions must be approved (00) to qualify for CPS. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

Commercial Card: STIP is not available for large-ticket transactions.

CRIS Advices: The field 39 response code from the transaction causing the alert is in field 48.

CVV/iCVV: If Visa performs CVV or iCVV checking and detects an invalid CVV or iCVV and if the VSDC issuer elects to receive CVV results through field 39, the 0100 authorization request or account verification request, or 0100 cash disbursement or balance inquiry forwarded to the issuer contains this field with code 82. Issuers can optionally receive positive and negative CVV or iCVV validation results in field 44.5. When recovering advice messages, the issuer should note that a response code of 82 means the acquirer received the issuer’s default response code.

NOTE: *When BASE I acquirers forward CVV- or iCVV-based requests to SMS issuers, the acquirer BIN indicated in field 32 of the request must have its CVV or iCVV participation flag on. Otherwise, the transaction will be downgraded from 90 to 02 (CVV) or 05 to 95 (iCVV) in field 22.*

CVV2: Response code N7 indicates that the transaction would have been approved had the CVV2 value been valid. Issuers also can use N7 when merchants say no CVV2 was on the card (field 126.10, position 1 = 9), but issuers know that CVV2 actually *is* on the card. When the merchant receives N7, it can either decline the transaction or resubmit it with a different (or no) CVV2 value.

V.I.P. Message Format: Responses come from BASE I and SMS issuers; therefore, BASE I acquirers should be prepared to receive SMS codes as well. The following codes can be used for all BASE I and SMS 0110 authorization responses and 0410 reversal responses: 00, 01, 02, 03, 04, 05, 06, 07, 14, 15, 41, 43, 51, 52, 53, 54, 55, 57, 62, 93, and 96.

Verification-Only Requests: For account, address, and telecode verification-only requests, the positive issuer response is 85 (No Reason to Decline), *not* 00 (Approved), unless there is a higher priority response in the Exception File.

Address Verification With Authorization Requests: Depending on issuer specifications, the decision reflected in the field 39 response code may or may not depend on the outcome of the address verification check as reflected in the field 44.2 result code.

When an airline transaction authorization request includes an address verification request, and the amount is under the issuer limit, and the issuer does its own address verification, the issuer handles the address verification-only part of the request, and BASE I STIP handles the authorization decision. When the VIC receives the standard address verification-only response code (85, and others), the 85 response code in field 39 is changed to the STIP authorization response code (00, and others) before the response is sent to the acquirer. A referral or negative response code from the issuer takes precedence over a STIP approval, and is returned to the acquirer.

Visa Cashback:

U.K and U.S.: If the issuer is not a Visa Cashback participant, the decline response code is N3. If the cashback amount exceeds the issuer limit (or \$200 in the U.S.), or the cashback portion of the total amount is otherwise declined, the decline response code is N4. Declined transactions can be resubmitted with lower cashback amounts, or the actual purchase amount only.

U.S.: If the issuer is unavailable, STIP declines with response code 91.

Visa Check Card II: Transactions must be U.S. domestic or requests receive response code 57.

VSDC: Field 39 is present in 0110 responses, including those for ATM balance inquiries, and 0120 advices. Early data option issuers participating in the VisaNet Card Authentication Service are notified of card authentication failures in this field with the code Q1, which V.I.P. forwards to issuers in 0100 requests (authorization, account verification, cash disbursement, balance inquiries). If issuers include Q1 as a response code in an 0110 response, V.I.P. rejects the message. A list of STIP default response codes for VSDC transactions are located in Appendix C of this manual.

Visa Horizon— COPAC and VSDC Formats: Transactions must be authorized by the issuer, not STIP. If the issuer is unavailable, the default response code is 91.

Visa Commerce: The amount, including any currency conversion, cannot exceed US \$10 million; otherwise, the request will be returned with reason code 13 (invalid amount; currency conversion field overflow).

MasterCard ATM Cash or American Express Authorization Requests: Response code is 57. American Express manual cash authorizations are valid.

MasterCard Fleet Transactions: If MasterCard has declined the transaction (reason code 12 in DE39 of the MasterCard response message), the explanation is contained in field 48 of the response. Refer to field 48, Usage 2, in this Technical Specification for more information.

Check Acceptance: Vendor codes in responses are: 00, 01, 03, 05, 06, 13, 14, 54, 57, 80, 91, and 96.

0120 File Update Advices: Field 39 is present and the code is either 00 (successful update) or 06 (discrepancy advice). For Enhanced Authorization Response (EAR) advices, the code is 06 only.

0322 File Update Advices: Field 39 is present in Auto-CDB and EAR advices. If the response code is 06, Field 48 contains the error reason code.

STIP and Switch Advices: Field 39 is present in 0120 or 0420 advices and contains the actual STIP response *before* any conversion for the acquirer.

Field Edits

Field 39 is required in all 0110, 0310, 0312, and 0410 responses. (Use in 0102 confirmations is not edited.) The code must be one from Table 4–7 of the “Valid Values” section, subject to the restrictions referred to in the footnotes.

Response codes 01 and 02 are invalid for ATM transactions.

Issuers cannot use response code 92; it can only be assigned by V.I.P. in responses.

Check Acceptance: Field 39 is required in all 0110 responses.

Comments

Converting Referral Codes: In certain circumstances, Visa will convert issuer-initiated referral code 01 (refer to card issuer) to 00 (approval), 05 (decline) or 01 (which means, no conversion) for POS transactions when the issuer is unavailable and the transaction amount is US\$150 or less. Referral code conversion does *not* apply to POS requests converted to an issuer-specified response for activity-exceeded situations, and it also does not apply to ATM or e-commerce transactions.

Transactions eligible for referral code conversions are those where field 60.1 and field 60.2 each has a valid value *other* than zero, and the Merchant Category Group (MCG) is 01 (airlines), 02 (lodging), 03 (auto rental), 04 (restaurants), 05 (mail/telephone order), 07 (other purchase), or 11 (medical).

Depending on the combination of merchant category code (MCC), merchant region, and issuer region, Visa may do one or both of the following:

- Convert referrals to declines before forwarding the response to the acquirer.
- Reject referral responses from the issuer.

U.S. issuers must choose either 00 or 01. Only non-U.S. issuers may, in some cases, elect not to have referrals converted, that is, have Visa forward the 01 referral code unchanged to the acquirer.

Referral Response processing rules for regional merchant category code combinations are listed in [Table 4–9](#). The EU-specific processing rules are summarized in [Table 4–10](#).

Table 4–9: Referral Response Rejection MCC and Region Combinations (1 of 2)

MCC	Merchant Region ¹	Issuer Region	Transaction Amount To (USD)
4814—Telecommunications Services	0	0	Any amount to system maximum
4816—Computer network/information services	3	3	See Table 4–10
5411—Grocery stores and supermarkets ²	6	6	\$149.00
	3	6	\$149.00
	3	3	\$149.00
5960—Direct marketing, insurance services	1	1	\$99.99
	3	3	See Table 4–10
5962—direct marketing, travel related arrangement services	1	1	\$99.99
	3	3	See Table 4–10
5963—door-to-door sales	3	3	See Table 4–10
5964—direct marketing, catalog merchants	1	1	\$99.99
	3	3	See Table 4–10
5965—direct marketing, combination catalog and retail merchants	1	1	\$99.99
	3	3	See Table 4–10
5966—direct marketing, outbound telemarketing merchants	1	1	\$99.99
	3	3	See Table 4–10
5967—direct marketing, inbound telemarketing merchants	1	1	\$99.99
	3	3	See Table 4–10
5968—direct marketing, continuity/subscription merchants	1	1	\$99.99
	3	3	See Table 4–10
5969—direct marketing, not elsewhere classified	1	1	\$99.99
	3	3	See Table 4–10
9751	6	6	\$149.00

Table 4–9: Referral Response Rejection MCC and Region Combinations (2 of 2)

MCC	Merchant Region ¹	Issuer Region	Transaction Amount To (USD)
9751	6	3	\$149.00
9751	3	6	\$149.00
9751	3	3	\$149.00

¹ The regions are: 0—All regions, 1—U.S., 2—Canada, 3—EU, 4—Asia-Pacific, 5—Latin America and the Caribbean, 6— CEMEA.

² Non-EU and non-CEMEA Supermarket requests are sent to the issuer regardless of dollar amount.

Table 4–10: EU Referral Response Code Rules for MOTO MCCs 4816, 5960, and 5962–5969

Condition	Processing Rule
STIP processes the transaction.	STIP changes the referral response codes 01 or 02 to a decline response code 05 (Do not honor) in the response sent to the acquirer.
EU region issuer responds to the request with an 01 or 02 referral response code and Field 25—POS Condition Code is 08.	BASE I rejects the response back to the issuer with reject code 87 (Invalid value), and inserts decline response code 05 (Do not honor) in the response sent to the acquirer.
EU region issuer responds to the request with an 01 or 02 referral response code and Field 25—POS Condition Code is 00.	BASE I changes the referral response to a decline response code 05 but does not reject the message back to the issuer.

Restricted Card Response Codes: Response code 62 applies to issuer-defined excluded or embargoed countries.

Discard Message Reason Codes: Discarded messages are those that are identified as not requiring further processing. .

Reject Codes

0087 = Invalid value

0294 = Field missing

Valid Values

[Table 4–11](#) defines the response categories for field 39. [Table 4–12](#) lists the valid BASE I Visa response codes and their definitions. The right side of the table indicates which entities may use which codes for which response type. A check mark (✓) means the code is valid for that category.

Table 4–11: Key to Field 39 BASE I Response Code

Response Category	Category Definitions
Issr	✓ Means the issuer can use the code in authorization requests or reversals subject to the restrictions noted. Most are for cardholder transactions.
STIP	✓ Means STIP can use the code in authorization request or reversal responses.
Updt	✓ Means the code is used in 0310/0312 file update responses.
Inq	✓ Means the code is used in 0310/0312 file inquiry responses.
Adv	✓ Means STIP generates the code for 0120 and 0420 advices.

Exception File codes are listed separately. The pick-up or confiscate codes, for example, for CRBs are 04, 07, 41, and 43. See the description of Field 127E.1—Format 2 Action Code for the BASE I Exception File.

Table 4–12: Field 39 BASE I Response Codes (1 of 3)

Code	Definition	0110 msgs		0410 msgs		031x msgs		0 x20
		Issr	STIP	Issr	STIP	Inq	Upd	Adv
00	Successful approval/completion or that V.I.P. PIN verification is valid	✓ ¹	✓ ¹	✓	✓	✓	✓	✓
01 ^{2,9}	Refer to card issuer	✓	✓					✓
02 ^{2,9}	Refer to card issuer, special condition	✓						
03	Invalid merchant or service provider	✓						
04 ²	Pickup card	✓	✓					✓
05 ²	Do not honor	✓	✓					✓
06 ³	Error	✓				✓ ⁴	✓ ⁴	✓ ⁸
07 ²	Pickup card, special condition (other than lost/stolen card)	✓	✓					✓
11 ⁵	V.I.P. approval							✓
12	Invalid transaction	✓	✓					
13	Invalid amount (currency conversion field overflow. Visa Cash—invalid load mount)	✓	✓	✓	✓			
14	Invalid account number (no such number)	✓	✓	✓	✓	⁶		
15	No such issuer ⁷		✓		✓			
19	Re-enter transaction	✓						
21	No action taken (unable to back out prior transaction)			✓	✓			✓

¹ The response message must contain field 38.

² Eligible for forward referrals if issuers have elected to receive them. See this field description's "Comment" section for non-U.S. issuer conversion options.

³ Code 06 is valid in 0110 responses from check acceptance vendors only. Field 48—Additional Data—Private, contains error text for POS terminal display.

⁴ In 0310 and 0312 responses containing code 06, Field 48—Additional Data—Private, identifies the error reason.

⁵ For security reasons, this code should not be used by the issuer. If code 11 is received at the VIC, it is changed to 00 before the response is returned to the acquirer.

⁶ Valid in 0312 responses only.

⁷ Specifically, Field 100—Receiving Institution Identification Code, is not a valid destination.

⁸ Valid for 0120 Enhanced Authorization Response discrepancy advices (field 48 is not present).

⁹ Invalid for ATM transactions. Issuer responses to telephone service authorization requests where the MCC = 4814. BASE I converts issuer-generated 01/02 codes to 05 only for Visa Cashback requests. For ATM or unattended acceptance terminal requests handled by BASE I STIP, STIP-generated 01 codes are converted to 05.

Table 4-12: Field 39 BASE I Response Codes (2 of 3)

Code	Definition	0110 msgs		0410 msgs		031x msgs		0 x20
		Issr	STIP	Issr	STIP	Inq	Upd	Adv
25	Unable to locate record in file, or account number is missing from the inquiry					✓		
28	File is temporarily unavailable						✓	
41 ²	Pickup card (lost card)	✓	✓					✓
43 ²	Pickup card (stolen card)	✓	✓					✓
51	Insufficient funds	✓						
52	No checking account	✓						
53	No savings account	✓						
54 ²	Expired card	✓						✓
55	Incorrect PIN (Visa Cash—invalid or missing S1 signature)	✓	✓					✓
57	Transaction not permitted to cardholder (Visa Cash—incorrect routing, not a load request)	✓	✓					
58	Transaction not allowed at terminal	✓	✓					✓
61 ¹⁰	Activity amount limit exceeded							✓
62	Restricted card (for example, in Country Exclusion table)	✓	✓					
63	Security violation					✓		
65 ¹⁰	Activity count limit exceeded							✓
75	Allowable number of PIN-entry tries exceeded							✓
76	Unable to locate previous message (no match on Retrieval Reference number)			✓				
77	Previous message located for a repeat or reversal, but repeat or reversal data are inconsistent with original message	✓		✓				
80	Invalid date (For use in private label card transactions and check acceptance transactions)	✓		✓				

² This code is eligible for forward referral if issuers have elected to receive them.

¹⁰ This code is eligible for optional forward referral; otherwise, it is valid only in advices.

Table 4–12: Field 39 BASE I Response Codes (3 of 3)

Code	Definition	0110 msgs		0410 msgs		031x msgs		0 x20
		Issr	STIP	Issr	STIP	Inq	Upd	Adv
81	PIN cryptographic error found (error found by VIC security module during PIN decryption)		✓					
82	Incorrect CVV/iCVV		✓					
83	Unable to verify PIN ¹¹	✓	✓					✓
85	No reason to decline a request for account number verification or address verification	✓ ¹	✓ ¹					✓
91	Issuer unavailable or switch inoperative (STIP not applicable or available for this transaction)	¹²	✓	¹³	✓			
92	Destination cannot be found for routing ¹⁴		✓					✓
93	Transaction cannot be completed; violation of law	✓						
96	System malfunction	✓		✓		✓	✓	
	System malfunction or certain field error conditions		✓		✓			✓
N0 ¹³	Force STIP	✓						
N3	Cash service not available	✓	✓					
N4	Cash request exceeds issuer limit		✓					
N7	Decline for CVV2 failure	✓	✓					✓
Q1	Card Authentication failed	✓	✓					
Z3	Unable to go online; declined ¹⁵	✓	✓					
XA ¹⁶	Forward to issuer							
XD ¹⁶	Forward to issuer							

¹ The response message must contain field 38.

¹¹ Although typically used for ATM, STIP can use this code as a default code for any ATM or POS MCG.

¹² A center with a back-end link to another center or network may use this code to indicate unavailability of that link or the other system, and that Visa should not provide STIP. Valid in 0110 and 0410 responses.

¹³ Used by issuers to request “forced” STIP on a single transaction basis only. V.I.P. places a 6 (Enhanced STIP reason code provided on behalf of third-party processor (issuer request for STIP) in Field 44.1—Response Source/Reason Code of the 0120 advice to the issuer.

¹⁴ Response code 92 can be assigned only by V.I.P.

¹⁵ Z3 is used only by V.I.P. in non-cardholder requests such as advices. Issuers should never use this response code.

¹⁶ This code is an Exception File Listing Status and is valid only for forward referrals if issuers have elected to receive them.

Field 40—Service Restriction Code

Attributes

fixed length
3 AN, EBCDIC; 3 bytes

Description

Field 40 contains the 3-digit service code encoded on the magnetic stripe for card usage validation purposes. For Visa cards, see the service code definitions in the *Card Technology Standards Manual*.

Usage

Field 40 should not be included in messages that contain Track 1 or Track 2 magnetic stripe data (field 45 or field 35).

Reversals: This field is optional in reversals for on-us payment and Visa Cash transactions. Otherwise, the field is not used; if present in a reversal, it will cause reject 0518.

CVV2 Emergency Replacements: The service restriction code in 0600 messages is 000. Field 70 must be 0171.

Visa Horizon: This field is *not* used in VSDC-format or COPAC-format authorization requests.

Check Acceptance: Not applicable to field 40. If field 40 is present in a 0100 or 0110 check acceptance message, the message will be rejected with a 0518 reject code.

STIP and Switch Advices: Field 40 is present in 0120 and 0420 advices if it was present in the request.

Field Edits

If field 40 is present, it must contain a valid 3-digit code.

Reject Codes

The reject codes for field 40 are:

0027 = Invalid value

0518 = Inconsistent data elements

Field 41—Card Acceptor Terminal Identification

Attributes

fixed length
8 ANS, EBCDIC; 8 bytes

Description

Field 41 contains a code that identifies the card acceptor terminal or ATM. For electronic point-of-sale or point-of-service (POS) terminals, when the ID is not unique to a specific terminal, Field 42—Card Acceptor Identification Code can be used along with this field. ATM terminal IDs must be unique within the acquirer's network.

An identification code of fewer than 8 positions must be left-justified and the remainder of the field space-filled.

Usage

When present in a POS or ATM request, the field must be preserved and returned unchanged in the response; it is a key data element used to match a BASE I response to its request. If a match cannot be made, BASE I responds using ATR rules.

Whether or not this field is required in reversals depends on the transaction type. For ATM transactions, this field is required in 04xx reversals and must contain a nonzero value.

POS: Field 41 is required in all POS 01xx and 04xx messages *only* when the electronic POS terminal, rather than the acquiring institution or card acceptor, generates the retrieval reference number (field 37) for an original 0100 authorization request. Field 41 is used *only* when needed to fully identify the terminal. Otherwise, field 41 is omitted when no electronic authorization terminal or ECR is used at the point of service or sale or at the bank branch.

ATM and CPS/ATM: Field 41 with a nonzero value is required in *all* Visa ATM cash disbursement and balance inquiry requests. It also is required in 0102 confirmations.

NOTE: *Fields 42 and 43 with nonzero values are also required in all ATM transactions.*

Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

CRIS Advises: This value is the field 41 ID from the transaction in field 48 that is causing the alert.

File Processing: Field 41 must be numeric. In a Visa 0300 Merchant Central File update request, this field may be used to help identify the terminal for which a file record is established. It can be used for the remainder of the terminal ID when the entire terminal ID does not fit in field 42 (for example, for a second-generation dial terminal).

In an American Express, Discover, or MasterCard 0300 Merchant Central File update request, field 41 may be used to identify the terminal for which a file record is established *only if* field 42 is not used for this identification.

NOTE: *Refer to Chapter 6 in BASE I Processing Specifications for more information about using fields 41 and 42 for the key to the merchant ID.*

Check Acceptance: If field 41 is present in the 0100, it is returned in the 0110 response.

STIP and Switch Advices: Field 41 is present in STIP-generated 0120 or 0420 advices if it was in the original request and it must be returned unchanged in their responses. It must contain the original authorization transaction value, and it must be returned in 0430 responses. It is not required in 0130 responses.

Comments

The dial terminal subsystem of a VAP or VAS processor at the VIC uses field 41 for the last 8 digits of the 20-digit merchant ID in a second-generation dial terminal request. Note that these positions overlap what is placed in field 42.

MasterCard: Field 41 is used as a key to search the Merchant Central File, but when constructing MasterCard-compatible messages, BASE I uses whatever field 41 value it receives. If field 41 is not present in the VisaNet message, it will not be present in the corresponding MasterCard message.

Field Edits

Field 41 is required in any ATM transaction 01xx or 04xx message from an acquirer and must contain a nonzero value. Its presence in POS authorization requests is required *only* when the electronic POS terminal, rather than the acquiring institution or card acceptor, generates the retrieval reference number (field 37).

Reject Codes

The reject codes for field 41 are:

0289 = Field missing

File Edits

When field 41 is present in a format 2 file update request for the Merchant Central File, the VIC's File Management Function edits to ensure that the code is numeric for all nonuniversal MCFS record types, and that for non-Visa updates using 0300 requests, field 42 also is not present.

File Maintenance Error Codes

The error codes for field 41 are:

0802 = Invalid use of this field in 0300 request (both fields 41 and 42 are present)

0806 = Non-numeric value in 0300 request

Field 42—Card Acceptor Identification Code

Attributes

fixed length
15 ANS, EBCDIC; 15 bytes

Description

Field 42 contains the identifier of the card acceptor operating the point-of-sale or point-of-service terminal or at the ATM in local and in interchange environments.

Depending on the acquirer or merchant billing and reporting requirements, the acquirer-assigned code can represent a merchant, a specific merchant location, or a specific merchant location terminal.

The values in field 42 and Field 32—Acquiring Institution Identification Code, uniquely identify the merchant. The values in fields 42, 32, and if necessary 41, identify the authorization terminal. If the ID code is less than 15 positions, it must be left-justified and space-filled.

Usage

POS: Field 42 is required in all 01xx and 04xx POS and ATM messages except those for voice authorizations. If present, it must contain a nonzero value.

ATM: Field 42 is required in all 01xx and 04xx ATM transactions. The value must be returned unchanged in the response; it is a key data element for matching a BASE I response to its request. If a match cannot be made, BASE I responds using ATR rules.

NOTE: *Fields 41 and 43 with nonzero values are also required in all ATM transactions.*

CPS: The card acceptor's ID is required in all POS authorization requests, including U.S. cashback requests. For ATM requests, this field must contain the ATM owner's name. In both cases, the field must contain a nonzero value. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

VisaPhone: Field 42 is required and contains a carrier-assigned code that identifies the telephone location.

CRIS Advices: The field 42 code from the transaction causing the alert is in field 48.

File Processing: Field 42 must be numeric. In a Visa 0300 Merchant Central File update request, this field may be used to help identify the terminal for which a file record is established. In an American Express, Discover, or

MasterCard 0300 Merchant Central File update request, this field may be used to identify the terminal for which a file record is established only if field 41 is not used for this identification.

NOTE: Refer to Chapter 6 in the BASE I Processing Specifications manual for more information about using fields 41 and 42 for the key to the merchant ID.

Check Acceptance: Used in all requests and responses. This code is a merchant ID assigned by the check acceptance vendor, not by the acquirer.

STIP and Switch Advices: Field 42 is present in 0120 or 0420 advices and must be returned unchanged in their responses.

Comments

The VAP dial terminal subsystem uses field 42 for:

- The 10-digit merchant ID in a first-generation dial terminal request.
- The first 15 digits of the 20-digit merchant ID in a second-generation dial terminal request.

Field Edits

If present, field 42 must contain a nonzero value.

CPS: Field 42 must be present in 01xx and 04xx messages and must contain a nonzero value.

ATM: Field 42 is required in any message related to a cardholder transaction and must contain a nonzero value. Otherwise, the transaction will be rejected with code 0096.

Discover: If field 42 is present, it must comply with the Discover check-digit routine. Otherwise, there must be a value in the Merchant Central File.

American Express: If field 42 is present, it must comply with the Discover check-digit routine. If it is not present, V.I.P assigns a default value unless there is a different value on the Merchant Control File.

Check Acceptance: Field 42 is required in all 0100 and 0110 messages.

Reject Codes

The reject codes for field 42 are:

0096 = Invalid value (Discover)

0311 = Field missing

File Edits

When field 42 is present in a format 2 Merchant Central File update request, the VIC File Management Function edits to ensure that the code is numeric for all non-Universal Data Format MCFS record types. For non-Visa updates using 0300 requests, field 41 is not present.

File Maintenance Error Codes

The error codes for field 42 are:

0802 = Invalid use of this field in 0300 request (fields 41 *and* 42 are present)

0806 = Non-numeric value in 0300 request

Field 43—Card Acceptor Name/Location

Attributes

fixed length
40 ANS, EBCDIC; 40 bytes

Description

Field 43 contains the name and location of the card acceptor (such as merchant or ATM), including the city name and country code. Field 43 has a single fixed-length format, but the content of positions 1–25 depends on whether the request is for a POS transaction, a Visa or Plus ATM transaction, or a VisaPhone transaction.

Positions:

1–25

26–38

39–40

card acceptor name or ATM location	city name	country code
Byte 1–25	Byte 26–38	Byte 39–40

For Visa POS and ATM, and Plus ATM transactions, when the point of service is not in the same country as the acquirer, field 43 must identify the card acceptor country. Field 43 identifies the merchant or ATM location, while field 19 identifies the acquirer location.

Positions 1–25, Card Acceptor Name:

POS: Merchant name as known to the cardholder.

ATM: The ATM location, branch number, or street address only (institution name is in field 42).

VisaPhone: Telephone carrier name and call length, formatted as follows:

Positions 26–38, City Name:

POS and VisaPhone: City where the customer transaction occurs.

CPS Card-Not Present: Instead of the city name, these positions must contain the merchant's customer service telephone number including country and area codes.

ATM: City where the ATM is located, branch number or street address only (institution name is in field 42).

Positions 39–40, Country Code:

POS, ATM and VisaPhone: The 2-character alpha code in uppercase format for the country where the cardholder transaction occurs or the ATM is located. These codes are provided in Appendix E, Country and Currency Codes.

For U.S. military bases, embassies and consulates, and overseas traveling merchants, the country code must be US; field 19 must be 840; field 59, positions 1–2, must be 99.

Usage

POS: Field 43 is required in 0100 and 0400 POS requests to identify the point-of-service country *only* when the point of service (or card acceptor) is not in the same country as the acquirer. Field 19 identifies the acquirer location, so for POS transactions, when both merchant and acquirer are in the same country, only field 19 is needed. If present in 0100 or 0400 requests, it is included in 0120 and 0420 advices. Field 43 is not included in responses.

ATM: Field 43 is required with a nonzero value in all 01xx and 04xx ATM transactions including balance inquiries and ATM confirmations. For ATM transactions, both field 19 and field 43 must be present even if the acquirer and merchant are in the same country. It is included in 0120 and 0420 advices. It is not included in responses.

NOTE: *Fields 41 and 42 with nonzero values are also required in all ATM transactions.*

CPS: This field is required in all-card-present and card-not-present POS and ATM authorization requests. It is also required in U.S. cashback requests. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

Non-U.S. National Payment Services: Field 43 is optional for Retail, including Petroleum and Restaurant transactions. If it is present, the country code must be valid to receive an ACI of E.

EIRF Non-CPS Transactions: The ticket number must be in positions 13–25.

CRIS Advices: The field 43 value from the transaction causing the alert is in Field 48.

Plus: Field 43 is required in all 0100 and 0400 requests acquired outside the U.S.

Check Acceptance: Not applicable to field 43.

STIP and Switch Advices: Field 43 is present in 0120 or 0420 advices if it was in the request.

Field Edits

Field 43 is required in ATM cash disbursement and 0102 confirmation messages. The ATM location in position 1–25 and the city name in position 26–38 must both be left-justified. The country code must be valid and in uppercase (for example, CA for Canada).

Reject Codes

The field 43 reject codes are:

0169 = Invalid value

0312 = Field missing

Field 44—Additional Response Data

Attributes

variable length
1 byte, binary +
up to 25 ANS, EBCDIC; maximum 26 bytes

Description

Field 44 contains miscellaneous response message data. Visa uses this field and its subfields for the following special codes:

- 44.1 Response Source/Reason Code
- 44.2 Address Verification Result Code
- 44.3 Telecode Verification Result Code
- 44.4 Card Product Type (IARS)
- 44.5 CVV/iCVV Results Code (requests and responses)
- 44.6 PACM Diversion Level
- 44.7 PACM Diversion Reason Code
- 44.8 Card Authentication Results Code
- 44.9 Latin America Additional Response Data
- 44.10 CVV2 Result Code
- 44.11 Original Response Code—SMS-only field
- 44.12 Check Settlement Code (U.S. only)—SMS-only field
- 44.13 3D Secure CAVV Result Code

Many of the fields begin with a length subfield, which specifies the number of bytes present in the field. The length subfields are typically “position zero.”

Field 44 content depends on message usage. Unused subfields between the response source code (44.1) and the first value-filled subfield are either space-filled or null-filled (binary zeros) and passed with the message. All unused subfields following the last value-filled subfield, including all trailing spaces, are omitted.

Usage

Acquirers receive field 44 in all 0110 authorization responses. Issuers include this field in the 0110 message only when they need to supply fields 44.2, 44.3, 44.5, 44.6, 44.7, 44.8, 44.9, 44.10, or 44.13. Otherwise, field 44 is omitted until the response reaches the VIC, where V.I.P. supplies at least Field 44.1—Response Source/Reason Code. The individual subfield descriptions explain when the VIC adds this field to requests and responses.

NOTE: *Fields 44.11 and 44.12 are SMS fields and are not used in BASE I processing. They are listed here only to inform the reader that the subfields numbers are in use.*

Check Acceptance: See the “field 44.1” subfield description. No other field 44 subfields are applicable.

STIP and Switch Advices: Usage varies by subfield. See the individual field 44 field descriptions that follow.

Field Edits

Field 44 must be present in a response to an 0100 request containing field 123.

The value in the length subfield must not exceed 25.

Field 44 must also be present in the response to a request with field 25 = 55 when a processor performs its own telecode checking.

Reject Codes

The reject codes for field 44 are:

0071 = Invalid length

0379 = Field missing

Field 44.1—Response Source/Reason Code

Attributes

fixed length
1 ANS, EBCDIC; 1 byte

Description

Field 44.1 is used only by Visa and contains the response source/reason code that identifies the source of the field 39 response decision. For example, an approval response code of 00 in field 39 might have been issued by STIP, which would be shown in field 44.1 as 1. The codes are in [Table 4–13](#) of the “Valid Values” section.

Authorization source values 6, 7, 8, and 9 used in V.I.P. online responses differ from the meaning of the same values in the BASE II record’s authorization source code field. Subfield codes can be used to distinguish a Visa-generated 0120 file update advice from a normal STIP-generated 0120 authorization advice.

NOTE: *The response source/reason code is different from a discard message reason code. Discard message reason codes identify why processing has been terminated for a message (for example, a late reversal response). Discard message reason codes are found in message logprints. See Chapter 1 of this manual for more information about discard message reason codes.*

Usage

V.I.P. adds this subfield to all 0110 and 0410 responses before they are returned to the acquirer. The values placed in field 44.1 by issuers are removed when the response reaches the VIC. If an issuer responds with “N0” in field 39, “forcing” STIP on a request, V.I.P. inserts a response code of 6 in this subfield before forwarding the response to the acquirer.

Verification Services: Field 44.1 is set to 2 when STIP provides the response to an account, address, or telecode verification request.

IARS Advices: Field 44.1 is present containing a value of 9 in all 0120 advices generated by IARS. All members must be able to receive the 9 whether or not they participate in the service. The value 9 is converted to 4 for issuers that do not receive this subfield in 0120 messages or that receive their advices through BASE II (TC 48).

CRIS Advices: The field 44.1 STIP code from the transaction causing the alert is in field 48.

If issuers are not certified to receive Enhanced STIP reason codes 6 and 9, they are changed to 4 before V.I.P. forwards the message.

Ready Post: Values 7 or 8 appear in Visa-generated reversals or reversal advices for duplicate authorization requests. A probable duplicate is defined as being sent by the acquirer within 60 seconds of a previous response, and a reversal was not processed during the same timeframe, and the duplicate contains the same values for field 2, 4, 32, 37, 41, 42, and 49. If fields 37 and 49 are not the same, the duplicate is considered a potential duplicate.

Check Acceptance: The only valid values are 5 or 4 (when the issuer is unavailable).

0120 File Update Advices: Field 44.1 is present and contains 0 for an Exception File update or "T" for a Telecode Verification File Update.

0322 File Update Advices: Not applicable to field 44.1.

STIP and Switch Advices: Field 44.1 is present in 0120 or 0420 advices.

Field Edits

There are no field edits for field 44.1.

Reject Codes

There are no reject codes for field 44.1.

Valid Values

[Table 4-13](#) provides the valid values for field 44.1.

Table 4-13: Field 44.1 Response Source/Reason Codes (1 of 2)

Code ¹	Definition
0	Advice of Exception File change initiated by the Account Tracking Service (ATS), Chargeback Reduction Service (CRS), the Visa Travel Service Center (VTSC), or the Automatic Cardholder Database Update Service (Auto-CDB) of the Enhanced Authorization Service (EAS)
1	Response provided by STIP because the request was timed out by Switch (Assured Transaction Response)
2	Response provided by STIP because the transaction amount was below issuer limit (PCAS processing), or transaction amount is below sliding dollar limit (PACM processing), or in response to a verification request
3	Response provided by STIP because the Issuer is in Suppress Inquiries (SI) Mode
4	Response provided by STIP for one or more of the following reasons: <ul style="list-style-type: none"> • Issuer was not available for processing (for reasons other than SI mode) • CVV or iCVV invalid and Visa has acted on the negative results • PVV invalid and Visa has acted on the negative results Code 4 is the default code when the others listed here do not apply.

Table 4–13: Field 44.1 Response Source/Reason Codes (2 of 2)

Code ¹	Definition
5	Response provided by issuer
6 ²	Enhanced STIP reason code provided on behalf of third-party processor (issuer request for STIP)
7 ²	Reversal advice provided by Visa to identify a potential duplicate transaction
8 ²	Reversal advice provided by Visa to identify a probable duplicate authorization (including returned reference number)
9 ²	Enhanced STIP reason code provided by the Visa International Automated Referral Service (IARS)
T	Advice of a Telecode File change initiated by the VisaPhone Issuer Direct Service (VIDS)
U	Advice of a Telecode File change initiated because the invalid telecode attempt threshold was exceeded
V	Advice of a Telecode File change initiated because the maximum telecode usage threshold was exceeded

¹ Codes not defined for V.I.P. use may be used elsewhere within VisaNet, for example, by BASE II.

² Values 6, 7, 8, and 9 only appear on issuer advices, never in responses to acquirers. Codes 6 and 9 are Enhanced STIP reason codes. If the BIN cannot receive them, the default is 4.

Field 44.2—Address Verification Result Code

Attributes

fixed length
1 AN, EBCDIC; 1 byte

Description

Field 44.2 contains a Visa-defined code that describes the results of a Visa address verification. The Visa Address Verification Service can be used for all merchants that include field 123 in Visa card 0100 authorization requests. It can also be used for MasterCard, American Express, Discover, and in the U.S., proprietary and private label transactions. The codes are in [Table 4–14](#) of the “Valid Values” section. Refer to field 123 for a summary of address verification processing.

Usage

Field 44.2 is used in responses to original card-present and card-not-present requests that include address verification data in field 123. It is not used in 0410 reversal responses. Either the issuer or the VIC through IAVS provides the code. MasterCard issuers provide it through the BASE I BankNet gateway.

If this subfield does not apply, but subsequent ones do, it is either space-filled or null-filled (binary zeros) for endpoints unable to accept spaces. If this subfield applies but no subsequent ones do, truncate all trailing spaces.

V.I.P. may convert result codes generated by the issuer depending on transaction jurisdiction and acquirer capabilities. See [Table 4–15](#) and [Table 4–16](#) for code conversions.

If participating U.S.-domestic issuers direct Visa to verify the address but have the authorization routed to them under issuer-available conditions for the final decision, issuers can choose whether field 123 address data is included in these forwarded authorization requests. Issuers can also request that V.I.P. also include the result code in advices sent to issuers.

If the issuer ordinarily performs its own address verification but is unavailable, the VIC inserts an “R” (retry) in the response. If the VIC performs address verification for an issuer but no AVS record is on file for the account, the VIC inserts a “U” (address not verified for domestic transaction) or a “G” (address not verified for international transaction) in the response. The VIC also inserts a “U” if it determines an issuer does not support AVS but address verification has been requested in the 0100 message from the acquirer, for example, a message for a card type other than Visa or MasterCard.

CPS: This field is present in responses to requests that included address verification data. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

CRIS Advices: The field 44.2 code from the transaction responsible for the alert is in field 48.

MasterCard and Cirrus: If MasterCard responds with a code of “X”, V.I.P. changes it to a “Y” before forwarding the response to the acquirer.

Check Acceptance: Not applicable to field 44.2.

STIP and Switch Advices: Field 44.2 is present in 0120 advices.

Comments

If a U.S. issuer receives all zeros for the postal code, the result code should be A or N. If all zeros are received for the street address, the code should be Z or N.

For U.S. acquirers, the state code is not required. The postal code or the street address (or both) can be submitted.

If STIP provides the authorization decision after the issuer provides the address verification response, the acquirer receives the code 2 in field 44.1. (The authorization source takes precedence over the address verification source.)

If an issuer needs to return other information in a response, it can use field 48 for the response text.

Refer to field 123 for a summary of the address data requirements and compression algorithms. AVS details are also found in *V.I.P. System Services*.

Field Edits

If the issuer receives field 123 in the request, it must include one of the codes listed in [Table 4–14](#) of the “Valid Values” section in this field in the response; otherwise, V.I.P. inserts a “U” before the response is forwarded to the acquirer.

If a request containing address data is bound for a nonparticipating issuer, the request is accepted but field 123 is dropped before the message is passed to the nonparticipating issuer. When the response is received at the VIC, the result code “U” is added for the acquirer.

Reject Codes

The reject codes for field 44.2 are:

0127 = Invalid value

0379 = Field missing

Valid Values

[Table 4–14](#) provides the valid values for field 44.2.

Table 4–14: Field 44.2 Address Verification Results Codes (1 of 2)

Code	Definition	Code Applies to	
		Domestic	International
A	Street addresses match. The street addresses match but the postal/ZIP codes do not, or the request does not include the postal/ZIP code.	✓	✓
B	Street addresses match. Postal code not verified due to incompatible formats. (Acquirer sent both street address and postal code.)	✓	✓
C	Street address and postal code not verified due to incompatible formats. (Acquirer sent both street address and postal code.)	✓	✓
D	Street addresses and postal codes match.		✓
F	Street address and postal code match. Applies to U.K. only.	✓	
G	Address information not verified for international transaction.		✓
I	Address information not verified.		✓
M	Street address and postal code match.		✓
N	No match. Acquirer sent postal/ZIP code only, or street address only, or both postal code and street address.	✓	✓
P	Postal code match. Acquirer sent both postal code and street address, but street address not verified due to incompatible formats.	✓	✓
R	Retry: System unavailable or timed out. Issuer ordinarily performs its own AVS but was unavailable. Available for U.S. issuers only.	✓	
S	Not applicable. If present, replaced with "U" by V.I.P. ¹ Available for U.S. issuers only.	✓	
U	Address not verified for domestic transaction. Visa tried to perform check on issuer's behalf but no AVS information was available on record, issuer is not an AVS participant, or AVS data was present in the request but issuer did not return an AVS result.	✓	
W	Not applicable. If present, replaced with "Z" by V.I.P. Available for U.S. issuers only.	✓	
X	Not applicable. If present, replaced with "Y" by V.I.P. Available for U.S. issuers only.	✓	
Y	Street address and postal code match.	✓	

Table 4–14: Field 44.2 Address Verification Results Codes (2 of 2)

Code	Definition	Code Applies to	
		Domestic	International
Z	Postal/ZIP matches, street address does not match or street address not included in request.	✓	✓

¹ Issuers can send codes “S”, “W”, and “X”, but they are converted at the VIC to “U,” “Z,” and “Y” as appropriate before the message is forwarded to the acquirer.

Result Code Conversion Based on Jurisdiction and Representment Rights

Depending on transaction jurisdiction and member participation options, V.I.P. converts the issuer’s AVS result code to reflect the transaction’s correct representment rights status. [Table 4–15](#) shows the conversion codes.

Table 4–15: AVS Result Code Conversions Based on Jurisdiction and Representment Rights

Issuer or V.I.P. Result Code	Converted Result Code to Acquirer		
	Domestic Transaction	International Transaction	
		Representment Rights	No Representment Rights
Y	F (U.K.)	M	D
M ¹	Y (U.S.) or F (U.K.)		D
D ¹	Y (U.S.) or F (U.K.)	M	
U		I	G
I ²	U		G
G ²	U	I	

¹ Only V.I.P. should use these codes. Issuers should use “Y” (“F” in U.K.).

² Only V.I.P. should use these codes. Issuers should use “U.”

**Result Code Conversion Based on Acquirer Participation
(U.K. and U.S. Only)**

If an acquirer cannot receive the IAVS result codes (B, P, C, D, I, M, or G), V.I.P. converts them as indicated in [Table 4-16](#) before forwarding the response to the acquirer. If the acquirer cannot receive the first replacement code from V.I.P. or from the issuer, V.I.P. uses the second, or default, replacement code.

Table 4-16: AVS Result Code Conversion Based on Acquirer Participation

Issuer or V.I.P. Result Code	First Replacement Code	Second Replacement Code
G	I	U
B	A	
C	G	U
D	Y	
I	U	
M	Y or F (U.K.)	
P	Z	

Field 44.3—Telecode Verification Result Code

Attributes

fixed length
1 ANS, EBCDIC; 1 byte

Description

Field 44.3 contains a Visa-defined code for telecode verification results. STIP generates this code when Visa provides telecode verification and activity threshold checking (incorrect telecode attempts and total daily usage), or by the issuer if the issuer provides the verification. This subfield applies to VisaPhone calls only. The result codes are in [Table 4-17](#) of the “Valid Values” section.

Usage

Field 44.3 is used in 0110 responses to telecode verification requests. When STIP does the telecode check, it provides this code unless the response code in field 39 is 15 (no such issuer). An issuer doing its own telecode check always provides this code.

If telecode verification does not apply but later subfields do, this subfield is space-filled. If no other subfields are involved, truncate all trailing spaces.

Check Acceptance: Not applicable to field 44.3.

0322 File Update Advices: Field 44.3 is present in the message when telecode activity thresholds are exceeded. Field 48 contains the telecode to be deleted.

STIP and Switch Advices: Field 44.3 is present in 0120 advices when STIP does the telecode check.

Field Edits

There are no field edits for field 44.3.

Reject Codes

There are no reject codes for field 44.3.

Valid Values

[Table 4–17](#) provides the valid values for field 44.3.

Table 4–17: Field 44.3 Telecode Verification Results Codes

Code	Definition
0	Telecode matches the value on file.
1	Cardholder record is not in the Telecode Verification File.
2	Telecode does not match the value on file.
3	Maximum invalid telecode attempts threshold exceeded.
4	Maximum daily usage threshold exceeded.
Space	Telecode verification is not applicable (sent only if subsequent subfields contain a value other than a space).

Field 44.4—Card Product Type

Attributes

fixed length
1 ANS, EBCDIC; 1 byte

Description

Field 44.4 is reserved for Visa use.

Usage

Field 44.4 is used internally at Visa to support the Automated Referral Service. It has a nonspace value in messages sent to endpoints.

In messages that include fields 44.5 to 44.7, this subfield is space-filled. Otherwise, omit it and truncate all trailing spaces.

Field Edits

There are no field edits for field 44.4.

Reject Codes

There are no reject codes for field 44.4.

Valid Values

Field 44.4 contains card product type codes:

C = Visa Classic Card

G = Visa Premium/Gold

E = Visa Electron Card

B = Visa Business Card

R = Visa Corporate T&E Card

S = Visa Procurement Card

Field 44.5—CVV/iCVV Results Code

Attributes

fixed length
1 ANS, EBCDIC; 1 byte

Description

Field 44.5 contains a Visa-defined code indicating Card Verification Value (CVV) or iCVV (Integrated Chip Card CVV) verification results. [Table 4–18](#) of the “Valid Values” section lists these codes. Refer to “Field 44.10” description for the CVV2 result code. The system assumes that the CVV is from the chip and not the magnetic stripe if Field 22—POS Entry Mode Code, is 05 or 95.

Usage

Requests: Field 44.5 is used in 0100 authorization and account verification requests, and 0100 cash disbursements and balance inquiries. If Visa validates the CVV or iCVV on the issuer’s behalf, V.I.P. forwards the positive or negative results to the issuer in this field if the issuer elects to receive them here rather than in field 39. Issuers must be certified to receive the CVV or iCVV verification results in this subfield.

Responses: Field 44.5 is used in 0110 responses by the issuer to communicate its verification results to Visa. The field is also used to pass verification results to the acquirer regardless of whether the VIC or the issuer performed the CVV or iCVV check. Acquirers must be certified and elect to receive the CVV or iCVV verification results.

If Visa conducts the CVV or iCVV test on the issuer’s behalf under issuer-unavailable conditions, V.I.P. inserts the results of its CVV or iCVV verification in the response to the acquirer.

Field 44.5 is space-filled when the code does not apply but later field 44 subfields do apply.

VSDC: Issuers must be certified and must elect the full data option to receive this field in requests when V.I.P. has validated the CVV or iCVV on the issuer’s behalf.

CRIS Advices: The field 44.5 code from the transaction causing the alert is in field 48.

Check Acceptance: Not applicable to field 44.5.

STIP and Switch Advices: Field 44.5 is present in 0120 advices if CVV or iCVV checking was performed.

Field Edits

There are no field edits for field 44.5.

Reject Codes

There are no reject codes for field 44.5.

Valid Values

[Table 4–18](#) provides the valid values for field 44.5.

Table 4–18: Field 44.5 CVV Verification Results Codes

Code	Definition
(Blank) or not present	CVV or iCVV was not verified
1	CVV or iCVV failed verification
2	CVV or iCVV passed verification

Field 44.6—PACM Diversion Level Code

Attributes

fixed length
2 ANS, EBCDIC; 2 bytes

Description

Field 44.6 contains a Visa-defined code to indicate the applicable diversion level when Positive Authorization Capacity Management (PACM) processing is used to route a Visa 0100 POS authorization request or 0400 request. PACM also applies to MasterCard transactions. There are 21 PACM diversion levels, and each one indicates a specific dollar amount below which transactions are processed by STIP. Other transactions apply only when the card range is set up for PACM. Refer to [Table 4-19](#) of the “Valid Values” section for PACM division levels. PACM does not apply to cash disbursements, balance inquiries, status checks, MOTO or e-commerce transactions.

Usage

STIP and Switch Advices: This PACM field is present in 0120 and 0420 STIP and switch advices for participating issuers when PACM diversion occurs. It is not required in advice responses. This subfield is not used in 0110 or 0410 responses. When it is not applicable in other messages, BASE I omits it.

Check Acceptance: Not applicable to field 44.6.

Field Edits

There are no field edits for field 44.6.

Reject Codes

There are no reject codes for field 44.6.

Valid Values

[Table 4-19](#), provides the valid values for field 44.6. The table lists BASE I regional defaults for the six Visa regions:

- 1 = United States (US)
- 2 = Canada (CA)
- 3 = European Union (EU)
- 4 = Asia-Pacific (AP)

5 = Latin America (including Caribbean) (LAC)

6 = Central Europe, Middle East, and Africa (CE)

Table 4–19: BASE I PACM Diversion Tables by Visa Region

Diversion Level	Percentage of Eligible Transactions Diverted to STIP	BASE I DIVERSION TABLES Dollar Value of Diverted Transactions (Eligible if Below Listed Amount)		
		Regions 1 (US), 2 (CA), 5 (LAC)	Region 3 (EU), 6 (CE)	Region 4 (AP)
00	00	0	0	0
01	05	8	14	11
02	10	12	20	14
03	15	14	26	16
04	20	17	31	19
05	25	19	38	22
06	30	22	44	25
07	35	25	52	29
08	40	28	59	33
09	45	31	68	38
10	50	36	76	45
11	55	40	87	54
12	60	46	102	64
13	65	52	118	75
14	70	59	140	89
15	75	70	160	107
16	80	85	188	131
17	85	105	235	160
18	90	151	314	212
19	95	253	403	321
20	100	99,999	99,999	99,999

Field 44.7—PACM Diversion Reason Code

Attributes

fixed length
1 ANS, EBCDIC; 1 byte

Description

Field 44.7 is a code defined and applied by Visa to indicate that PACM diverted a transaction to STIP on the issuer's behalf.

Usage

STIP and Switch Advices: At the discretion of participating issuers, this subfield is present in 0120 or 0420 advices when PACM diversion occurs. It is not required in advice responses. When this subfield is not applicable, V.I.P. omits it.

Check Acceptance: Not applicable to field 44.7.

Comments

If MasterCard issuers have instructed Visa to send transactions to BankNet when the issuer is unavailable, PACM-diverted transactions are also switched to BankNet instead of to STIP.

Field Edits

There are no field edits for field 44.7.

Reject Codes

There are no reject codes for field 44.7.

Valid Values

Currently, the only defined value for this subfield is "A" (Exceeded Capacity).

Field 44.8—Card Authentication Results Code

Attributes

Fixed length
1 ANS, EBCDIC; 1 byte

Description

Field 44.8 is a VSDC code indicating card authentication results.

Usage

For VSDC transactions, this subfield is used by V.I.P. in the following messages to the full data issuer to communicate card authentication results when V.I.P. has performed card authentication on the issuer's behalf for full data issuers:

0100 authorization and account verification requests

0100 cash disbursements and balance inquiries

0120 stand-in advices

This subfield is used in 0110 authorization request responses to communicate card authentication results to V.I.P. when the issuer has performed card authentication. This subfield is passed to acquirers that have elected to receive card authentication results and that are certified to receive them. If this code does not apply but subsequent subfields do, this subfield is space-filled. If no other subfields are involved, all trailing spaces are truncated.

Check Acceptance: Not applicable to field 44.8.

STIP and Switch Advices: When Visa STIP conducts the test for the issuer, Visa includes the results in this subfield if the issuer has elected to receive it.

Field Edits

There are no field edits for field 44.8.

Reject Codes

There are no reject codes for field 44.8.

Valid Values

[Table 4–20](#), provides the valid values for field 44.8.

Table 4–20: Field 44.8 Card Authentication Results Codes

Code	Definition
Blank or not present	Card authentication was not performed or some other situation prevented verification; for example, issuer is not a service participant or a system or a cryptographic error occurred.
1	The ARQC was checked but failed verification.
2	The ARQC was checked and passed verification.

Field 44.9—Latin America Additional Response Data

Attributes

Fixed length
1 ANS, EBCDIC; 1 byte

Description

Field 44.9 contains an additional declined card transaction response code returned by Latin America and Caribbean (LAC) issuers.

Usage

Field 44.9 is present in non-CPS 0110 POS or ATM responses for reporting purposes only. V.I.P. removes it before the response is passed to the acquirer. It does not apply to ATM confirmations or balance inquiries, or to reversals.

Check Acceptance: Not applicable to field 44.9.

Field Edits

There are no field edits for field 44.9.

Reject Codes

There are no reject codes for field 44.9.

Valid Values

[Table 4–21](#) provides the valid values for field 44.9.

Table 4–21: Field 44.9 Latin America and Caribbean Response Codes

Code	Definition
1	The transaction is declined for delinquency reasons.
2	The transaction is declined for exceeding internal issuer activity parameters for ATM cash.
3	The transaction is declined based on issuer cardholder file being unavailable.
4	The transaction is declined for improper format.

Field 44.10—CVV2 Result Code

Attributes

Fixed length
1 ANS, EBCDIC; 1 byte

Description

Field 44.10 contains a Card Verification Value 2 (CVV2) verification result. CVV2 is a card verification tool for card-not-present transactions. The Operating Regulations for the six Visa regions require issuers to print the CVV2 value on the back of all Visa credit and debit cards generated after 1 January 1998.

CVV2 participation is optional. Participating merchants must manually enter the CVV2 values. All CVV2 participating issuers, acquirers, and merchants must be prepared to send and receive the new information. Participating issuers may choose to have Visa perform or bypass CVV2 validation.

Usage

Field 44.10 is used in card-not-present 0100 authorization requests, 0110 authorization responses, and in 0120 advices. This subfield depends on the content of Field 126.10—CVV2 Authorization Request Data.

Authorization Requests: The following processing rules apply to requests:

- If a participating certified issuer provided Visa with its CVV2 encryption keys, Visa validates the CVV2 value and passes the CVV2 result to the issuer in the request message. An “M” in field 44.10 indicates a match. An “N” indicates no match.
- If a participating issuer selected the “CVV2 None” option and also provided Visa with its CVV2 encryption keys, Visa inserts a “P” (not processed) in the message.
- If an issuer did not meet the certification criteria or did not provide Visa with its CVV2 encryption keys (or both), Visa inserts a “U” in the response message to the acquirer.

Because the expiration date (field 14) is used to determine which key set to use, field 14 is required for CVV2 validation. When a certified acquirer submits an authorization request and the expiration date is not present, Visa edits the transaction. If the transaction passes all tests, Visa inserts a value of “P” or “U” in field 44.10 and forwards the request to the issuer for further processing.

Visa uses the following rules to set the CVV2 result if the expiration date is not provided:

- If the issuer is certified and has provided Visa with the encryption keys, Visa inserts a “P” in field 44.10.
- If the issuer is not certified or did not provide Visa with the encryption keys (or both), Visa inserts a “U” in field 44.10.

Authorization Responses: The following rules apply to responses:

- If the issuer overrides the result sent from Visa, the issuer must return to Visa a value of “M,” “N,” “P,” or “S” in field 44.10. See “Field Edits.”
- If the issuer does not override the Visa CVV2 result, Visa returns the result to the acquirer if the merchant has requested it.
- If the issuer is not participating or has not sent Visa its CVV2 encryption keys, Visa always returns the CVV2 result code “U” to the acquirer, even if the issuer attempts to override the Visa CVV2 result field.

The merchant has the option of receiving the CVV2 result in the authorization response. If the merchant has indicated that the CVV2 result is not to be returned (response type = 0 in position 2 of field 126.10), Visa removes the CVV2 result from the request response. Visa will not return field 126.10 in response messages.

CPS: Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

MasterCard E-commerce Authorization Responses: This field contains MasterCard’s CVC2 validation result code, which is its version of Visa’s CVV2. The CVC2 value received at the VIC in field 126.10 is forwarded to the MasterCard issuer in DE (data element) 48, subelement 92 of the authorization request. The response is sent to the acquirer in DE 48, subelement 87. The possible MasterCard result codes:

M = Valid or “matched” CVC2 code

N = Invalid CVC2 code

P = Not processed

U = User is unregistered

Y = No match when only CVC1 was present in the message.

Check Acceptance: Not applicable to field 44.10.

STIP and Switch Advices: Field 44.10 will contain the result determined by STIP.

Field Edits

If the issuer put an invalid CVV2 result value in a response, Visa rejects the response and sends it back to the issuer and also returns the Visa CVV2 result to the acquirer.

Reject Codes

The reject codes for field 44.10 are:

0149 = Invalid value

Valid Values

[Table 4–22](#) provides the valid values for Visa card responses for field 44.10.

Table 4–22: Field 44.10 CVV2 Results Codes

Code	Definition
M	CVV2 Match
N	CVV2 No Match
P	Not processed
S	The CVV2 should be on the card but the merchant indicates it is not.
U	The Issuer is not certified or has not provided Visa with encryption keys.

Field 44.11—Original Response Code

Attributes

fixed length
2 ANS, EBCDIC; 2 bytes

Description

This is an SMS field. When SMS encounters a duplicate transaction, this field contains the field 39 response code from the original transaction.

Usage

Field 63 is *not* used in BASE I processing. BASE I acquirers do *not* populate this field or use spaces if field 44.13 is being included. If this field is present in a BASE I message, V.I.P. removes it.

Field 44.12—Check Settlement Code (U.S. Only)

Attributes

fixed length
1 ANS, EBCDIC; 1 byte

Description

This is an SMS field. Visa provides this U.S.-only field in responses to indicate the settlement disposition of POS Check Service transactions.

Usage

Field 63 is *not* used in BASE I processing. If this field is present in a BASE I message, V.I.P. removes it.

Field 44.13—Card Authentication Verification Value (CAVV) Result Code

Attributes

Fixed length
1 ANS, EBCDIC; 1 byte

Description

Field 44.13 contains the 3-D Secure Cardholder Authentication Verification Value (CAVV) results code. A CAVV is a cryptographic value generated during the 3-D Secure authentication process by the issuer's Authentication Control Server (ACS) to verify the cardholder. The merchant must forward the CAVV to Visa and it must be in field 126.9.

Visa (or the cardholder's issuer) must perform the same cryptographic calculation using the issuer's key and related fields to validate the CAVV. The result of the validation process is stored in the CAVV results code.

Usage

Field 44.13 is used in 0100 and 0110 authorization messages and in 0120 advices. If Visa validates the CAVV on behalf of the issuer, V.I.P forwards the positive and negative results to the issuer in this field. Only issuers participating in the 3-D Secure protocol receive this field.

If the issuer validates the CAVV, this field must be included in the response message to Visa. Visa will forward the field to acquirers participating in 3-D Secure. Codes 5 and 6 are assigned only by Visa in the response to the acquirer.

If this code does not apply but subsequent subfields do, this subfield is space-filled. If no other subfields are involved, all trailing spaces are truncated.

Check Acceptance: Not applicable to field 44.13.

STIP and Switch Advices: Field 44.13 will contain the result determined by STIP.

Field Edits

Field 44.13 is edited for valid result codes from the issuer. If the issuer puts an invalid CAVV result value in a response, Visa rejects responses with invalid CAVV result codes.

Reject Codes

The reject codes for field 44.13 are:

0193 = Invalid CAVV results code value

Valid Values

[Table 4–23](#) provides the valid values for field 44.13.

Table 4–23: Field 44.13 CAVV Results Codes

Code	Definition
Blank, or not Present	CAVV not validated.
0	CAVV not validated due to erroneous data submitted.
1	CAVV failed validation.
2	CAVV passed validation.
3	<ul style="list-style-type: none">• CAVV verification could not be performed. Or• A 3-D Secure Authentication value of 5 from the Issuer's Access Control Server (ACS) indicates that authentication was attempted but not completed.
4	<ul style="list-style-type: none">• CAVV verification could not be performed. Or• A 3-D Secure Authentication value from the Issuer's Access Control Server (AVS) indicates that the following prevented authentication:<ul style="list-style-type: none">6 – System error9 – Authentication failure
5	CAVV not validated: Fields 126.8 and 126.9 were present in the request but the issuer is not a CAVV service participant.
6	CAVV not validated: Fields 126.8 and 126.9 were present in the request but the issuer is not set to participate in any of the four CAVV service options.

Field 45—Track 1 Data

variable length
1 byte, binary +
up to 76 ANS, EBCDIC; maximum 77 bytes

Description

Field 45 contains the information encoded on Track 1 of the magnetic stripe, including field separators but excluding beginning and ending sentinels and LRC characters.

NOTE: *The Track 1 delimiter/separator character (^) must be encoded as X'5F' or '¬' in EBCDIC.*

The length specifies the number of Track 1 data digits or separators. When the data is an odd number of digits, a leading zero is required to pad the first unused half-byte of data. Because this zero is a filler and not part of the Track 1 data, it is *not* counted for the length subfield. See the *Card Technology Standards Manual* or ISO 7813 for more information about Track 1 card location and content.

Usage

Field 45 is used in authorization requests but not in their responses, advice responses, or reversals. Its presence depends on the card program, and it is present *only* when Track 1 data has been read at the terminal; otherwise, it must be omitted. If both Track 1 and Track 2 are present in a message, Track 1 takes precedence.

VisaNet: For ATM authorization requests, Field 35—Track 2 Data, is preferred.

Non-Visa Card: For ATM including Plus, field 45 does not apply. For POS, field 45 should be present. Field 45 or Field 35 track data must be present in the message if field 22 = 90.

Visa: May be used for magnetic stripe-based POS transactions, and should always contain the entire stripe content. For all Visa card-present transactions, if field 22 = 90, field 45 or field 35 must contain the entire stripe. Zero-filling the remainder of the field invalidates CVV processing.

CPS: Either this field or field 35 must be present in non-key entered card-present authorization requests. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

CVV2: If both field 45 and field 126.10 (CVV2 data) are present in the request, field 126.10 is removed.

VSDC: If field 22 is 05 or 95, indicating a chip-based request, this field is assumed to contain the track data from the chip image, not the magnetic stripe.

MasterCard: Field 45 is present only when Track 1 instead of Track 2 is read at the terminal.

Other Card Programs: Track 1 is used in magnetic stripe-based requests. If present, field 45 must contain Track 1 data in its entirety even if it does not comply with ISO 7813. Field 45 is not included in the request if field 35 contains Track 2 data.

Check Acceptance: Not applicable to field 45.

STIP and Switch Advices: Field 45 is present in 0120 advices if it was in the request. It is not used in advice responses.

Field Edits

If field 45 is present, the value in the length subfield must not exceed 76.

If field 22 = 90 or 05, and field 45 is present in the message rather than in field 35, field 45 must contain the entire, unaltered Track 1 data from the magnetic stripe or chip including any trailing blanks or spaces. If neither field 35 or field 45 is present when field 22 = 90 or 05, or if the acquirer is not certified for code 90 or 05, the request will be rejected. If the track data is present and meets system requirements but the issuer is not a CVV or iCVV participant or is not certified for code 90 or 05 in field 22, code 90 or 05 is changed to code 02 or 95, respectively.

The Service Code must be a valid code for Visa cards as specified in the *Card Technology Standards Manual*.

If field 14 is omitted, field 45 cannot be present.

Reject Codes

The reject codes for field 45 are:

0102 = Invalid length

0142 = Magnetic stripe data missing when field 22 = 90.

0027 = Invalid track data (Service Code)

Field 48—Additional Data—Private

Attributes

variable length
1 byte, binary +
up to 255 bytes, variable by usage; maximum 256 bytes

Description

Field 48 is a Visa private-use field for miscellaneous information that involves multiple uses and field formats for different types of transactions and messages. The current usages are as follows:

- [Field 48, Usage 1a—Error Codes in 0312 Responses, Format 1](#)
- [Field 48, Usage 1b—Error Codes in 0310/0312 Responses and 0322 Advices, Format 2](#)
- [Field 48, Usage 2—Unformatted Text in Authorization/Reversal Messages](#)
- Usage 3—Error Reason Text in Check Acceptance Responses
- [Field 48, Usage 4—Unformatted Text in Network or Administrative Messages](#)
- [Field 48, Usage 5—VAP-Generated Dial Terminal Information](#)
- **Field 48, Usage 6—Check Acceptance Information**
- [Field 48, Usage 7—Billing/Reporting/Other Data for Visa Use](#)
- [Field 48, Usage 8—Telecode Verification Requests \(VisaPhone\)](#)
- [Field 48, Usage 9—Timeout Station ID](#)
- [Field 48, Usage 10—MasterCard Corporate Fleet Card Data](#)
- [Field 48, Usage 11—Commercial Card Type Request](#)
- [Field 48, Usage 12—Purchasing Card—Visa Fleet Service](#)
- [Field 48, Usage 13—AdvanceBK Risk Alert](#)
- [Field 48, Usage 14—CRIS Alert, Part 1](#)
- Usage 15—Reserved
- Usage 16—Visa Commerce Data
- Usage 17—Reserved

Regardless of format, the length subfield always specifies the number of bytes that follow the length subfield.

Field 48, Usage 1a—Error Codes in 0312 Responses, Format 1

Attributes

variable length
1 byte, binary +
4–510 N, 4-bit BCD (unsigned packed); maximum 256 bytes

Description

Field 48, Usage 1a contains format 1 Exception and PIN Verification File request error codes. The field has one or more sets of three subfields following the length subfield. When the 0312 response code in field 39 is 06, this field describes the first error found by the File Management Function at the VIC. Field content is defined as:

Positions:			
1–4	5–6	7–x	
length	error code	acct number length	account number
Byte 1	Byte 2–3	Byte 4	Byte 5–256

The three subfields (positions 1 to *x*) occur multiple times when there are multiple errors in a 0302 request with multiple updates.

Length Subfield: This value is the number of bytes following the length subfield.

Positions 1–4, Error Code: These positions comprise a 4-digit code for the specific error found in the 0302 request message or 0110 authorization response message. Possible error codes are labeled as format 1 in Appendix B, File Maintenance Error Codes.

Positions 5–6, Account Number Length: A 2-position value that specifies the number of digits in the account number. (The length is specified in the same manner as for field 2.)

Positions 7–*x*, Account Number: The account number from the request that was found to be in error.

NOTE: For positions 5–6 and 7–*x*, the account number length and the account number are not present if error code is 0530, 0538, 0564, or 0568.

Usage

Usage 1a applies only to format 1, 0312 responses generated by the File Management Function at the VIC.

Check Acceptance: Not applicable to Usage 1a.

Field Edits

There are no field edits for field 48, Usage 1a.

Reject Codes

There are no reject codes for field 48, Usage 1a.

Field 48, Usage 1b—Error Codes in 0310/0312 Responses and 0322 Advices, Format 2

Attributes

variable length
1 byte, binary +
4 N, 4-bit BCD (unsigned packed); maximum 3 bytes

Description

Field 48, Usage 1b, describes the first error that the VIC found in a format 2, 0300 or 0302 file maintenance request message. It occurs when the field 39 response code in an 0310 or 0312 response is 06.

For EAR participants only, when the VIC is unable to process the file update request that was included in the 0110 authorization response, this field in the 0322 EAR discrepancy advice describes the error condition. The field has one subfield following the length subfield.

Positions:
1–4

length	error code
Byte 1	Byte 2–3

Length Subfield: The number of bytes following the length subfield.

Positions 1–4, Error Code: These positions comprise a 4-digit code describing the specific error in the 0300 or 0302 request or the 0110 authorization response. Possible error codes are labeled as format 2 in Appendix B, File Maintenance Error Codes.

Usage

Usage 1b is always present in format 2, 0310 or 0312 responses (including EAR/Auto-CDB responses) and 0322 advices generated by the VIC File Management Function.

Check Acceptance: Not applicable to Usage 1b.

Field Edits

There are no field edits for field 48, Usage 1b.

Reject Codes

There are no reject codes for field 48, Usage 1b.

Field 48, Usage 2—Unformatted Text in Authorization/Reversal Messages

Attributes

variable length
1 byte, binary +
up to 255 ANS, EBCDIC; maximum 256 bytes

Description

A BASE I processor may use this field for comments. Usage 2 has two subfields after the length subfield.

Positions:

1 2–255

length	identifier: [*]	unformatted text
Byte 1	Byte 2	Byte 3–256

Length Subfield: This value is the number of bytes following the length subfield.

Position 1, Field Identifier: This is a 1-position code, ^{*}(asterisk). This code indicates that this field contains unformatted, user-determined text for the destination acquirer or issuer.

Positions 2–255, Text: In authorization or reversal requests, the input consists of acquirer comments for the issuer. In authorization or reversal request responses, the input consists of issuer comments for the acquirer, such as a referral telephone number.

NOTE: *STIP ignores text comments when making authorization decisions on behalf of the issuer.*

Usage

This usage applies to 0100/0110 and 0400/0410 messages only.

A BASE I endpoint may not originate an outgoing message with a field identifier other than an asterisk except in a check acceptance request. Visa recommends not using the percent sign (%) anywhere in the text—there are conditions when the VIC truncates text following this character.

The issuer has the option of:

- Not returning the field in a response.

- Returning it with the text from the 0100 request.
- Returning it with different text.

MasterCard Fleet Transactions: If MasterCard has declined the transaction (reason code 12 in DE39 of the MasterCard response message) for an incorrect ID number, incorrect Driver ID, or incorrect Vehicle ID, valid contents for field 48, Usage 2, in the Visa 0110 authorization response message are:

01—Issuer determines that the ID Number provided in the authorization message is invalid, causing the transaction to be declined.

02—Issuer determines that the Driver Number provided in the authorization message is invalid, causing the transaction to be declined.

03—Issuer determines that the Vehicle Number provided in the authorization message is invalid, causing the transaction to be declined.

Acquirers, however, should be prepared to handle exceptions to the above values.

Check Acceptance: Not applicable to Usage 2. See Usage 6.

STIP and Switch Advices: Usage 2 is not present in advices for authorization and reversal requests.

Field Edits

If this field is present, the length subfield value must not exceed 255. When this field is generated by an acquirer or an issuer, position 1 must be an asterisk (*).

Reject Codes

The reject codes for Usage 2 are:

0061 = Invalid value in position 1

0063 = Invalid length

Field 48, Usage 3—Error Reason Text in Check Acceptance Responses

Attributes

variable length
1 byte, binary +
up to 25 ANS, EBCDIC; maximum 26 bytes

Description

Usage 3 is a check acceptance field usage. When a check acceptance vendor detects an error in an authorization request, it has the option of explaining the error condition in this field in an 0110 response. The exact text in this field is displayed at the point-of-sale or point-of-service terminal. There are two subfields after the length subfield.

Positions:

1

2–25

length	identifier:*	unformatted text
Byte 1	Byte 2	Byte 3–26

Length Subfield: This value is the number of bytes following the length subfield.

Position 1, Field Identifier: A 1-position code, * (asterisk). This code means the field contains unformatted, user-determined text for the acquirer.

Positions 2–25, Text: This text appears at the dial terminal. A VAP's dial terminal subsystem is programmed to pass this text to the dial terminal that originated the request. A center host system supporting terminals that process check acceptance requests also should be programmed to pass this text to the terminal.

Usage

Check Acceptance: Usage 2 can be used in an 0110 response when field 39 = 06.

Field Edits

Check Acceptance: The length subfield value must not exceed 25. When this field is generated by an issuer, position 1 must be an asterisk (*).

Reject Codes

The reject codes for Usage 2 are:

0061 = Invalid value in position 1

0063 = Invalid length

Field 48, Usage 4—Unformatted Text in Network or Administrative Messages

Attributes

variable length
1 byte, binary +
up to 255 ANS, EBCDIC; maximum 256 bytes

Description

BASE I uses this field for unformatted text in an 0600 administrative message. The member receiving this message routes the text to a console, printer, or storage device for follow up. There is no field identifier.

Positions:
1–x

length	administrative message
Byte 1	Byte 2–256

Length Subfield: This value is the number of bytes following the length subfield.

Positions 1–x, Message: Text information the VIC needs to send to the center.

Usage

Usage 4 applies only to 0600 messages originated at the VIC. This field can also be used in 0800 and 0810 network management messages where field 70 = 301 (echo test).

Field Edits

There are no field edits for Usage 4.

Reject Codes

There are no reject codes for Usage 4.

Field 48, Usage 5—VAP-Generated Dial Terminal Information

Attributes

variable length
1 byte, binary +
up to 255 ANS, EBCDIC; maximum 256 bytes

Description

A VAP that supports dial terminals uses this field for additional information about the terminal that originated an authorization request. There are two subfields after the length subfield.

Positions:

1

2 or 2–5

length	field identifier: @	terminal information
Byte 1	Byte 2	Byte 3–256

Length Subfield: This value is the number of bytes following the length subfield.

Position 1, Field Identifier: A 1-position code, @ (“at” sign). It means this field contains dial terminal information for the issuer.

Position 2 or Positions 2–5, Terminal Information: For a Type A dial terminal, position 2 contains the 1-character Message Format Code. For a Type B terminal, positions 2–5 contain the 2-digit Terminal Type Code and the first 2 digits of the Terminal Type.

Usage

Usage 5 applies only when a VAP dial terminal subsystem generates an 0100 authorization request. This field is not required in a 0110 response.

Check Acceptance: Not applicable to Usage 5.

STIP and Switch Advices: Usage 5 is present in an 0120 advice of a VAP-generated dial terminal request.

Field Edits

Length must not exceed 255.

Reject Codes

The reject codes for Usage 5 are:

0063 = Invalid length

Field 48, Usage 6—Check Acceptance Information

Attributes

variable length
1 byte, binary +
up to 255 ANS, EBCDIC; maximum 256 bytes

Description

Usage 6 is a Check Acceptance field usage. In a Check Acceptance request, Usage 6 shows the source of the request (a VAP dial terminal subsystem or a center host). When the source is a VAP, it shows the format of the request message from the dial terminal. There are 2 subfields after the length subfield.

Positions:			
	1	2	3–x
length	field identifier: @	source	additional request information
Byte 1	Byte 2	Byte 3	Byte 4–256

Length Subfield: This value is the number of bytes after the length subfield.

Position 1, Field Identifier: A 1-position code, @ (“at” sign). This code means the field contains information for the check acceptance vendor.

Position 2, Message Source Information: When a VAP generates this field, it contains the 1-character Message Format Code for the Type A dial terminal that originated the authorization request. When a member host generates this field, it must place an “M” in this field.

Position 3, Additional Request Information: Optional free-form text field forwarded at the request of the check acceptance vendor.

Usage

Usage 6 applies to all 0100 check acceptance requests. It is not returned in the responses.

Field Edits

The length subfield value must not exceed 255. The field identifier must be an “at” sign (@).

Reject Codes

The reject codes for Usage 6 are:

0061 = Invalid value in position 1 (not * or @)

0063 = Invalid length

Field 48, Usage 7—Billing/Reporting/Other Data for Visa Use

Attributes

variable length
1 byte, binary +
up to 255 ANS, EBCDIC; maximum 256 bytes

Description

A VIC Acquirer Services (VAS) processor uses this field for Visa billing and reporting information. Certain member- and merchant-operated acquirers also use this field for reporting information. The field has four or more subfields after the length subfield.

Positions:				
1	2	3	4–x	
length	field identifier:@	billing indicator	%	reporting information
Byte 1	Byte 2	Byte 3	Byte 4	Byte 5–256
to issuer			truncated at the VIC	

Length Subfield: This value is the number of bytes after the length subfield.

Position 1, Field Identifier: A 1-position code, @ (“at” sign). It means this field contains dial terminal information for the issuer. Refer to the following description of position 3.

Position 2, Billing Indicator: When generated by a VAS processor, position 2 contains the letter “L,” which means billing is based on local phone service rates. When generated by an acquirer, position 2 contains the letter “M,” which means the request originated at a member host rather than at a VAP.

Position 3, Field Identifier: This identifier is a 1-position code,% (percent sign). It means that the remaining information in this field is for the VIC and is not to be passed to the issuer.

Positions 4–x, Reporting Information: Information needed at the VIC for billing, reporting, or special processing purposes. Exact content may vary.

Typically, Usage 7 contains a 4-digit identifier (related to a station address or Visa BIN) that can be used to uniquely identify the acquirer.

Usage

Usage 7 applies only to 0100 and 0400 requests from a VAS processor at a VIC, or from an acquirer that wants some but not all of its transactions to be included in the VAP monthly reports, or from a merchant-operated acquirer using a standard VAP rather than a VAP-CIO.

Field usage for the reporting information that follows the percent sign (%) has no impact on the issuer. The message that the issuer receives contains only the “at” sign (@) and the billing indicator subfield, which is the same format as that in a standard dial terminal request.

Any other use of this combination of @ and % to convey information to the offline functions at the VIC must be prearranged with Visa.

STIP and Switch Advices: This field is not present in STIP-generated 0120 or 0420 advices.

Field Edits

The length subfield value must not exceed 255.

Reject Codes

The reject codes for Usage 7 are:

0063 = Invalid length

Field 48, Usage 8—Telecode Verification Requests (VisaPhone)

Attributes

variable length
1 byte, binary +
up to 5 ANS, EBCDIC; maximum 6 bytes

Description

Usage 8 is a VisaPhone telecode. There are two subfields after the length subfield.

Positions:
1 2–5

length	field identifier: #	telecode
Byte 1	Byte 2	Byte 3–6

Length Subfield: This value is the number of bytes after the length subfield: 5.

Position 1, Field Identifier: This identifier is a 1-position code, # (number sign). It means this field contains a 4-digit telecode.

Positions 2–5, Telecode: A cardholder's 4-digit, issuer-assigned VisaPhone Service code. Telecodes can begin with zero.

Usage

VisaPhone: Field 48, Usage 8 is required in 0100 telecode verification requests from telephone carriers for VisaPhone calls. The format must be valid for the code to be validated against the positive telecode file at the VIC when processed by BASE I STIP or validated by the issuer.

0322 File Update Advices: This field contains the telecode to be deleted when activity thresholds are exceeded.

Others, Visa rules: Not applicable to Usage 8.

Field Edits

Usage 8 is required in 0100 telecode verification requests. A number sign (#) must precede the telecode. The length subfield value must not exceed 5.

Reject Codes

The reject codes for Usage 8 are:

0061 = Invalid value in position 1 (not #)

0063 = Invalid length

0313 = Field missing

Field 48, Usage 9—Timeout Station ID

Attributes

fixed length

1 byte, binary + “?” (1 byte character) +

3 bytes, 4-bit BCD (unsigned packed); maximum 5 bytes

Description

V.I.P. provides this field to certified issuers. It contains the station ID for STIP-generated 0120/0420 advices created for timed-out 0100 authorizations and 0420 reversals. The field has two subfields after the length subfield.

Positions:

1

2–4

length	field identifier:?	station ID data
Byte 1	Byte 2	Byte 3–5

Length Subfield: This value is the number of bytes following the length subfield is 3.

Position 1, Field Identifier: This identifier is a 1-position code,? (question mark). It means this field has the station ID from the timeout message (0100 or 0400).

Positions 2–4, Station ID: A 6-digit Station ID (for example, 421202).

Usage

This optional field is used in STIP-generated 0120 and 0420 messages to provide issuers with destination station identification for 0100 authorization and 0400 reversals that have timed out (STIP = 1). Participating issuers can use this information for researching station timeout problems.

Field Edits

There are no field edits for Usage 9.

Reject Codes

There are no reject codes for Usage 9.

Field 48, Usage 10—MasterCard Corporate Fleet Card Data

Attributes

variable length
1 byte, binary +
up to 36 ANS, EDCDIC, maximum 37 bytes

Description

Acquirers use this field in 0100 authorization requests for MasterCard Corporate Fleet Card data. There are two subfields after the length subfield.

Positions:		
1	2–36	
length	field identifier: \$	MasterCard Corporate Fleet Card Data
Byte 1	Byte 2	Byte 3–37

Length Subfield: This value is the number of bytes following the length subfield.

Position 1, Field Identifier: This identifier is a 1-position code, \$(dollar sign). It means this field contains MasterCard Corporate Fleet Card data in positions 2 through 36.

Positions 2–36, Data: A maximum of two subfields may occur, each preceded by a dollar sign (\$). For example, positions 1 through 18 = subfield 1, and positions 19 through 36 = subfield 2. The first subfield may be empty, in which case the second dollar sign (\$) immediately follows the first, that is, \$\$\$. Each subfield has a maximum of 17 numeric characters.

Usage

Usage 10 applies only to 0100 authorization requests destined for MasterCard. These requests are acquired by Visa and contain certain authorization data entered at the point of sale or point of service, which is not necessary for other MasterCard card products.

Field Edits

The data must be numeric and be must be preceded by a dollar sign (\$). If two subfields occur, only the first may be empty.

Reject Codes

The reject codes for Usage 10 are:

0061 = Invalid value

Field 48, Usage 11—Commercial Card Type Request

Attributes

fixed length
1 byte, binary +
4–19 ANS, EBCDIC; maximum 20 bytes

Description

This usage is an indicator requesting the type of Visa commercial purchasing card being used at the point of sale or service. In a response, this field contains a value indicating whether the card is Business, Corporate, or Purchasing. The field has two subfields after the length subfield.

Positions:		
1–3		4–19
length	field identifier: !01	Commercial Card type request/response
Byte 1	Byte 2–4	Byte 5–20

Length Subfield: This value is the number of bytes following the length subfield.

Position 1–3, Field Identifier: This value is a 3-position code,!01. It signifies a request for the type of commercial card being used at the point of service. It is present in approved responses.

Position 4, Commercial Card Type Request/Response: Acquirers enter the value 0 in authorization requests. In approval responses, the zero is replaced with “B” for Business card, “R” for Corporate card, or “S” for Purchasing card. Visa Purchasing cards are identified by BIN ranges.

Usage

Usage 11 is used by merchants and acquirers and is optional in 0100 authorization requests; V.I.P. does not pass it to the issuer. If the request is approved, and if the card is a commercial card, V.I.P. replaces zero in position 4 with “B,” “R,” or “S” in the 0110 response. Whether or not the request is approved, if the card is not a commercial card, V.I.P. returns the zero in position 4 from the request.

Acquirers in all regions can send in the authorization request with this field 48 usage and receive the valid commercial card type in the response. The commercial card type will be present in the response even when the transaction is declined.

Check Acceptance: Not applicable to Usage 11.

Field Edits

There are no field edits for Usage 11.

Reject Codes

There are no reject codes for Usage 11.

Field 48, Usage 12—Purchasing Card—Visa Fleet Service

Attributes

variable length
1 byte, binary +
up to 19 ANS, EBCDIC; maximum 20 bytes

Description

A supplemental data field usage in 0100 authorization requests by the U.S. acquirers participating in the Purchasing Card—Visa Fleet Service.

The data is prompted from the cardholder at keypad-equipped, point-of-service or point-of-sale terminals when the Service Enhancement Indicator in the card's magnetic stripe is 1 (Fleet) or 2 (Fleet/fuel-only restriction). The field has two subfields after the length subfield.

Positions:
1–2 3–19

length	field identifier: \$\$	Visa Fleet Service—Enhanced Authorization Data
Byte 1	Byte 2–3	Byte 4–20

Length Subfield: This value is the number of bytes following the length subfield.

Position 1–2, Field Identifier: This identifier is a 2-position code, \$\$ (dollar signs). It means this field contains driver or vehicle identification information for the issuer.

Position 3–19, Visa Fleet Service—Enhanced Authorization Data: This value is up to 17 alphanumeric characters containing driver or vehicle identification.

NOTE: *Due to current POS keypad limitations, issuers should use only numerics for driver or vehicle identification schemes. For example, 9\$\$4545454 would be the field's representation of driver ID 4545454.*

Usage

Usage 12 is optional and applies only to Visa Fleet service 0100 authorizations. It is not required in a 0110 response.

For an authorization request to be considered a Fleet transaction, issuers must include at least a single \$ even if there is no driver or vehicle identification.

Check Acceptance: Not applicable to Usage 12.

Field Edits

If present, the data must be numeric and be preceded by a dollar sign (\$).

Reject Codes

The reject codes for Usage 12 are:

0061 = Invalid value

Field 48, Usage 13—AdvanceBK Risk Alert

Attributes

variable length

1 byte, binary +

Format 1: up to 138 ANS, EBCDIC; maximum: 139 bytes

Format 2: up to 255 ANS, EBCDIC; maximum: 256 bytes

Description

Field 48, Usage 13 contains cardholder account number alert information from AdvanceBK (Bankruptcy Risk Prediction Service). V.I.P. converts the service's information to 0620 advice format and delivers it to participating issuers. There are two field formats, each with a different number of subfields after the length subfield:

- Format 1 has 21 subfields after the length subfield. It has two zeros (00) in subfield 2, Field Identifier.
- Format 2 has 37 subfields after the length subfield. It has a 25 in subfield 3, Field Identifier.

Format 1

Positions:

1

2–3

4–11

12–19

20–23

Subfield 1: Length	Subfield 2: Field Identifier	Subfield 3: Field Sub- Identifier	Subfield 4: Activity From	Subfield 5: Activity To	Subfield 6: issuer Account Score Threshold
Byte 1	Byte 2	Byte 3–4	Byte 5–12	Byte 13–20	Byte 21–24
24–27	28–31	32–35	36–43	44–51	52–59
Subfield 7: Issuer Consolidated Score Threshold	Subfield 8: Account Score	Subfield 9: Consolidated Score	Subfield 10: Account Alert Date	Subfield 11: Consolidated Alert Date	Subfield 12: Last Account Alert Date
Byte 25–28	Byte 29–32	Byte 33–36	Byte 37–44	Byte 45–52	Byte 53–60
60–63	64–71	72–75	76	77–79	80–82
Subfield 13: Last Account Alert Score	Subfield 14: Last Consolidated Alert Date	Subfield 15: Last Consolidated Alert Score	Subfield 16: CRIS Cross- Alert Indicator	Subfield 17: Account Alert Type	Subfield 18: Account Reason Code 1
Byte 61–64	Byte 65–72	Byte 73–76	Byte 77	Byte 78–80	Byte 81–83
83–85	86–88	89–91	92–94	95–97	98–100
Subfield 19: Account Reason Code 2	Subfield 20: Account Reason Code 3	Subfield 21: Account Reason Code 4	Subfield 22: Consolidated Alert Type	Subfield 23: Consolidated Reason Code 1	Subfield 24: Consolidated Reason Code 2
Byte 84–86	Byte 87–89	Byte 90–92	Byte 93–95	Byte 96–98	Byte 99–101
101–103	104–106	107–128	129–138		
Subfield 25: Consolidated Reason Code 3	Subfield 26: Consolidated Reason Code 4	Subfield 27: AdvanceBK Risk Audit ID	Subfield 28: Sequence Number		
Byte 102–104	Byte 105–107	Byte 108–129	Byte 130–139		

Length: This value is the number of bytes following the length subfield.**Position 1, Field Identifier (Subfield 2):** This value is a 1-character code, "B." This subfield is required. Depending on positions 2–3 (Field Sub-Identifier), this value may represent other risk alert formats.

Positions 2–3, Field Sub-Identifier (Subfield 3): In conjunction with the Field Identifier in position 1, this value indicates the risk alert format of the remainder of this field. The value is two zeros (00) for the first AdvanceBK alert format.

Positions 4–11, Activity From (Subfield 4): This value is the U.S. Eastern Standard Time date of the start of the period being reported in the format mmddccyy,

where: mm = 01–12
 dd = 01–31
 cc = 19 or 20 (cc: 19 = 20th century, 20 = 21st century)
 yy = 00–99

Positions 12–19, Activity To (Subfield 5): The U.S. Eastern Standard Time date of the end of the period being reported in the format mmddccyy,

where: mm = 01–12
 dd = 01–31
 cc = 19 or 20 (cc: 19 = 20th century, 20 = 21st century)
 yy = 00–99

Positions 20–23, Issuer Account Score Threshold (Subfield 6): This value is an issuer-defined reporting account score threshold.

Positions 24–27, Issuer Consolidated Score Threshold (Subfield 7): This value is an issuer-defined reporting consolidated score threshold.

Positions 28–31, Account Score (Subfield 8): This value represents the risk associated with an account becoming a bankruptcy loss to the issuer, as scored in the reporting period. If no score was generated for the reporting period, the value is 0001.

Positions 32–35, Consolidated Score (Subfield 9): This value represents the risk of all associated accounts linked by Customer ID becoming a bankruptcy loss to the issuer.

Positions 36–43, Account Alert Date (Subfield 10): This value is the date in the period being reported on which the account score first reached the score reported, in the format mmddccyy,

where: mm = 01–12
 dd = 01–31
 cc = 19 or 20 (cc: 19 = 20th century, 20 = 21st century)
 yy = 00–99

Positions 44–51, Consolidated Alert Date (Subfield 11): This value is the date in the period being reported on which the consolidated score first reached the score reported, in the format mmddccyy,

where: mm = 01–12
 dd = 01–31
 cc = 19 or 20 (cc: 19 = 20th century, 20 = 21st century)
 yy = 00–99

Positions 52–59, Last Account Alert Date (Subfield 12): This value is the date of previous account alert for account in the format mmddccyy,

where: mm = 01–12
 dd = 01–31
 cc = 19 or 20 (cc: 19 = 20th century, 20 = 21st century)
 yy = 00–99

If there is no previous account alert, the value is all zeros.

Positions 60–63, Last Account Alert Score (Subfield 13): This value is the account score that last equaled or was less than the issuer account score threshold. If there is no previous account alert, the value is 0001.

Positions 64–71, Last Consolidated Alert Date (Subfield 14): This value is the date of the previous consolidated alert for the account in the format mmddccyy,

where: mm = 01–12
 dd = 01–31
 cc = 19 or 20 (cc: 19 = 20th century, 20 = 21st century)
 yy = 00–99

If there is no previous account alert, the value is all zeros.

Positions 72–75, Last Consolidated Alert Score (Subfield 15): This value is the consolidated score that last equaled or was less than the issuer consolidated score threshold. If there is no previous consolidated alert, the value is 0001.

Position 76, CRIS Cross-Alert Indicator (Subfield 16): This value is a “Y” if the account was alerted by CRIS within the previous 24 hours.

Positions 77–79, Account Alert Type (Subfield 17): This value is a 3-position code indicating the model type and version used to produce the account score, as follows:

Position 1 = Model version designator

Position 2 = Major product designator

Position 3 = Minor product designator

Positions 80–82, Account Reason Code 1 (Subfield 18): This value is a 3-position code representing a significant reason why the account did not score higher.

Positions 83–85, Account Reason Code 2 (Subfield 19): Same as Account Reason Code 1.

Positions 86–88, Account Reason Code 3 (Subfield 20): Same as Account Reason Code 1.

Positions 89–91, Account Reason Code 4 (Subfield 21): Same as Account Reason Code 1.

Positions 92–94, Consolidated Alert Type (Subfield 22): This value is a 3-position code indicating the model type and version used to produce the consolidated score, as follows:

Position 1 = Model version designator

Position 2 = Major product designator

Position 3 = Minor product designator

Positions 95–97, Consolidated Reason Code 1 (Subfield 23): This value is a 3-position code representing a significant reason why the account did not score higher.

Positions 98–100, Consolidated Reason Code 2 (Subfield 24): Same as Consolidated Reason Code 1.

Positions 101–103, Consolidated Reason Code 3 (Subfield 25): Same as Consolidated Reason Code 1.

Positions 104–106, Consolidated Reason Code 4 (Subfield 26): Same as Consolidated Reason Code 1.

Positions 107–128, AdvanceBK Risk Audit ID (Subfield 27): This value is a 22 position code indicating the audit performed as follows:

Positions 1–2 (107–108) = Service ID

Positions 3–6 (109–112) = Group Number

Positions 7–14 (113–120) = Cycle Date

Positions 15–16 (121–122) = Cycle Number

Positions 17–22 (123–128) = Audit Number

Positions 129–138, Sequence Number (Subfield 28): This value is used to identify records for a customer within the file/report. This identifier is not retained.

Format 2

Positions:

1

2–3

4–7

8–11

12–13

Subfield 1: Length	Subfield 2: Field Identifier	Subfield 3: Field Sub- Identifier	Subfield 4: Client ID	Subfield 5: Record type	Subfield 6: Reject code
Byte 1	Byte 2	Byte 3–4	Byte 5–8	Byte 9–12	Byte 13–14

14–32

33–44

45–46

47–55

56

57–82

Subfield 7: Account number	Subfield 8: Application number	Subfield 9: Application suffix	Subfield 10: Primary customer ID	Subfield 11: Customer type	Subfield 12: Filler
Byte 15–33	Byte 34–45	Byte 46–47	Byte 48–56	Byte 57	Byte 58–83

83–87

88–95

96–103

104–111

112–119

120–124

Subfield 13: Score type	Subfield 14: Score calculation date	Subfield 15: Score calculation time	Subfield 16: Raw score	Subfield 17: Bankruptcy score	Subfield 18: Score source
Byte 84–88	Byte 89–96	Byte 97–104	Byte 105–112	Byte 113–120	Byte 121–125

125–131

132–133

134–136

137–143

144–148

149–153

Subfield 19: Rating grade	Subfield 20: Bureau ID	Subfield 21: Market address code	Subfield 22: Score reason code 1	Subfield 23: Score reason code 2	Subfield 24: Score reason code 3
Byte 126–132	Byte 133–134	Byte 135–137	Byte 138–144	Byte 145–149	Byte 150–154

154–158

159–164

165–170

171–176

177–182

183–187

Subfield 25: Score reason code 4	Subfield 26: Score difference reason 1	Subfield 27: Score difference reason 2	Subfield 28: Score difference reason 3	Subfield 29: Score difference reason 4	Subfield 30: Account relation code
Byte 155–159	Byte 160–165	Byte 166–171	Byte 172–177	Byte 178–183	Byte 184–188

188–193

194–200

201–207

208–214

215–226

227–238

Subfield 31: Operator ID	Subfield 32: User defined field 1	Subfield 33: User defined field 2	Subfield 34: User defined field 3	Subfield 35: User defined numeric data field 1	Subfield 36: User defined numeric data field 2
Byte 189–194	Byte 195–201	Byte 202–208	Byte 209–215	Byte 216–227	Byte 228–239

239–255

Subfield 37: Filler
Byte 240–256

Length: This value is the number of bytes following the length subfield.

Position 1, Field Identifier (Subfield 2): This subfield contains a 1-character code, "B." This subfield is required. Depending on positions 2–3 (Field Sub-Identifier), this value may represent other risk alert formats.

Positions 2–3, Field Sub-Identifier (Subfield 3): In conjunction with the Field Identifier in position 1, this subfield contains identifies the risk alert format of the remainder of this field. The value is 25 for Format 2.

Positions 4–7, Field Client ID (Subfield 4): This subfield contains the client ID and is provided by Total Systems.

Positions 8–11, Field Record Type (Subfield 5): This subfield contains the record type values, which are SC01, SC31 or SC32.

Positions 12–13, Field Reject Code (Subfield 6): This subfield contains a 2-digit value provided by Total Systems and indicates bad data, for example, an invalid account number.

Positions 14–32, Field Account Number (Subfield 7): This subfield contains the account number for which the alert is issued.

Positions 33–44, Field Application Number (Subfield 8): This subfield contains the application number of the account and is provided by Total Systems. If there is no data, this subfield is blank-filled.

Positions 45–46, Field Application Suffix (Subfield 9): This subfield contains the application number's suffix of the account and is provided by Total Systems. If there is no data, this subfield is blank-filled.

Positions 47–55, Field Primary Customer ID (Subfield 10): This subfield contains Total Systems' primary customer ID. It is currently zero-filled.

Positions 56, Field Customer Type (Subfield 11): This subfield contains Total Systems' customer type. It is currently zero-filled.

Positions 57–82, Filler (Subfield 12): This subfield is blank-filled.

Positions 83–87, Field Score Type (Subfield 13): This subfield contains the ISCAS if the score reported is for the account, or "ISCSS", if the score is reported by the customer.

Positions 88–95, Field Score Calculation Date (Subfield 14): This subfield contains the date when the score was calculated in the format `yyyymmdd`,

where: `yyyy` = 2000–2099
 `mm` = 01–12
 `dd` = 01–31

Positions 96–103, Field Score Calculation Time (Subfield 15): This subfield contains the time when the score was calculated in the format hhmmssss,

where: hh = 00–24
 mm = 00–59
 ssss = 0000–0059

Positions 104–111, Field Raw Score (Subfield 16): This subfield is currently blank-filled.

Positions 112–119, Field Bankruptcy Score (Subfield 17): This subfield contains the AdvanceBK Alert score.

Positions 120–124, Field Score Source (Subfield 18): This subfield contains the source of the scoring for the member bank. The current value is ISC02.

Positions 125–131, Field Rating Grade (Subfield 19): This subfield contains the rating grade assigned to the account if the score provided is not the true score. Currently, the positions are blank-filled.

Positions 132–133, Field Bureau ID (Subfield 20): This subfield identifies bureau that originated the score. Currently, the positions are zero-filled.

Positions 134–138, Field Market Address Code (Subfield 21): This subfield contains the address of the bureau that originated the score. Currently, the positions are blank-filled.

Positions 139–143, Field Score Reason Code 1 (Subfield 22): This subfield contains:

a 3-position reason code representing a significant reason for the account/consolidated risk score, *or*

spaces if the account/consolidated score was greater than the issuer threshold.

Positions 144–148, Field Score Reason Code 2 (Subfield 23): This subfield contains:

a code representing a significant reason for the account/consolidated score, *or*

spaces when the account/consolidated score is less than the issuer threshold, or if no additional reason code is provided.

Positions 149–153, Field Score Reason Code 3 (Subfield 24): This subfield contains:

a code representing a significant reason for the account/consolidated score, *or*

spaces when the account/consolidated score is less than the issuer threshold, or if no additional reason code is provided.

Positions 154–158, Field Score Reason Code 4 (Subfield 25): This subfield contains:

a code representing a significant reason for the account/consolidated score, *or*

spaces when the account/consolidated score is less than the issuer threshold, or if no additional reason code is provided.

Positions 159–164, Field Score Difference Reason 1 (Subfield 26): This subfield is used to note the severity of the related scoring reason. Currently, this subfield is zero-filled.

Positions 165–170, Field Score Difference Reason 2 (Subfield 27): This subfield is used to note the severity of the related scoring reason. Currently, this subfield is zero-filled.

Positions 171–176, Field Score Difference Reason 3 (Subfield 28): This subfield is used to note the severity of the related scoring reason. Currently, this subfield is zero-filled.

Positions 177–182, Field Score Difference Reason 4 (Subfield 29): This subfield is used to note the severity of the related scoring reason. Currently, this subfield is zero-filled.

Positions 183–187, Field Account Relation Code (Subfield 30): This subfield is reserved for distinguishing relationships between the score and the account. Currently, this subfield is blank-filled.

Positions 188–193, Field Operator ID (Subfield 31): This subfield is used to identify which operator added the score. Currently, this subfield is blank-filled.

Positions 194–200, Field User Defined Field 1 (Subfield 32): This subfield is reserved for Total Systems. Currently, this subfield is zero-filled.

Positions 201–207, Field User Defined Field 2 (Subfield 33): This subfield is reserved for Total Systems. Currently, this subfield is zero-filled.

Positions 208–214, Field User Defined Field 3 (Subfield 34): This subfield is reserved for Total Systems. Currently, this subfield is zero-filled.

Positions 215–226, Field User Defined Numeric Data Field 1 (Subfield 35): This subfield contains signed numeric data that can be added to the score. Currently, this subfield is zero-filled.

Positions 227–238, Field User Defined Numeric Data Field 2 (Subfield 36): This subfield contains signed numeric data that can be added to the score. Currently, this subfield is zero-filled.

Positions 239–255, Filler (Subfield 37): This subfield is blank-filled.

Usage

Usage 13 is used in 0620 AdvanceBK alert advices originated at the VIC.

Field Edits

There are no field edits for Usage 13.

Reject Codes

There are no reject codes for Usage 13.

Field 48, Usage 14—CRIS Alert, Part 1

Attributes

variable length
1 byte, binary +
up to 255 ANS, EBCDIC; maximum 256 bytes

Description

This CRIS alert format information is present in 0620 administrative advices. The center receiving this message routes the text to a console, printer, or storage device for follow-up. There is no Field Identifier.

For CRIS Alert, Part 2, see the “Field 125, Usage 1” description.

Positions:

1 2–4 5–9 10–31 32–44

Subfield 1: Length	Subfield 2: CRIS Alert Type Identifier	Subfield 3: CRIS Alert Type	Subfield 4: CRIS Transaction Risk Score	Subfield 5: Primary Account Number	Subfield 6: Transaction Amount
Byte 1	Byte 2	Byte 3–5	Byte 6–10	Byte 11–32	Byte 33–45
45–57	58–67	68–75	76–79	80–83	84–94
Subfield 7: Amount, Cardholder Billing	Subfield 8: Transmission Date and Time	Subfield 9: Conversion Rate, Cardholder Billing	Subfield 10: Merchant Type	Subfield 11: POS Entry Mode	Subfield 12: Acquirer BIN
Byte 46–58	Byte 59–68	Byte 69–76	Byte 77–80	Byte 81–84	Byte 85–95
95–96	97–104	105–119	120–159	160	161
Subfield 13: Response Code	Subfield 14: Card Acceptor Terminal ID	Subfield 15: Card Acceptor ID Code	Subfield 16: Card Acceptor Name/Location	Subfield 17: Response Source/Reason Code	Subfield 18: Address Verification Result Code
Byte 96–97	Byte 98–105	Byte 106–120	Byte 121–160	Byte 161	Byte 162
162	163–165	166–168	169–172	173–176	177–255
Subfield 19: CVV/iCVV Results Code	Subfield 20: Currency Code, Transaction	Subfield 21: Currency Code, Cardholder Billing	Network ID Not used in BASE I; space- fill	STIP/Switch Reason Code Not used in BASE I; space- fill	Not used; space- fill
Byte 163	Byte 164–166	Byte 167–169	Byte 170–173	Byte 174–177	Byte 178–256

Length Subfield: This value is the number of bytes following the length subfield.

Position 1, CRIS Alert Type Identifier (Subfield 2): Valid values are “R” for risk alert, or “C” for CVV/iCVV alert.

Positions 2–4, CRIS Alert Type (Subfield 3): The following provides the descriptions and values for positions 2 through 4.

Position	Description	Values
2	Mathematical model version designator	This subfield is an alphanumeric position with the following values: 0 = default 1 = initial value 2–Z = reserved for future use
3	Major product designator	This subfield is an alphanumeric position with the following values 0 = default 1 = credit 2 = debit 3–Z = reserved for future use
4	Minor product designator	This subfield is an alphanumeric position with the following values: 0 = default 1 = fraud application model 2–Z = reserved for future use

Positions 5–9, CRIS Transaction Risk Score (Subfield 4): This value is a numeric value between 00000–00999.

Positions 10–31, Primary Account Number (Subfield 5): This value is an up to 22 position cardholder account number from field 2 of the transaction causing the alert. It is left-justified with trailing spaces.

Positions 32–44, Transaction Amount (Subfield 6): This value is the field 4 purchase amount from the transaction causing the alert in acquirer currency or U.S. dollars. It may include a decimal point. The amount is right-justified with leading zeros.

Positions 45–57, Amount, Cardholder Billing (Subfield 7): This value is the transaction amount converted to cardholder billing currency from field 6 of the transaction causing the alert. The amount is right-justified with leading zeros.

Positions 58–67, Transmission Date and Time (Subfield 8): This value is the GMT date and time from field 7 of the transaction causing the alert.

Positions 68–75, Conversion Rate, Cardholder Billing (Subfield 9): The value is an 8-position numeric value from field 10 of the transaction causing the alert.

Positions 76–79, Merchant Type (Subfield 10): This value is 4-position numeric merchant category code from field 18 of the transaction causing the alert.

Positions 80–83, POS Entry Mode (Subfield 11): This subfield contains the value from the first two positions in field 22 of the transaction causing the alert. The code specifies whether the entire magnetic stripe was included in the request. The last two positions are spaces.

Positions 84–94, Acquirer BIN (Subfield 12): This subfield contains the value from field 32 of the transaction causing the alert. It is left-justified with trailing spaces.

Positions 95–96, Response Code (Subfield 13): This value is the code from field 39 of the transaction causing the alert as returned to the acquirer.

Positions 97–104, Card Acceptor Terminal ID (Subfield 14): This subfield contains the value from field 41 of the transaction causing the alert. It is present only if it is present in the original message; otherwise, the position is space-filled.

Positions 105 –119, Card Acceptor ID Code (Subfield 15): This subfield contains the value from field 42 of the transaction causing the alert.

Positions 120–159, Card Acceptor Name/Location (Subfield 16): This subfield contains the value from field 43 of the transaction causing the alert if it is present in the original message; otherwise, the position is space-filled.

Position 160, Response Source/Reason Code (Subfield 17): This value is the code from field 44.1 of the transaction causing the alert. Otherwise, the position is space-filled.

Position 161, Address Verification Result Code (Subfield 18): This value is the code from field 44.2 of the transaction causing the alert if it is present in the original message. Otherwise, the position is space-filled.

Position 162, CVV/iCVV Results Code (Subfield 19): Code from field 44.5 of the transaction causing the alert if present in the original message; otherwise, the position is space-filled.

Positions 163–165, Currency Code, Transaction (Subfield 20): This value is the code from field 49 of the transaction causing the alert.

Positions 166–168, Currency Code, Cardholder Billing (Subfield 21): This value is the code from field 51 of the transaction causing the alert.

Positions 169–176 (Subfields 22 and 23): These positions comprise the Field 63.1—Network ID Code and the Field 63.4—STIP/Switch Reason Code. These codes are not applicable to BASE I and will be space-filled.

Usage

This usage applies only to 0620 advices originated at the VIC for CRIS.

Field Edits

There are no field edits for Usage 14.

Reject Codes

There are no reject codes for Usage 14.

Field 48, Usage 16—Visa Commerce Data

Attributes

variable length
(1 byte binary) +
up to 255 ANS, EBCDIC; maximum 256 bytes

Description

This Field 48 usage in TLV format supports Visa Commerce data such as buyer or seller account number or invoice number. The TLV format is shown below; the order in which the Visa Commerce TLV subelements appear in the record does not matter. This is a “simple tokenized,” or abbreviated, use of the TLV format. The dataset length subfield is not used.

Positions:		
1–2		3–256
Length	field identifier:)E	Visa Commerce TLV elements
		<div> <div>TagLengthValue</div> <div>TLV₁</div> </div> <div> <div>TagLengthValue</div> <div>TLV_N</div> </div>
Byte 1	Byte 2–3	Byte 4–256

Length Subfield: One one-byte binary subfield that contains the number of bytes in this field. The maximum value is 255 bytes.

Positions 1–2, Field Identifier: A two-byte ANS EBCDIC identifier that means the field contains Visa Commerce data. The identifier is: ‘)E’ where

) [right parenthesis (x'5D')]

E [letter E (x'C5')]

Positions 3–256, Visa Commerce Data: A 253-maximum-byte subfield for the datasets that contain the region-specific data. Each dataset comprises a tag value, length value, and the data itself. The TLV combinations can be in any order.

Tag: A two-byte fixed EBCDIC value that identifies the data set element to follow. The value 01 indicates a purchase document number. The value 02 indicates the number of days until settlement

Length: A three-byte fixed EBCDIC value that indicates how many bytes of data constitute the value itself. The value 020 indicates a purchase document number data element. The value 003 indicates a number of days until settlement data element.

Value: The 20-byte alphanumeric maximum purchase document number, or the 3-byte alphanumeric maximum number of days until settlement.

Usage

This field usage applies only to 0100 authorization and 0400 reversal requests for participating members. It is not present in responses or STIP advices. If field 48 is present in a response, it is dropped at the VIC.

Field Edits

There are no field edits.

Reject Codes

There are no reject codes.

Field 49—Currency Code, Transaction

Attributes

fixed length
3 N, 4-bit BCD (unsigned packed); 2 bytes

Description

Field 49 contains a code that identifies the currency of the following amount fields:

- Field 4—Amount, Transaction
- Field 54—Additional Amounts
- Field 61.1—Other Amount, Transaction
- Field 95.1—Actual Amount, Transaction

This value is the 3-digit numeric code used by V.I.P. to determine the number of decimal places in fields 4, 54, 61.1, and 95.1. Refer to Appendix E, Country and Currency Codes, for a list of valid codes. A leading zero is required to pad the first unused half-byte of this field. The zero is a filler, and is *not* part of the currency code.

The code in this field must always reflect the currency in field 4. The currency in field 4 is not always the transaction currency.

Usage

Field 49 is used in messages related to a customer transaction that contains fields 4, 61.1, or 95, even when the amount is zero (as in any verification request). It is required in 0100 and 0400 requests and their responses for both BASE I and V.I.P. message formats. This field is required in 0100 ATM balance inquiry requests, even though field 4 is not present, and even if the requestor does not participate in multicurrency (the code specifies the currency in which the acquirer wants the balance amount). The field is also required in 0102 ATM confirmations.

For currencies with 3 decimal places, the last digit of the amount in fields 4, 28, 61.1, and 95.1 must be zero (that is, the amount must be rounded to two decimal places to maintain compatibility with BASE II clearing messages, which do not support amounts with 3 decimals).

Multicurrency Participants: The message originator can use any code, listed in Appendix E, Country and Currency Codes. For multicurrency processing, the currency code and country code may not match.

Nonmulticurrency Participants: The message originator must use 840 (U.S. dollars).

CRIS Advices: This value is the field 49 code from the transaction causing the alert.

Commercial Card Large-Ticket Transactions: The currency code must be 840.

Check Acceptance: Field 49 is required in all messages.

0120 File Update Advices: Field 49 is always present in 0120 messages.

0322 File Update Advices: Not applicable to field 49.

STIP and Switch Advices: Field 49 is present in 0120 or 0420 advices if it was in the request. It is not used in STIP/Switch responses.

Field Edits

This code must be 840 if the message originator does not participate in multicurrency processing. Other values must be one of the 3-digit numeric codes listed in Appendix E, Country and Currency Codes.

For ATM transactions only, the currency code must match the currency dispensed (Field 4—Amount, Transaction). For non-ATM transactions, the acquirer may submit the authorization in U.S. dollars (field 49 = 840).

Check Acceptance: Field 49 is required in 0100 and 0110 messages. Check acceptance is currently only a U.S. service; thus, the value must always be 840.

Reject Codes

The reject codes for field 49 are:

0037 = Invalid value

0315 = Field missing

Field 51—Currency Code, Cardholder Billing

Attributes

fixed length
3 N, 4-bit BCD (unsigned packed); 2 bytes

Description

Field 51 is a multicurrency field. It contains a 3-digit numeric code identifying the currency used by the issuer to bill the cardholder's account (see Appendix E, Country and Currency Codes, for valid codes). It also identifies the currency for these amount fields:

- Field 6—Amount, Cardholder Billing
- Field 61.2—Other Amount, Cardholder Billing
- Field 61.3—Other Amount, Replacement Billing

V.I.P. uses this code to determine the number of decimal places in fields 6, 61.2 and 61.3. A leading zero is required to pad the first unused half-byte of this field. The zero is a filler, and is *not* part of the currency code. If this field is present, these fields also are required:

- Field 6—Amount, Cardholder Billing
- Field 10—Conversion Rate, Cardholder Billing

Usage

Multicurrency Participants: Acquirers do not provide this field. V.I.P. adds it and sends it to the issuer if the issuer is a multicurrency participant. Multicurrency issuers should not return this field in responses. For POS transactions only, V.I.P. adds it for participating acquirers if the request was referred to the issuer (field 39 response code is 01 or 02). The field is not added to ATM responses because referrals are not allowed for ATM transactions.

CRIS Advices: If the transaction being reported is a multicurrency transaction, this value is the field 51 code from the transaction causing the alert.

Nonmulticurrency Participants: Not applicable to field 51.

Check Acceptance: Not applicable to field 51.

STIP and Switch Advices: Field 51 is present in 0120 or 0420 advices if it was in the request. It is not present in advice responses.

Field Edits

There are no field edits for field 51.

Reject Codes

There are no reject codes for field 51.

Field 52—Personal Identification Number (PIN) Data

Attributes

fixed length
64 N, bit string; 8 bytes

Description

Field 52 contains a PIN or password, encrypted and formatted as a block of 16 hexadecimal digits. (A PIN or password is a number assigned to a cardholder for unique identification at the point of service or ATM.)

In an acquirer-initiated request, this field format must conform to the PIN Block Format Code in Field 53—Security Related Control Information. In a request or advice received by the issuer, the format conforms to the PIN Block Format of the issuer, as previously specified to Visa. A customer PIN or password is never logged, even if it is in an encrypted form.

Usage

Field 52 is required in 0100 requests when the customer enters a PIN at the point of service or at an ATM. It always is required in ATM cash disbursements and balance inquiries. If the VIC successfully verifies the PIN, fields 52 and 53 are dropped from the request before it is forwarded to the issuer. This field is not used in reversal requests or advices, or in any responses.

If this field is present, Field 53—Security Related Control Information must also be present. This field is never allowed when the cardholder is not present; for example, for mail or telephone order transactions.

Visa Cash CEPS Unlinked Load: This field contains the Visa Cash R_1 value, encrypted with the acquirer (inbound) or issuer (outbound) key exchange keys. The clear R_1 value must be a valid 8-byte (16 hexadecimal digit) DES key.

NOTE: *Single-length DES keys must be used for Visa Cash R_1 processing.*

Check Acceptance: Not applicable to field 52.

STIP and Switch Advices: Field 52 is omitted from 0120 advices.

Field Edits

Field 52 is required if field 18 is 6011.

The VIC's security module edits field content during PIN translation and PIN verification. If there is an error (typically an acquirer key problem), the request message is not rejected; instead, the response code in field 39 of the 0110 response is set to 81.

Visa Electron: This field must not be present if field 22 = 01 (manual entry).

Reject Codes

The reject codes for field 52 are:

0295 = Field missing

0592 = PIN data present when not allowed

Field 53—Security Related Control Information

Attributes

fixed length
16 N, 4-bit BCD (unsigned packed); 8 bytes

Description

This field contains the data needed by the issuer or the VIC Security Module to process PINs entered at the point of sale or point of service. See [Table 4-24](#) of the “Valid Values” section for field codes. This field has five subfields.

Positions:

1–2 3–4 5–6 7–8 9–10 11–16

security format code	algorithm ID	PIN block format code	zone key index	PIN Data Type	Visa Reserved
Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Bytes 6–8

Positions 1–2, Security Format Code (Field 53.1): This code defines the security technique used.

Positions 3–4, PIN Encryption Algorithm Identifier (Field 53.2): This code defines the encryption technique used.

Positions 5–6, PIN Block Format Code (Field 53.3): This code defines the field 52 format. In acquirer-to-VIC requests, it describes the acquirer’s PIN block format. In VIC-to-issuer requests, it describes the issuer’s PIN block format.

Positions 7–8, Zone Key Index (Field 53.4): This value indicates the key used to encrypt the PIN. In acquirer-to-VIC requests, the index points to the acquirer key used to encrypt the PIN block. In VIC-to-issuer requests, it points to the zone key the VIC used to encrypt the PIN block before it was forwarded.

Positions 9–10, PIN Data Type: Used in Visa Cash CEPS Unlinked Load requests. The value 03 indicates the presence of an R₁ value.

Positions 11–16, Visa Reserved: This subfield is used by the BASE I Switch.

NOTE: *Acquirers that want to submit double-length DES keys must contact their Visa representative.*

Usage

Field 53 is required in any message containing a PIN (field 52); otherwise, it is not used. The acquirer must place zeros in positions 9–16. The issuer receives values set by the VIC.

Visa Cash CEPS Unlinked Load: Refer to the Field Edits section below for field value requirements.

Check Acceptance: Not applicable to field 53.

STIP and Switch Advices: If STIP authorizes a request with a PIN, field 53 is omitted from the 0120 advice.

Field Edits

Field 53 is required if field 52 is present in the message. Field 53 must contain the following subfield values.

- Positions 1–2 (53.1) must be 02 or 20
- Positions 3–4 (53.2) are not edited
- Positions 5–6 (53.3) must be 01, 02, 03, or 04
- Positions 7–8 (53.4) must be 01 or 02
- Positions 9–16 must be zeros in outgoing requests

Visa Cash Load Unlinked Requests:

- Positions 1–2 (53.1) must be 20 (zone encryption)
- Positions 3–4 (53.2) must be 01 (ANSI DES)
- Positions 5–6 (53.3) must be 00 (field not applicable)
- Positions 7–8 (53.4) must be 00 (field not applicable)
- Positions 9–10 (53.5) must be 03 (R₁ value is present in field 52)

VisaNet, Plus, MasterCard and Cirrus: Positions 5–6 must be 01, 02, or 03.

Reject Codes

The reject codes for field 53 are:

0088 = Invalid value

0384 = Field missing

Valid Values

[Table 4–24](#) provides the valid values for field 53.

Table 4–24: Field 53 Security Control Code

Code	Definition
Positions 1–2: Security Format Code	
02	Issuer Key - Plus ISO
20	Zone encryption
Positions 3–4: PIN Encryption Algorithm Identifier	
01	ANSI DES
Positions 5–6: PIN Block Format Code (per ANSI 9.8)	
00	Not applicable
01	Format is based on the PIN, the PIN length, and selected rightmost digits of the account number; it is also based on the pad characters “0” and “F”—combined through an exclusive OR operation. Conforms to ISO Format 0
02	Format is based on the PIN, the PIN length, and a user-specified numeric pad character. (Docutel)
03	Format is based on the PIN and the “F” pad character (Diebold-IBM)
04	PIN Block Format (Plus transactions)
05	ISO Format 1
Positions 7–8: PIN Zone Key Index	
00	Not applicable
01	Working key 1 is to be changed or used.
02	Working key 2 is to be changed or used.
Positions 9–10: PIN Data Type	
00	PIN is present in field 52.
01	Password is present in field 52.
03	R ₁ value is present in field 52 (Visa Cash)

Positions 11–16 are reserved for BASE I use at the VIC. They must be zero-filled by the acquirer.

Field 54—Additional Amounts

Attributes

variable length
1 byte, binary +
20 ANS, EBCDIC; 21 bytes total
or 40 ANS, EBCDIC; 41 bytes total
or 60 ANS, EBCDIC; 61 bytes total
or 80 ANS, EBCDIC; 81 bytes total
or 100 ANS, EBCDIC; 101 bytes total
or 120 ANS, EBCDIC; 121 bytes total
maximum: 121 bytes

Description

Field 54 contains account balance information for ATM balance inquiries or cash disbursements. Acquirers can display balances at the terminal, print them on the receipt, or both.

Field 54 can be used whether or not the issuer or acquirer are multicurrency participants. It comprises *sets* of account balance information. A set is 20 bytes long, not including the length subfield.

Positions:

1–2

3–4

5–7

8

9–20

length	Account type	amount type	currency code	amount, sign	amount
Byte 1	Byte 2–3	Byte 4–5	Byte 6–8	Byte 9	Byte 10–21

Length Subfield: This value is the number of bytes following the length subfield.

Positions 1–2, Account Type (Field 54.1): This value is a 2-digit code identifying the account type affected by the balance inquiry. See [Table 4–25](#) of the “Valid Values” section for valid codes.

Positions 3–4, Amount Type (Field 54.2): This value is a 2-digit code describing the use of the amount indicated in positions 9–20. See [Table 4–25](#) of the “Valid Values” section for valid codes.

Positions 5–7, Currency Code (Field 54.3): This value is a 3-digit code that defines the currency used in positions 9–20. See Appendix E, Country and Currency Codes, for a currency code list.

Position 8, Amount, Sign (Field 54.4): This value is a 1-digit code that defines the value of the amount as either positive or negative

where: C = positive balance

D = negative balance

Positions 9–20, Amount (Field 54.5): This value is a 12-character amount that is right-justified and contains leading zeros. The amount also includes an implied decimal relative to the currency code specified in positions 5–7.

Currency Processing

The issuer or customer financial institution responding to a balance inquiry can provide either one or two balance information sets.

If the field in the issuer response contains:		Then the field in the response contains (along with account type, amount type, currency code, and positive/negative balance code):			
Number of balances supplied by issuer	Currency conversion required?	Subfield 1, positions 1–20 (“54A”)	Subfield 2, positions 21–40 (“54B”)	Subfield 3, positions 41–60 (“54C”)	Subfield 4, positions 61–80 (“54D”)
One	No	Balance A amount in issuer billing currency	Not returned	Not returned	Not returned
One	Yes	Balance A amount in issuer billing currency	Zero-filled	Balance A amount in acquirer transaction currency	Not returned
Two	No	Balance A amount in issuer billing currency	Balance B amount in issuer billing currency	Not returned	Not returned
Two	Yes	Balance A amount in issuer billing currency	Balance B amount in issuer billing currency	Balance A amount in acquirer transaction currency	Balance B amount in acquirer transaction currency

Multicurrency Processing: Visa converts cardholder billing currency amounts provided by the issuer or customer financial institution to their appropriate transaction currency amounts before the response is forwarded to the acquirer or service provider. The acquirer receives those balances expressed in both the issuer-provided currency and in the converted transaction currency.

Nonmulticurrency Participating Acquirer: Visa replaces the billing amount in positions 1–20 (and positions 21–40, if present) with the equivalent transaction amounts. Nonmulticurrency acquirers will not receive positions 41–60 and 61–80.

Usage

This field is used in approved magnetic-stripe-based balance inquiries.

Acquirers submitting requests containing an account type of 10 or 20 will receive the value 40 from issuers in countries that do not support account selection.

Account Type Coding: If the issuer provides two amounts in a balance inquiry or card transaction response, they must have the same account type. If the account type (field 3, positions 3–4) in a request is 00, the account type for the responses may be 00 or it can be changed to the proper code for the amount being provided. The account type subfield code of every data set in this field must be the account type code in field 3 of the response.

If the account type in a request is specific (not 00), that code must be used in the response both in field 3 and in all field 54 data sets.

For balance inquiries, if only one balance is included, it is recommended that it be the current account ledger balance. For credit card accounts, the current account ledger balance refers to the amount of credit remaining to the customer.

Because issuers can return negative balances, acquirers must be able to receive positive or negative balances.

CPS/ATM: Field 54 is used in approved magnetic-stripe-based ATM balance inquiry and cash disbursement responses.

Visa Horizon—COPAC Format: Acquirers must include this field in:

- 0100 ATM cash withdrawals (field 3, positions 1–2 = 01, positions 3–4 = 64, and positions 5–6 = 00)
- 0100 POS preauthorization requests (field 3, positions 1–2 = 68, positions 3–4 = any valid account type, and positions 5–6 = 64).

It is not used in responses. The required subfields are:

Subfield 54.1 must be 64 (Spending Power Account). This value must match field 3, positions 3–4.

Subfield 54.2 must be 02 (Spending power accounts: current available preauthorized amount)

Subfield 54.4 must be “C” for positive balance.

Subfield 54.5 must be the spending power balance on the card, post-application of the field 4 amount.

NOTE: *Balance inquiries are not applicable to Visa Horizon—COPAC Format.*

VSDC Transactions, including Visa Horizon—VSDC Format: This field is used in balance inquiry responses.

Visa check card II: Issuers that process VCCII transactions must provide this field in cashback transaction responses. The format is:

Positions 1–2, Account Type: the value must be 00.

Positions 3–4, Amount Type: the value must be 40.

Positions 5–7, Currency Code: the value must be a valid currency code.

Position 8, Amount, Sign: the value must be C.

Positions 9–20, Amount: the 12-character amount is right-justified with leading zeros. The decimal is implied relative to the currency code in positions 5–7.

STIP and Switch Advices: Field 54 does not apply to STIP advices.

Field Edits

Field 54 is required in all magnetic stripe-based and VSDC-based 0110 balance inquiry approval responses, and the length subfield value must be 20, 40, 60, 80, 100, or 120. It should not be present when a balance inquiry is declined, but its presence does not cause a reject.

In responses, every account type code in this field must match field 3 positions 3–4.

The value in the account type and amount type subfields must be one from [Table 4–25](#) of the “Valid Values” section.

The value in the currency code subfield must be one listed in Appendix E, Country and Currency Codes.

The amount sign must be “C” or “D.”

If the issuer supplies only one set (Set A), then the acquirer will receive only two sets, not four (only one set if the currencies are equal). BASE I does not zero-fill sets.

Visa Commerce: Field 54 is dropped in requests from SMS acquirers to BASE I issuers.

MasterCard and Cirrus: Not applicable to field 54. See field 61.

Reject Codes

The reject codes for field 54 are:

0150 = Invalid value.

0250 = Field missing

0517 = Value for account type does not match value in field 3 account type

0518 = Incorrect field usage (member is not certified)

Valid Values

[Table 4–25](#) shows balance inquiry account and amount type codes.

Table 4–25: Field 54 Balance Inquiry Account and Amount Type Codes

Code	Definition
Positions 1– 2: Account Type	
00	Not Applicable or Not Specified
10	Savings Account
20	Checking Account
30	Credit Card Account
40	Universal Account
64	Spending Power
Positions 3–4: Amount Type	
01	Deposit Accounts: Current ledger (posted) balance Credit Card Accounts: Credit amount remaining for customer (open to buy)
02	Deposit Accounts: Current available balance (typically, ledger balance less outstanding authorizations. Some depository institutions also include pending deposits and the credit or overdraft line associated with the account.) Credit Card Accounts: Customer's credit limit. Spending power accounts: Current remaining preauthorized amount.

Field 55—BER-TLV Chip Data

Attributes

variable length
1 byte binary +
up to 255 bytes, variable by usage; maximum 256 bytes

Description

Field 55 is an ISO field for transmitting chip data in Basic Encoding Rules (BER), Tag-Length-Value (TLV) format. See Chapter 3, The ISO Tag-Length-Value Format, for further information on how the field is constructed and used.

The following usages are detailed in the rest of the field 55 field description:

- Usage 1—Visa Cash Load

Field 55, Usage 1—Visa Cash BER-TLV CEPS Data

Attributes

variable length
1 byte binary +
up to 255 bytes (510 hex digits), variable by usage; maximum 256 bytes

Description

Usage 1 contains Visa Cash data that conforms to the Common Electronic Purse Specifications (CEPS) in TLV format. Field content can include signature data (S1 and S2) used in authenticating requests, card value balances, and transaction number (usage count).

This usage has three subfields after the length subfield.

Positions:

1

2–3

4–255

Length	dataset ID	dataset length	Visa Cash TLV elements
			<div><div>TagLengthValue</div><div>TLV₁</div><div>TagLengthValue</div><div>TLV_N</div></div>
Byte 1	Byte 2	Byte 3–4	Byte 5–256

Length Subfield: This is a one-byte binary subfield that contains the number of bytes in this field after the length subfield.

Position 1, Dataset ID: This is a one-byte binary identifier given to each dataset. The identifier is 00 (hexadecimal).

Positions 2–3, Dataset Length: This is a two-byte binary subfield that contains the total length of the subsequent CEPS datasets.

Position 4–255, Tag Length Value (TLV): This is a 252-maximum byte (504 hexadecimal digits) subfield that contains CEPS datasets. It is composed of three data elements: CEPS Tag Data, CEPS Data length, and CEPS Data.

Tag: This one-byte binary value should be 01.

Length: This is a one-byte binary value that indicates how many bytes of data constitute the value; for example, a TLV format length of 05 means that 5 bytes of data resides in the TLV format's value field.

Value: This is the actual CEPS data in hexadecimal form.

Usage

For certified participants, field 55 is required in the following messages:

- Linked Load and Unlinked Load requests: 0100 requests, 0110 responses, 0120 STIP advices, 0400 reversal requests, and 0420 STIP advices. It is not used in Linked or Unlinked reversal responses.
- Currency Exchange requests: 0100 requests, 0110 responses, 0400 reversal requests, and 0420 reversal STIP advices. It is not used in Currency Exchange reversal responses.
- Transaction Completion requests: 0100 requests and 0120 advices. The field is required in a Transaction Completion response *only* if Issuer Script data is included in the same message.

Field Edits

There are no field edits for Field 55.

Reject Codes

There are no reject codes.

Field 59—National Point-of-Service Geographic Data

Attributes

variable length
1 byte, binary +
up to 14 ANS, EBCDIC; maximum 15 bytes

Description

Field 59 is a national-use field to identify an intra-country geographical location. Visa uses this field to describe the location of a customer transaction within the country of the card acceptor. The card acceptor country is identified in Field 19—Acquiring Institution Country Code or Field 43—Card Acceptor Name Location). Field 59 contains:

- U.S. card acceptors: the value must be a numeric state code (except for U.S. embassies and consulates) or numeric ZIP code or both.
- Canadian card acceptors: the value must be a numeric province code or alphanumeric postal code or both.
- Card acceptors outside the U.S. or Canada: the value must be a 1–14 position alphanumeric postal code.

When the card acceptor is located in the U.S. or in Canada (field 19 is 840 or 124, respectively, or the country in field 43 is U.S. or CA, respectively), field 59 conforms to the ANSI X9A2 definition of U.S. and Canadian geographic data.

Field 59 has three subfields after the length subfield.

Positions:
1–2

3–5

6–10, –11, or –14

length	card acceptor state or province code	card acceptor county code	card acceptor postal or ZIP code
Byte 1	Byte 2–3	Byte 4–6	Byte 7–15

Length Subfield: The value is the number of bytes following the length subfield.

Card Acceptor State or Province Code (Positions 1–2): This subfield contains zeros when not applicable, or for a U.S. card acceptor, it contains a 2-digit numeric state code defined by ANSI X3.38 (1972, revised 1977). See [Table 4–26](#) of the “Valid Values” section. See [Table 4–27](#) for Canadian 2-digit numeric province codes.

U.S. Card Acceptor County Code (Positions 3–5): This subfield is omitted when:

- It is not applicable and no postal or ZIP code is present.
- It contains zeros when not applicable and a postal or ZIP code is present.
- For a U.S. card acceptor, contains a 3-digit numeric county code as defined in FIPS PUB 6.3, 1979 (Federal Information Processing Standards Publication—Counties and County Equivalents of the States of the United States).
- For the U.S. overseas military bases, embassies and consulates, and traveling merchants, the code in positions 1–2 is 99. If 99 is used, field 19 must be 840, and if present, field 43, positions 39–40, must be US.

NOTE: The V.I.P. numeric state code 99 corresponds with its BASE II counterpart, XX.

This subfield does not apply to Canadian transactions. It must be zero-filled by Canadian card acceptors that are providing a postal code.

U.S. Card Acceptor Canadian Postal Code or ZIP (Positions 6–10, 6–11, or 6–14): This subfield is omitted if not applicable.

When it is present in a U.S. transaction, this subfield contains the 5-digit or 9-digit ZIP code (5-digit ZIP code plus 4-digit extension) for the location of this customer transaction.

When it is present in a Canadian transaction, this subfield contains the 6- or 9-character alphanumeric postal code (the 9-character alphanumeric Canadian postal code is the 6-character alphanumeric postal code followed by three zeros). Typical field uses are as follows.

State/Province Code only:

Length = 2	State/Province Code = NN
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State Code and 5-digit ZIP Code:

Length = 10	State Code = NN	000	ZIP Code = NNNNN
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State Code and 9-digit ZIP Code:

Length = 14	State Code = NN	000	ZIP Code = NNNNNNNNN
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5-digit ZIP Code only:

Length = 10	00	000	ZIP Code = NNNNN
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9-digit ZIP Code only:

Length = 14	00	000	ZIP Code = NNNNNNNNN
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Province Code and 6-digit Postal Code:

Length = 11	Prov. Code = NN	000	ZIP Code = NNNNNN
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Province Code and 9-digit Postal Code:

Length = 14	Prov. Code = NN	000	ZIP Code = NNNNNN000
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Usage

Field usage depends on message format:

BASE I Message Format: Field 59 is not required.

V.I.P. Message Format: Field 59 is required in 0100 authorization requests when field 43 is also present and contains a United States (840) or Canada country code. Only state or province codes are required. County and postal or ZIP codes are optional.

Acquirers outside of the U.S. and Canada should not send field 59. When required, this field is used in all requests and advices related to a customer transaction. It is not used in responses or advice responses. See the “Field Edits” of this field.

NOTE: *Positions 3–5 are used for a **county** code, not a **country** code, that is, country code 840 is not valid in these positions.*

The ZIP code may be 5 or 9 digits, that is, the total field length must be 10 or 14. The first five ZIP code subfield positions must not be all spaces or all zeros, and may not have embedded spaces. The ZIP code extension can be 0000.

The Canadian postal code may be 6 or 9 alphanumeric characters, that is, the total field length must be 11 or 14. The 9-character alphanumeric version is the 6-character alphanumeric code followed by three zeros. Either way, the county code subfield (positions 3–5) should be zero-filled.

CPS: This field requires a ZIP code in all U.S.-domestic POS authorization requests. If present in Canadian or U.S. domestic ATM authorization requests, the province, postal or ZIP, and state codes must be valid. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

For non-CPS 0100 authorization requests, state or province and county codes are not required. Their subfields can be furnished at the acquirer's option. If the state or province and county codes are not provided but the postal or ZIP code is, the state or province and county code subfields must be zero-filled.

Check Acceptance: Field 59 is optional.

Field Edits

BASE I Message Format: The length subfield value must not exceed 14. Content is edited for numerics for the U.S. acquirers.

V.I.P. Message Format: Field 59 must be present when the message includes field 43 and the country value in that field is US or CA, but only the state or province code subfield needs to be supplied. Whether or not field 43 is present, if field 59 is present, its content is edited.

The length subfield value must be 2, 5, 10, 11, or 14.

The U.S. State code must be one of the codes in [Table 4-26](#). Canadian province code must be one of the codes listed in [Table 4-27](#).

If field 59 is 99, indicating the U.S. military bases and embassies and travelling merchants (for example, nonstorefront merchants doing business inside a military base), field 19 must be 840 and field 43, positions 39-40, must be a valid country code.

Reject Codes

The reject codes for field 59 are:

0028 = Invalid length

0643 = Invalid national POS geographic code

0644 = Invalid national POS ZIP code

Valid Values

[Table 4-26](#) contains the U.S. state codes. [Table 4-27](#) contains the Canadian Province Codes. The ANSI codes for U.S. territories such as Puerto Rico, Guam, the Virgin Islands, and others, are not used in field 59. These entities are coded as countries in field 19 or in field 43 or in both.

Table 4-26: U.S. State Codes (1 of 3)

State Name	Code
Alabama	01
Alaska	02
Arizona	04
Arkansas	05
California	06
Colorado	08
Connecticut	09
Delaware	10
District of Columbia	11
Florida	12
Georgia	13
Hawaii	15
Idaho	16

Table 4–26: U.S. State Codes (2 of 3)

State Name	Code
Illinois	17
Indiana	18
Iowa	19
Kansas	20
Kentucky	21
Louisiana	22
Maine	23
Maryland	24
Massachusetts	25
Michigan	26
Minnesota	27
Mississippi	28
Missouri	29
Montana	30
Nebraska	31
Nevada	32
New Hampshire	33
New Jersey	34
New Mexico	35
New York	36
North Carolina	37
North Dakota	38
Ohio	39
Oklahoma	40
Oregon	41
Pennsylvania	42
Rhode Island	44

Table 4–26: U.S. State Codes (3 of 3)

State Name	Code
South Carolina	45
South Dakota	46
Tennessee	47
Texas	48
Utah	49
Vermont	50
Virginia	51
Washington	53
West Virginia	54
Wisconsin	55
Wyoming	56
U.S. military base, embassies, traveling merchants	99

[Table 4–27](#) provides Canada's province codes.

Table 4–27: Canada Province Codes (1 of 2)

Code	Province Name
60	Alberta
61	British Columbia
62	Manitoba
63	New Brunswick
64	Newfoundland
65	Northwest Territories
66	Nova Scotia
67	Ontario
68	Prince Edward Island

Table 4–27: Canada Province Codes (2 of 2)

Code	Province Name
69	Quebec
70	Saskatchewan
71	Yukon

Field 60—Additional POS Information

Attributes

variable length
1 byte, binary +
up to 10 N, 4-bit BCD (unsigned packed), maximum 6 bytes

Description

Visa has defined this field for private use to contain additional point-of-sale or point-of-service information. Refer to [Table 4-28](#) of the “Valid Values” section for subfield codes. Eight subfields follow the length subfield.

Positions:					
1	2	3	4	5–6	
length	F60.1 terminal type	F60.2 terminal entry capability	F60.3 chip condition code	F60.4 special condition indicator—existing debt	F60.5 merchant group indicator
Byte 1	Byte 2		Byte 3		Byte 4

Positions:		
7	8	9–10
F60.6 transaction indicator	F60.7 card authentication reliability indicator	F60.8 mail order/telephone order/electronic commerce indicator
Byte 5		Byte 6

Length Subfield: The value in the length subfield indicates the number of bytes that are to follow the length subfield.

Position 1, Terminal Type (Field 60.1): This is a 1-digit code identifying the basic point-of-service electronic terminal. This subfield is also used for identifying ATM transactions.

Position 2, Terminal Entry Capability (Field 60.2): This is a 1-digit code identifying the terminal’s capability to electronically read account numbers and expiration dates from cards. The method by which the account number was actually entered at the terminal is coded in Field 22—POS Entry Mode Code. Codes 0–5 for this subfield parallel the codes for field 22, positions 1–2. For chip transactions, see the “Visa Smart Debit/Credit” usage subsection.

Position 3, Chip Condition Code (Field 60.3): This is a 1-digit code used to provide information about VSDC cards when their magnetic stripes are read at VSDC terminals. For chip transactions, see the “Visa Smart Debit/Credit” usage subsection.

Position 4, Special Condition Indicator—Existing Debt (Field 60.4): This subfield is currently used as an Existing Debt indicator so merchants can indicate whether a payment is being made on an existing debt.

Positions 5–6, Merchant Group Indicator (Field 60.5): This is a 2-digit code identifying the general category of the card acceptor and transaction. It is used as a key to a BASE I issuer’s PCAS parameters. It is assigned by V.I.P. and is based on all transaction aspects: processing code (purchase versus cash), merchant type code, POS condition code (in-person versus mail or telephone order), and others.

Position 7, Chip Transaction Indicator (Field 60.6): This is a 1-digit code set by acquirers when they receive the message from the terminal to indicate a VSDC transaction. For chip transactions, see the “Visa Smart Debit/Credit” Usage subsection.

Position 8, Chip Authentication Reliability Indicator (Field 60.7): This is a 1-digit code indicating the reliability of card authentication in a VSDC transaction. Acquirers set this code when they are experiencing problems with a merchant or terminal, and Visa sets this code when either the acquirer or issuer is inactive for card authentication. For chip transactions, see the “Visa Smart Debit/Credit” Usage subsection.

Position 9–10, Mail Order/Telephone Order/Electronic Commerce Indicator—(Field 60.8): This is a 2-digit code. For mail order or telephone order transactions (field 25 = 08), it identifies the type of mail/telephone order. For e-commerce transactions (field 25 = 59), it identifies the level of security used in an e-commerce transaction over an open network (for example, the Internet).

Indicator values are supplied by acquirers and forwarded by V.I.P. in requests and advices to issuers certified to receive them. The subfield is dropped if issuers are not certified or choose not to receive it.

Usage

Field 60 is used in POS and ATM 0100 and 0400 requests. It is not present in responses. Unused subfields that precede ones that are used are zero-filled; otherwise, subfield 60 is truncated to the last valid subfield. Issuers should not edit these subfields or use them for purposes not sanctioned by Visa.

POS: Subfield presence requirements in a request are described below. For VisaPhone requests, field 60 is required when an electronic terminal is used but not used when the verification request is verbal.

ATM: Field 60 is required in 0100 ATM cash disbursements and balance inquiries and 0400 reversals. It is not required in voice authorization requests. Except for VSDC transactions, it is not required in 0102 ATM confirmation messages. If sent by an acquirer, V.I.P. drops the field before the message is forwarded to the issuer.

Subfields 60.1 and 60.2 (field 60, positions 1–2)

They are required in a POS 0100 authorization request *if* an electronic terminal was used—the subfields are otherwise optional for requests involving other terminal types. If subfields 60.1 and 60.2 were present in the authorization request, they must be present in the 0400 reversal.

When a request is generated by a VAP's dial terminal subsystem, subfield 60.1 is set to 7 (even if the request came from an ECR emulating a dial terminal).

The VIC zero-fills subfields 60.1 and 60.2 if they are not provided by the acquirer.

NOTE: *The \$150 requirement (that is, STIP approves or declines qualifying transactions rather than responding with a referral) applies only when field 60.1 and field 60.2 both contain a value other than zero. This requirement is mandatory only for U.S. issuers. Refer to field 39 for more information.*

CPS: Subfields 60.1 and 60.2 are required in all card-present 0100 authorization requests. Subfield 60.2 must be 2 or 5. Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

VSDC: Subfield 60.2 is required in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, 0102 ATM confirmations, 0120 stand-in advices, 0400 reversal requests, and 0420 reversal advices. Code 5 indicates that the terminal can read a chip card.

ATM transactions submitted with 5 in subfield 60.2, along with other VSDC field requirements being met, are eligible for interregional and intraregional fees.

EIRF Non-CPS Submission: Subfield 60.2 in 0100 requests must be 0 through 5, or 9.

Subfield 60.3 (field 60, position 3)

VSDC: Subfield 60.3 is provided by the acquirer and is optional in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 stand-in advices. It provides diagnostic and fraud detection data about magnetic stripe-read transactions at VSDC terminals. The values can be 0, 1, or 2.

If this subfield is present and the value is invalid, or if the issuer does not participate in the VSDC service, V.I.P. converts it to zero to fill the position if subfield 60.4 is present, or to drop the field if no other subsequent subfields are present.

NOTE: *This field is included in a magnetic stripe-based request that originates from a VSDC terminal. This field is not included in the Chapter 5 message format tables. Refer to the Visa Smart Debit/Visa Smart Credit System Technical Manual for more information.*

Subfield 60.4 (field 60, position 4)

Special Condition Indicator—Existing Debt: Acquirers must use code 9 in 0100 authorization and 0400 in authorization reversal requests to indicate if the cardholder is making a payment on an existing debt. The default value is 0 (zero). If the issuer is unavailable, STIP processes an 0100 existing debt authorization request as a quasi-cash MCG under PCAS rules. If the issuer does not support subfield 60.4, V.I.P. drops it from the request before forwarding it.

Subfield 60.5 (field 60, positions 5–6)

If the account number is one for which STIP could provide stand-in authorization, this subfield is added before the request is sent to the issuer if the issuer is certified to receive it.

Subfield 60.6 (field 60, position 7)

VSDC: Subfield 60.6 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 stand-in advices. It is set by acquirers to indicate a VSDC transaction. Valid values are 0 or 1.

Visa Horizon—COPAC Format: If the acquirer has set subfields 60.6 and 60.7 incorrectly, BASE I inserts the zeros to ensure that COPAC transactions are not processed as VSDC transactions.

Subfield 60.7 (position 8)

VSDC: Subfield 60.7 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 stand-in advices. It indicates card authentication reliability. Either the acquirer or Visa can set this field. Acquirers set it when they have problems with the terminal or merchant. Visa sets it when either the acquirer or issuer is not processing card authentications. The valid values are 0, 1, 2, or 3.

Visa Horizon—COPAC Format: See Subfield 60.6, above.

Subfield 60.8 (positions 9–10)

MailOrder/Telephone Order: This subfield is optional in MOTO 0100 authorization and related 0400 reversal requests. The allowable MOTO codes are 01 through 04. If the transaction is a recurring payment transaction, the value should be 02.

E-commerce: This subfield is required in 0100 e-commerce authorization requests seeking CPS qualification. The subfield also is required in related 0400 reversal requests. It is not returned in 0110 or 0410 responses. E-commerce requests require that field 25 contain code 59; any other code results in subfield 60.8 being dropped.

- For secure transmissions using SET, the codes must be: 05 (SET with cardholder certificate), 06 (nonauthenticated security transaction with merchant certificate), or 07 (nonauthenticated security transaction without merchant certificate).
- Code 09 in subfield 60.8 applies to non-U.S. domestic, non-SET compliant transactions originating from SET-enabled merchants, for example, interregional purchases.
- For 3-D Secure transmissions, the code must be 05.

NOTE: *Although field 60.8 can be included in a 3-D Secure authorization request in which a VSDC card was used for authentication purposes, field 60.8 is not considered a VSDC field, and therefore is not shown in the VSDC message format tables in Chapter 5.*

If the issuer is not certified to receive 59, the code is changed from 59 to 08 and 60.8 is not sent to the issuer.

CPS: Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

Visa Commerce: Participating acquirers must comply with SET requirements for field 60, subfield 8 (positions 9–10), including the field 60.8 edit requirement.

MasterCard E-commerce Authorization Requests: Field 60.8 (positions 9–10) is present in e-commerce authorization requests containing CVC2 in field 126.10 that are sent to MasterCard issuers. The value in field 60.8 will be 09. CVC2 is MasterCard's version of Visa's CVV2. The content of Visa field 60.8 (positions 9–10) is mapped to MasterCard's DE 48, subelement 42.

Check Acceptance: Subfields 60.1 and 60.2 are optional. The remaining subfields do not apply.

STIP and Switch Advices: Field 60 is present in 0120 and 0420 advices if it was in the request or was added to the request at the VIC. It is not used in advice responses.

Field Edits

The value in the length subfield may not exceed 6.

Subfields 60.1 and 60.2 must use codes from [Table 4–28](#).

E-commerce: If field 25 contains 59 and subfield 60.8 is missing or invalid, the message is rejected.

Reject Codes

The reject codes for field 60 are:

0072 = Invalid length

0105 = Invalid value

0185 = Invalid values in positions 9–10 for e-commerce transactions

0360 = Field missing

0488 = ECI (positions 9–10) is missing

0518 = Field not allowed in message

Valid Values

[Table 4–28](#) provides the valid values for field 60.

Table 4–28: Field 60 Additional POS Information Position Values (1 of 3)

Code	Definition
60.1—Position 1	
0	Unspecified
1	Limited amount terminal
2	Unattended terminal (ATM)
3	Unattended acceptance terminal: Automated dispensing machine or self-service terminal
4	Electronic cash register
5	Home terminals, which includes personal computers, personal digital assistants, interactive televisions, and telephones
7	Telephone device (including Visa dial terminals)
8	Reserved

Table 4–28: Field 60 Additional POS Information Position Values (2 of 3)

Code	Definition
60.2—Position 2	
0	Unknown
1	Terminal not used
2	Magnetic stripe read capability
3	Barcode read capability
4	OCR read capability
5	Chip read capability
9	Terminal does not read card data
60.3—Position 3	
0	Service code does not begin with 2 or 6; or fill for subsequent positions that are present
1	Service code begins with 2 or 6, last read at the chip capable terminal was successful, or was not a chip transaction, or unknown
2	Service code begins with 2 or 6; last transaction at the chip capable terminal was an unsuccessful chip read
60.4—Position 4	
0	Default value
9	Existing debt indicator
60.5—Positions 5–6	
01	Commercial Travel
02	Lodging
03	Auto Rental
04	Restaurant
05	Mail/Telephone/Electronic Commerce Orders (MOTO/ECI)
06	Risky Purchases
07	Other Purchases
08	Manual Cash (also known as Other Cash)

Table 4–28: Field 60 Additional POS Information Position Values (3 of 3)

Code	Definition
09	ATM cash
10	Quasi-cash
11	Medical

60.6—Position 7

0	Non-VSDC transaction or fill for subsequent positions that are present
1	The acquirer identified transaction as a VSDC transaction

60.7—Position 8

0	Fill for field 60, position 8 present, or subsequent positions that are present
1	Acquirer indicates that Card Authentication may not be reliable
2	VisaNet indicates acquirer inactive for Card Authentication
3	VisaNet indicates issuer inactive for Card Authentication

60.8—Positions 9–10

00	Not applicable
01	Single transaction for Mail Order/Telephone Order (MOTO)
02	Recurring transaction
03	Installment payment
04	Unknown classification/other mail order
05	Secure electronic commerce Transaction
06	Nonauthenticated security transaction at a 3-D Secure-capable merchant, and merchant attempted to authenticate the cardholder using 3-D Secure
07	Nonauthenticated Security Transaction
08	Nonsecure transaction
09	Nonauthenticated security transaction at a SET-capable merchant

Field 61 (61.1, 61.2, 61.3)—Other Amounts

Attributes

1 byte, binary +
12 N, 4-bit BCD (unsigned packed), 7 bytes total
or 24 N, 4-bit BCD (unsigned packed), 13 bytes total
or 36 N, 4-bit BCD (unsigned packed), 19 bytes total

Descriptions

Visa has defined this field for private use to contain one or more amounts related to a cardholder transaction. This field has one length subfield followed by three subfields.

Positions:			
1–12		13–24	25–36
	Field 61.1	Field 61.2	Field 61.3
length	other amount, transaction payment request: amount due	other amount, cardholder billing	other amount, replacement billing
Byte 1	Byte 2–7	Byte 8–13	Byte 14–19

Length Subfield: This value is the number of bytes following the length subfield.

Position 1–12, Other Amount, Transaction (Field 61.1): In authorization requests, field 61.1 contains the cashback amount for Visa Cashback participants, or the amount of cash actually dispensed in a partial dispense ATM transaction.

0120 File Update Advices for Visa Cashback and ATM Partial Dispense Confirmations: In authorization requests, the currency is identified in Field 49—Currency Code, Transaction. The implied decimal point in this value depends on the currency. See Appendix E, Country and Currency Codes.

Positions 13–24, Other Amount, Cardholder Billing (Field 61.2): This field is for multicurrency only and is added at the VIC in 0100 and 0102 messages for participating issuers *only* if currency conversion is required. Otherwise, the field is not used. If present, field 61.2 contains the field 61.1 amount expressed in the cardholder billing currency. The value includes the appropriate proportional amount of the Visa conversion fee and the optional issuer fee. The currency code is identified in Field 51—Currency Code, Cardholder Billing. The location of the implied decimal point in this value depends on the currency.

Positions 25–35, Other Amount, Replacement Billing (Field 61.3): This field is for multicurrency only and is added at the VIC in 0400 reversals for participating issuers *only* if currency conversion is required; otherwise the field is not used. If present, field 61.3 contains the field 95.1 amount in cardholder billing currency. The value includes the Visa conversion fee and the optional issuer fee. The currency code is identified in Field 51—Currency Code, Cardholder Billing. The location of the implied decimal point in this value depends on the currency.

Usage

This field is used in 0100 authorization requests, 0400 reversals including partial reversals, and in 0102 ATM confirmations. It is not returned in responses except unless otherwise noted. Each amount is right-justified with lead zero-fill within its own subfield.

Multicurrency participating issuers: Subfields 61.1, 61.2, and 61.3 are used.

All acquirers and Nonmulticurrency participating users: Only subfield 61.1 is used.

Other Amount, Transaction (Field 61.1): For POS transactions, this field is used in 0100 authorization requests *only* if cashback is involved, in which case it is required. It is present in POS 0400 reversals if present in the original and the value must be from the original. It is not used in ATM transactions except for 0102 ATM confirmations when there is a partial dispense (dispensed amount is less than requested amount) in which case it contains the amount actually dispensed. This field is not used in AFD transactions. It is not used in 0110 or 0410 responses. It is present in 0120 STIP advices.

NOTE: *Balances received with ATM withdrawal responses are in field 54.*

Visa Cashback: For U.K. domestic POS transactions, field 61.1 must be present and amount must be less than the amount in field 4. For U.S. domestic POS transactions, field 61.1 amount must not exceed \$200.

Other Amount, Cardholder Billing (Field 61.2): The value is added at the VIC for participating issuers only when field 61.1 is present and currency conversion is required in original requests and their reversals.

Other Amount, Replacement Billing (Field 61.3): The value is added at the VIC for participating issuers *only* when field 95.1 is present in reversals and currency conversion is involved. If field 61.3 must be added, but fields 61.1 and 61.2 are absent, positions 1–12 and 13–24 are zero-filled.

For partial reversals, the field 61.3 cardholder billing currency value is derived from the amount in field 95.1, even if both currencies are the same.

Check Acceptance: Not applicable to field 61.

STIP and Switch Advices: Field 61 is present in 0120 or 0420 advices if it was present in the request.

Field Edits

If field 61 is present in the message, both the length and the amounts must be numeric.

When the acquirer includes field 61.1, the value in the length subfield must be 6. (If Field 61.2 is added by itself, the length is 12. If field 61.3 is added, the length is 18.)

Reject Codes

The reject codes for field 61 are:

0026 = Invalid length

0106 = Invalid amount (non-numeric)

0517 = Account type value does not match field 3 account type value.

Field 62—Custom Payment Service Fields (Fixed and Bit Map Formats)

Attributes, Both Formats

1 byte, binary +
variable by subfield
maximum: 13 bytes if fixed format, 59 bytes if bit mapped format

Description, Both Formats

Visa has defined Field 62 for private use with CPS transactions. CPS participants must be certified to receive field 62.

Description	Bytes	Number Position	Field Attribute	Fixed or Bit Map Format
Length Subfield	1		Binary	Fixed and Bit Map
62.0 Field 62 Bit Map	8	64	Bit String	Bit Map only
62.1 Authorization Characteristics Indicator	1	1	AN	Fixed and Bit Map
62.2 Transaction Identifier	8	15	N, BCD	Fixed and Bit Map
62.3 Validation Code	4	4	AN	Fixed and Bit Map
62.4 Market-Specific Data Identifier	1	1	AN	Bit Map only
62.5 Duration	1	2	N, BCD	Bit Map only
62.6 Prestigious Property Indicator	1	1	AN	Bit Map only
62.7 through 62.16	Not Applicable			
62.17 MasterCard Interchange Compliance	15	15	EBCDIC	Bit Map only

Usage, Fixed Format

Only subfields 62.1, 62.2, and 62.3 are used for fixed format CPS processing.

- CPS/Retail POS transactions with magnetic stripe read, signature obtained, CVV or iCVV requested
- Passenger Transport with magnetic stripe read, signature obtained
- Direct Marketing with address verification
- Automatic Fuel Dispenser (AFD)

Fixed format is not valid for the following market segments:

- CPS/Retail 2
- Commercial Card
- Visa Cashback
- E-commerce
- Healthcare

Fixed format is also not valid for incremental authorizations, recurring MOTO/ECI transactions, partial reversals, ATM transactions, or for processing Mastercard Interchange Compliance Program downgrades.

Usage, Bit Map Format

CPS POS authorization requests and reversals use subfields 62.0 through 62.6.

CPS ATM authorization requests use subfields 62.0 through 62.3.

MasterCard: Subfield 62.17 is used for MasterCard responses coming from BankNet through Visa to certified acquirers.

Field Edits, Fixed Format

The value in the length subfield must be 1, 9, or 13.

Field Edits, Bit Map Format

The value in the length subfield must correlate with the actual subfields present in the message.

Reject Codes, Both Formats

The reject codes for subfield 62 are:

0151 = Invalid length

Field 62.1—Authorization Characteristics Indicator (Fixed Format)

Attributes

fixed length
1 AN, EBCDIC; 1 byte

Description

Subfield 62.1 is a code used by the acquirer to request CPS qualification. If applicable, V.I.P. changes the code to reflect the results of its CPS evaluation. [Table 4–29](#) shows CPS authorization characteristics indicators.

Table 4–29: CPS Authorization Characteristics Indicators (Fixed Format)

Acquirer Sends ACI	Acquirer Receives:		Because ...
	Qualified	Not Qualified	
Y (Transaction requests participation)	A	N	Card present; magnetic stripe read and sent, CVV requested
	E	N	Meets requirements for A, plus merchant/ATM owner name and location (enriched name and location data) present
	V	N	Meets address verification requirements; verification requested for card-not-present transactions (Direct Marketing, Passenger Transport)
	C	N	Meets requirements for A, plus merchant name, location present, and unattended acceptance terminal indicator set, but no signature required: AFD

Usage

For 0100 authorization requests, the value set by the acquirer must be “Y.” Otherwise, V.I.P. drops all of field 62. If the request qualifies and is approved, it receives an “A,” “E,” “V,” or “C” in the 0110 response to the acquirer. If not approved, the response contains an “N.” For qualified requests, acquirers must include subfield 62.1 in 0400 reversals and the value must match the original 0110 response. Only if the original 0110 response indicates a positive CPS qualification can subfield 62.1 be included in any reversal requests for that transaction. The reversal also must not include subfield 62.1 if the 0100 request was reversed prior to receiving the 0110 response.

NOTE: *If the 0100 authorization request fails CPS qualification but the message content is otherwise valid, the request is not rejected but is downgraded, and processing continues.*

Issuers are not required to include the subfield in 0110 and 0410 responses but if it is included, the value must match the value they received in the request. If issuers do not include the subfield in a response, V.I.P. inserts it for participating acquirers.

CPS: Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

Check Acceptance: Not applicable to subfield 62.1.

STIP and Switch Advices: Subfield 62.1 is present in 0120 or 0420 advices for certified issuers if it was in the request.

Field Edits

Subfield 62.1 must be present as described in the “Usage” section.

Reject Codes

The reject codes for subfield 62.1 are:

0152 = Invalid value

0483 = Field missing

Valid Values

See the “Description” and “Usage” sections in this field description.

Field 62.2—Transaction Identifier (Fixed Format)

Attributes

fixed length
15 N, 4-bit BCD (unsigned packed); 8 bytes

Description

Subfield 62.2 is a right-justified, Visa-generated identifier unique for each original transaction. The identifier is a key element that links original authorization requests to subsequent messages, such as reversals.

Usage

The acquirer does not include subfield 62.2 in 0100 authorization requests. V.I.P. assigns the identifier before the request is forwarded to the issuer for approval regardless of qualification. It is optional in 0110 and 0410 responses from the issuer. If issuers do not include the subfield in a qualified, approved response, V.I.P. inserts it for participating acquirers.

Acquirers must save the Transaction Identifier and include it in subsequent related messages such as reversals.

Reversals: Subfield 62.2 is required in a 0400 reversal request if it was present in the qualified 0110 response. The value must be from the 0110 response. A participating issuer receives this subfield in the 0400 request. It is optional in the 0410 issuer response. The acquirer receives it in the 0410 response if it was present in the 0400 reversal request.

Check Acceptance: Not applicable to subfield 62.2.

STIP and Switch Advices: Subfield 62.2 is present in 0120 or 0420 advices for qualified CPS transactions.

Field Edits

The Transaction Identifier must be valid for reversals; otherwise, the transaction is rejected with reason code 0153.

Reject Codes

The reject codes for subfield 62.2 are:

0153 = Invalid value

0483 = Field missing

Field 62.3—Validation Code (Fixed Format)

Attributes

fixed length
4 AN, EBCDIC; 4 bytes

Description

Subfield 62.3 is a V.I.P.-calculated code to ensure that key fields in the 0100 authorization requests match their respective fields in BASE II deferred clearing messages. See [Table 4–30](#).

Table 4–30: Field 62.3: Fields Protected by CPS Validation Code

Fields Protected by the Validation Code		
Field	Name	Default
2	Primary Account Number	None
4	Amount, Transaction	None
18	Merchant's Type	None
22	POS Entry Mode Code (position 1–2)	None
38	Authorization ID Response	None
39	Response Code	None
49	Currency Code, Transaction	None
61.1	Other Amount, Transaction, ¹ Cashback	Zeros
62.1	Authorization Characteristics Indicator	None
62.2	Transaction Identifier	None
62.3	Validation Code	None

¹ If the specified subfield is not present, V.I.P. substitutes the default value, which must be provided in the clearing transaction sent to BASE II.

NOTE: *Downgrade reason codes are not included in fixed format subfield 62.3 in responses but are included in CPS downgrade reports.*

Usage

Subfield 62.3 is generated for all CPS-validated 0100 authorization requests approved by the issuer, except incremental authorizations.

The acquirer receives this subfield in 0110 authorization responses. The validation code must be saved for the transaction's BASE II deferred clearing message. This subfield is not used in incremental authorization requests and advices.

Check Acceptance: Not applicable to subfield 62.3.

STIP and Switch Advices: Subfield 62.3 is not present in 0120 or 0420 advices.

Field Edits

There are no field edits for subfield 62.3.

Reject Codes

There are no reject codes for subfield 62.3.

Field 62.0—CPS Fields Bit Map

Attributes

64 N, bit string, 8 bytes

Description

Subfield 62.0 is a bit map specifying which field 62 subfields are present. Byte 1 and byte 3 are applicable to BASE I. Byte 3, bit 1, is used for MasterCard Interchange Compliance Information. The rest of byte 3 and bytes 4 through 8 are reserved for future use and are set to zero.

Field 62.0 Bit Map		Byte 1								Byte 2	Byte 3		Byte 4–8
		1	2	3	4	5	6	7	8		1	2-8	
62.1	Authorization Characteristics Indicator	✓								Not applicable		Reserved for future use	Reserved for future use
62.2	Transaction Identifier		✓										
62.3	Validation Code			✓									
62.4	Market-specific Data Identifier				✓								
62.5	Duration					✓							
62.6	Prestige. Property Indicator						✓						
62.7–62.16		Not applicable											
62.17	MasterCard Interchange Compliance Information									Not applicable	✓	Reserved for future use	Reserved for future use
62.18–62.64		Reserved for future use											

Usage

Field 62.0 must be present if any of its subsequent subfields are present.

ATM Confirmations: If this field is present in a confirmation message, V.I.P. removes it before the message is forwarded to the issuer.

Field 62.1—Authorization Characteristics Indicator (Bit Map Format)**Attributes**

fixed length
1 AN, EBCDIC; 1 byte

Description

Subfield 62.1 is a code used by the acquirer to request CPS qualification. If applicable, V.I.P. changes the code to reflect the results of its CPS evaluation. [Table 4–31](#) shows CPS authorization characteristics indicators.

Table 4–31: CPS Authorization Characteristics Indicator (Bit Map Format) (1 of 2)

Acquirer Sends ACI	Acquirer Receives:		Because ...
	Qualified	Not Qualified	
Y (Transaction requests participation)	A	N	Card present; magnetic stripe read and sent or, for Retail 2 (key entered) or Commercial Card submissions, the magnetic stripe is not included but other submission requirements are met; signature obtained; CVV requested if magnetic stripe is present: All CPS market segments.
	C	N	Meets requirements for A, plus merchant name, location present, and unattended acceptance terminal indicator set, but no signature required: AFD.
	E	N	Meets requirements for A, plus merchant/ATM owner name and location (enriched name and location data) present; also valid for Retail 2 (key-entered), Commercial Card and Visa Cashback submissions.
	F	N	Meets CPS/Account Funding requirements.
	K	N	Card present with key entry.
	M	N	Meets national payment service requirements with no address verification: Direct Marketing (currently M used for Germany only).
	U	N	Meets basic CPS/Electronic Commerce requirements and VSEC 3-D Secure data is present.
	V	N	Meets address verification requirements; verification requested for card-not-present transactions (Direct Marketing, Transport market segments).
	W	N	Meets basic CPS/Electronic Commerce requirements but transmission was nonverified VSEC 3-D Secure transmission.

Table 4–31: CPS Authorization Characteristics Indicator (Bit Map Format) (2 of 2)

Acquirer Sends ACI	Acquirer Receives:		Because ...
	Qualified	Not Qualified	
R (Recurring payment)	R	N	Meets Direct Marketing recurring payment qualification without address verification request. U.S. only.
I ¹ (Increment to previously approved transaction)	I	N	Incremental authorization qualified for CPS, card may or may not be present: Hotel/Auto Rental.
P ¹ (Preferred Customer) ²	P	N	Meets requirements for Preferred Customer, Card Not Present: Hotel/Auto Rental and Transport.

¹ I and P are passed to participating issuers and returned to acquirers if not downgraded.

² Acquirers participating in MasterCard's Premier Service Program can send the value P in original MasterCard point-of-service transactions. This value is forwarded to MasterCard in its DE48.90.

Usage

For 0100 authorization requests, the ACI sent by the acquirer must be valid for the transaction being considered; otherwise, V.I.P. drops all of field 62. Hotel/Auto Rental incremental authorization requests can only be submitted in bit map format.

If the request qualifies and is approved, the appropriate ACI value is present in the 0110 response to the acquirer. If the request does not qualify, the response contains an “N.”

NOTE: *If the 0100 authorization request fails CPS qualification but the message content is otherwise valid, the request is not rejected but is downgraded, and processing continues.*

The subfield 62.1 value in a CPS-qualified response must be used in 0400 reversals. The reversal must not include subfield 62.1 if the 0100 request was reversed prior to receiving the 0110 response.

Issuers are not required to include the subfield in 0110 and 0410 responses but if it is included, the value must match that from the request. If issuers do not include the subfield in a response, V.I.P. inserts it for participating acquirers.

CPS/Retail 2 (Key-Entered) Submissions: The value in 0100 authorization requests must be “Y.” Key-entered commercial card submissions must have an appropriate and valid merchant category code in field 18.

CPS/E-commerce: Authorization requests must be submitted with ACI = Y. Otherwise, the request is reclassified as a non-CPS transaction. The ACI in the response for qualified e-commerce T&E submissions can be P (hotel/auto rental) or V (passenger transport). Requests that meet VSEC 3-D Secure requirements receive an ACI = U in the response. If CAVV authentication is good but verification fails, the ACI is W if the request otherwise qualifies for the Basic fee program, which requires the full cardholder address or ZIP or postal code in field 123.

CPS/Account Funding: The ACI in Account Funding authorization requests must be Y. The acquirer receives an F in the response if the transaction qualifies.

Healthcare Submissions: Healthcare transactions must contain “R” when AVS is not being requested. Qualified transaction responses without address verification contain an “R” in this subfield. Qualified transaction responses with address verification contain a “V” in this subfield.

Visa Cash Back: U.S. cashback submissions must contain a “Y” in this subfield to qualify for CPS/Retail Check. Qualified transactions contain an “E” in the 0110 response to indicate enhanced merchant data.

ATM Confirmations: If subfield 62.1 is present in a confirmation message, V.I.P. removes it before the message is forwarded to the issuer.

CPS: Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

Check Acceptance: Not applicable to subfield 62.1.

STIP and Switch Advices: Subfield 62.1 is present in 0120 or 0420 advices for certified issuers if it was in the request.

Field Edits

Subfield 62.1 must be present as described in the “Usage” section.

Reject Codes

The reject codes for subfield 62.1 are:

0152 = Invalid value

0483 = Field missing

Valid Values

See the “Description” and “Usage” sections in this subfield description.

Field 62.2—Transaction Identifier (Bit Map Format)

Attributes

fixed length
15 N, 4-bit BCD (unsigned packed); 8 bytes

Description

Subfield 62.2 is a right-justified, Visa-generated identifier unique for each original transaction. The identifier is a key element that links original authorization requests to subsequent messages, such as reversals.

Usage

The acquirer does not include subfield 62.2 in 0100 authorization requests unless the request is for an incremental authorization. V.I.P. assigns the identifier before the request is forwarded to the issuer for approval regardless of qualification. It is optional in 0110 and 0410 responses from the issuer. If issuers do not include this subfield in a qualified, approved response, V.I.P. inserts it for participating acquirers.

Acquirers must save the Transaction Identifier (TI) and include it in subsequent related messages such as reversals.

Incremental Authorizations: Acquirers *must* include the Transaction Identifier from the initial authorization in subsequent incremental authorization requests; otherwise, the request is downgraded with CPS downgrade reason code TI. If it is not included or is incorrect, it is not forwarded to the issuer or returned to the acquirer in the response. Incremental authorization requests without the Transaction Identifier are not protected from authorization-related chargebacks.

Reversals: Subfield 62.2 is required in a 0400 reversal request if it was present in the qualified 0110 response; the values must match. A participating issuer receives this subfield in the 0400 request. It is optional in the 0410 issuer response. The acquirer receives it in the 0410 response if it was present in the 0400 reversal request.

ATM Confirmations: If subfield 62.2 is present in a confirmation message, V.I.P. removes it before the message is forwarded to the issuer.

Check Acceptance: Not applicable to subfield 62.2.

STIP and Switch Advices: Subfield 62.2 is present in 0120 or 0420 advices for qualified CPS transactions.

Field Edits

The Transaction Identifier must be valid for reversals; otherwise, the transaction is rejected with reason code 0153.

Reject Codes

The reject codes for subfield 62.2 are:

0153 = Invalid value

0483 = Field missing

Field 62.3—Validation Code (Bit Map Format)

Attributes

fixed length
4 AN, EBCDIC; 4 bytes

Description

Subfield 62.3 is a V.I.P.-calculated code to ensure that key fields in the 0100 authorization requests match their respective fields in BASE II deferred clearing messages. See [Table 4–32](#).

Table 4–32: Field 62.3: Fields Protected by CPS Validation Code

Fields Protected by the Validation Code		
Field	Name	Default
2	Primary Account Number	None
4	Amount, Transaction	None
18	Merchant's Type	None
22	POS Entry Mode Code (position 1–2)	None
38	Authorization ID Response	None
39	Response Code	None
49	Currency Code, Transaction	None
61.1	Other Amount, Transaction, ¹ Cashback	Zeros
62.1	Authorization Characteristics Indicator	None
62.2	Transaction Identifier	None
62.3	Validation Code (Downgrade Reason Code)	None
62.4	Market-Specific Data Identifier ¹	Blank

¹ If the specified subfield is not present, V.I.P. substitutes the default value, which must be provided in the clearing transaction sent to BASE II.

In bit map format, this subfield also can contain a downgrade reason code for authorization requests that fail CPS qualification.

Validation Code Usage

Subfield 62.3 is generated for all CPS-validated 0100 authorization requests approved by the issuer, except incremental authorizations.

The acquirer receives this subfield in 0110 authorization responses. The validation code must be saved for the transaction's BASE II deferred clearing message. This subfield is not used in incremental authorization requests and advices.

CPS/ATM: If field 18 = 6011 (ATM), the validation code is based on a subset of the other protected CPS fields, which are listed in [Table 4-32](#).

All non-Visa Programs Except Plus: Not applicable to subfield 62.3.

Check Acceptance: Not applicable to subfield 62.3.

Downgrade Reason Code Usage

CPS downgrade reason codes are located in Appendix A, CPS and CRS Reason Codes.

For downgraded authorization requests, the downgrade reason code is substituted for the validation code in this subfield. The downgrade reason code is left-justified, blank-filled. For downgraded 0100 authorization requests, the acquirer must set this subfield to spaces in the BASE II deferred clearing transaction.

MasterCard: Subfield 62.3 is used for Interchange Compliance program downgrades. For further information, contact MasterCard.

STIP and Switch Advices: Subfield 62.5 is not used in 0120 or 0420 advices.

File Edits

There are no file edits for subfield 62.3.

Reject Codes

There are no reject codes for subfield 62.3.

Subfield 62.4—Market-Specific Data Identifier (Bit Map Format)

Attributes

1 AN, EBCDIC, 1 byte

Description

Subfield 62.4 identifies the industry for which market-specific data has been provided in other field 62 subfields. It is used only in authorization requests.

Usage

Subfield 62.4 is required in all initial CPS/Hotel or Auto Rental 0100 authorization requests and their responses. The acquirer inserts:

- “A” (Auto Rental) or “H” (Hotel) if Subfield 62.5—Duration, is present.
- “H” (Hotel) if Subfield 62.6—Prestigious Property Indicator, is present.

If subfield 62.5 or subfield 62.6 is invalid, V.I.P. substitutes an “N” (Failed Market-Specific Data edit) for the acquirer-supplied codes. If this subfield is invalid, this subfield and 62.6 are not forwarded to the issuer in the authorization.

This subfield’s value is used in the BASE II clearing record. BASE II recognizes its presence in the authorization by the authorization’s validation code (subfield 62.3). This subfield’s value in the authorization must match that in the clearing record. If the subfield is omitted in the authorization, it must be spaces in the BASE II clearing message.

Subfield 62.4 is optional on incremental authorizations. It is not used in reversals or responses. It is present in 0120 advices if it was present in the 0100 request.

Field Edits

There are no field edits for subfield 62.4.

Reject Codes

There are no reject codes for subfield 62.4.

Valid Values

[Table 4–33](#) provides the valid values for subfield 62.4.

Table 4–33: Field 62.4 Market-Specific Data Identifiers

Code	Definition
A	Auto Rental
H	Hotel
N	Failed CPS Market-Specific Data edit

Field 62.5—Duration (Bit Map Format)

Attributes

2 N, BCD, 1 byte

Description

Subfield 62.5 indicates the number of days (from 01 through 99) anticipated for the auto rental or hotel stay. For auto rental prepaids and hotel deposits, the value reflects the number of days covered by the advance payment. This subfield is used only in authorization requests.

Usage

Subfield 62.5 is a required field on all CPS Hotel or Auto Rental 0100 authorization requests if subfield 62.4 is “A” or “H.”

If the value in this subfield is invalid, V.I.P. substitutes an “N” in subfield 62.4 and does not forward fields 62.5 or 62.6 to the issuer. It is not used in responses.

Subfield 62.5 is optional in incremental authorizations. If present, it reflects the number of additional days to be added to the auto rental or hotel stay.

STIP and Switch Advices: Subfield 62.5 is present in 0120 advices for certified issuers if it was present in the 0100 request.

Field Edits

There are no field edits for subfield 62.5.

Reject Codes

There are no reject codes for subfield 62.5.

Valid Values

The valid values for subfield 62.5 are:

01–99. (For no-show authorizations, the value is 01.)

NOTE: Zeros (00s) are not allowed.

Field 62.6—Prestigious Property Indicator (Bit Map Format)

Attributes

1 AN, EBCDIC, 1 byte

Description

Subfield 62.6 is an indicator used by CPS acquirers in the Visa U.S.A. Prestigious Lodging program to identify a property floor limit. This subfield is used only in authorization requests.

Usage

Subfield 62.6 is required in 0100 authorization requests only when the merchant wants a US\$1 status check to guarantee the transaction up to its floor limit and the acquirer participates in CPS. Otherwise, the subfield is omitted.

If the value in subfield 62.6 is invalid, V.I.P. substitutes an “N” in subfield 62.4 and does not forward fields 62.5 or 62.6 to the issuer.

This is not used in incremental authorizations, reversals, responses, or exception item processing.

STIP and Switch Advices: This subfield is present in 0120 advices for certified issuers if it was present in the 0100 request.

Field Edits

There are no field edits for subfield 62.6.

Reject Codes

There are no reject codes for subfield 62.6.

Valid Values

[Table 4–34](#) provides the valid values for subfield 62.6.

Table 4–34: Field 62.6 Prestigious Property Indicator Codes

Code	Definition
D	Prestigious Property with US\$500 limit
B	Prestigious Property with a US\$1,000 limit
S	Prestigious Property with a US\$1,500 limit

Field 62.17—MasterCard Interchange Compliance Information (Bit Map Format)

Attributes

fixed length
15 AN EBCDIC, 15 bytes

Description

Subfield 62.17 contains qualification information for the MasterCard Interchange Compliance (MIC) program. This subfield is used for all MasterCard responses coming from BankNet through Visa to certified acquirers.

MasterCard Interchange Compliance program downgrade codes are in subfield 62.3. For further information, contact MasterCard.

Usage

Subfield 62.17 is used in 0110 authorization responses if acquirers participate in MasterCard and are certified to receive field 62 in its bit-mapped format.

The subfield format is the mmdd BankNet date in positions 1–4 followed by a 9-character BankNet Reference Number in positions 5 through 13. Positions 14–15 are space-filled.

Field Edits

There are no field edits for subfield 62.17.

Reject Codes

There are no reject codes for subfield 62.17.

Field 63—V.I.P. Format Private-Use Field

Attributes

variable length
1 byte, binary +
up to 255 bytes, variable; maximum: 256 bytes

Description

Visa has defined Field 63 for private use to contain the V.I.P. format. This field contains Single Message System (SMS) message information, including acquirer network identification and various reason codes. The length subfield specifies the number of bytes that follow it. Maximum field length is currently 79 bytes. [Table 4–35](#) shows the field 63 layout.

Table 4–35: Field 63 Layout (1 of 2)

Subfield	Description	Length		Format
		Bytes	Positions	
n/a	Length Subfield	1		binary
63.0	Bit Map	3	24	bit string
63.1	Network ID	2	4	N, BCD
63.2	Not applicable	2	4	N, BCD
63.3	Message Reason Code	2	4	N, BCD
63.4	STIP/Switch Reason Code	2	4	N, BCD
63.5	Not applicable	3	6	N, BCD
63.6	Chargeback Reduction/BASE II Flags	7	7	ANS
63.7	Network Participation Flags	8	64	bit string
63.8	Visa Acquirer's Business ID	4	8	N, BCD
63.9	Fraud Notification Data	14	3	ANS
63.10	Not applicable	13	2	ANS
63.11	Reimbursement Attribute	1	1	ANS
63.12	Sharing Group Code	30	14	ANS
63.13	Decimal Positions Indicator	3	6	N, BCD

Table 4–35: Field 63 Layout (2 of 2)

Subfield	Description	Length		Format
		Bytes	Positions	
63.14	Issuer Currency Conversion Data	36	36	ANS
63.15	Settlement Amount, Acquirer Currency Conversion Fee Allocation	9	9	ANS
63.16	Visa ImagExpress Workstation (VIEW) Station BIN Address	3	6	N, BCD
63.17	Additional Data Indicator	1	1	N, BCD
63.18	Volume-Tier Request Indicator	1	1	N, BCD
63.19	Fee Program indicator	3	1–3	AN

Usage

Field 63 is *not* used in BASE I processing. If this field is present in V.I.P. format messages, BASE I passes it to members or to SMS. The acquirer and issuer stations must be flagged to indicate that they can send or receive this field in V.I.P. format 0100 and 0400 requests and in their respective 0110 and 0410 responses. Complete field descriptions are located in the SMS POS and SMS ATM technical specifications.

Members that want to use this field must contact Visa. Certification is required.

Field 64—Message Authentication Code

Attributes

fixed length
64 N, bit string; 8 bytes

Description

Field 64 contains a Message Authentication Code (MAC) calculated by a message sender that can be recalculated by the receiver to validate the message's content. Until a standard from ISO TC68 is available, this code should be calculated using the formula given in *Financial Institution Message Authentication Wholesale—ANSI X9.9-1984*.

Usage

Field 64 is an optional field and is not supported by V.I.P. This field is included in messages only if required in bilateral agreements within a given network. If a message sender includes a MAC, the code must be placed in the last field of the message text. Its presence is indicated in the last bit of the last bit map in the message.

STIP and Switch Advices: Field 64 is present in an STIP-generated 0120 advice if it was in the request.

Field Edits

There are no field edits for field 64.

Reject Codes

There are no reject codes for field 64.

Field 68—Receiving Institution Country Code

Attributes

fixed length
3 N, 4-bit BCD (unsigned packed); 2 bytes

Description

Field 68 contains the code for the country of the receiving institution in field 100. Country codes are listed in Appendix E, Country and Currency Codes. A leading zero is required to pad the first unused half-byte of this field. The zero is a filler and is not part of the code.

Usage

Field 68 is used as follows.

Check Acceptance: Not applicable.

STIP and Switch Advices: This field is present in a STIP-generated 0120 or 0420 advice if it was in the request. It is not required in a response to the advice.

Field Edits

The code in field 68 must be one of the 3-digit numeric codes listed in Appendix E, Country and Currency Codes.

Reject Codes

Reject codes are:

0119 = Invalid value

0453 = Field missing

Field 70—Network Management Information Code

Attributes

fixed length
3 N, 4-bit BCD (unsigned packed); 2 bytes

Description

Field 70 contains a code that defines the type of network management needed:

- Network sign-on and sign-off
- “SI” mode entry and exit
- Start or stop transmitting advices
- Communication link test between a VIC and the user

Usage

Field 70 is used only in 08xx network management messages. See [Table 4–38](#) of the “Valid Values” section for valid values. A leading zero is required to pad the first unused half-byte of this field. The zero is a filler and is not part of the code.

Centers using a BASE I VAP Link process BASE I messages in BASE I or V.I.P. message formats. Use BASE I Station codes. (For a BASE I link, the line test code 301 is reserved for VIC use. Processors test the V.I.P. line by sending a normal 001 sign-on message.)

Centers using a Common Interface VAP Link process both BASE I and SMS message in V.I.P. message formats. Use Common Interface Station codes. These centers can optionally send code 301 or 071 to confirm system availability. They also can use either a BASE I or SMS message to sign on and sign off (with code 071 or 072).

CVV: Field 70 must contain 0170 in GCAS requests for new CVVs for emergency replacement cards.

CVV2: Field 70 must contain 0171 in GCAS requests for new CVV2s for emergency replacement cards.

CRIS Advices: The code is 0174. CRIS advices are always delivered online, and are the first ones delivered before the regular advices for a BIN.

AdvanceBK Alerts: Field 70 contains 173 in 0620 advices to issuers.

NOTE: *As an optional Advice Message Recovery service, issuers can choose to remain in advice recovery mode after an advice file has been emptied so they can receive their advices as BASE I creates them.*

Field Edits

Field 70 is required in all 08xx messages. The code must be one of those in [Table 4–38](#).

Reject Codes

The reject codes for field 70 are:

0042 = Invalid value

0321 = Field missing

Valid Values

[Table 4–38](#) provides the valid values for field 70.

Table 4–38: Field 70 Network Codes

Code	Station Type	Description
001	BASE I	Sign-on to V.I.P. System for BASE I processing
002	BASE I	Sign-off from V.I.P. System, terminate BASE I processing
062	BASE I or Common Interface	Enter “SI” Mode (valid in BASE I processing only)
063	BASE I or Common Interface	Exit “SI” Mode (valid in BASE I processing only)
066	BASE I or Common Interface	Prompt for next BASE I advice
068	BASE I or Common Interface	Start transmission of BASE I advices
069	BASE I or Common Interface	Stop transmission of BASE I advices (in a center-initiated message)
	BASE I or Common Interface	End of BASE I Advice File (in a VIC-initiated message)
071	Common Interface	Sign-on to the V.I.P. System, start BASE I and SMS processing
072	Common Interface	Sign-off from the V.I.P. System, terminate BASE I and SMS processing
078	Common Interface	Start transmission of both BASE I and SMS advices
079	Common Interface	Stop transmission of both BASE I and SMS advices
170	BASE I or Common Interface	GCAS-initiated CVV generation request for emergency replacement card
171	BASE I or Common Interface	GCAS-initiated CVV2 generation request for emergency replacement card
173	BASE I or Common Interface	AdvanceBK alert
174	BASE I or Common Interface	CRIS alert
301	BASE I or Common Interface	Echo test (for a BASE I station, initiated by the VIC)

Field 73—Date, Action

Attributes

fixed length
6 N, 4-bit BCD (unsigned packed); 3 bytes
format: variable

Description

Visa defines field 73 for miscellaneous dates, including file maintenance and check acceptance transaction expiration and purge dates. Dates can be up to 6 digits in the file maintenance yymmdd format, or in any format for check acceptance. Purge dates beyond 1999 are acceptable.

Usage

Format 2 File Update Requests: The date specified in field 73 determines how long the cardholder or merchant record must stay on file at the VIC, that is, the record's purge date. It is returned in the response. It is not used in a delete update or a file inquiry request. It is present in the file inquiry response only if the response code is 00.

The date format is yymmdd,

where: yy = 00–99

mm = 01–12

dd = 00–31 (when dd = 00, the VIC calculates the purge date as the last day of the month), or the value 999900 (indefinite purge date) leaves the record on file indefinitely.

Indefinite purge date 999900 is valid for the 21st century.

If field 73 is present in an 0302 file inquiry request, V.I.P. ignores it.

NOTE: *Auto-CDB lists the account for either 60 days from the date of the update or until the original expiration date for the existing account listing, whichever date is later. For account listings set to expire in less than 60 days, Auto-CDB will change the expiration date to 60 days.*

If the account is listed in either the BASE I or SMS Exception File with something other than pickup status, Auto-CDB changes the listing to pickup status.

Field 73 may also be used for dates related to private label and proprietary card transactions, when the account number is in fields 102 or 103.

Enhanced Auto-CDB Response (EAR): Field 73 is optional for replace file update requests in 0110 messages. It is not required for delete requests.

Address Verification: Address verification data may be placed permanently on file (date = 999900) and updated through A2 add, change, or replace requests. The purge date provided in a File Name C2 add, change, or replace that has both PVS and AVS data is assumed to apply to both PIN verification and address verification data. (File Name P2 must be used to assign a unique purge date to PVS data.)

When the old C2 file name or format is used, the purge dates do not apply to AVS data in the Cardholder ID File; that data stays on the file until specifically deleted by the issuer. Thus, the date in an add or change of PVS data only, or of both AVS and PVS data, must be the date desired for the PVS data. Field 73 in an add, change, or replace of AVS data only should be 999900.

0322 File Update Advices: Field 73 contains the purge date on file in the format yymmdd. It is present in the message when field 91 = 1 (add) or 2 (change). This field is not present in VisaPhone 0322 advices involving the deletion of a telecode due to excessive threshold activity.

For replaces processed by EAR, the purge date is from this field in the 0110 message, if present; otherwise the default is the current date plus 60 days. For deletes, the current date plus 10 days. This means the record remains in the file for ten days but is not used; after the ten days, it is deleted.

Check Acceptance: Whenever a check acceptance vendor requires a date (for example, the expiration date of a driver's license or the expiration date on a card used for ID) in its requests, that date must be placed in this field. The date may be in any format requested by the vendor, with lead-zero fill if needed. When no date is available at the point of sale, this field is omitted.

STIP and Switch Advices: Field 73 is present in 0120 or 0420 advices if it was in the request.

Comments

In adds and changes for records in the Exception File, Visa routinely changes the purge date entered by the issuer to coincide with the yymmdd expiration date of the Card Recovery Bulletin in effect at that time. Note that for format 2 file updates, the purge date is in this field. For format 1 file updates, the purge date is in field 127.3.

In a C2 update for the Cardholder ID File: If this field in an update to AVS data only is not set to 999900, V.I.P. ignores the value here and places 999900 in the file, or if PVS data already is present in the file, it retains the existing purge date. The value in the 0312 response is the value in the file after the update has been applied.

Field Edits

Field 73 is not edited in customer transaction-related messages.

Check Acceptance: If field 73 appears in the message, the value must be numeric.

Reject Codes

I There are no reject codes for field 73.

File Edits

Field 73 is required in a format 2, 0300 or 0302 request if field 91 is 1, 2, or for BASE I processing, if field 91 is 4. The yymmdd value must be numeric. The date cannot be expired. The following requirements apply:

- The yy positions must be 00–99.
- The mm positions must be 01–12 or 99.
- The dd positions must be 01–31.

If field 91 is 3, field 73 must be omitted.

File Maintenance Error Codes

The error codes for field 73 are:

0573 = Non-numeric character

0574 = Month is not 01–12 or the next refresh date incorrectly calculated for the F2 file

0575 = Field missing, expired date, day not valid, or date present in a delete

Field 90—Original Data Elements

Attributes

fixed length

42 N, 4-bit BCD (unsigned packed); 21 bytes

Description

Field 90 contains information for tracking the current message back to prior messages for the same cardholder transaction, for example, a reversal to an original request. This field is fixed-length with five subfields.

Positions:

1–4

5– 10

11–20

21–42

original message type	original trace number	original transaction date/time	original acquirer ID & original forwarding institution ID
Byte 1–2	Byte 3–5	Byte 6–10	Byte 11–21

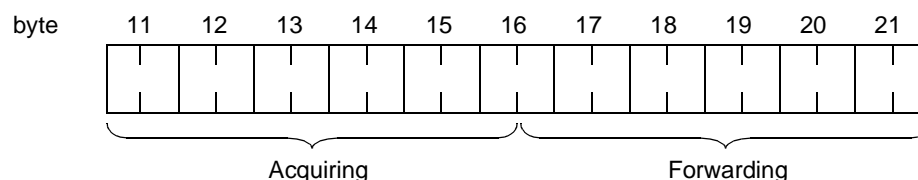
Original Message Type (Field 90.1): This subfield contains the 4-digit message type identifier from the original message for the transaction being reversed.

Original Trace Number (Field 90.2): This subfield contains the 6-digit trace number from field 11 of the original message.

Original Transmission Date and Time (Field 90.3): This subfield contains the 10-digit transmission date and time from field 7 of the original message.

Original Acquirer ID and Original Forwarding Institution ID (Field 90.4): This subfield contains 11 positions for the acquiring institution ID from field 32 of the original message, right-justified, with lead-zero-fill, and 11 positions for the forwarding institution ID from field 33 of the original message, which is right-justified, with lead zero-fill.

NOTE: *The institution ID subfields do not follow the usual rule regarding byte boundaries: each occupies 5 1/2 bytes:*



Usage

Field 90 is used in reversal requests. It is optional in reversal responses. The first subfield, the original message type, must always be provided whenever field 90 is used. The remaining subfields may be zero-filled or contain valid values.

The first subfield contains 0100 or 0101, as appropriate.

The second subfield contains the field 11 trace number from the original authorization request, or zeros if no trace number is assigned or the number assigned is unavailable.

The remainder of this field may be zero-filled.

Visa Cash: This field is used in 0100 Transaction Completion requests, and in Currency Exchange and Cash Load (linked and unlinked) reversals.

Check Acceptance: Not applicable to field 90.

STIP and Switch Advices: Field 90 is present in 0420 advices.

Field Edits

For both BASE I and V.I.P. message formats, field 90 is required in all 0400 reversal requests and the value must be numeric. It is optional in 0410 responses, but if present, the value must match that in the request.

Reject Codes

The reject codes for field 90 are:

0055 = Invalid value

0336 = Field missing

Field 91—File Update Code

Attributes

fixed length
1 AN, EBCDIC; 1 byte

Description

Field 91 contains a code that specifies the type of file processing required. See [Table 4-39](#) of the “Valid Values” section for valid codes.

Usage

Field 91 is used in 03xx format 1 and format 2 messages:

- Format 1 file inquiries for the Exception and PIN Verification: Code 5 is the only value allowed in this field of a format 1, 0302 request because field 127.1 of a format 1 file update carries the type of update code.
- Format 2 updates and inquiries for all Cardholder Database files and the Merchant Central File: If field 91 contains a 5 for inquiry requests, fields 73 and 127 are not used; if they are present, V.I.P. ignores them.

Authorization Responses With Auto-CDB or EAR Requests: Auto-CDB is performed if the issuer uses both Auto-CDB and EAR, fields 91 and 127E.1 are present in the 0110 message, and field 39 is a pickup response code.

Enhanced Auto-CDB Response (EAR): Field 91 is required in an 0110 response when the issuer wishes to update the Exception File. “Replace” and “delete” are the only valid functions.

This field is present in 0120 and 0322 file update advices and contains the code for the action taken.

For EAR file update advices, this field contains the value from the 0110 message.

Field Edits

Field 91 is required in a format 1, 0302 request if field 127 is omitted, and it is required in all format 2, 03xx requests.

Reject Codes

The reject codes for field 91 are:

0341 = Field missing

File Edits

If Field 101—File Name contains a 2-character name, the code must be one of those in [Table 4–39](#).

For 8-character file names, the code must be 5.

If the file name is I2, this code must be 2.

Enhanced Auto-CDB Response: When field 91 is present in an 0110 response (an EAR requirement), it must contain either 3 or 4. Under EAR rules, this value in an 0110 response must be valid for the value in field 39. This edit is shown in field 127E.2.

MCFS: The replace command (code 4) is not allowed.

File Maintenance Error Codes

The error codes for field 91 are:

0566 = Record already on file; cannot add

0568 = Invalid value

Valid Values

[Table 4–39](#) provides the valid values for field 91.

Table 4–39: Field 91 File Update Codes

Code	Definition	Explanation
1	Add	Add a new record only if one does not already exist.
2	Change	Change an existing record.
3	Delete	Delete an existing record.
4	Replace	Add a new record if none exists or replace an existing record if one does exist (BASE I file updates only).
5	Inquire	Send a copy of an existing record.

Field 92—File Security Code

Attributes

fixed length
2 AN, EBCDIC; 2 bytes

Description

An operator identification number. An issuer uses this field when it needs to include an operator ID in a file update or file inquiry.

Usage

Field 92 is optional in 0300 and 0302 requests. If this field is present in a request, it is returned in the 0310 and 0312 response.

Field Edits

The V.I.P. Terminal Function of a VAP places the operator ID in this field of all preauthorization, authorization, reversal, and file requests. If an authorization or reversal request with this field is routed from a BASE I acquirer to an SMS Switch, field 92 is deleted before the request is passed to the SMS issuer.

Reject Codes

The reject codes for field 92 are:

0342 = Field missing

File Edits

There are no file edits for field 92.

File Maintenance Error Codes

There are no error codes for field 92.

Field 93—Response Indicator

Attributes

fixed length
5 AN, EBCDIC; 5 bytes

Description

Field 93 contains a code that acknowledges VIC receipt of an 0800 message from a BASE I center.

Usage

Field 93 is used in all VIC-generated 0810 messages related to BASE I processing, regardless of message format used (V.I.P. or BASE I message format) and regardless of station type (BASE I or Common Interface). Field 93 does not apply to center-generated 0810 responses, that is, field 93 does not apply to the echo test response.

Field 93 is always supplied by the VIC responding to the request. It contains the value "00002," meaning that the message has been received and processed.

Field Edits

There are no field edits for field 93.

Reject Codes

There are no reject codes for field 93.

Field 95—Replacement Amounts

Attributes

fixed length
42 AN, EBCDIC; 42 bytes

Description

Field 95 contains the corrected amount of a transaction in a partial reversal. This is defined as a fixed-length field with four subfields, but only the first subfield is used.

Positions:

1–12 13–24 25–33 34–42

actual amount, transaction	unused	unused	unused
Byte 1–12	Byte 13–42		

Actual Amount, Transaction (Field 95.1): This 12-position field is used for the corrected, actual amount of the cardholder's transaction, in the transaction currency. The value is right justified, with lead zero-fill.

Actual Amount, Settlement (Field 95.2): This 12-position field is used for for the corrected, actual amount of the customer's transaction, in the settlement currency. The field, which is unused, must be zero-filled.

Actual Amount, Transaction Fee (Field 95.3): This 9-position field contains:

- A sign (C = Credit; D = Debit)
- 8 digits for the corrected, actual amount of the fee for this customer transaction, in the transaction currency. The field, which is unused, must be zero-filled.

Actual Amount, Settlement Fee (Field 95.4): This 9-position field contains:

- A sign (C = Credit; D = Debit)
- 8 digits for the corrected, actual amount of the fee for this customer transaction, in the settlement currency. The field, which is unused, must be zero-filled.

The amount in field 95 is expressed in the currency identified by Field 49—Currency Code, Transaction. The number of decimal places assumed for this field depends on the currency. Currency codes and the locations of the implied decimal place for each currency are listed in the Appendix E, Country and Currency Codes.

Usage

Field 95 is used in partial reversal messages *only*, and if present in the partial reversal 0400 request, it must be present in the 0410 response, and in any 0420 advice. The field is not present in any other reversal message. Partial reversals are allowed in non-Visa card as well as Visa card transactions.

Subfield 95.1 contains the corrected, actual amount of the cardholder transaction; that is, the amount to be posted to the cardholder's account. For example, if the amount in an initial authorization is US\$200, but the cardholder only spends US\$100, the US\$200 goes in field 4 and the US\$100 goes in field 95.

If multicurrency conversion is required, participating issuers also receive this subfield 95.1 value in subfield 61.3 as cardholder billing currency. The subfield 61.3 amount will include the Visa conversion fee and the optional issuer fee.

NOTE: *Subfield 61.3, which is inserted in a message by V.I.P., is used only when field 95.1 is present in a partial reversal and if currency conversion is necessary.*

Multiple Reversals: The field 95 replacement amount must be *less* than the original amount in field 4; otherwise, the reversal message will be rejected. Because BASE I does not retain data from previous reversals, multiple partial reversals can be processed as long as field 95 is less than field 4.

CPS: Field 95 is required in CPS partial reversal transactions except AFD and ATM transactions and 0200s to partially reverse an authorized 0100 authorization amount. In a partial authorization reversal, this field contains the corrected total amount of the authorization for the transaction. In a partial reversal of a multiple authorization, this field reflects the corrected total amount authorized.

NOTE: *Partial misdisburse ATM transactions require 0102 ATM confirmation messages.*

Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

STIP and Switch Advices: Field 95 is present in an 0420 advice if it was present in the 0400 request.

Field Edits

If field 95 is present, it must be numeric, right-justified and zero-filled in the first 12 positions. The remaining 30 positions must be filled with zeros.

A partial reversal amount cannot be greater than the original purchase amount.

Reject Codes

The reject codes for field 95 are:

0126 = Value not numeric, or the field 95 value is equal to or greater than the field 4 transaction amount.

Field 100—Receiving Institution Identification Code

Attributes

variable length
1 byte, binary +
up to 11 N, 4-bit BCD (unsigned packed); maximum: 7 bytes

Description

Field 100 is a message routing field. It contains a code identifying the institution that should receive a request or advice. This ID is used when it is not possible to route a message using the account number field in the message.

The length specifies the number of bytes following the length subfield.

Positions:

1–11

length	institution ID code
Byte 1	Byte 2–7

Length: This value specifies the number of digits in the ID code. If the ID is an odd number of digits, a leading zero is required to pad the first unused half-byte of data. Because the zero is a filler, not part of the ID code, it is *not* counted for the length subfield.

Usage

This field is not used in Visa card transactions including CPS POS or ATM transactions. It is used in 0100 check acceptance requests to identify the vendor. Members wanting to use this field in non-check acceptance processing must first coordinate field usage with Visa. The routing information in this field will supersede routing information in all other account number fields.

When applicable, field 100 is used in 0100 and 0400 POS or ATM authorization requests but not in responses or advices. It is not valid in balance inquiries or 0102 ATM confirmations.

When this field is used to route customer transaction-related messages, it typically contains a 6–11 digit Visa-assigned BIN to identify the issuer responsible for the cardholder account. If this field's value in a request is invalid (not a 6–11 digit Visa BIN eligible for incoming requests), the field 39 response code will be 15 (no such issuer).

Check Acceptance: Field 100 is used always to identify the vendor in check acceptance requests. It is not used in 0110 responses. [Table 4–40](#) shows check acceptance vendors.

Table 4–40: Check Acceptance Vendors

Vendor Code	Vendor	Routing ID
1	Not used	
2	TeleCheck	861400
3	NPC/JBS	810000
4	Equifax Card Services	894400
5	Not used	
6	ETC Scan (formerly Deluxe Data)	813500

CRIS Advices: Field 100 identifies the institution receiving the CRIS alert.

STIP and Switch Advices: Not applicable to field 100.

Field Edits

The field value including the length subfield must be numeric and cannot exceed 11 digits.

If this field is present in a 0102 ATM confirmation, the message will be rejected.

Check Acceptance: Field 100 is required in all 0100 requests. Edits are the same as for card transactions.

Reject Codes

The reject codes for field 100 are:

0082 = Invalid value

0100 = Invalid length

0334 = Field missing

Field 101—File Name

Attributes

variable length
1 byte, binary +
up to 17 ANS, EBCDIC; maximum: 18 bytes

Description

Field 101 contains a code identifying the VIC-resident cardholder or merchant file to be accessed by a file update or inquiry, and the update/inquiry request format. See [Table 4-41](#) of the “Valid Values” section for valid codes. The length specifies the number of bytes following the length subfield.

Positions:
1–17

length	file name
Byte 1	Byte 2–18

Usage

Field 101 is used for all 03xx messages. The file name determines the system file affected, the 03xx message content and the field 127 layout. File update or inquiry request format requirements are:

Either V.I.P. or BASE I format 2 message format can be used by BASE I issuers and acquirers to update any of the Cardholder Database files or the Merchant Central File.

BASE I-only message format, format 1, can be used to update the BASE I Exception File or the BASE I Cardholder ID File (previously called the PVV File). No other cardholder files can be accessed with format 1.

Enhanced Auto-CDB Response: Field 101 is optional for EAR 0110 responses. If field 101 is omitted, E2 is assumed.

0120 File Update Advices: Not applicable to field 101.

0322 File Update Advices: Field 101 contains the code for the updated file: E2 for Exception File updates, E9 for Exception File updates for Canadian issuers, or S2 for Telecode Verification File updates.

Field Edits

Field 101 is required in all 03xx messages. Length must be numeric and cannot exceed 17.

Reject Codes

The reject codes for field 101 are:

0060 = Invalid length. Length equals zero (0) or it exceeds 17.

0344 = Field missing

File Edits

The length subfield value must be 2 or 8. The field value must be from [Table 4-41](#).

Exception File Processing: Attempts to add an account number to the BASE I Exception File when the account number already exists are accepted as changes and do not result in error code 566. Attempts to change an account number on the BASE I Exception File when the number does not already exist are accepted as additions and do not result in error code 565. Attempts to delete an account number on the BASE I Exception File that does not exist results in an file maintenance error (error code 565). Attempts to add, change or delete an account number that exists on both the BASE I and SMS Exception File (“dual item check”) are processed accordingly and do not result in error code 530. Refer to Chapter 6 in the *BASE I Processing Specifications* manual for more information about the BASE I cardholder database.

File Maintenance Error Codes

The error codes for field 101 are:

0530 = Invalid file name

0538 = Invalid length (not 8 for a format 1 file)

0682 = Invalid length (not 2 for a format 2 file)

Valid Values

[Table 4–41](#) provides the valid values for field 101.

Table 4–41: Field 101 File Names

Name	Format	File
A2 ¹	Format 2	Address Verification File
C2	Format 2	BASE I Cardholder ID File: PIN Verification Data or Address Verification Data
E2	Format 2	BASE I Exception File
E3	Format 2	BASE I Exception File and SMS Exception File
E9	Format 2	BASE I Exception File (used by Canadian issuers only)
F2	Format 2	Full Authorization File
I2	Format 2	Full Authorization File Adjustment
M9	Format 2	Merchant Central File (used by Merchant Central File Service participants only)
P2 ¹	Format 2	PIN Verification File
R2	Format 2	Risk Level File
S2	Format 2	Telecode Verification File
V.CH.EXP	Format 1	BASE I Exception File
V.CH.PVF	Format 1	BASE I Cardholder ID File
D.CH.EXP	Format 1	SMS Exception File
D.CH.PVF	Format 1	SMS Cardholder ID File

¹ To update address and PIN verification data online, use File Name A2 (Format 2) for address verification data and File Name P2 (Format 2) for PIN verification data. For batch updates mailed to the VIC, the center must use File Type C2 (Format 2) for both address verification and PIN verification data. File Types A2 and P2 are valid only when batch files are transmitted to the VIC from a VAP.

Field 102—Account Identification 1

Attributes

variable length
1 byte, binary +
5–28 ANS, EBCDIC; maximum: 29 bytes

Description

Field 102 contains a number identifying an account or customer relationship in cardholder transactions. The length specifies the number of bytes following the length subfield.

Positions:
1–28

length	account identification 1
Byte 1	Byte 2–29

Check Acceptance: This field contains an identification number based on the type of identification presented, for example, a driver's license number.

Usage

Field 102 is used for proprietary or private label cardholder transactions when the account number contains alphabetic characters or is otherwise nonstandard. If the account number includes alphabetic characters, an issuer ID is required in field 121. Use of this field (and field 121) must be prearranged with Visa.

If an issuer receives its account numbers in this field and uses format 2 messages to update the Cardholder Database, this field is used in the 0302 and 0312 messages.

When field 102 is present in a POS or ATM authorization request, it must be returned in the response and must be used in all subsequent messages pertaining to the transaction. It is used in 0102 ATM confirmations but not in balance inquiries.

Issuers can optionally place a posting account number in this field in any response message, but only if the posting account differs from that in fields 2 or 103. If this is done, the acquirer has the option of returning this field as well as the account number field in any subsequent reversal.

CPS: This field does not apply to CPS POS or ATM transactions.

Check Acceptance: Field 102 is required in all check acceptance requests and responses. The customer ID (for example, a driver's license number) must be present even when a card with a standard account number is used for ID.

0322 File Update Advices: Not applicable to field 102.

STIP and Switch Advices: Field 102 is present in 0120 or 0420 advices if it was in the request.

Field Edits

If the account number is placed in field 102 in the original request, this field is required and the same account number must be used in all subsequent messages for the cardholder transaction. Special characters are allowed.

NOTE: *The number must be within one of the ranges of card numbers supported by V.I.P. Otherwise, the request will be returned with a response code of 15.*

If field 102 is present in the message, the value in the length subfield must not exceed 28.

For any message related to a customer transaction, the account number must be present in field 102 if it is not in fields 2 or 103.

Check Acceptance: Field 102 is required in all 0100 and 0110 messages.

Reject Codes

The reject codes for field 102 are:

0104 = Invalid length

0394 = Field missing

0103 = Invalid value

STIP Edits

STIP authorizations require the following field 102 edits:

- At issuer option, the account number must pass a modulus-10 check.
- The length must be one used by the issuer. This edit is done only at issuer request.
- The number must fall within one of the ranges of valid numbers for the issuer.

Decline Responses

The decline responses for field 102 are:

14 = invalid account number (check digit or length)

File Edits

When field 102 is present in a format 2 file update request:

- Length must be 5 to 28, and must be valid for the issuer's BIN.
- The account number must fall within the range of numbers used by the issuer, and must be under the control of the issuer. (An issuer may only update records for its own cardholders, not those of any other issuer.)
- For an add, the account number may not already be in the file. For a change or delete, the account number must be present in the file.
- If the account number has a check digit, that check digit must pass a modulus-10 check. This edit is done only at issuer request.

Exception File Processing: Attempts to add an account number to the BASE I Exception file when the account number already exists are accepted as changes and do not result in error code 566. Attempts to change an account number on the BASE I Exception file when the number does not already exist are accepted as additions and do not result in error code 565. Attempts to delete an account number on the BASE I Exception file that does not exist results in an file maintenance error (error code 565). Attempts to add, change, or delete an account number that exists on both the BASE I and SMS Exception file ("dual item check") are processed accordingly and do not result in error code 530. Refer to Chapter 6 in the *BASE I Processing Specifications* manual for more information.

File Maintenance Error Codes

The error codes for field 102 are:

0558 = Length not used by issuer

0564 = Invalid length for non-Visa Card (< 5 or > 28)

0565 = No record on file (change, delete, or inquiry)

0566 = Record already on file, cannot add

0570 = Invalid check digit

0571 = Account number out of issuer's range

Field 103—Account Identification 2

Attributes

variable length
1 byte, binary +
5–28 ANS, EBCDIC; maximum: 29 bytes

Description

Field 103 contains a number that identifies an account or cardholder relationship. The length specifies the number of bytes following the length subfield.

Positions:
1–28

length	account identification 2
Byte 1	Byte 2–29

Usage

Field 103 is used for proprietary or private label card transactions when the account number contains alphabetic characters or is otherwise nonstandard. If alphabetic characters are used, an issuer ID is required in field 121. Use of this field (and field 121) must be prearranged with Visa.

If an issuer receives its account numbers in this field and uses format 2 messages to update the Cardholder Database, this field is used in the 0302 and 0312 messages.

When field 103 is present in a POS or ATM authorization request, it must be returned in the response and must be used in all subsequent messages for the transaction. It is used in 0102 ATM confirmations but not in balance inquiries.

CPS: This field does not apply to CPS POS or ATM transactions.

0322 File Update Advices: Not applicable to field 103.

STIP and Switch Advices: Field 103 is present in 0120 or 0420 advices if it was in the request.

Field Edits

If the account number is placed in this field in the original request, field 103 is required and the same account number must be used in all subsequent messages for the cardholder transaction.

NOTE: *The number must be within one of the ranges of card numbers supported by V.I.P. Otherwise, the request will be returned with a response code of 15.*

If field 103 is present in the message, the length must be a numeric value between 5 and 28.

For any message related to a specific customer transaction, the account number must be present in field 103 if it is not in fields 2 or 102.

Check Acceptance: Field 103 is not allowed.

Reject Codes

The reject codes for field 103 are:

0111 = Invalid length

0112 = Invalid value

0397 = Field missing

STIP Edits

At issuer option, the account number must pass a modulus-10 check.

The length must be one used by the issuer. This edit is done only at issuer request.

Number must fall within one of the ranges of valid numbers for the issuer.

Decline Responses

The decline responses for field 103 are:

14 = invalid account number (check digit or length)

File Edits

When field 103 is present in a format 2 file update request:

- The value in the length subfield must be 5 to 28, and must be valid for the issuers BIN.
- The account number must fall within the range of numbers used by the issuer, and under the control of the issuer. (An issuer processor may only update records for its own cardholders, not for those of any other issuer processor.)
- For an add, the account number may not already be in the file. For a change or delete, the account number must be present in the file.
- If the account number has a check digit, that check digit must pass a modulus-10 check. This option is used only at issuer request.

Exception File Processing: Attempts to add an account number to the BASE I Exception File when the account number already exists are accepted as changes and do not result in error code 566. Attempts to change an account number on the BASE I Exception File when the number does not already exist are accepted as additions and do not result in error code 565. Attempts to delete an account number on the BASE I Exception File that does not exist results in an file maintenance error (error code 565). Attempts to add, change or delete an account number that exists on both the BASE I and SMS Exception File (“dual item check”) are processed accordingly and do not result in error code 530. Refer to Chapter 6 in *BASE I Processing Specifications* for more information.

File Maintenance Error Codes

The error codes for field 103 are:

0558 = Length not used by issuer

0564 = Invalid length for non-Visa Card (< 5 or > 28)

0565 = No record on file (change, delete, or inquiry)

0566 = Record already on file; cannot add

0570 = Invalid check digit

0571 = Account number out of issuer’s range

Field 104—Transaction Description

Attributes

variable length
1 byte, binary +
100 ANS, EBCDIC
total: 101 bytes

Description

This ISO-defined field contains additional billing or reporting information about transaction or message processing.

Visa: This value is a 1-character billing descriptor identifying the type of phone service used by the dial terminal to contact the VAS processor at the VIC. See [Table 4-42](#) of the “Valid Values” section for valid codes.

Usage

Field 104 is used in 0100 and 0400 dial terminal authorization requests generated by the VAS processor at the VIC for the BASE I component of V.I.P. It is never received by a BASE I issuer. This field does not apply to ATM transactions.

Check Acceptance: The usage is the same as for card transactions.

Field Edits

There are no field edits for field 104.

Reject Codes

There are no reject codes for field 104.

Valid Values

[Table 4-42](#) provides the valid values for field 104.

Table 4-42: Field 104 Phone Service Codes

Code	Definition
A	Leased-Line Service
B	WATS
C	Local Service
E	Digital Radio Network (DRN/LATA)

Attributes

Description

Positions:

 $5 - x$

length	country code	data
Byte 1	Byte 2–3	Byte 4–256

Field 118 is currently used for:

Usage 2—Korea

Field usage is optional, and must be prearranged with Visa. Depending on country specifications, it can be used in BASE I- or V.I.P.-format, card-present POS and ATM 0100 authorization requests and their responses—its presence in an authorization response is optional. If present in the original request, it is

nevertheless optional in 0400 reversal requests and their responses. It can also be used in AFD requests, ATM balance inquiries, and in 0102 ATM confirmations. It is valid for CPS and non-CPS transactions.

Because it is for national use only, the VIC forwards this field to the destination center only if both source and destination centers are in the same country.

Check Acceptance: Not applicable to field 118.

STIP and Switch Advices: Field 118 is present in 0120 and 0420 advices if it was in the 0100 and 0400 request.

Field Edits

This field is optional for the countries that use it. There is no reject if the field is not present in an original request. There is also no reject if the field was present in the original but not in a reversal, or reversal response. If the field is present, the value in the length subfield cannot exceed 255.

Reject Codes

The reject codes for field 118 are:

0144 = Invalid value

Usage 1—Japan

Attributes

variable length
1 byte, binary +
3N, 4-bit BCD (unsigned packed); 2 bytes +
up to 201 ANS, EBCDIC-K; maximum: 204 bytes

NOTE: *EBCDIC-K represents the EBCDIC 7 bit code definition for Japanese Katakana characters which are used to describe names, places and words of non-Japanese origin.*

Position numbers have been modified. Subfield 2 now occupies 2 byte positions rather than 4 nibble/half-byte positions in keeping with the remaining subfields that occupy full byte positions.

Description

Usage 1 is a private national-use field entered by acquirers and issuers in Japan for Japan-domestic (intra-country) authorizations. The subfields are:

Positions:					
1–2	3–5	6	7–19	20–25	
Subfield 1: Length	Subfield 2: Country Code	Subfield 3: Auth. Response Code	Subfield 4: Message Type	Subfield 5: Terminal ID	Subfield 6: Processing Date
Byte 1	Byte 2–3	Byte 4–6	Byte 7	Byte 8–20	Byte 21–26
26	27–28	29–33	34	35–39	40–46
Subfield 7: Entry Indicator	Subfield 8: Payment Mode	Subfield 9: Sales Slip Number	Subfield 10: Pre-approval Type	Subfield 11: Issuer Company Code	Subfield 12: Goods Code
Byte 27	Byte 28–29	Byte 30–34	Byte 35	Byte 36–40	Byte 41–47
47	48–54	55	56–81	82	83–87
Subfield 13: Separator: 22	Subfield 14: Tax Amount	Subfield 15: Separator: 22	Subfield 16: Payment Specifics	Subfield 17: Separator: 22	Subfield 18: Reserved
Byte 48	Byte 49–55	Byte 56	Byte 57–82	Byte 83	Byte 84–88
88	89–157	158	159–195	196	197–202
Subfield 19: Separator: 22	Subfield 20: JIS II Data	Subfield 21: Separator: 22	Subfield 22: Back Magnetic Stripe Data	Subfield 23: Separator: 22	Subfield 24: Authorization Authority
Byte 89	Byte 90–158	Byte 159	Byte 160–196	Byte 197	Byte 198–203
203					
Subfield 25: Separator: 22	A shaded cell means that a reserved subfield must be omitted. A field separator value of 22 is required for each optional field whether or not each optional field is present.				
Byte 204					

Length Subfield: This value is the number of bytes in the field after the length subfield.

Positions 1–2, Country Code (Subfield 2): This value is the 3-digit country code which must match that in field 19 (Japan = 0392). Use leading zero to pad subfield's first unused half-byte; it is not part of the country code.

Positions 3–5, Authorization Response Code (Subfield 3): This value is the 3-digit CAFIS error code. In 0100/0400 messages, the value is 000. Field 118, Usage 1 is used by acquirers rather than field 39. It is never used by the TP or VAP.

Position 6, Message Type (Subfield 4): This value is a 1-position value:

- Banking data = 1
- Authorization data = 2
- Authorizations from the VAP transaction processor always have the value 2.

Positions 7–19, Terminal Identification Number (Subfield 5): This value is the 13-digit JCCA number.

Positions 20–25, Processing Date (Subfield 6): This value is the 6-digit processing date in the format YYMMDD.

Position 26, Entry Indicator (Subfield 7): This value is the account number source. See [Table 4–43](#).

Table 4–43: Field 118, Usage 1 Subfield 7 Indicators

Account Number Source	Indicator
Back stripe ISO	1
Front stripe JIS II	2
Manual	3
Back stripe JIS I	4

Positions 27–28, Payment Mode (Subfield 8): This value is a 2-digit code indicating the payment method. The content of this subfield relates to subfield 16, Payment Specifics. See [Table 4–44](#).

Table 4–44: Field 118, Usage 1 Subfield 8 Payment Modes

Payment Method	Code
One-time payment	10
Bonus (one-time) payment	21, 22, 23, 24
Installment payment	61
Integrated (Bonus + Installment) payment	31, 32, 33, 34
Revolving payment	80

Positions 29–33, Sales Slip Number (Subfield 9): This value is a 5-digit number from the current transaction (purchase or reversal).

Position 34, Pre-Approval Type (Subfield 10): This value is a 1-digit number:

- 0 = Normal (authorization with amount and clearing/settlement; data capture or paper draft)
- 1 = Negative card authorization (authorization only with 0 or 1 amount)
- 2 = Reservation of authorization (authorization only with amount)

Positions 35–39, Issuer Company Code (Subfield 11): This value is a 5-digit value comprising a 1-digit business location code and a 4-digit enterprise code, or zeros if no company code. A value is required for CAFIS transactions. CAFIS interface determines the processing company code.

Positions 40–46, Goods Code (Subfield 12): This value is a 7-digit, right-justified code that identifies the merchandise.

Position 47, Field Separator (Subfield 13): This value is a required entry of 22.

Positions 48–54, Tax Amount (Subfield 14): This value is a 7-digit amount of the tax (tax amount is included in the field 4 total amount).

Position 55, Field Separator (Subfield 15): This value is a required entry of 22.

Positions 56–81, Payment Specifics (Subfield 16): This value is a variable-length, 26-digit-maximum subfield for payment information. This field is required if subfield 8, Payment Mode, is present in the message, but not if subfield 8 is 10, 21, or 80. See [Table 4–45](#) for examples.

Table 4–45: Determining Field 118, Usage 1 Subfield 16 Payment Specifics Indicator

If Payment Mode (Subfield 8) Is:	Then the Payment Specifics Indicator Is:	Bytes
22	④	2
23	⑤	2
24	④+⑤+⑤	6 max
61	①+②	4
31	①+②	4
32	①+②+③	12
33	①+②+④+⑤+⑤	10 maximum
34	①+②+④+⑤+③+⑤+③	26 maximum

[Table 4–46](#) shows field 118, Usage 1 subfield 16 payment indicator names.

Table 4–46: Field 118, Usage 1 Subfield 16 Payment Indicator Names

Indicator	Name	Length	Contents
①	First billing month	2	01–12
②	Number of payments	2	01–99
③	Bonus amount	8	00000001–99999999
④	Number of bonus payments	2	01 or 02
⑤	Bonus month	2	01–12

Payment indicators are entered one after another; for example, if the payment mode is 24, the number of Bonus Payments is 02, and the Bonus months are 01 and 03 respectively, the subfield content is: 020103.

When the number of bonus payments is 02 for codes 24 or 33, the bonus month ⑤ is entered twice, for two bonus months. When the number of bonus payments is 02 for code 34, the bonus month ⑤ and the bonus amount ③ are entered twice for two bonus months.

Position 82, Field Separator (Subfield 17): This value is a required entry of 22.

Positions 83–87, Reserved (Subfield 18): This value is a 5-digit subfield reserved for future use.

Position 88, Field Separator (Subfield 19): This value is a required entry of 22.

Positions 89–157, JIS II Data (Front Stripe) (Subfield 20): This value is a 69-digit subfield that must be present if the Entry Indicator (subfield 7) is present and contains 2. Start and end sentinel, and LRC are not included. The first position is the ID mark.

Position 158, Field Separator (Subfield 21): This value is a required entry of 22.

Positions 159–195, Back Mag Stripe Data (Subfield 22): This value is a 37-digit subfield for 0400 or 0410 reversals only that contains the back magnetic stripe data. Start and end sentinel, and LRC are not included.

Position 196, Field Separator (Subfield 23): This value is a required entry of 22.

Positions 197–202, Authorization Authority (Subfield 24): This value is a 6-digit issuer-supplied code. This subfield is used in 0410 reversal responses only.

Position 203, Field Separator (Subfield 25): This value is a required entry of 22.

Usage

Field 118, Usage 1 is used in 0100 and 0400 Japan-domestic messages when the issuer is certified to receive it. When the issuer sets the indicator to receive this field, every 0100 and 0400 message contains it. Field contents vary depending on whether the front magnetic stripe data is present in the message. Refer to the main field 118 field description's usage section for further usage information.

NOTE: *Beginning with subfield 12 (position 42), field 118's remaining length depends on the presence of any optional fields.*

For authorizations with front magnetic stripe data only, subfield 20, JIS II Data (Front Stripe) must be present in the message.

Issuers may include an additional response code in subfield 3 (positions 5 through 7).

Check Acceptance: Not applicable to field 118, Usage 1.

STIP and Switch Advices: Field 118, Usage 1 is present in an 0120 advice.

Field Edits

The value in positions 1 through 3 must be numeric. If field 118, Usage 1 is present in the message, the value in the length subfield cannot exceed 255. Refer to the main field 118 field description's edit section for further system edit information.

Reject Codes

The reject codes for field 118, Usage 1 are:

0144 = Invalid value

Usage 2—Korea

Attributes

variable length
1 byte, binary +
3N, 4-bit BCD (unsigned packed); 2 bytes +
up to 130 ANS, EBCDIC; maximum: 133 bytes

Description

Usage 2 is a private national-use field entered by acquirers and issuers in Korea for Korea-domestic (intra-country) authorizations. The subfields are:

Positions:					
1–2	3–4	5–12	13–27	28–39	
Subfield 1: Length	Subfield 2: Country Code	Subfield 3: number of installment payments	Subfield 4: local authorization number	Subfield 5: merchant ID	Subfield 6: merchant business ID
Byte 1	Byte 2–3	Byte 4–5	Byte 6–13	Byte 14–28	Byte 29–40
40–51	52–63	64–75	76–88	89	90
Subfield 7: terminal ID	Subfield 8: tax amount	Subfield 9: service charge amount	Subfield 10: merchant representative resident registration number	Subfield 11: cardholder fee indicator	Subfield 12: merchant fee indicator
Byte 41–52	Byte 53–64	Byte 65–76	Byte 77–89	Byte 90	Byte 91
91–98	99–106	107–118	119–126	127–129	130–132
Subfield 13: merchant payment date (YYYYMMDD)	Subfield 14: cardholder settlement date (YYYYMMDD)	Subfield 15: retrieval reference number	Subfield 16: cardholder payment start date (YYYYMMDD)	Subfield 17: cardholder deferred days	Subfield 18: merchant deferred days
Byte 92–99	Byte 100–107	Byte 108–119	Byte 120–127	Byte 128–130	Byte 131–133

Length Subfield: This value is the number of bytes in the field after the length subfield.

Positions 1–2, Country Code (Subfield 2): This value is the 3-digit country code which must match that in field 19 (Korea = 0410). Use leading zero to pad subfield's first unused half-byte; it is not part of the country code.

Positions 3–4, Number of Installment Payments (Subfield 3): This value is the 2-digit number of installment payments. The values are:

00 = one-time payment

02–60 = The number of installment payment months allowed (for example, 60 months)

Positions 5–12, Local Authorization Number (Subfield 4): This value is an 8-position authorization code provided by the issuer when a transaction is approved. For Korea-domestic transactions, this subfield must be used instead of field 38.

Positions 13–27, Merchant ID (Subfield 5): This value is the 15-digit merchant identification number. The subfield is right-justified with leading zeros if necessary.

Positions 28–39, Merchant Business ID (Subfield 6): This value is the merchant's 12-digit business identification. The subfield is right-justified with leading spaces if necessary. If there is no merchant business ID, space-fill the subfield.

Positions 40–51, Terminal ID (Subfield 7): This up to 12-digit value identifies the acquirer's terminal. The subfield is right-justified with leading zeros if necessary. If this subfield is not used, it is zero-filled.

Positions 52–63, Tax Amount (Subfield 8): This value is up to a 12-digit amount of the tax. The subfield is right-justified with leading zeros if necessary. The tax is included with the total transaction amount in field 4. If this subfield is not used, it is zero-filled.

Positions 64–75, Service Charge Amount (Subfield 9): This value is up to a 12-digit service charge amount. The subfield is right-justified with leading zeros if necessary. The service charge is included with the total transaction amount in field 4. If this subfield is not used, it is zero-filled.

Positions 76–88, Merchant Representative Resident Registration Number (Subfield 10): This value is up to a 12-digit number with leading zeros if necessary. If there is no value, the subfield is filled with zeros.

Position 89, Cardholder Fee Indicator (Subfield 11): This value is a 1-digit indicator. The valid values are:

0 = Installment payment fee charge from merchant

1 = Installment payment fee charge from cardholder

Position 90, Merchant Fee Indicator (Subfield 12): This value is a 1-digit indicator. The valid values are:

1 = Merchant fee charge from cardholder

2 = Merchant fee charge from merchant

Positions 91–98, Merchant Payment Date (Subfield 13): This value is the 8-digit cardholder payment date in the format YYYYMMDD.

Positions 99–106, Cardholder Settlement Date (Subfield 14): This value is the 8-digit merchant settlement date in the format YYYYMMDD.

Positions 107–118, Retrieval Reference Number (Subfield 15): This value is the 12-digit retrieval reference number from field 37 of the current purchase transaction. The subfield is right-justified with leading zeros if necessary.

Positions 119–126, Cardholder Payment Start Date (Subfield 16): This value is the 8-digit cardholder payment start date in the format YYYYMMDD. If there is no date, zero-fill the subfield.

Positions 127–129, Cardholder Deferred Days (Subfield 17): This value is the 3-digit number of days the cardholder can defer the payment start date. The subfield is right-justified with leading zeros if necessary. If there is no value, zero-fill the subfield.

Positions 130–132, Merchant Deferred Days (Subfield 18): This value is the 3-digit number of days the merchant can defer the purchase date. The subfield is right-justified with leading zeros if necessary. If there is no value, zero-fill the subfield.

Usage

Field 118, Usage 2 is used in 0100 and 0400 Korea-domestic messages when the issuer is certified to receive it. Field 19 must be 0410. Refer to the main field 118 field description's usage section for further usage information.

Check Acceptance: Not applicable to field 118, Usage 2.

STIP and Switch Advices: Field 118, Usage 1 is present in an 0120 advice.

Field Edits

The value in positions 1 through 3 must be numeric. If field 118, Usage 2 is present in the message, the value in the length subfield cannot exceed 255. Refer to the main field 118 field description's edit section for further system edit information.

Reject Codes

The reject codes for field 118, Usage 2 are:

0144 = Invalid value

Field 120—Original Message Type Identifier

Attributes

fixed length
1 byte, binary +
4 N, 4-bit BCD (unsigned packed); 2 bytes
total: 3 bytes

Description

Field 120 is a Visa-defined private-use field for message type identifiers. The length indicates the number of bytes following the length subfield.

Positions:
1–4

length	original message type ID
Byte 1	Byte 2–3

Usage

Check Acceptance: Not applicable to field 120.

0120 File Update Advices: An Auto-CDB or EAR advice contains the 0100 or 0101 of the authorization request. In other Exception File update advices, field 120 contains 0100. In a Telecode Verification File update advice, field 120 contains 0100.

0322 File Update Advices: Not applicable to field 120.

STIP and Switch Advices: Field 120 is generated by STIP, IARS, or file update processing, and is present in 0120 and 0420 advices only.

- In a STIP advice, it contains the message type of the original authorization or reversal request for which the advice was created: 0100 in an 0120 advice, and 0400 in an 0420 advice.
- For IARS advices, this field contains 0100.

Field Edits

The original message type identification must be numeric and valid.

Reject Codes

The reject codes for field 120 are:

0074 = Field invalid for message type, or field length invalid. This reject code is system-generated.

Field 121—Issuing Institution Identification Code

Attributes

variable length
1 byte, binary +
3–11 AN, EBCDIC; maximum: 12 bytes

Description

Field 121 is a Visa-defined private-use field that contains a code identifying the issuer when the issuer cannot be determined from the message's account number.

NOTE: *Because field 121 is a private-use field, the institution ID is in EBCDIC, not in 4-bit BCD as in other institution ID fields (fields 32, 33, and 100).*

The most common code length is six digits, but it can be up to 11 digits in length. The length indicates the number of bytes that follow the length subfield.

Positions:
1–11

length	issuing institution ID code
Byte 1	Byte 2–12

Usage

Field 121 applies only to Visa card account numbers that are not ISO-registered numbers (and thus may conflict with a registered number). The field is used in card transaction and format 2 file maintenance requests only after prior consultation with Visa. Allowable messages are POS and ATM authorization requests and ATM balance inquiries, their responses, and advices. The field is used in reversals if present in originals.

CPS: This field does not apply to CPS POS or ATM transactions.

Authorization request routing:

- The BIN-level option to route according to the data in this field must be set to “yes.”
- The default response code cannot be 57 (transaction not permitted to cardholder)

Check Acceptance: Not applicable to field 121.

0322 File Update Advices: Not applicable to field 121.

STIP and Switch Advices: Field 121 is present in 0120 or 0420 advices if it was in the request.

Field Edits

Field 121 is required when a card account number in fields 102 or 103 includes alphabetic characters. The length subfield value must not exceed 11. The value in this field must be numeric and must be a valid institution ID. If present in a request, this field must also be present in the response.

Reject Codes

The reject codes for field 121 are:

0128 = Invalid length

0129 = Invalid value

0401 = Field missing

File Edits

When field 121 is present in a format 2 file update request, there are no additional edits.

File Maintenance Error Codes

There are no error codes for field 121.

Field 122—Remaining Open-to-Use

Attributes

fixed length
1 byte, binary +
13 AN, EBCDIC
total: 14 bytes

Description

Field 122 is a Visa-defined private-use field that contains the amount of the cardholder's remaining open-to-use balance stored in the Full Authorization File at the VIC, expressed in whole U.S. dollars.

The first byte of this field contains a sign: "C" for a credit (positive) value or "D" for a debit (negative) value. (A negative open-to-use means that the cardholder has exceeded the open-to-use by that amount.)

The amount is in the remaining 12 bytes, right-justified, and zero-filled. The length indicates the number of bytes that follow the length subfield.

Usage

Visa places field 122 in 0120 and 0420 advices when the cardholder has spent more than half of the monthly open-to-use. The field's value reflects the open-to-use applicable to the transaction. For example, in an advice of a cash transaction, this field contains the cash open-to-use amount after that transaction has been deducted.

Check Acceptance: Not applicable to field 122.

STIP and Switch Advices: Field 122 is used in STIP-generated advices only.

Field Edits

There are no field edits for field 122.

Reject Codes

There are no reject codes for field 122.

Field 123—Address Verification Data

Attributes

variable length

1 byte, binary +

Fixed Format: up to 29 ANS, EBCDIC; maximum: 30 bytes

TLV Format: up to 255 ANS, EBCDIC; maximum: 256 bytes

Description: Record Formats

Field 123 is a Visa-defined private-use field that contains selected portions of the cardholder's postal code and street address for verification. All merchants whose acquirers subscribe to the Visa Address Verification Service may request ZIP or postal code and street address verification for a cardholder.

This field supports two International Data Standard (IDS)-compliant data formats: Fixed format, and Tag-Length-Value (TLV) Format. Refer to the Address Verification Service entry in the *V.I.P. System Services* manual for additional information.

Fixed Format

The fixed format version of this field has two subfields following the length subfield:

Positions:		
	1–9	10–29
length	Postal code	cardholder street address
Byte 1	Bytes 2–10	Bytes 11–30

Length Subfield: This value is the number of bytes in this field after the length subfield.

Positions 1–9, Postal Code: This value is the 5-digit postal or ZIP code (left-justified with 4 positions of right-space-fill), or 9-digit postal or ZIP code.

Positions 10–29, Cardholder Street Address: This subfield contains up to 20 characters of street address. The acquirer converts spelled-out numbers to digits, left-justified with right space-fill. Examples of street addresses in this standard format are:

Actual Address	Acquirer's Subfield Entry
One Elm St	1 Elm St

Actual Address	Acquirer's Subfield Entry
123 First St	123 1st St
89 25th Ave	89 25th Ave
22 Walnut St #23	22 Walnut St #23
P.O. Box 12345	P. O. Box 12345

Fixed format data can be submitted in compressed or uncompressed form.

TLV Format

The TLV format is shown below.

Positions: 1–2		3–4	5–255
Subfield 1: Length	dataset ID	dataset length	Address Data TLV elements
			<div> <div>TagLengthValue</div> <div>TLV₁</div> </div> <div> <div>TagLengthValue</div> <div>TLV_N</div> </div>
Byte 1	Byte 2–3	Byte 4–5	Byte 6–256

Length Subfield: One one-byte binary subfield that contains the number of bytes in this field.

Position 1–2, Dataset ID: A two-byte binary identifier given to each address verification dataset. The Dataset Identifier has a value of hexadecimal 66. Up to 256 possible datasets per composite data element are allowed.

Positions 3–4, Dataset Length: A two-byte binary number which gives the total length of the subsequent postal/ZIP and street address datasets. The length value is right-justified with leading zeros.

Positions 5–255, Address Verification TLV Elements: A 255-byte maximum subfield for all the postal or street address datasets. The subfield supports two datasets: Postal Code TLV is a 11-byte maximum dataset per occurrence, and the Street Address TLV is a 42-byte maximum dataset per occurrence. The datasets can be in any order. Each dataset has the following elements:

Tag: A one-byte binary value identifying the postal code or street address data set element:

Hex "C0" = Postal Code

Hex "CF" = Street Address

IAVS participants cannot send multiple elements within the same tag.

Length: A one-byte binary value indicating how many bytes of data constitute the value; for example, a TLV format's Length of 05 means that 5 bytes of postal data resides in the TLV format's Value field.

Value:

Postal Code: A 9-byte maximum, AN EBCDIC postal/ZIP code, left-justified. Postal/ZIP codes fewer than 9 alphanumeric characters in length do not require spaces. Numeric-only data is acceptable.

Street Address: A 40-byte maximum, AN EBCDIC street address, left-justified. Street addresses fewer than 40 characters in length do not require spaces. Alphabetic numbers in street addresses must be converted to numeric equivalents, for example, "twelve" is "12."

All members in all regions can use the TLV format. Non-U.S. and non-U.K. issuers and acquirers *must* use the TLV format. U.S. and U.K. acquirers can vary fixed and TLV formats from one transaction to the next depending upon merchant support requirements. V.I.P. reformats the data when a transaction involves an acquirer using one format (fixed or TLV) and the issuer using the other format, truncating data when necessary. Refer to the Address Verification Service in *V.I.P. System Services* for information on the different compression methods.

NOTE: *V.I.P. also converts issuer-generated AVS Result Codes to their appropriate counterparts when incompatible data standards are encountered. See Field 44.2, Address Verification Result Code.*

Data Compression

Compression is available *only* for Visa card transactions, not for MasterCard, American Express or Discover.

- *Uncompressed* data means that the issuer receives postal and street address data exactly as the acquirer sent it, including any non-numeric characters. Acquirers must always forward at least 20 characters of uncompressed address data unless agreements on compatible compression methods have been established between specific acquirers and specific issuers.

- *Compressed* data means that the issuer receives only numeric data, any alpha characters and special symbols in a street address have been removed. The address verification services for U.S.- and U.K.-domestic transactions matches only on numerics.

This compression option applies to postal codes *and* street addresses *except* in the U.K., where postal code compression does not apply.

Refer to the Address Verification Service in *V.I.P. System Services* for information on the Leading Numerics and First Five Numerics compression methods. For fixed format submissions, compressed data includes spaces necessary to fill out a subfield. No space-fill is required for TLV submissions. Both algorithms ignore special characters such as:

/ (forward slash)

\ (backward slash)

(number/pound sign)

- (hyphen in a hyphenated numeric; for example, 214-30)

Address verification can be requested only for Visa, Visa-approved U.S.-issuer proprietary or private label card types, American Express, Discover, or Mastercard POS transactions. STIP performs address verification for Visa, MasterCard, and proprietary and private label transactions only. Refer to the Address Verification Service in *V.I.P. System Services* for information on the service.

Usage

This field is used in card-present and card-not-present 0100 authorization requests, and in 0120 advices if the issuer elects to have it included. It is not used in responses or reversals.

If V.I.P. receives an authorization request containing field 123 for a non-AVS-valid card type, it removes the field before passing the request to the issuer. When V.I.P. receives the 0110 issuer response, it inserts a U (unavailable; issuer not an AVS participant) in Field 44.2, AVS Result Code.

Except for the U.K., acquirers can use an 0100 message to request an address verification by itself or along with an authorization request. U.K. acquirers must include address verification requests with authorization requests. The address verification result code is located in field 44.2.

U.K. Domestic Transactions: Issuer participation in AVS is optional. U.K. issuers must receive fixed format data compressed using the First Five Numerics approach, and they must perform their own address verification. BASE I routes issuer-unavailable transaction to STIP according to issuer specifications but address verification is not performed. BASE I returns a “U” in field 44.2 for the AVS result code.

U.K. acquirers may submit address data in either fixed or TLV formats:

- Address data must be in fixed format and the data must be compressed using the Leading Numerics algorithm.
- V.I.P. removes fixed format address verification data from requests bound for non-U.K. issuers.
- Address data in international transactions (U.K. merchants and acquirers to non-U.K. issuers) can be in TLV IDS format.

U.S. Domestic Transactions: Acquirers may submit uncompressed or Leading-Numerics-Only compressed street address data in either fixed or TLV formats. U.S. acquirers may also submit only the street address and postal code; the state is not required.

U.S. issuer participation in AVS is mandatory. U.S. issuers can choose to receive address data in either fixed or TLV format, and in compressed or uncompressed format. If compressed, the Leading Numerics algorithm must be used.

All Other Users: Participation by non-U.S. and non-U.K. issuers and acquirers is optional. All non-U.S. and non-U.K. members must use the TLV format. Data sent by U.S. domestic or U.K. domestic acquirers to non-U.S./U.K. issuers is converted if necessary to the TLV format.

NOTE: *Issuers performing their own address verification should elect to receive uncompressed data unless their verification approach is compatible with the Leading Numerics or First Five Numerics algorithms.*

CPS: Refer to Appendix A, CPS Program Key Field Edit Criteria, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

Check Acceptance: Not applicable.

STIP and Switch Advices: Field 123 is present in 0120 advices if it was in the request and the issuer elects to receive it, whether the issuer or the VIC performs the verification.

Field Edits

Fixed Format: If the field length exceeds 29 characters, the message is not rejected but the length is truncated to the first 29 characters. V.I.P. stops editing for numerics when any of the following are encountered:

- The first alpha character or space (not counting special characters) if within the first five numerics.
- The fifth numeric
- The end of the street address field

TLV Format: The field must be correctly formatted; otherwise, it will be rejected.

Reject Codes

Fixed Format: There are no reject codes for field 123.

TLV Format: 0137 = Invalid AVS data length

Field 124—Free-Form Text—Japan

Attributes

variable length
1 byte, binary +
up to 135 ANS, EBCDIC; maximum: 136 bytes

Description

Field 124 is a Visa-defined, Japanese domestic, private-use field for use by issuers in Japan for authorizations acquired in Japan.

Positions:
1–135

length	free form text
Byte 1	Byte 2–136

Length Subfield: This value is the number of bytes in field 124 after the length subfield.

Positions 1–135, Free Form Text: The field contains the Katakana or Roman text to be printed on the receipt. There is a maximum of 115 print characters plus a maximum of 20 nonprintable shift-in and shift-out indicators for changes to and from Katakana and alphanumeric characters. The CAFIS interface formats it with five lines of 23 printable characters, depending on the response code returned by the issuer. The field length indicator tells the terminal when the end of the text is reached.

Usage

Field 124 is used by Japanese issuers in Japan-domestic transactions only. It is optional only in no-PIN 0110 and 0410 responses; it is not used in any other message. Field 124 is valid for both BASE I or V.I.P. message formats.

Check Acceptance: Not applicable to field 124.

Field 124 is present in a 0120 advice if it was in the request and if the issuer is in Japan.

Field Edits

If field 124 is present in the message, the length subfield value cannot exceed 135.

Reject Codes

The reject codes for field 124 are:

0400 = invalid length

Field 125—Supporting Information

Attributes

variable length
1 byte, binary +
up to 255 bytes, variable by usage and subfield; maximum: 256 bytes

Description

Field 125 is a private-use field with the following usage:

- [Field 125, Usage 1—CRIS Alert, Part 2](#)
- Field 125, Usage 2—Magneprint Data (Anti-Skimming Measures)
- Field 125, Usage 3—Reserved

Usage

Field 125 format varies by usage; see the “Usage 1” description for field 125.

Check Acceptance: Not applicable to field 125.

Field 125 is present in a Switch-generated 0620 copy processing advice. This field is not applicable for STIP advices.

Field Edits

See the following Usage descriptions.

Reject Codes

See the following Usage descriptions.

Field 125, Usage 1—CRIS Alert, Part 2

Attributes

variable length
1 byte, binary +
up to 255 ANS, EBCDIC; maximum: 256 bytes

Description

CRIS alert information is present in 0620 administrative advices. The center receiving this message routes the text to a console, printer, or storage device for follow-up.

NOTE: For CRIS Alert, Part 1, See Field 48, Usage 14.

Positions:

1 2–21 22 23–24 25–100

Subfield 1: Length	Subfield 2: Field Identifier	Subfield 3: Merchant Location	Subfield 4: Track Indicator	Subfield 5: Track Length	Subfield 6: Track Data
Byte 1	Byte 2	Byte 3–22	Byte 23	Byte 24–25	Byte 26–101

101–255

unused
Byte 102–256

Length Subfield: This value is the number of bytes in field 125, Usage 1 after the length subfield.

Position 1, Field Identifier (Subfield 2): This value is “C” for CRIS alert.

Positions 2–21, Merchant Location (Subfield 3): This subfield contains alphanumeric values as follows:

Position	Description	Values
For U.S. Transactions		
2–18	City	
19	Filler	Space
20–21	State Code	See Field 59 for allowable state abbreviations.
For International Transactions		
2–18	Country Name	

Position	Description	Values
19–21	Filler	Spaces

Position 22, Track Indicator (Subfield 4): This 1-position subfield indicates whether Track 1 or Track 2 data was read at the point of sale or point of service. It should be space-filled if the transaction causing the alert passed the CVV or iCVV check. If code = 1, then Track 1 data follows. If code = 2, then Track 2 data follows.

Positions 23–24, Track Length (Subfield 5): This value is the verification length of the track data transmitted by the acquirer to Visa for the transaction causing the alert. This 2-position subfield is zero-filled if the original transaction passed the CVV or iCVV check.

Positions 25–100, Track Data (Subfield 6): This value is the transaction's Track 1 or Track 2 data for the transaction causing the alert, based on the Track Indicator. This 76-position subfield is space-filled if the original transaction passed the CVV or iCVV check.

Usage

Field 125, Usage 1 applies only to 0620 advices originated at the VIC as part of the CRIS service. It contains the second part of CRIS alert data (field 48, Usage 14, contains Part 1).

Field Edits

There are no field edits for field 125, Usage 1.

Reject Codes

There are no reject codes for field 125, Usage 1.

Field 125, Usage 2—MagnePrint Data

Attributes

variable length
1 byte, binary +
up to 255 ANS, EBCDIC; maximum: 256 bytes

Description

This field 125 usage applies to POS card-present transactions that include the Magneprint data with the magnetic stripe to prevent skimming. The field is in BER-TLV format, as shown below.

Positions			
1	2–3	4–255	
Length	dataset ID	dataset length	Magneprint TLV elements
			<div><div>TagLengthValue</div><div>TLV₁</div><div>TagLengthValue</div><div>TLV_N</div></div>
Byte 1	Byte 2	Byte 3–4	Byte 5–256

Length Subfield: One one-byte binary subfield that contains the number of bytes in this field. The maximum value is 255.

Byte 1, Dataset ID: A one-byte binary identifier given to each dataset. The identifier is 67 (hexadecimal).

Bytes 2–3, Dataset Length: A 2 digit binary number which gives the length of all data objects that follow. Maximum allowable value for Visa’s implementation of Field 125 is 256 bytes. The length value is right-justified with leading zeros.

Bytes 4–253, Magneprint TLV Elements: Each dataset comprises a tag value, length value and the Magneprint data itself. The TLV combinations can be in any order and the combinations are repeated until all the data is transmitted within the allocated byte. Tag and length values are transmitted using either 1 or 2 bytes as appropriate to accommodate a specific tag or length value. For example, a tag of 9A will be transmitted in one byte, and a tag of 9F02 will be transmitted in two bytes.

Tag: A one-byte binary value of D0 to identify Magneprint data.

Length: A one-byte binary value currently defined as a fixed length of 54 bytes.

Value: The actual Magneprint data which is currently defined as 54 bytes of binary data.

Usage

This field 125 usage applies to card-present 0100 POS authorization requests only and is sent by participating acquirers only to participating issuers. It is optional in 0400 reversal requests for card-present authorizations. If present in reversal requests, it is forwarded to the participating issuer; otherwise, it is dropped at the VIC. It is not used in responses or 0420 reversal advices.

NOTE: *A BER-TLV subelement should appear only once in the field. If an element appears more than once, the first occurrence is used in processing, although correct results cannot be ensured.*

Field Edits

Field length is edited but content is not. The field length of the Magneprint data must be 54 bytes.

Reject Codes

0715 = Incorrect data length.

0716 = Length error (TLV format)

Field 126—Visa Private-Use Fields

Attributes

1 byte, binary +
variable by field
minimum: 10 bytes
maximum: 255 bytes

Description

Field 126 is a bit-mapped, private-use field for VSEC program fields, and CVV2 services. Field 126 subfields are listed in [Table 4-47](#).

Table 4-47: Field 126 Subfields

Description	Bytes	Number of Positions	Format
Length Subfield	1	n/a	Binary
126.0 Field 126 Bit map	8	64	Bit String
126.1 through 126.5 Unused—Reserved	153	153	ANS
126.6 Cardholder Certificate Serial Number (VSEC)	17	1 + 16	Binary
126.7 Merchant Certificate Serial Number (VSEC)	17	1 + 16	Binary
126.8 Transaction ID (VSEC)	20	20	Binary
126.9 TransStain/CAVV (VSEC)	20	20	Binary
126.10 CVV2 Authorization Request Data and American Express CID Data	6	6	AN
126.11 IGOTS Transaction Description	2	2	AN
126.12 Service Indicators	3	24	Bit String
126.13 Unused—Reserved			
126.14 Payment Guarantee Option	1	1	AN

NOTE: *The services that use field 126 are mutually exclusive. Therefore, all possible field 126 subfields will never and can never be present in the same message.*

Usage

E-commerce: For Visa transactions, Field 126 is used in card-not-present 0100 authorization requests if the request contains additional security information. VSEC fields are not returned in 0110 responses.

Participating acquirers must always include appropriate VSEC subfields 126.6, 126.7, 126.8, and 126.9 in 0100 authorization requests only when submitting a VSEC 3-D Secure or SET transaction. Field 126.6 must be included if it is supplied by an issuer's certificate authority.

Visa Commerce: Field 126 is used in large-ticket e-commerce business-to-business transactions over public networks such as the Internet. Visa Commerce transactions must include field 126.14.

CVV2: The CVV2 value must be printed on the back of all Visa credit and debit cards generated after 1 January 1998, but participation in CVV2 is optional. Participating merchants enter the CVV2 values. Participating issuers must be able to accept and process the CVV2 data, and they can choose to have Visa perform CVV2 validation or not.

Field 126 is used if the 0100 authorization request contains CVV2 authorization data. This field is not returned in 0100 responses.

American Express/VisaNet Gateway: Field 126.10 contains the American Express Card Identifier (CID) and is used by Visa acquirers of American Express manually entered, card-not-present transactions to be sent to American Express through VisaNet. See the Field 126.10 field description for more information.

Check Acceptance: Not applicable to field 126.

Field 126.0—Field 126 Bit Map

Attributes

64 N, bit string, 8 bytes

Description

Field 126.0 is a bit map specifying which field 126 subfields are present.

Bit Map		Byte 1								Byte 2								Bytes 3–8
		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	
126.1 through 126.5 Unused		✓	✓	✓	✓	✓												n/a
126.6	Cardholder Certificate Serial Number (VSEC)						✓											n/a
126.7	Merchant Certificate Serial Number (VSEC)							✓										n/a
126.8	Transaction ID (VSEC)								✓									n/a
126.9	TransStain/CAVV (VSEC)									✓								n/a
126.10	CVV2 Authorization Request Data and American Express CID Data										✓							n/a
126.11	IGOTS Transaction Description											✓						n/a
126.12	Service Indicator												✓					n/a
126.13	Unused (must not be specified)													✓				n/a
126.14	Payment Guarantee Option														✓			n/a
126.15– 126.64	Unused (must not be specified)															✓	✓	n/a

Usage

Field 126.0 must be present in the message if any of the subsequent subfields are present.

Field Edits

Field 126.0 must be present in the message if any of the subfields are present. The bit switches for subfields marked as “unused” must not be present.

Reject Codes

The reject codes for field 126.0 are:

0180 = Invalid bit map

Field 126.6—Cardholder Certificate Serial Number (VSEC)

Attributes

fixed length
1 byte, binary + (number of significant digits)
16 bytes binary (32 hexadecimal digits), 17 bytes total

Description

Field 126.6 contains a value assigned to a VSEC SET cardholder certificate issued by the acquirer's certificate authority. The number's specific size and data type is not defined by the SET standard. The first byte contains the number of significant hexadecimal digits from 1 to 32. The number is right-justified and zero-filled if less than 16 bytes binary.

Usage

Field 126.6 is present in a SET 0100 authorization request and any subsequent 0400 reversal. It is not returned in 0110 or 0410 responses. Issuers must be certified to receive this field.

Field Edits

There are no field edits for field 126.6.

Reject Codes

There are no reject codes for field 126.6.

Field 126.7—Merchant Certificate Serial Number (VSEC)

Attributes

fixed length
1 byte, binary + (number of significant digits)
16 bytes binary (32 hexadecimal digits), 17 bytes total

Description

Field 126.7 contains a value assigned to a VSEC SET merchant certificate issued by the acquirer's certificate authority. The number's specific size and data type is not defined by the SET standard. The first byte contains the number of significant hexadecimal digits from 1 to 32. The number is right-justified and zero-filled if less than 16 bytes binary.

Usage

Field 126.7 is present in a SET 0100 authorization request and any subsequent 0400 reversal. It is not returned in 0110 or 0410 responses. Issuers must be certified to receive this field.

Field Edits

There are no field edits for field 126.7.

Reject Codes

There are no reject codes for field 126.7.

Field 126.8—Transaction ID (VSEC)

Attributes

fixed length
binary, 20 bytes

Description

Field 126.8 contains the VSEC transaction ID (“XID”) that is a unique number generated by the merchant server to identify the transaction. This ID is part of the TransStain (field 126.9).

Usage

Field 126.8 is present in a VSEC SET or 3-D Secure 0100 authorization request and any subsequent 0400 reversal. It is not returned in 0110 or 0410 responses. Issuers must be certified to receive this field.

CPS: For CPS/Electronic Commerce submissions, this field is required in Preferred fee program requests which require 3-D Secure encryption. The acquirer transfers the value to the request as generated by the issuer’s ACS. This field is not used in the Basic fee program.

Refer to Appendix A, CPS Processing, for CPS-specific field presence requirements, edit criteria, and possible downgrade reason codes.

NOTE: *Although field 126.8 can be included in a 3-D Secure authorization request in which a VSDC card was used for authentication purposes, field 126.8 is not considered a VSDC field, and therefore is not shown in the VSDC message format tables in Chapter 5.*

Field Edits

There are no field edits for field 126.8.

Reject Codes

There are no reject codes for field 126.8.

Field 126.9—TransStain/CAVV (VSEC)

Attributes

fixed length
binary, 20 bytes

Description

This is a multi-use field for VSEC transactions. It contains encrypted data for verification purposes depending on the Visa service involved.

Field 126, Usage 1: TransStain data for a VSEC SET transaction.

Field 126, Usage 2: CAVV data for a VSEC 3-D Secure transaction.

| Field 126.9, Usage 1—TransStain (SET)

Attributes

fixed length
binary, 20 bytes

Description

The TransStain is a 20-byte hash value calculated by applying a secure hash algorithm to the Transaction ID and CardSecret value:

- The TransStain proves the presence of the cardholder certificate in a SET transaction.
- A CardSecret is a secret SET-defined value known only to the cardholder and the issuer of the cardholder certificate.

The TransStain cannot be reproduced or copied from one transaction to another. If no cardholder certificate is present in the transaction, the TransStain is calculated using a CardSecret of zeros.

Usage

Field 126.9, Usage 1, is present in a SET 0100 authorization request and in any subsequent 0400 reversal. It is not returned in 0110 or 0410 responses. Issuers must be certified to receive this field.

Field Edits

There are no field edits for field 126.9.

Reject Codes

There are no reject codes for field 126.9.

Field 126.9, Usage 2—CAVV Data (3-D Secure™)

Attributes

fixed length

40N, 4 bit BCD (unsigned packed); 20 bytes

Description

This field usage contains the Cardholder Authentication Verification Value (CAVV) for VSEC Three-Domain Secure (3-D Secure) transactions. The CAVV is a cryptographic value calculated by the issuer's Access Control Server (ACS) using the issuer's encryption key and related elements. The CAVV value is unique to the cardholder and to the transaction that was authenticated. The acquirer transfers the ACS data to this field when preparing the VisaNet request. Visa or the issuer verifies the CAVV to ensure that the issuer's ACS authenticated the cardholder for the transaction and that its contents have not been altered.

Positions:

1	2	3	4	5
3-D Secure Authentication Results Code	Second Factor Authentication Code	CAVV Key Indicator	CAVV Value	Unpredictable Number
Byte 1	Byte 2	Byte 3	Bytes 4–5	Bytes 6–7

See description below.

6.1	6.2	6.3
Card Sequence Number	Card Verification Results	Reserved
Bytes 8–9	Bytes 10–13	Bytes 14–20

Position 1, 3-D Secure Authentication Results Code: This value is a 1-digit code indicating the result of the Issuer's Access Control Server (ACS) authentication decision. A leading zero is required to pad the first unused half-byte of the 3D Authentication Results Code.

Position 2, Second Factor Authentication Code: This value is a 2-digit code, determined by the Issuer's ACS based on the type of additional authentication performed. This value may indicate when a VSDC card is used.

Position 3, CAVV Key Indicator: This value is a 1-digit code indicating the CAVV key set used to calculate the CAVV value. A leading zero is required to pad the first unused half-byte of the CAVV Key Indicator.

Position 4, CAVV: This is a 3-digit code generated by the Issuer's ACS that may be used by the issuer to validate the authentication response during authorization. A leading zero is required in byte 4 to pad the first unused half-byte of the CAVV, for example, 0456.

Position 5, Unpredictable Number: This is a 4-digit code used by the issuer's ACS to generate the CAVV.

Position 6.1 and Position 6.2: When a 3D-Secure transaction involves another method of authentication, such as a VSDC card, the positions 6.1 and 6.2 are formatted as shown below. Otherwise, the rest of the field (byte 8–20) is filled with binary zeros. If the first digit of the Second Factor Authentication Code is 1, it indicates that a VSDC card was used and position 6 will contain the following VSDC authentication data:

Position 6.1, Card Sequence Number: This is a 3-digit code identifying the VSDC card's sequence number that distinguishes it from other cards having the same primary account number. A leading zero in byte 8 is required to pad the first unused half-byte of the Card Sequence Number, for example, 0123.

When the number of digits is less than 3 digits, zero-fill byte 8 and pad the first unused half-byte of byte 9 with a zero, for example, 0002.

Positions 6.2, Card Verification Results: This position is 4 bytes. It contains a series of card-recorded offline and online processing indicators. See Field 134.3 for specific information.

Positions 6.3, Reserved: Not used For VSDC—bytes 14–20 zero-filled.

[Table 4–48](#) is an example of field 126.9 with VSEC 3-D Secure data.

Table 4–48: Field 126.9 Example With VSEC 3-D Secure Data

Field	Value	Meaning
3-D Secure Authentication Results Code	00	Authentication successful
Second Factor Authentication Code	00	Non-VSDC card used
CAVV key Indicator	01	Key set 1 used
CAVV Output	0114	CAVV
Unpredictable Number	7993	
Card Sequence Number	0000	
Card Verification Results (CVR)	00000000	
Zero-fill	0000000000000000	

Usage

Field 126.9, Usage 2, is present in an 0100 authorization request and in any subsequent 0400 reversal if it represents a 3-D Secure transaction. It is not returned in 0110 or 0410 responses. Issuers must be certified to receive this field.

CPS/Electronic Commerce: This field must be present and the CAVV data validated in 0100 requests submitted for the Preferred fee program. It is not used in the Basic fee program.

NOTE: *Although field 126.8 can be included in a 3-D Secure authorization request in which a VSDC card was used for authentication purposes, field 126.8 is not considered a VSDC field, and therefore is not shown in the VSDC message format tables in Chapter 5.*

Field Edits

There are no field edits for field 126.9.

Reject Codes

There are no reject codes for field 126.9.

Valid Values

[Table 4–49](#) lists the valid values for field 126.9.

Table 4–49: Field 126.9 CAVV Codes (1 of 2)

Code	Definition
Position 1: 3-D Secure Authentication Results Code	
0	Authentication successful
5	Authentication could not be performed
6	ACS system error
9	Authentication failed
Position 2: Second Factor Authentication Code	
00	Not present
11	VSDC card used; cryptogram failed
12	VSDC card used; cryptogram passed
Position 3: Second Factor Authentication Code	

Table 4–49: Field 126.9 CAVV Codes (2 of 2)

Code	Definition
01	CAVV key set 1
02	CAVV key set 2

Field 126.10—CVV2 Authorization Request Data

Attributes

fixed length
6 ANS, EBCDIC, 6 bytes

Description

Field 126.10 contains CVV2 data for the card-not-present CVV2 service, and manually entered card-not-present American Express Card Identifier (CID) or MasterCard CVC2 data.

Positions:

1 2 3-6

Subfield 1: Presence Indicator	Subfield 2: Response Type	Subfield 3: CVV2 Value
Byte 1	Byte 2	Byte 3–6

Visa CVV2 Data:

Position 1, Presence Indicator: The merchant provides this code to indicate that the CVV2 value is on the card. The CVV2 valid values are:

0 = CVV2 value is deliberately bypassed or is not provided by the merchant.

1 = CVV2 value is present.

2 = CVV2 value is on the card but is illegible.

9 = Cardholder states that the card has no CVV2 imprint.

Participating merchants put a value of 1 in this position when the CVV2 value is provided. If the CVV2 value is unavailable, illegible, or missing from the card, the merchant must use the value 0, 2, or 9. The value 9 alerts the issuer to validate that the card was issued without the CVV2 value imprinted on it because of possible fraud activity. This position must contain one of the values referred to above.

Position 2, Response Type: The merchant provides this code to indicate the type of response to be returned. The valid values are:

0 = Only the normal response code in field 39 should be returned.

1 = The normal response code in field 39 and the CVV2 result in field 44.10 should be returned.

V.I.P. uses 0 (zero) as a default value when the response type is not 0 or 1.

Positions 3–6, CVV2 Value: This value is the 3-digit value on the back of the Visa card in a unique, reverse italic font. The value helps detect fraud in non-PIN-based transactions. This subfield is right-justified and filled with blanks.

MasterCard CVC2 or American Express CID Data:

Position 1, Presence Indicator: Not used, filled with zeros.

Position 2, Response Type: Not used, filled with zeros.

Positions 3–6, CID Code: The value is a 3-digit MasterCard CVC2 or American Express CID value that appears on their respective cards.

Usage

Visa: Field 126.10 is present in a card-not-present 0100 authorization request. It is not returned in 0110 responses. CVV2 results are returned in field 44.10. Issuers must be certified to receive this field. For nonparticipating issuers, Visa will remove this field from the request before forwarding it to the issuer.

NOTE: *The card expiration date is used to determine which key set, if any, is used for validation.*

CPS/Account Funding: This field must be present in the request. The value must be 1, 2, or 9 (downgrade reason code PI).

MasterCard and American Express: This field is present in manually entered, card-not-present authorization requests. It is not returned in responses.

MasterCard: If present in a Visa-format authorization request for a MasterCard issuer, V.I.P. transfers the CVC2 value to data element 48, subelement 92, in the MasterCard format authorization message. The result code in field 44.10 of the response is transferred to MasterCard DE 48, subelement 87.

American Express: If this field is present in a Visa-format authorization request for an American Express issuer, V.I.P. transfers the 4-digit CID value to field 53 in the American Express format authorization message, along with inserting an S in American Express field 22, byte 7. If this field in the request contains hex zeros or spaces, or if Track 1 or Track 2 magnetic data is present, V.I.P. removes it. The American Express code in a response is converted to a corresponding Visa code before the message is forwarded to the acquirer.

Field Edits

Visa: If field 126.10 is present in the message, the value in position 1 must be 0, 1, 2, or 9.

Reject Codes

0148 = Invalid value (position 1 not equal to 0, 1, 2, or 9)

Field 126.11—IGOTS Transaction Description

Attributes

fixed length
2 AN, EBCDIC; 2 bytes

Description

This field contains the IGOTS (Intra-Government Transfer System) Transaction Description that a participating acquirer passes to a participating issuer. IGOTS is part of the Visa Commercial Card Large-Ticket program.

Usage

Field 126.11 is used in 0100 POS authorization requests. It is not used in responses. It is not used in reversals. If present in requests, it is present in 0120 advices.

If this field is present in a request from a participating acquirer, the merchant category code in field 18 must be 9405, and field 4 amount must be US\$10 million or below.

Issuers must be certified to receive this field. For participating issuers, if field 126.11 contains all zeros, V.I.P. drops it before forwarding the request to the issuer. For nonparticipating issuers, V.I.P. will remove this field from the request before forwarding it to the issuer.

Field Edits

| The value in this field must be alphanumeric. The entry must be A–Z, 0–9, or a space (hex '40'). Otherwise, the field is dropped.

Reject Codes

There are no reject codes.

Field 126.12— Service Indicators

Attributes

fixed length
24 N, Bit string, 3 bytes

Description

Field 126.12 is a Visa private-use Service Development field for the U.S. region. Members must be certified to send and receive this field in its entirety whether or not they participate in any of its service applications. Its current uses are:

- **Transponder Indicator:** To identify participating member transactions that use radio frequency (RF) devices to exchange information in certain attended and unattended environments. This usage also supports MasterCard and American Express transponder-based transactions.
- **Relationship Participant Indicator:** To identify transactions originating from merchants participating in the Visa U.S.A. Relationship Manager Service that regularly collect recurring payments from customers.
- **Deferred Billing:** To identify transactions from participating U.S. region members that use deferred billing. Participating and nonparticipating acquirers may include the field in requests. The field is dropped from messages sent to nonparticipating issuers.

Positions:

1	2	3	5–24
Transponder Indicator	Relationship Participant Indicator	Deferred Billing Indicator	Reserved
Byte 1	Byte 2	Byte 3	

Position 1, Transponder Indicator: This code is provided by the merchant. The valid Transponder Indicator values are:

0 = Not provided

1 = Transponder Initiated

Participating merchants put a value of 1 in this position when a transponder was used at the point of service. This also applies to MasterCard.

Position 2, Relationship Participant Indicator: This code is provided by the merchant. The valid Relationship Participant values are:

0 = Not provided

1 = Relationship Participant

A value of 1 indicates that the merchant and acquirer are service participants.

Position 3, Deferred Billing Indicator: This code is provided by the merchant through U.S. region acquirers to indicate that a Visa card transaction is to be billed on a deferred basis, that is, the cardholder is to be billed for merchandise already received. The valid Deferred Billing Indicator values are:

0 = Not provided

1 = Deferred Billing Transaction

The Deferred Billing Indicator is valid only for Visa card products. The field will be dropped from MasterCard, American Express, On-Us Payment, Account Verification, ATM Confirmation, Check Acceptance, and Visa Cash Load transactions.

Position 4–24, Reserved: This position is set to all zeros.

Usage

Depending on field content, for participating members, field 126.12 is present in 0100 and 0400 requests and their responses. It is also present in 0102 confirmations, 0120 STIP advices, and 0420 reversal advices. Issuers must be certified to receive this field regardless of usage. If field 126.12 contains all zeros, or if the message is destined for a nonparticipating issuer, V.I.P. drops it before forwarding the request.

This field can contain more than one indicator in a message with the unused positions filled with zeros. For example, in a single request, this field could contain a Transponder Indicator and a Deferred Billing Indicator. In this case, the Transponder Indicator would be in position 1, position 2 would be a zero, the Deferred Billing Indicator would be in position 3, and positions 4–24 would be zeros.

MasterCard—Transponder Indicator: If present in a V.I.P. request, the value of 1 is converted to a value of 7 for DE 61, position 10, in the MasterCard-equivalent message.

Field Edits

There are no edits.

Reject Codes

There are no reject codes.

Field 126.14—Payment Guarantee Option Indicator

Attributes

fixed length
1AN, EBCDIC; 1 byte

Description

Field 126.14 is a Visa private-use Visa Commerce field. It is used to indicate whether the seller requires a payment guarantee as a precondition to filling the order. The valid values are shown in [Table 4–50](#).

Usage

For participating members, field 126.14 is required in 0100 authorization and 0400 reversal requests and related 0120 and 0420 STIP advices. The field is not present in responses.

Field Edits

This field must be present in a Visa Commerce e-commerce request (criteria includes acquirer and issuer being participants, field 25 = 59, field 60.8 = a valid e-commerce indicator). The value must be 1 or 2. If the field is present in a response, it is dropped at the VIC.

Reject Codes

0176 = Payment guarantee option missing.

0177 = Payment guarantee option invalid.

Valid Values

[Table 4–50](#) provides the valid values for field 126.14.

Table 4–50: Field 126.14 Payment Guarantee Options

Value	Option	Description
1	Open Account/Open Trade	The seller does not require a payment guarantee as a precondition for filling the order.
2	Payment Guarantee Trade	The seller does require a payment guarantee as a precondition for filling the order.

Field 127—File Record(s)—Action and Data

Attributes

variable length

1 byte, binary + up to 255 bytes, variable by subfield; maximum: 256 bytes

Description

Field 127 is a multipart, private-use field used to maintain and display records in the Cardholder Database and the Merchant Central File. It is used in these messages:

- 0300–0310 and 0302–0312 file maintenance messages
- 0110 EAR authorization responses
- 0322 file update advices for Visa-initiated file updates, and Enhanced Auto-CDB updates

Field use in file maintenance requests and responses depends on the file accessed, within two basic concepts for file access.

Format 1 File Maintenance: This format is used for the BASE I Exception File and the BASE I PIN Verification File.

Format 1 is for 0302–0312 messages that permits an issuer to update or display records in only the BASE I Exception File or the BASE I PIN Verification File. It may be used to process the listing of exception accounts or PIN verification data for 13- and 16-digit Visa and MasterCard account numbers.

Format 2 File Maintenance: This format is used for the BASE I Exception, Address Verification, Full Authorization, Merchant Central, PIN Verification, Telecode, and Risk Level Files.

Format 2 is the preferred file processing method. It is used for 0300 or 0310 and 0302 or 0312 messages that permit an issuer to update or display any issuer-maintained file in the BASE I Cardholder Database and permits an acquirer to maintain the Merchant Central File.

Format 2 may be used to process any type of account number, supporting exception and PIN verification listings, address verification, risk level and activity limit assignment, and full authorization processing. It also allows non-U.S. issuers access to expanded CRB subregion coding.

NOTE: *Third-party processors must use format 2.*

The format (format 1 or format 2) selected by a user determines which fields are required in the 030x file update request messages, and determines how this field is divided into subfields. Each subfield for each possible type of 03xx request and response message is described on the following pages. Format 1 subfields are discussed first, followed by format 2 subfields.

In 0322 advices, format 2 layout applies.

NOTE: *A file inquiry has a “successful response” if the field 39 response code = 00.*

Effective Date/Time for Records: The Greenwich mean date and time (GMT) when the record goes into effect. It is determined by the record update method used:

Online method—The effective time is the date and time the message is received at the VIC. This applies to both adding records and deleting records.

Batch method—The effective time is the issuer's date and time specified in the tape header (for example, the tape creation date and time). The update time is not changed by the delete operation of an existing record; that is, after the delete is processed, the ZBDCH card # display will show the “add” system time as the update time.

NOTE: *Refer to the Cardholder Database Service description in V.I.P. System Services for more information about updating methods.*

Update Date/Time for Records: Update time is a system-generated “time stamp” indicating the date and time a record was established. Update time is not visible to users, but is available to Visa for research and settling chargeback disputes. Update time is automatically generated when a negative (decline or referral) or pickup record is first entered in the file, and when a VIP (Very Important Person) or XA code in an existing record is changed to a negative or pickup code.

For the Exception File, update time refers to the first date and time the file is updated with an action code other than an approval, that is, nonapproval codes 01, 04, 05, 07, 41, and 43. This date and time is kept and is not changed during subsequent updates as long as the action code is not an approval. For file types other than Exception file types, the update time date reflects the date and time of the last record update.

Field 127—Format 1, File Maintenance

Attributes

variable length
1 byte, binary + up to 255 bytes
variable by subfield; maximum: 256 bytes

Description

This section describes format 1 requirements for this field, as used to update or review the BASE I Exception File and the BASE I PIN Verification File. Format 2 requirements immediately follow field 127.PVV5.

IMPORTANT

File format 2 is the preferred format for file updates.

For format 1, field 127 has multiple subfields, which can recur. It is designed to contain one or more sets of account data and is required to add, change, or delete records in the Exception File and PIN Verification File. The file affected is identified in field 101 (File Name).

The information in an account set depends on the file name. See [Figure 4-1](#). This figure also illustrates how one 0302 message can be used to update several file records by including multiple account sets in field 127.

Descriptions of the data subfields for format 1 updating follow the figure, in data field order within file type. Note that the field numbers by which these subfields are known are in this format:

“127”
+ a decimal point
+ an alpha identifier derived from the file name if the field applies to only one file,
+ the sequence number of the subfield
Subfield file name

For example, the first subfield for either file is labeled “Field 127.1” and the first subfield unique to updating the Exception File is labeled “Field 127.EF4.”

The length specifies the number of bytes after the length subfield.

Usage

At least one account set must be present in field 127 for each 0302 update request. Multiple sets can be present as long as they are for the same file and BIN. Field 127 is not present in the 0312 response to a file update.

Field 127, format 1 is not used in an 0302 file inquiry request, which asks for a single account number record already in a file at a VIC. It is present, with one account set, in the 0312 response to the inquiry request.

NOTE: *This field cannot be included in a file inquiry request (Field 91 = 5). File inquiries require the account number in field 2 and the file update code (5) in field 91. Field 127 includes the PVV or exception file data in the response.*

Field Edits

Field 127, format 1 is required in all 0302 file update requests.

Length cannot exceed 255.

Reject Codes

The reject codes for field 127, format 1 are:

0075 = Invalid length (exceeds 255)

0399 = Field missing

0518 = Invalid field in message

File Edits

For a format 1 file update request:

- The center sending the file request must be the center that is responsible for the cardholder account number.
- With a PIN Verification File update, length must equal an integral number of updates.

File Maintenance Error Codes

The error codes for field 127, format 1 are:

0564 = Invalid length (not integral number of updates)

0568 = Field 127 invalid in a file inquiry request; and fields 2 and 91 are missing

0572 = Account number does not belong to update source (center is not the one responsible for the record)

Figure 4–1: Field 127 Format 1 Layout

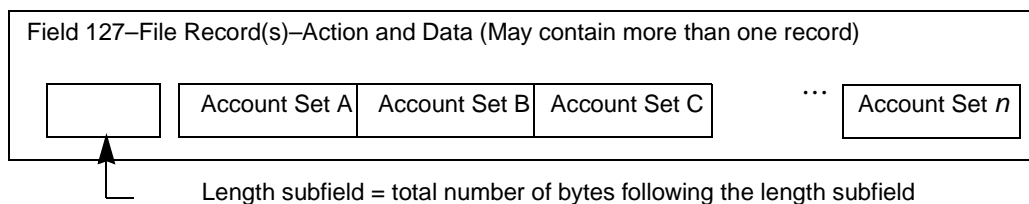
One “account set” for the Exception File
File Name V.CH.EXP

127.1	127.2	127.3	127.EF4	127.EF5	127.EF6
File Update Code	Account Number	Purge Date	Designated Action Code	Region Coding	Filler

One “account set” for the PIN Verification File
File Name V.CH.PVF

127.1	127.2	127.3	127.PVV4	127.PVV5
File Update Code	Account Number	Purge Date	Algorithm Identifier	Security Data

Use of Field 127 for multiple sets of account data



Field 127.1—Format 1, File Update Code

Applies to

Exception File (Field 101—File Name = V.CH.EXP)
PIN Verification File (Field 101—File Name = V.CH.PVV)

Attributes

fixed length, 1 byte
1 AN, EBCDIC

Description

Field 127.1, format 1 contains a code that specifies the type of file processing to be performed. Update codes are listed in [Table 4-50](#).

Usage

Field 127.1, format 1 is used in all format 1, 0302 file update requests, with code 1, 2, or 3. It is not returned in the response. It is not used in a format 1 file inquiry request. It is present in a successful 0312 response, where the code is 5.

Comments

Format and coding specifications for this field match those in field 91.

File Edits

Field 127.1, format 1 must be present in a format 1, 0302 file update request. The code must be 1, 2, or 3.

Exception File Processing: Attempts to add an account number to the BASE I Exception File when the account number already exists are accepted as changes and do not result in error code 566. Attempts to change an account number on the BASE I Exception File when the number does not already exist are accepted as additions and do not result in error code 565. Attempts to delete an account number on the BASE I Exception File that does not already exist results in an file maintenance error (error code 565). Attempts to add, change or delete an account number that already exists on both the BASE I and SMS Exception File (“dual item check”) are processed accordingly and do not result in error code 530. Refer to Chapter 6 in *BASE I Processing Specifications* for more information.

File Maintenance Error Codes

The error codes for field 127.1, format 1 are:

0566 = Record already on file

0568 = Invalid value. This error code also occurs if a file inquiry (field 127.1 = 5) is attempted but fields 2 and 91 are missing from the request.

Valid Values

[Table 4–50](#) provides the valid values for field 127.1, format 1.

Table 4–50: Field 127, Format 1 File Update Codes

Code	Definition	Explanation
1	Add	Add a new record only if one does not already exist.
2	Change	Change an existing record.
3	Delete	Delete an existing record.
5	Inquire	This code is returned in field 127.1, format 1 when a file inquiry is performed. It is not allowed in an 0302 request.

Field 127.2—Format 1, Account Number

Applies to

Exception File (Field 101—File Name = V.CH.EXP)
PIN Verification File (Field 101—File Name = V.CH.PVV)

Attributes

1 byte, binary +
13 N, 4-bit BCD (unsigned packed); 8 bytes total
or 16 N, 4-bit BCD (unsigned packed); 9 bytes total

Description

Field 127.2, format 1 contains its own length subfield and a number identifying the account being processed with respect to stand-in authorization or PIN verification. The length specifies the number of account number digits.

Usage

Field 127.2, format 1 is used in all format 1, 0302 file update requests. It is not returned in the responses. It is not used in a format 1 file inquiry request. It is present in a successful 0312 response. Format 1 may be used only to process 13-digit and 16-digit Visa and MasterCard account numbers.

If the account number contains 13 digits, a leading zero is required to pad the first unused half-byte of data. Because the zero is a filler, not part of the account number, it is not counted for the length subfield. When an 0302 message contains updates for multiple account numbers, all numbers must be present in the same file and within the same issuer BIN.

File Edits

Field 127.2, format 1 must be present in a format 1, 0302 file update request. The length must be 13 or 16 digits and the length must be valid for the issuer. The account number must be numeric and must modulus-10 check.

Exception File Processing: Attempts to add an account number to the BASE I Exception File when the account number already exists are accepted as changes and do not result in error code 566. Attempts to change an account number on the BASE I Exception File when the number does not already exist are accepted as additions and do not result in error code 565. Attempts to delete an account number on the BASE I Exception File that does not already exist results in an file maintenance error (error code 565). Attempts to add, change or delete an account number that already exists on both the BASE I and SMS Exception File (“dual item check”) are processed accordingly and do not result in error code 530. Refer to Chapter 6 in *BASE I Processing Specifications* for more information.

File Maintenance Error Codes

The error codes for field 127.2, format 1 are:

0531 = Invalid length: Visa not 13 or 16; MasterCard not 16

0565 = No record on file (change, delete or inquiry)

0566 = Record already on file

0569 = Non-numeric character

0570 = Invalid check digit

0571 = Invalid account number (not in issuer's range of valid account numbers)

Field 127.3—Format 1, Purge Date

Applies to

Exception File (Field 101—File Name = V.CH.EXP)
PIN Verification File (Field 101—File Name = V.CH.PVV)

Attributes

fixed length, 2 bytes
4 N, 4-bit BCD (unsigned packed)
format: yymm

Description

Field 127.3, format 1 contains a date in yymm format indicating the year and month through which the file data is valid. A purge date beyond 2000 is valid.

Usage

Field 127.3, format 1 is used in all format 1, 0302 file update requests. A valid date is needed for an add or change, but not for a delete, where the field should be zero-filled. The field is not returned in the responses. It is not used in a file inquiry request. It is present in a successful 0312 response.

Do-Not-Purge Dates: If an issuer wants to place a record in the file indefinitely, including into the twenty-first century, the dates 9999 or 9912 can be used. The 9912 date cannot be used as a 12/31/99 purge date. To compensate for this, issuers should use 99/11 or 00/01.

Comments

In adds and changes of Exception File records, Visa converts the yymm value to a yymmdd date that coincides with the expiration of the Card Recovery Bulletin in effect at that time. This conversion occurs because V.I.P. assumes a yymm date to mean the data is valid through the entire month. For example, 9910 (October 1999) would use the CRB issue which includes 31 October 1999. The applicable bulletin is effective 25 October through 7 November. Thus, the purge date is 991107 (7 November 1999).

File Edits

Field 127.3, format 1 must be present in a format 1, 0302 request if field 127.1 is 1 (add) or 2 (change). It is optional if field 127.1 is 3 (delete). In an add or change, this field must contain an unexpired yymm date where yy = 00–99, and mm = 01–12.

If this field is present in a delete, the value must be zeros or a valid yymm date.

Exception File Processing: Attempts to add an account number to the BASE I Exception File when the account number already exists are accepted as changes and do not result in error code 566. Attempts to change an account number on the BASE I Exception File when the number does not already exist are accepted as additions and do not result in error code 565. Attempts to delete an account number on the BASE I Exception File that does not already exist results in an file maintenance error (error code 565). Attempts to add, change or delete an account number that already exists on both the BASE I and SMS Exception File (“dual item check”) are processed accordingly and do not result in error code 530. Refer to Chapter 6 in *BASE I Processing Specifications* for more information.

File Maintenance Error Codes

The error codes for field 127.3, format 1 are:

0573 = Non-numeric character

0574 = Invalid month

0575 = Subfield missing, expired date in an add or change. Error 0575 is issued because the purge date is before the current date, or the purge date is not present in an add, change or replace.

Field 127.EF4—Format 1, Action Code

Applies to

Exception File (Field 101—File Name = V.CH.EXP)

Attributes

fixed length, 2 bytes
2 ANS, EBCDIC

Description

Field 127.EF4, format 1 contains a code specifying the response or special handling required by the issuer when the VIC performs stand-in authorization. The codes that can be used in this field are the same as those in field 127E.1 for format 2 updates.

Usage

Field 127.EF4, format 1 is used in all format 1, 0302 file update requests for the Exception File. A valid code is needed for an add or change, but not for a delete, where the field should be space-filled. The field is not returned in the responses. It is not used in a file inquiry request. It is present in a successful 0312 response.

File Edits

Field 127.EF4, format 1 must be present in a format 1, 0302 request if field 101 is V.CH.EXP and field 127.1 is 1, 2, or 3.

In an add or change:

- The code must be valid.
- Code 01 (referral) is not allowed for an Electron account listing.

In a delete, the value in this field can be spaces or a valid code.

Exception File Processing: Attempts to add an account number to the BASE I Exception File when the account number already exists are accepted as changes and do not result in error code 566. Attempts to change an account number on the BASE I Exception File when the number does not already exist are accepted as additions and do not result in error code 565. Attempts to delete an account number on the BASE I Exception File that does not already exist results in an file maintenance error (error code 565). Attempts to add, change or delete an account number that already exists on both the BASE I and SMS Exception File (“dual item check”) are processed accordingly and do not result in error code 530. Refer to Chapter 6 in *BASE I Processing Specifications* for more information.

File Maintenance Error Codes

The error codes for field 127.EF4, format 1 are:

0576 = Invalid value

Field 127.EF5—Format 1, Region Coding

Applies to

Exception File (Field 101—File Name = V.CH.EXP)

Attributes

fixed length, 9 bytes
9 ANS, EBCDIC

Description

Field 127.EF5, format 1 contains one or more CRB region codes, defining the distribution of a Visa cardholder account number in Card Recovery Bulletin Service files and bulletins. The codes in this field are the same as those in Field 127E.2 of format 2 updates.

Usage

Field 127.EF5, format 1 is used in format 1, 0302 file update requests for the Exception File. It is needed in every add or change request; but not in a delete, where the field should be omitted. The field is not returned in the responses. It is not used in a file inquiry request; it is present in a successful 0312 response.

This field contains one or more valid codes whenever the action code in an update request is a pickup code. Otherwise, it contains all spaces. (If an update is received at the VIC with a region code that is not a pickup code, that update is accepted but the region coding is ignored.) When more than one region code is placed in this field, spaces can be used to separate them, although V.I.P. ignores them.

Field Edits

Field 127.EF5, format 1 must be present in a format 1 0302 request if field 101 is V.CH.EXP and field 127.1 is 1, 2, or 3. In an add or change, at least one valid region code is required if the action code is 04, 07, 41, or 43 (a pickup response code); and codes must be 0–9, A–F, or X–Z, left-justified and right space-filled.

In a delete, this field can be spaces or valid codes.

Exception File Processing: Attempts to add an account number to the BASE I Exception File when the account number already exists are accepted as changes and do not result in error code 566. Attempts to change an account number on the BASE I Exception File when the number does not already exist are accepted as additions and do not result in error code 565. Attempts to delete an account number on the BASE I Exception File that does not already exist results in an file maintenance error (error code 565). Attempts to add,

change or delete an account number that already exists on both the BASE I and SMS Exception File (“dual item check”) are processed accordingly and do not result in error code 530. Refer to Chapter 6 in *BASE I Processing Specifications* for more information.

File Maintenance Error Codes

The error codes for field 127.EF5, format 1 are:

0577 = Invalid code

0578 = Invalid spaces (action code is a pickup code)

Field 127.EF6 I—Format 1, Filler

Applies to

Exception File (Field 101 File Name = V.CH.EXP)

Attributes

4 N, 4-bit BCD (unsigned packed)
fixed length, 2 bytes

Description

Field 127.EF6 I, format 1 contains 4 digits of zero-fill.

Usage

Field 127.EF6 I, format 1 is used in all format 1, 0302 file add, change, and delete requests for the Exception File. The field is not returned in the responses. It is not used in a file inquiry request. It is zero-filled in a successful 0312 response.

File Edits

Field 127.EF6 I, format 1 must be present in a format 1, 0302 request if field 101 is V.CH.EXP and field 127.1 is 1, 2, or 3. The value must be zeros.

Exception File Processing: Attempts to add an account number to the BASE I Exception File when the account number already exists are accepted as changes and do not result in error code 566. Attempts to change an account number on the BASE I Exception File when the number does not already exist are accepted as additions and do not result in error code 565. Attempts to delete an account number on the BASE I Exception File that does not already exist results in an file maintenance error (error code 565). Attempts to add, change or delete an account number that already exists on both the BASE I and SMS Exception File ("dual item check") are processed accordingly and do not result in error code 530. Refer to Chapter 6 in *BASE I Processing Specifications* for more information.

File Maintenance Error Codes

The error codes for field 127.EF6 I, format 1 are:

0581 = Invalid value

Field 127.PVV4—Format 1, Algorithm Identifier

Applies to

PIN Verification File (Field 101—File Name = V.CH.PVV)

Attributes

fixed length, 1 byte
2 N, 4-bit BCD (unsigned packed)

Description

Field 127.PVV4, format 1 contains a code that identifies the algorithm used by the issuer to verify the customer PIN. See [Table 4-51](#) of the “Valid Values” section for valid codes.

Usage

Field 127.PVV4, format 1 is used in all format 1, 0302 file update requests for the PIN Verification File. A valid code is needed for an add or change, but not for a delete, where the field should be zero-filled. The field is not returned in the responses. It is not used in a file inquiry request. It is present in a successful 0312 response.

File Edits

Field 127.PVV4, format 1 must be present in a format 1, 0302 request if field 101 is V.CH.PVV and field 127.1 is 1, 2, or 3.

In an add or change, this code must be 01 or 04.

In a delete, this field can be zeros or a valid code.

File Maintenance Error Codes

The error codes for field 127.PVV4, format 1 are:

0582 = Invalid value

Valid Values

[Table 4–51](#) provides the valid values for field 127.PVV4, format 1.

Table 4–51: Field 127. PVV4 PVV Algorithm Identifier

Code	Definition
01	Visa PVV Method
04	IBM PIN Offset

Field 127.PVV5—Format 1, Security Data

Applies to

PIN Verification File (Field 101—File Name = V.CH.PVV)

Attributes

fixed length, 10 bytes
20 N, 4-bit BCD (unsigned packed)

Description

Field 127.PVV5, format 1 contains a PVKI and a verification value. This verification value is either a Visa PVV or an IBM PIN offset.

Position 1, PVKI: The first half-byte of this field contains a 1-digit PIN Verification Key Index (PVKI). If the verification value is a Visa PVV, the PVKI is a value between 1 and 6, indicating which of six possible pairs of PIN Verification Keys was used by the card issuer to generate the PVV. If the verification value is an IBM PIN offset, the PVKI must be 1, representing the single key used to create the offset.

Positions 2–5, Verification Value: The second half-byte through the first half of byte 3 of this field contains a 4-digit PIN Verification Value (PVV) or PIN Offset Value. This value is derived by the card issuer using either the Visa PVV method or the IBM PIN offset method. The verification value is calculated using the account number, the PIN, and, depending on method, other data such as the PVKI, one or more PIN Verification Keys, and a decimalization table. To verify a PIN in an authorization request, the verification value is first recalculated using information from the message, and then is compared to the value on file.

Positions 6–20, Fill: The second half of byte 3 through byte 10 of this field contain 15 digits of a filler (zeros).

Usage

Field 127.PVV5, format 1 is used in all format 1, 0302 file update requests for the PIN Verification File. Any add or change request must include a valid code. The field is zero-filled for deletes. The field is not returned in the responses.

This field is not used in a file inquiry request. It is present in a successful 0312 response.

File Edits

Field 127.PVV5, format 1 must be present in a format 1, 0302 request if field 101 is V.CH.PVV and field 127.1 is 1, 2, or 3.

In an add or change:

- The PVKI for a PVV must be between 1 and 6.
- The PVKI for an offset must be 1. The verification value must be a 4-digit numeric.

In a delete, this field may be zeros or contain valid values.

File Maintenance Error Codes

The error codes for field 127.PVV5, format 1 are:

0583 = Invalid PVKI

0584 = Non-numeric PIN verification value

Field 127—BASE I Format 2, File Maintenance

Applies to

Cardholder ID File (Field 101—File Name = C2)

Attributes

1 byte, binary +
up to 255 bytes, variable by subfield
maximum: 256 bytes

Description

This section describes format 2 requirements for field 127, as used to update or review records in the BASE I Address Verification, Exception, Cardholder ID, Full Authorization, PIN Verification, Risk Level, and Telecode Verification Files, and in the Merchant Central File.

IMPORTANT

Format 2 is preferred over format 1.

For format 2, field 127 has multiple subfields for some of the data needed in an 0300 or 0302 request¹ or an 0110 EAR authorization response to update a single record in the file identified in field 101 (File Name). The remaining data is located in other fields of the 0300 and 0302 request or 0110 response. The length specifies the number of bytes that follow the length subfield.

Usage

Field 127, format 2 is used in 0300, 0302, and 0110 messages that request file updating. It is needed in all file add, change, or replace requests, but is needed in a file delete request only to delete a Merchant Central File record to identify the card type of the record being changed. When it is present in an 0300 or 0302 request, this field is returned in the 0310 or 0312 response. When it is present in a 0110 response, it is returned in the 0322 advice.

This field is not used in 0300 or 0302 file inquiry requests. If field 127, format 2 is present in the message, V.I.P. ignores it. It is present in the 0310 and 0312 response to a file inquiry.

¹ For cardholder files, a separate 0302 request is required for each update and inquiry. For the Merchant Central File, a separate 0300 request is required for each update and inquiry.

[Figure 4-2](#) and [Figure 4-3](#) illustrate the subfield composition for each file. Descriptions of these data fields follow this figure, in data field order within file type. Note the field numbers by which these subfields are known are in the following format:

“127”
+ a decimal point
+ an alpha identifier derived from the file name
+ the sequence number of the subfield
Subfield file name

For example, the first subfield of field 127 for an Exception File update is labeled “Field 127E.1.”

Field 127, format 2 is not present in the message if the issuer sends a delete request in an 0110 message.

Field Edits

Field 127, format 2 is required in an 0300 request if field 91 is 1, 2, 3, or 4, and in an 0302 request if field 91 is 1, 2, or 4. Length cannot exceed 255. It is also required in an 0110 authorization response if field 91 = 4.

Reject Codes

The reject codes for field 127, format 2 are:

0075 = Invalid length (exceeds 255)

0399 = Field missing

File Edits

The File Management Function at the VIC applies these additional edits:

In 0302 adds, changes, and replaces, the length must be valid based on the subfields required for the File Name.

- If field 101 is A2, length must be 5, 9, or 14.
- If field 101 is C2, length must be 7, 27, 31, or 36.
- If field 101 is E2, length must be 11.
- If field 101 is E9, length must be 11.
- If field 101 is F2, length must be 20 or 38.
- If field 101 is I2, length must be 18 or 36.
- If field 101 is P2, length must be 7.
- If field 101 is R2, length must be 21, 31, 41, 51, 61, 71, 81, 91, 101, or 111.
- If field 101 is S2, length must be 4.

In 0300 adds, changes, and replaces where field 101 (File Name) is M9, the length must be valid for the merchant record type (field 127M.1):

- If field 127M.1 is “A”, length must be 17.
- If field 127M.1 is “D”, length must be 16.
- If field 127M.1 is “M”, length must be 14.
- If field 127M.1 is “U”, length must be 5 or 45, or 4 through 61.
- If field 127M.1 is “V”, length must be 5.
- In 0300 deletes where field 101 is M9, length must be 1.

File Maintenance Error Codes

The error codes for field 127, format 2 are:

0699 = Length is invalid for file name.

0801 = Invalid length in 0300 request

0809 = Field is all spaces in 0300 request.

Figure 4–2: Field 127 Format 2 Layout**File Name A2—Address Verification File**

127A.1	127A.2
Postal Code	Address Verification Value

File Name C2—Cardholder ID File

127C.1	127C.2	127C.3
PIN Verification Code	Postal Code	Address Verification Value

File Name E2 or E9—Exception File

127E.1	127E.2
Action Code	Region Coding

File Name F2— Full Authorization File

127F.1	127F.2	127F.3	127F.4	127F.5
Refresh Day	Noncash Monthly Open-to- Use	Cash Monthly Open-to- Use	Noncash Verification Amount	Cash Verification Amount

File Name I2—Full Authorization Adjustment

127I.1	127I.2	127I.3	127I.4
Noncash Adjustment Amount	Cash Adjustment Amount	Noncash Verification Amount	Cash Verification Amount

Figure 4–3: BASE I Field 127 Format 2 Layout

File Name M9—Merchant Central File

127M.1		127M.2	127M.3	127M.4
Merchant Record Type	A	Reserved	Reserved	
	D	Terminal ID		
	M	Category Code	Postal Code	
	V	Category Code		
	X	Terminal ID		
	U	Category Code	Card Acceptor Name Location	Card Acceptor State/County/ZIP

File Name P2—PIN Verification File

127.P1		
Algorithm Identifier	PVKI	Verification Value

File Name R2—Risk Level File

127R.1	127R.2	127R.3	127R.4	127R.5	127R.6	127R.7	
Risk Level	Noncash Daily Spending Limits		Cash Daily Spending Limits		Travel Activity Limits		
	Available	Unavailable	Available	Unavailable	Available	Unavailable	
127R.8	127R.9	127R.10	127R.11	127R.12	127R.13	127R.14	127R.15
Lodging Activity Limits		Auto Rental Activity Limits		Restaurant Activity Limits		Mail/Telephone Activity Limits	
Available	Unavailable	Available	Unavailable	Available	Unavailable	Available	Unavailable
127R.16	127R.17	127R.18	127R.19	127R.20	127R.21	127R.22	127R.23
Risk Purchase Activity Limits		Total Purchase Activity Limits		Total Cash Activity Limits		ATM Cash Activity Limits	
Available	Unavailable	Available	Unavailable	Available	Unavailable	Available	Unavailable

File Name S2—Telecode Verification File

127S.1
Telecode

Field 127A.1—Format 2, Address Verification Postal Code

Applies to

Address Verification File (Field 101—File Name = A2)

Attributes

fixed length, 9 bytes
9 ANS, EBCDIC

Description

Field 127A.1, format 2 contains the ZIP or other postal code of the cardholder's address.

Usage

Field 127A.1, format 2 is used in all format 2, 0302 file update requests when the card issuer needs to add, change, or replace a cardholder's address verification data; that is, it is required in any format 2, 0302 request if field 101 is A2 and field 91 is 1, 2, or 4.

In a change or replace request, this field, with a code or spaces, is needed even when it is only the address verification value (AVV) being changed.

This field is not used in a delete request. If it is present in an 0302 update request, this field is returned in the 0312 response. It is not used in a file inquiry request. It is present in a successful 0312 response.

The postal code must be left-justified in this field. Unused positions must be filled with spaces.

File Edits

When field 101 is A2 and field 91 is 1, 2, or 4, this edit applies:

For a U.S. account, code must be 5 numerics followed by 4 spaces, or 9 numerics.

When field 91 is 3, this edit applies:

This field should not be present in the message but it will not be rejected if it is set to spaces or a valid code.

File Maintenance Error Codes

The error codes for field 127A.1, format 2 are:

0651 = Invalid postal code

Field 127A.2—Format 2, Address Verification Value

Applies to

Address Verification File (Field 101—File Name = A2)

Attributes

fixed length, 5 bytes
5 ANS, EBCDIC

Description

Field 127A.2, format 2 contains an AVV (Address Verification Value), which is the first 5 digits of the cardholder's address, including numeric equivalents of any numbers that are spelled out.

Usage

Field 127A.2, format 2 is used in all format 2, 0302 file update requests when the card issuer needs to add, change, or replace a cardholder's address verification data; that is, it is required in any format 2, 0302 request if field 101 is A2 and field 91 is 1, 2, or 4. It is not used in a delete request. If it is present in an 0302 request, it is returned in the 0312 response. It is not used in a file inquiry request. It is present in a successful 0312 response.

This AVV is needed in a change or replace, even when it is only the postal code that is being changed. The AVV must be left-justified in this field, and unused positions must be filled with spaces. The following examples show how address digits should be entered in this field.

AVV	Cardholder Address
1	One Elm Street
1231	123 First St
8925	89 25th Avenue
2223	22 Walnut St Apt 23
12345	P. O. Box 12345
4567	4567 Birch Rd Apt A
46002	4600 Birch Rd Apt 29

File Edits

When field 101 is A2 and field 91 is 1, 2, or 4, these edits apply:

The AVV must be numeric, and this subfield must be 5 bytes long, that is, the AVV must be left-justified and trailing spaces are required after an AVV with less than five positions.

When field 91 is 3, this edit applies:

This field should not be present in the message but it will not be rejected if it is set to spaces or a valid value.

File Maintenance Error Codes

The error codes for field 127A.2 format 2 are:

0696 = Invalid value

Field 127C.1—Format 2, PIN Verification Data

Applies to

Cardholder ID File (Field 101—File Name = C2)

Attributes

fixed length, 7 bytes
7 AN, EBCDIC
or fixed length, 22 bytes
22 AN, EBCDIC

Description

Field 127C.1, format 2 has four subfields:

Positions 1–2, Algorithm Identifier: This value is a code that identifies the algorithm used by the issuer to verify the PIN. The valid codes are shown in [Table 4–52](#) of the “Valid Values” section.

Position 3, PVKI: This value is a 1-digit PIN Verification Key Index (PVKI). If the verification value is a Visa PVV, the PVKI is a value between 1 and 6, indicating which of six possible pairs of PIN Verification Keys was used by the card issuer to generate the PVV. If the verification value is an IBM PIN Offset, the PVKI must be 1, representing the single key used to generate the offset.

Positions 4–7, Verification Value: This value is a 4-digit PIN Verification Value (PVV) or PIN Offset Value. This value is derived by the card issuer using either the Visa PVV method or the IBM PIN offset method. The verification value is calculated using the account number, the PIN, and depending on method, other data such as the PVKI, one or more PIN Verification Keys, and a decimalization table. To verify a PIN in an authorization request, the verification value is first recalculated using information from the message, and then is compared to the value on file.

Positions 8–22, Fill: These positions contain 15 digits numeric fill (zeros), which are reserved for future use.

Usage

Field 127C.1, format 2 is used in all format 2, 0302 file add, change, and replace requests for the Cardholder ID File when a card issuer that still uses C2 file name and format needs to update PIN verification (PVS) data only, or needs to update PVS and address verification (AVS) data. The field is required in a format 2, 0302 request whenever field 101 is C2 and field 91 is 1, 2, or 4.

If File Name C2 format and fields are used for an AVS only update, this entire field, all 22 positions, must be set to zeros. If File Name C2 format or fields are used for a PVS only update, positions 8–22 of this field (and fields 127C.2 and 127C.3) are omitted.

This field is not used in a delete request. A deletion with File Name C2 removes PIN verification data and address verification data. File Name A2 is designed for an AVS only update. File Name P2 is designed for a PVS only update.

When it is present in an 0302 request, this field is returned in the 0312 response. This field is not used in a file inquiry request. It is present in a successful 0312 response.

File Edits

When field 101 is C2 and field 91 is 1, 2, or 4, these edits apply:

- When PVS data is present in the message, the Algorithm ID must be 01 or 04, the PVKI must be a value from 1 through 6, and the verification value must be numeric.
- When PVS data is not present in the message, this entire field must be set to zeros.
- When field 91 is 3, this field should not be present in the message but it will not be rejected if it is set to zeros or valid values.

File Maintenance Error Codes

The error codes for field 127C.1, format 2 are:

0582 = Invalid algorithm ID

0583 = Invalid PVKI

0584 = Invalid verification value

Valid Values

[Table 4–52](#) provides the valid values for field 127C.1, format 2.

Table 4–52: Field 127.C1, Format 2: BASE I PVV Algorithm Identifier (Positions 1–2)

Code	Definition
00	PIN verification data not included in this record
01	Visa PVV Method
04	IBM PIN Offset

Field 127C.2—Format 2, Address Verification Postal Code

Applies to

Cardholder ID File (Field 101—File Name = C2)

Attributes

fixed length, 9 bytes
9 ANS, EBCDIC

Description

Field 127C.2, format 2 contains the ZIP or other postal code of the cardholder's address.

Usage

Field 127C.2, format 2 is used in all format 2, 0302 file add, change, or replace requests for the Cardholder ID File when a card issuer that is still using the C2 file name and format needs to update address verification (AVS) data. If this field is present in an 0302 update request, it is returned in the 0312 response. It is not used in a file inquiry request. It is present in a successful 0312 response when AVS data is on file.

In a change or replace request, this field, with a code or spaces, is needed even when it is only the AVV that is being changed. It is not used in a delete request.

NOTE: *A deletion with File Name C2 removes PIN verification data and address verification data.*

The postal code must be left-justified in this field. Unused positions must be filled with spaces.

File Edits

When field 101 is C2 and field 91 is 1, 2, or 4, and the account is U.S., this edit applies:

The code must be 5 numerics followed by 4 spaces, or 9 numerics.

When field 91 is 3, this edit applies:

This field should not be present.

File Maintenance Error Codes

The error codes for field 127C.2, format 2 are:

0651 = Invalid postal code

Field 127C.3—Format 2, Address Verification Value

Applies to

Cardholder ID File (Field 101—File Name = C2)

Attributes

fixed length
5 ANS, EBCDIC; 5 bytes

Description

Field 127C.3, format 2 contains an AVV (Address Verification Value), which is the first 5 digits of the cardholder's address including numeric equivalents of any numbers that are spelled out.

Usage

Field 127C.3, format 2 is used in all format 2, 0302 file add, change, and replace requests for the Cardholder ID File when a card issuer that is still using the C2 file name and format needs to update address verification (AVS) data. If this field is present in an 0302 request, it is returned in the 0312 response. It is not used in a file inquiry request. It is present in a successful 0312 response.

In a change or replace request, this field is needed even when it is only the postal code that is being changed. This field is not used in a delete request. A deletion with File Name C2 removes both PIN verification data and address verification data.

The AVV must be left-justified in this field, and unused positions must be filled with spaces, not omitted. Here are examples of how address digits should be entered in this field.

AVV	Cardholder Address
1	One Elm Street
1231	123 First St
8925	89 25th Avenue
2223	22 Walnut St Apt 23
12345	P. O. Box 12345
4567	4567 Birch Rd Apt A
46002	4600 Birch Rd Apt 29

The AVS algorithm scans the 20-character address in field 123 or field 127C.3 but compares only the first 5 numerics before the first alphabetic character or space is encountered. The algorithm ignores the following characters if encountered within the first 5 numeric positions of the address:

/ (forward slash)

\ (backward slash)

(number/pound sign)

- (hyphen in a hyphenated numeric; for example, 214-30)

The following illustrates the AVS matching process when the address format that the merchant sends in differs from that in the file.

Street Address from Merchant	Address on file	Result
202 Second Avenue	202 2nd Avenue	Full match
1505/Apt Two, Main St	1505/Apt 2, Main St	Full match, forward slash ignored

File Edits

When field 101 is C2 and field 91 is 1, 2, or 4, these edits apply:

- The AVV must be numeric.
- This subfield must be 5 bytes long, that is, the AVV must be left-justified and trailing spaces are required after an AVV with less than five positions.

When field 91 is 3, field 127C.3 should not be present in the message, but it will not be rejected if it is set to spaces or a valid value.

File Maintenance Error Codes

The error codes for field C.3, format 2 are:

0696 = Invalid value

Field 127E.1—Format 2, Action Code

Applies to

Exception File (Field 101—File Name = E2 or E9)

Attributes

fixed length
2 AN, EBCDIC; 2 bytes

Description

Field 127E.1, format 2 contains the code that determines the response and special handling required when the BASE I System at the VIC performs stand-in authorization on the issuer's behalf.

[Table 4–53](#) shows the codes that can be specified in this field. These codes also are valid for use in field 127.EF4 of a format 1 update for the Exception File.

Usage

Field 127E.1, format 2 is used in format 2, 0302 add, change, and replace requests for the Exception File, and it is returned in the responses. It is not used in delete requests. It is not used in an 0302 file inquiry request. It is present in a successful 0312 response, and it also is present in 0322 advices.

Enhanced Auto-CDB Response (EAR): Field 127E.1, format 2 is used in 0110 authorization responses that include an Exception File action request. The value in this field must be appropriate for the field 39 response code.

Field 127E.1, format 2 is present and contains the value that was placed in the Exception File.

Comments

If a record was added to the Exception File with an old-format action code (for example, F1, ND), field 127E.1, format 2 contains that old-format code in a response to a file inquiry.

The Activity Limits for Action Codes A1 through A9 represent consolidated limits for all merchant category groups, not limits for individual ones.

Action code 11 (approval for VIP cardholder) means activity checking is bypassed during STIP. V.I.P., however, still uses applicable mandatory and issuer-specified amount limits to determine whether to route a transaction to an available issuer. Action code 11 does not trigger a referral if the transaction is routed to STIP.

Only one action code per record is allowed.

Auto-CDB: If the account is listed in either the BASE I or SMS Exception File with something other than pickup status, Auto-CDB changes the listing to pickup status.

File Edits

Field 127E.1, format 2 must be present in a format 2, 0302 request if field 101 is E2 or E9, and field 91 is 1, 2, or 4. It also must be present in an 0110 EAR response if field 91 is 4.

The value in this field must be one of the codes listed in [Table 4-53](#) of the “Valid Values” section.

Code 01 (referral) is not allowed for an Electron account listing.

When field 91 is 3, this field should not be present.

For Enhanced Auto-CDB processing, the field entry must be valid for the response code in field 39. See [Table 4-54](#) of the “Valid Values” section for Auto-CDB response code rules.

Exception File Processing: Attempts to add an account number to the BASE I Exception File when the account number already exists are accepted as changes and do not result in error code 566. Attempts to change an account number on the BASE I Exception File when the number does not already exist are accepted as additions and do not result in error code 565. Attempts to delete an account number on the BASE I Exception File that does not already exist results in an file maintenance error (error code 565). Attempts to add, change or delete an account number that already exists on both the BASE I and SMS Exception File (“dual item check”) are processed accordingly and do not result in error code 530. Refer to Chapter 6 in *BASE I Processing Specifications* for more information.

File Maintenance Error Codes

The error codes for field 127E.1 are:

0650 = Invalid value

Valid Values

[Table 4-53](#) provides the valid values for field 127E.1.

Table 4-53: Field 127E.1, Format 2: BASE I Exception File Action Codes (1 of 2)

Code	Definition
01	Refer to card issuer
04	pickup card

Table 4–53: Field 127E.1, Format 2: BASE I Exception File Action Codes (2 of 2)

Code	Definition
05	Do not honor
07	Pickup card, special condition
11	Approval for VIP
41	Lost card, pickup
43	Stolen card, pickup

Codes A1 through A9 are V.I.P. codes associated with special high-value activity limits.
Amount limits are in U.S. dollars.

	One-Day Limits		Four-Day Limits	
	Amount	Count	Amount	Count
A1	US\$1,500	3	US\$1,500	9
A2	US\$2,000	5	US\$3,500	12
A3	US\$3,000	8	US\$6,000	14
A4	US\$4,500	12	US\$8,000	25
A5	US\$6,000	15	US\$10,000	40
A6	US\$8,000	20	US\$14,000	50
A7	US\$10,000	25	US\$20,000	100
A8	US\$1,500	4	US\$2,000	10
A9	US\$2,225	6	US\$3,500	13
XA	Forward to issuer; default to 00			
XD	Forward to issuer; default to 05			

[Table 4–54](#) contains Auto-CDB 0110 Response Action Code Rules.

Table 4–54: Field 127E.1, Format 2: Auto-CDB 0110 Response Action Code Rules

If the Field 39 Response Code Is ...	The Action Code in This Field Must Be:								And the Field 91 File Update Code Must Be ...	
	01	04	05	07	41	43	XA	XD	03	04
00 Approval							✓		✓	✓
01 Refer to issuer	✓						✓	✓	✓	✓
02 Refer to issuer	✓						✓	✓	✓	✓
04 Pickup		X								✓
05 Decline	✓		✓					✓		✓
07 Pickup—special				X						✓
41 Pickup—lost card					X					✓
43 Pickup—stolen card						X				✓
54 Expired card	✓		✓					✓		✓
62 Restricted card	✓		✓					✓		✓

✓ = valid combination

X = the value has to match that in field 39

File Update Codes:

03 = Delete

04 = Replace

Field 127E.2—Format 2, Region Coding

Applies to

Exception File (Field 101—File Name = E2 or E9)

Attributes

fixed length
9 ANS, EBCDIC; 9 bytes

Description

Field 127E.2, format 2 contains one or more CRB region codes that define the distribution of a Visa cardholder account number in Card Recovery Bulletin Service files and bulletins. See [Table 4-55](#) of the “Valid Values” section for field values. Except those labeled for file name E9, these values are also valid in field 127.EF5 of a format 1 Exception File update.

Usage

Field 127E.2, format 2 is used in format 2, 0302 add, change, and replace requests for the Exception File, and is returned in the responses. It is not used in delete requests. It is not used in an 0302 file inquiry request. It is present in a successful 0312 response. It is present in 0322 advices.

This field contains one or more valid codes whenever the action code in an update request is a pickup code: 04, 07, 41, or 43. Otherwise, it contains spaces. If an update is received with a region code that is not a pick-up code, that update is accepted and the region coding is ignored; in this case, the CRB is not updated.

When more than one region code is placed in this field, spaces can be used to separate them, although V.I.P. ignores them.

If the file name is E2, the subregion codes C1–C3 do not apply. These codes are valid only when the file name is E9.

When region code 0 is used, the account number is present in the National Card Recovery File (NCRF) but not in Regional Card Recovery File (RCRF).

Region code “E” means the account should be included in the Europe CRB. The code “E” is used for all electronic STIP authorizations regardless of acquirer or issuer Visa region.

NOTE: *The U.S. region CRB has been eliminated. Old region codes X1 (region 1) through X9 (region 9) do not apply.*

If the file name is E9, an entire region is specified with one letter, and a subregion with the letter followed by one or more digits. To specify combinations of subregions, give the letter of the region plus the numbers of the subregions. Here are examples of how region and subregion codes should be entered in this field.

Field Entry	Area
C	All areas of Canada
C1	Canada subregion 1
C12	Canada subregions 1 and 2
CX	All areas of Canada and the U.S.
C1X	Canada subregion 1 plus all areas of the U.S.
CX128	All areas of Canada plus U.S. regions 1, 2, and 8

For details on the countries within CRB regions, see the *VisaNet Card Recovery Bulletin User Guide*.

Field 127E.2, format 2 is present in the EAR advice only if it was present in the 0110 message. It also is present in ATS and VTSC advices.

File Edits

Field 127E.2, format 2 must be present in a format 2, 0302 request if field 101 is E2 or E9, and field 91 is 1, 2, or 4. It is required in an 0110 EAR response if field 91 is 4. The codes must be left-justified. The remainder of the field must be space-filled.

If file name is E9, subregion codes C1 through C3 for Canada and X1 through X9 for the United States may be used, but numeric codes 1 through 9 do not apply.

When field 91 is 3, this field should not be present in the message, but it will not be rejected if it is set to spaces or valid values.

Any combination of region codes can be placed in field 127E.2 in any order and with or without imbedded spaces, except that no other region code can be specified in combination with region code 0.

Exception File Processing: Attempts to add an account number to the BASE I Exception File when the account number already exists are accepted as changes and do not result in error code 566. Attempts to change an account number on the BASE I Exception File when the number does not already exist are accepted as additions and do not result in error code 565. Attempts to

delete an account number on the BASE I Exception File that does not already exist results in an file maintenance error (error code 565). Attempts to add, change or delete an account number that already exists on both the BASE I and SMS Exception File (“dual item check”) are processed accordingly and do not result in error code 530. Refer to Chapter 6 in *BASE I Processing Specifications* for more information.

File Maintenance Error Codes

The error codes for field 127E.2 are:

0577 = Invalid code

0578 = Invalid spaces (action code is a pick-up)

Valid Values

[Table 4–55](#) provides the valid values for field 127E.2, format 2.

Table 4–55: Field 127E.2, Format 2 BASE I CRB Region Codes (1 of 2)

RegionCode	Geographic Area
0	Do not list in any Card Recovery Bulletin
1 ¹	U.S. (California, Hawaii, Nevada)
2 ¹	U.S. (Alaska, Arizona, Idaho, Oregon, Utah, Washington)
3 ¹	U.S. (Colorado, Iowa, Kansas, Minnesota, Montana, Nebraska, New Mexico, North Dakota, South Dakota, Wyoming)
4 ¹	U.S. (Oklahoma, Texas)
5 ¹	U.S. (Illinois, Indiana, Kentucky, Michigan, Missouri, Ohio, West Virginia, Wisconsin)
6 ¹	U.S. (Alabama, Arkansas, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, Washington, D.C.)
7 ¹	U.S. (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)
8 ¹	U.S. (Delaware, New Jersey, New York, Pennsylvania)
9 ¹	U.S. (Florida, Georgia)
A	Includes all countries in the Asia-Pacific region
B	Africa and part of the Middle East (includes countries that are part of Visa subregions 3 and 5 of the Europe, Middle East, Africa region)
C	All Canadian CRB regions (regions 1 through 3)
C1 ²	Quebec and the Maritimes

Table 4–55: Field 127E.2, Format 2 BASE I CRB Region Codes (2 of 2)

RegionCode	Geographic Area
C2 ²	Ontario (excluding area west of Thunder Bay)
C3 ²	Alberta, British Columbia, Manitoba, Ontario area west of Thunder Bay, and Saskatchewan
D	National CRB indicator
E	Europe and part of the Middle East (includes countries in the Europe, Middle East, Africa region not classified as part of CRB region B)
F	Includes all countries in the Latin America Region
X	All U.S. CRB regions (regions 1 through 9)
Y	All non-U.S. CRB regions (regions A, B, C, E, F)
Z	All CRB regions

¹ Region codes 1–9 do not apply for file name E9. See codes X1–X9.

² Region codes C1–C3 and X1–X9 apply only if the file name is E9.

Field 127F.1—Format 2, Refresh Day

Applies to

Full Authorization File (Field 101—File Name = F2)

Attributes

fixed length
2 AN, EBCDIC; 2 bytes

Description

Field 127F.1, format 2 contains the 2-digit day of month on which monthly open-to-use balances should be renewed (refreshed). For example, entering the value 15 results in renewal on the 15th of each month, while entering 01 results in renewal on a calendar month basis. Renewal occurs at GMT 0 on the day specified.

A renewal date change takes effect after the next (original) renewal day. Thus, the day can be changed at any time in the preceding month. For example, if the day on file is 25 and is changed to 20 on 30 May, renewal will occur on 25 June, then on 20 July and on the 20th of each month thereafter.

Usage

Field 127F.1, format 2 is used in format 2, 0302 add, change, and replace requests for the Full Authorization File, and is returned in the responses. It is not used in delete requests. It is not used in a file inquiry request. It is present in a successful 0312 response.

End-of-month values (29, 30, 31) should be avoided; they may cause confusion since the renewal day is not a fixed point. If the month does not contain the day specified, renewal will occur on the first day of the following month, for example, if the day on file is 31, the open-to-use will be renewed on 31 January, 1 March, 31 March, 1 May, and others.

Field Edits

Field 127F.1, format 2 must be present in a format 2, 0302 request if field 101 is F2 and field 91 is 1, 2, or 4. The value in this field must be between 01 and 31. When field 91 is 3, this field should not be present.

File Maintenance Error Codes

The error codes for field 127F.1, format 2 are:

0685 = Invalid value

Field 127F.2 and 127F.3—Format 2, Monthly Open-to-Use Amounts

Applies to

Full Authorization File (Field 101—File Name = F2)

Attributes

fixed length
18 AN, EBCDIC; 18 bytes

Description

Fields 127F.2 and 127F.3, format 2 contain the cardholder's available monthly open-to-use amounts for cash and noncash transactions expressed in whole U.S. dollars. See the subfield content below.

Subfield	Bytes	Type of Open-to-Use
127F.2	1–9	Noncash Monthly
127F.3	10–18	Cash Monthly

Usage

These fields are used in format 2, 0302 add, change, and replace requests for the Full Authorization File, and are returned in the responses. They are not used in delete requests or file inquiry requests. They are present in successful 0312 responses.

File Edits

Both fields must be present in a format 2, 0302 request if field 101 is F2 and field 91 is 1, 2, or 4. Each must be 9 positions of numeric digits or spaces. A single amount cannot exceed US\$20,000,000.

If field 91 is 2 or 4, the new value cannot exceed 150% of the previous value. For example, if the open-to-use is currently US\$1000, the maximum replacement value is US\$1500. When field 91 is 3, these fields should not be present.

File Maintenance Error Codes

The error codes for field 127F.1, format 2 are:

0686 = Invalid Noncash Monthly Open-to-Use

0687 = Noncash value exceeds 150% of file value

0688 = Invalid Cash Monthly Open-to-Use

0689 = Cash value exceeds 150% of file value

Field 127F.4 and 127F.5—Format 2, Verification Data

Applies to

Full Authorization File (Field 101—File Name = F2)

Attributes

fixed length
18 AN, EBCDIC; 18 bytes

Description

Fields 127F.4 and 127F.5, format 2 contain verification amounts, that is, the previous open-to-use amounts for cash and noncash transactions, expressed in whole U.S. dollars.

When a change is processed at the VIC, V.I.P. compares the verification amount to that on file and proceeds with the update only when the amounts match. See the subfield content below.

Subfield	Bytes	Type of Verification Data
127F.4	1–9	Previous Noncash Open-to-Use
127F.5	10–18	Previous Cash Open-to-Use

Usage

Use of verification amounts is optional. If not applicable, these fields are omitted from the request. When applicable, they are used in an 0302 change or replace request for the Full Authorization File, but not in an add or delete.

If these fields are present in the request, they are returned in the response. They are not used in a file inquiry request. They are present in a successful 0312 response.

File Edits

If one of these fields is present in the message, both are required. Each must be 9 positions of numeric digits or spaces. If these fields are present, the field 101 value must be F2 and the field 91 value must be 2 or 4. Each amount must match that on file at the VIC.

File Maintenance Error Codes

The error codes for field 127F.4 and 127F.5, format 2 are:

0697 = Invalid noncash verification value

0698 = Invalid cash verification value

Field 127I.1 and 127I.2—Format 2, Adjustment Amounts

Applies to

Full Authorization File (Field 101—File Name = F2)

Attributes

fixed length
18 AN, EBCDIC; 18 bytes

Description

Fields 127I.1 and 127I.2, format 2 are used to make short-term plus or minus adjustments to the cash or noncash open-to-use amounts. (Their effect is temporary, since the open-to-use is refreshed each month.) Each field includes a sign to indicate whether the adjustment is plus or minus, followed by the whole U.S. dollar adjustment. See subfield content below.

Subfield	Bytes	Type of Adjustment
127I.1	1	Sign: C = credit (plus) D = debit (minus)
	2–9	Noncash adjustment amount
127I.2	10	Sign: C = credit (plus) D = debit (minus)
	11–18	Cash adjustment amount

Usage

These fields are used in format 2, 0302 change requests for the Full Authorization File. They are not applicable for an add, replace, or delete. These fields are not used in a file inquiry request, and they are *not* present in a successful response.

File Edits

Both adjustment fields must be present in a format 2, 0302 request when field 101 is I2 and field 91 is 2. If only one open-to-use is being adjusted, the other adjustment amount must be specified as zeros.

The sign must be “C” or “D”.

The amount cannot exceed US\$20,000,000.

File Maintenance Error Codes

The error codes for fields 127I.1 and 127I.2, format 2 are:

0690 = Invalid sign in noncash adjustment, or adjustment is spaces when it should be an amount

0691 = Noncash adjustment is non-numeric or greater than US\$20,000,000.

0693 = Invalid sign in cash adjustment, or adjustment is spaces when it should be an amount

0694 = Cash adjustment is non-numeric or greater than US\$20,000,000.

Field 127I.3 and 127I.4—Format 2, Verification Data

Applies to

Full Authorization File (Field 101—File Name = F2)

Attributes

fixed length
18 AN, EBCDIC; 18 bytes

Description

Fields 127I.3 and 127I.4, format 2 contain verification amounts, that is, the previous open-to-use amounts for cash and noncash transactions, expressed in whole U.S. dollars. When an adjustment is processed at the VIC, V.I.P. compares the verification amount to that on file and proceeds with the adjustment only when the amounts match. See subfield content below.

Subfield	Bytes	Type of Verification Data
127I.3	1–9	Previous Noncash Open-to-Use
127I.4	10–18	Previous Cash Open-to-Use

Usage

Use of verification amounts is optional. If they are not applicable, these fields are omitted from the request. When these fields are applicable, they are used in format 2, 0302 change request, but not in an add, replace, or delete.

If fields 127I.3 and 127I.4, format 2 are present in the request, they are returned in the response. They are not used in a file inquiry request. They are present in a successful 0312 response.

File Edits

If one of these fields is present in the message, both are required. If these fields are present, the value in field 101 must be I2 and the value in field 91 must be 2. Each amount must match that on file at the VIC.

File Maintenance Error Codes

The error codes for fields 127I.3 and 127I.4, format 2 are:

0692 = Invalid noncash verification value

0695 = Invalid cash verification value

Field 127M.1—Format 2, Merchant Record Type

Applies to

Merchant Central File (Field 101—File Name = M9)

Attributes

fixed length
1 AN, EBCDIC; 1 byte

Description

Field 127M.1, format 2 contains a code indicating the type of Merchant Central File record to be added, changed, replaced, or deleted. This code determines the content and format of the rest of field 127. See [Table 4-56](#) of the “Valid Values” section for valid codes.

Usage

Field 127M.1, format 2 is used in 0300 and 0310 messages only. It is used for adds, changes, replaces, deletes, and file inquiry requests, and it is returned in the responses.

File Edits

Field 127M.1, format 2 must be present in every 0300 request, and the code must be one listed in [Table 4-56](#).

File Maintenance Error Codes

The error codes for Field 127M.1, format 2 are:

0800 = Invalid value

Valid Values

[Table 4-56](#) provides the valid values for field 127M.1, format 2.

Table 4-56: Field 127M.1, Format 2: Merchant Record Type Codes (1 of 2)

Code	Definition
A	Check acceptance
D	Discover
M	MasterCard
U	Universal Visa data

Table 4–56: Field 127M.1, Format 2: Merchant Record Type Codes (2 of 2)

Code	Definition
V	Visa
X	American Express

Field 127M.2—Format 2, Merchant Data 1

Applies to

Merchant Central File (Field 101—File Name = M9)

Attributes

4 ANS, EBCDIC; 4 bytes
or 15 ANS, EBCDIC; 15 bytes

Description

The length and content of field 127M.2, format 2 depends on the field 127M.1 record type as shown in [Table 4–57](#).

Table 4–57: Field 127M.2, Format 2: Record Types

Record Type	Content
A	15-digit vendor-assigned terminal ID, right-justified and zero-filled
D	15-digit Discover terminal ID, left-justified and space-filled
M	4-digit merchant category code
U	4-digit Visa merchant category code
V	4-digit merchant category code
X	15-digit American Express terminal ID, right-justified and zero-filled

Usage

Field 127M.2, format 2 is used in format 2, 0300 add, change, and replace requests for the Merchant Central File, and is returned in the responses. It is not used in delete requests. It is not used in a file inquiry request. It is present in a successful 0310 response.

File Edits

American Express, Discover, Visa, Check Acceptance, and MasterCard: Field 127M.2, format 2 must be present in a 0300 request if the value in field 101 is M9 and the value in field 91 is 1, 2, or 4. A merchant category code must be numeric.

Universal Data: Field 127M.2, format 2 is used if the value in field 101 is M9, and the value in field 91 is 1, 2, or 4. This field, if supplied, must be a valid merchant category code. If this field is not supplied, it must be space-filled and fields 127M.3 and 127M.4 must be supplied. If field 127M.3 and field 127M.4 are not supplied, length of field 127 should be 5.

Visa and Universal Data: Merchant category code, if supplied, must be a valid merchant category code.

If field 91 is 3, this field should not be present.

File Maintenance Error Codes

The error codes for field 127M.2, format 2 are:

0803 = Invalid merchant category code

0808 = Invalid replacement terminal ID

Field 127M.3—Format 2, Merchant Data 2

Applies to

Merchant Central File (Field 101—File Name = M9)

Attributes

1 ANS, EBCDIC; 1 byte total
or 9 ANS, EBCDIC; 9 bytes total
or 40 ANS, EBCDIC; 40 bytes total

Description

The length and content of field 127M.3, format 2 depend on the field 127M.1 record type. See [Table 4-58](#).

Table 4-58: Field 127M.3, Format 2: Record Types

Record Type	Content
A	1-position vendor ID, left-justified and space-filled
D	Not applicable
M	9-digit ZIP code or 9-position postal code, left-justified and space-filled
U	40-digit Card Acceptor Name/Location, comprised of: <ul style="list-style-type: none">• 25-digit Card Acceptor Name (127M.3.1) +• 13-digit City Name (127M.3.2) +• 2-digit Country Code (127M.3.3)
V	Not applicable
X	Not applicable

Usage

American Express, Discover, and Visa: Not applicable field 127M.3, format 2.

Check Acceptance, Universal Data, and MasterCard: Field 127M.3, format 2 is used in format 2, 0300 add or change, or replace requests for the Merchant Central File.

When this field is present in a request, it is returned in the response. It is not used in delete requests or a file inquiry request. It is present in a successful response.

File Edits

Field 127M.3, format 2 must be present in an 0300 request if:

- The value in field 101 is M9.
- The value in field 91 is 1, 2, or 4.
- The value in field 127M.1 is “A” or “M”.

When the record type is “A”, the check acceptance vendor ID must be one of the codes listed in [Table 4–59](#):

Table 4–59: Check Acceptance Vendors

Vendor Code	Vendor	Routing ID
1	Not used	
2	TeleCheck	861400
3	NPC/JBS	810000
4	Equifax Card Services	894400
5	Not used	
6	ETC Scan (formally Deluxe Data)	813500

When the record type is “M”, the postal code must be 9 numerics, or 5 numerics followed by spaces.

Universal Data: Field 127M.3, format 2 must be present in the message if field 127M.4 is present or neither field 127M.2 nor 127M.4 is supplied. This field is omitted when not applicable and field 127M.4 is not supplied. If supplied, all of its subfields, 127M.3.1, 127M.3.2, and 127M.3.3 must be present. Country Code (subfield 127M.3.3), if present, must be a valid 2-digit alphabetic Country Code. If field 127M.3 is supplied and field 127M.4 is not supplied, the length of field 127 should equate to decimal 45.

If field 91 is 3, this field should not be present in the message, but it will not be rejected if it is set to spaces or a valid value.

File Maintenance Error Codes

The error codes for field 127M.3, format 2 are:

0804 = Invalid vendor ID

0805 = Invalid postal code

0810 = Card Acceptor Name and Location is missing when Card Acceptor State/County ZIP is present

0811 = Not all subfields of the Card Acceptor Name and Location are present

0812 = Invalid Country Code

Field 127M.4—Format 2, Merchant Data 2

Applies to

Merchant Central File (Field 101—File Name = M9)

Attributes

16 ANS, EBCDIC; 16 bytes total

Description

The length and content of field 127M.4, format 2 depend on the field 127M.1 record type:

Record Type	Content
A	Not applicable
D	Not applicable
M	Master Card
U	2-digit length + 14-digit Card Acceptor State, Country, ZIP or Province Code
V	Not applicable
X	Not applicable

For record type “U”, the length and content of this field depend on the country code given in field 127M.3.3.

If the country code is “US”:

127M.4.1	127M.4.2	127M.4.3	127M.4.4
2-digit length field	2-digit numeric state code	3-digit numeric country code	5- or 9-digit numeric ZIP code

If the Country Code is “CA”:

127M.4.1	127M.4.2
2-digit length field	2-digit numeric province code

If the country code is not “US” and is not “CA”:

127M.4.1	127M.4.2
2-digit length field	1- to 14-digit alphanumeric postal code

MasterCard: For record type “M”, this field contains the following:

127M.4.1	127M.4.2	127M.4.3
25-digit card acceptor name	13-digit city name	2-digit alphanumeric country code

Usage

American Express, Discover, Visa, and Check Acceptance: Not applicable to field 127M.4, format 2.

Universal Data: Field 127M.4, format 2 is used in format 2, 0300 add, change, or replace requests for the Merchant Request File.

MasterCard: This field is omitted when not applicable. If present, all the subfields must be supplied (127M.4.1, 127M.4.2, 127M.4.3). The country code must be a valid 2-digit alphanumeric code. If field 127M.3 is supplied but field 127M4 is not, the field 127 length should be decimal 45. If field 91 = 3, this field should not be present but will not reject if it is set to spaces or a valid value.

This field is not used in delete requests or a file inquiry request. It may be present in a successful response.

File Edits

Field 127M.4, format 2 is omitted when not applicable. It must be present if neither field 127M.2 nor field 127M.3 are present.

If this field is supplied, the length field (field 127M.4.1) must be present and must be numeric.

If this field is supplied, and the country code in field 127M.3.3 is “US”, these rules apply:

- The value of the length field 127M.4.1 must be 10 or 14, depending on the ZIP code supplied in subfield 127M.4.4.
- A valid 2-digit numeric state code must be present in subfield 127M.4.2.

- Subfield 127M.4.3 must contain a numeric country code, or zeros, if this subfield is not supplied.
- A 5-digit or 9-digit numeric ZIP code must be present in subfield 127M.4.4. A ZIP code of all zeros is not valid.
- The length of field 127 should equate to decimal 57 or 61, depending on the ZIP code supplied in subfield 127M.4.4.

If this field is supplied, and the country code in field 127M.3.3 is “CA”, these rules apply:

- The value in the length 127M.4.1 must be 02.
- A valid 2-digit number province code must be present in subfield 127M.4.2.
- The length of field 127 should equate to decimal 49.

If this field is supplied, and the country code in field 127M.3.3 is not “US” and is not “CA,” these rules apply:

- The value of the length field 127M.4.1 must be 01 to 14, depending on the length of the postal code in subfield 127M.4.2.
- A variable length, 1- to 14-digit alphanumeric postal code must be present in subfield 127M.4.2.
- The length of field 127 should equate to decimal 48 through 61.

File Maintenance Error Codes

The error codes for field 127M.4, format 2 are:

0805 = Invalid postal code

0811 = Not all subfields of the card acceptor name/location are present

0812 = Invalid country code

0813 = The length subfield (field 127M.4.1) is missing when the other field 127M.4 subfields are present

0814 = State, county or ZIP data is not present, but the length subfield 127M.4.1 is present

0815 = The length subfield (field 127M.4.1) is invalid

0816 = State code is invalid or missing

0817 = Invalid county code

0818 = Postal code is missing

0819 = Province code is invalid or missing

Field 127P.1—Format 2, PIN Verification Data

Applies to

PIN Verification File (Field 101—File Name = P2)

Attributes

fixed length
7 AN, EBCDIC; 7 bytes

Description

Field 127P.1, format 2 has three subfields:

Positions 1–2, Algorithm Identifier: This is a code that identifies the algorithm used by the issuer to verify the PIN. Valid codes are shown in the “Valid Values” section of this field description.

Position 3, PVKI: This is a 1-digit PIN Verification Key Index (PVKI) value.

If the verification value is a Visa PVV, the PVKI is a value between 1 and 6. The value indicates which of six possible pairs of PIN Verification Keys was used by the card issuer to generate the PVV. If the verification value is an IBM PIN Offset, the PVKI must be 1, representing the single key used to generate the offset.

Positions 4–7, Verification Value: This is a 4-digit PIN Verification Value (PVV) or PIN Offset Value.

The card issuer derives this value using either the Visa PVV method or the IBM PIN offset method. The verification value is calculated using the account number and the PIN. Depending on the verification method, other data such as the PVKI, one or more PIN Verification Keys, and a decimalization table may be employed. To verify a PIN in an authorization request, the verification value is first recalculated. The recalculated value is then compared to the value on file.

Usage

Field 127P.1 is used in a format 2, 0302 add, change, and replace request when the card issuer needs to add or change PIN verification data, that is, it is required in any format 2, 0302 request if field 101 is P2 and field 91 is 1, 2, or 4.

This field is not used in a delete request or a file inquiry request. When this field is present in an 0302 request, it is returned in the 0312 response.

File Edits

When field 101 is P2 and field 91 is 1, 2, or 4, these edits apply:

- The algorithm ID must be 01 or 04.
- The PVKI must be a value from 1 through 6.
- The verification value must be numeric.

When the value in field 91 is 3, field 127P.1 should not be present but will not be rejected if set to zeros or valid values.

File Maintenance Error Codes

The error codes for field 127P.1, format 2 are:

0582 = Invalid algorithm ID

0583 = Invalid PVKI

0584 = Invalid verification value

Valid Values

[Table 4–60](#) provides the valid values for field 127P.1, format 2.

Table 4–60: Field 127P.1, Format 2: BASE I File Update PIN Verification Algorithm ID

Code	Definition
01	Visa PVV Method
04	IBM PIN Offset

Field 127R.1—Format 2, Risk Level

Applies to

Risk Level File (Field 101—File Name = R2)

Attributes

fixed length
1 ANS, EBCDIC; 1 byte

Description

Field 127R.1, format 2 contains a 1-character alphabetic code describing the cardholder risk level. The codes are “A,” “B,” “C,” and “D,” where “A” represents the lowest risk and “D” the highest.

Usage

Field 127R.1 is used in format 2, 0302 add, change and replace requests for the Risk Level File. It is returned in the responses. This field is not used in delete requests or a file inquiry request. It is present in a successful 0312 response. If an account-specific risk level does not apply to the cardholder, this field should contain the issuer's default value, if one is selected, or “C” (the default risk level assumed by V.I.P.). If this field in a change or replace request contains a space, the account-specific code on file is changed to the issuer's default risk level, if any, or to the system default.

Comments

It is assumed the issuer has previously established risk levels for BASE I processing.

Field Edits

Field 127R.1, format 2 must be present in a format 2 0302 request if field 101 is R2 and field 91 is 1, 2, or 4. The code must be “A” through “D.” In a change or replace involving assignment of lower risk, the new code must be the next lower code. For instance, if the risk level on file is “C”, it can be changed to “B” but not “A.” (This “next code” edit does not apply when higher risk is assigned. For instance, there is no problem in changing code “A” to “D.”)

If field 91 is 3, field 127R.1, format 2 should not be present in the message, but it will not be rejected if it is spaces or a valid value.

File Maintenance Error Codes

The error codes for Field 127R.1, format 2 are:

0653 = Invalid value

Field 127R.2 Through 127R.5—Format 2, Daily Spending Limits

Applies to

Risk Level File (Field 101—File Name = R2)

Attributes

fixed length
20 ANS, EBCDIC; 20 bytes

Description

These four subfields contain an account-specific daily spending limit for use during “available” or “unavailable” periods as applicable. Each limit is expressed in whole U.S. dollars and overrides those in effect for the BIN in general.

Subfield	Bytes	Type of Daily Spending Limit
127R.2	1–5	Noncash (Available)
127R.3	6–10	Noncash (Unavailable)
127R.4	11–15	Cash (Available)
127R.5	16–20	Cash (Unavailable)

Usage

These fields are used in format 2, 0302 add, change, and replace requests for the Risk Level File when daily spending limits or activity limits are updated. When present in the request, these fields are returned in the response. They are not used in a delete.

This field is not used in a file inquiry request. It is present in a successful 0312 response.

In an add, the issuer provides the appropriate numeric value for the fields where it wants unique daily limits for this cardholder. The issuer uses spaces in the fields where the limit for this cardholder is the default limit for all of the issuer’s cardholders as specified in the BASE I System.

In a change, the issuer can remove a unique limit by setting its field to spaces, can change any established limit by providing a new value for its field, but must provide the existing value for any limits that are not being changed. When a change is processed, the entire record is replaced.

When no unique daily spending limits apply, all four of these fields must contain spaces. The maximum limit that can be specified in any one of these fields is US\$65,000.

File Edits

Each field must be a numeric value or spaces. The numeric value in any one field cannot exceed 65000.

If activity limits (field 127R.6 through field 127R.23) do not apply, any trailing, space-filled fields may be omitted.

The issuer must subscribe to risk level processing to use these fields.

If the value in field 91 is 3, this field should not be present, but it will not be rejected if it is set to spaces or valid values.

File Maintenance Error Codes

The error codes for fields 127R.2 through 127R.5 are:

0654 = Invalid (available) noncash limit

0655 = Invalid (unavailable) noncash limit

0656 = Invalid (available) cash limit

0657 = Invalid (unavailable) cash limit

0700 = Invalid (available) noncash limit (issuer does not subscribe)

0701 = Invalid (unavailable) noncash limit (issuer does not subscribe)

0702 = Invalid (available) cash limit (issuer does not subscribe)

0703 = Invalid (unavailable) cash limit (issuer does not subscribe)

Field 127R.6 Through 127R.23—Format 2, Activity Limits

Applies to

Risk Level File (Field 101—File Name = R2)

Attributes

variable length

up to 90 ANS, EBCDIC; maximum: 90 bytes

Description

These 18 fields contain account-specific amount activity limits for a certain type of transaction. See [Table 4-61](#) for the applicable limits and subfield content. The limits in these fields override those in effect for all cardholders of this issuer; they do not impact count limits. Each limit is expressed in whole U.S. dollars. Subfield content is shown in [Table 4-61](#).

Table 4-61: Field 127R.6–127R.23, Format 2: Risk Level Activity Limits (1 of 2)

Subfield	Bytes	Type of Activity Limit
127R.6	1–5	Travel limit (issuer available)
127R.7	6–10	Travel limit (issuer unavailable)
127R.8	11–15	Lodging limit (issuer available)
127R.9	16–20	Lodging limit (issuer unavailable)
127R.10	21–25	Auto rental limit (issuer available)
127R.11	26–30	Auto rental limit (issuer unavailable)
127R.12	31–35	Restaurant limit (issuer available)
127R.13	36–40	Restaurant limit (issuer unavailable)
127R.14	41–45	Mail/telephone limit (issuer available)
127R.15	46–50	Mail/telephone limit (issuer unavailable)
127R.16	51–55	Risky purchase limit (issuer available)
127R.17	56–60	Risky purchase limit (issuer unavailable)
127R.18	61–65	Total purchase limit (issuer available)
127R.19	66–70	Total purchase limit (issuer unavailable)
127R.20	71–75	Total cash limit (issuer available)

Table 4–61: Field 127R.6–127R.23, Format 2: Risk Level Activity Limits (2 of 2)

Subfield	Bytes	Type of Activity Limit
127R.21	76–80	Total cash limit (issuer unavailable)
127R.22	81–85	ATM cash limit (issuer available)
127R.23	86–90	ATM cash limit (issuer unavailable)

Usage

The fields are used in format 2, 0302 add, change, and replace requests for the Risk Level File when the issuer elects to set unique activity limits for this cardholder. When these fields are present in a request, they are returned in the update response. They are not used in a delete.

These fields are not used in a file inquiry request. They are present in a successful 0312 response.

In an add, the issuer provides the appropriate numeric value for the fields where it wants unique activity limits for this cardholder, and uses spaces in the fields where the limit for this cardholder is the default limit for all of the issuer's cardholders (as specified in the appropriate risk level in the BASE I System).

In a change or replace, the issuer can remove a unique limit by setting its field to spaces, can change any established limit by providing a new value for its field, but must provide the existing value for any limits that are not being changed. When a change is processed, the entire record is replaced.

When no unique activity limits apply, all 18 of these fields are omitted from the update message.

File Edits

Any one or more of these fields may be present in an 0302 request if field 101 is R2 and field 91 is 1, 2, or 4. A space-filled field must be included only if it is followed by a nonspace field. Trailing space-filled fields may be omitted. The maximum limit that can be specified in any one of these fields is US\$65,000.

If field 91 is 3, these fields should not be present, but it will not be rejected if it is set to spaces or valid values.

File Maintenance Error Codes

The error codes for fields 127R.6 through 127R.23 are:

- 0658 = Invalid (available) travel limit
- 0659 = Invalid (unavailable) travel limit
- 0660 = Invalid (available) lodging limit
- 0661 = Invalid (unavailable) lodging limit
- 0662 = Invalid (available) auto rental limit
- 0663 = Invalid (unavailable) auto rental limit
- 0664 = Invalid (available) restaurant limit
- 0665 = Invalid (unavailable) restaurant limit
- 0666 = Invalid (available) mail or telephone limit
- 0667 = Invalid (unavailable) mail or telephone limit
- 0668 = Invalid (available) risky purchase limit
- 0669 = Invalid (unavailable) risky purchase limit
- 0670 = Invalid (available) total purchase limit
- 0671 = Invalid (unavailable) total purchase limit
- 0672 = Invalid (available) total cash limit
- 0673 = Invalid (unavailable) total cash limit
- 0674 = Invalid (available) ATM cash limit
- 0675 = Invalid (unavailable) ATM cash limit

Field 127S.1—Format 2, Telecode

Applies to

Telecode Verification File (Field 101—File Name = S2)

Attributes

fixed length
4 N; EBCDIC; 4 bytes

Description

Field 127S.1 applies to format 2 Telecode Verification File records. It contains the 4-digit telecode assigned to the cardholder for use with the VisaPhone Service.

Usage

Field 127S.1 is used in format 2, 0302. It contains the add, change, delete, or replace request that update telecodes in the Telecode Verification File, and is returned in the response. It is not used in a file inquiry request. It is present in a successful 0312 response.

Field Edits

Field 127S.1, format 2 is required when Field 91—File Update Code is 1, 2, 3, or 4.

Reject Codes

The reject codes for field 127S.1, format 2 are:

0399 = Field missing

Field 128—Message Authentication Code

Attributes

64 N, EBCDIC
bit string, 8 bytes

Description

Field 128 can be used to validate the source and the text of the message between the sender and the receiver.

Until a standard from ISO TC 68 is available, this code should be calculated using the formula given in *Financial Institution Message Authentication (Wholesale)—ANSI X9.9-1984*.

Usage

The message authentication code (MAC) must be placed in the last field of the message text. Therefore, V.I.P. recognizes its presence by the last bit of the last bit map in the message. If a message has no fields corresponding to bits 66 through 127, then bit 64 in the first bit map must be 1. If the message does contain fields corresponding to bits 66 through 127, then bit 64 in the first bit map must be 0 and the last bit in the second bit map (bit 128) must be 1. This field is included in messages only if required in bilateral agreements within a given network. It is a strictly optional field in V.I.P. messages.

STIP and Switch Advices: Field 128 is present in an STIP-generated 0120 advice if it was in the request.

File Edits

There are no file edits for field 128.

Reject Codes

There are no reject codes for field 128.

Field 130—Terminal Capability Profile

Attributes

fixed length
24 bit string; 3 bytes

Description

Field 130 is a VSDC field. It indicates the card data input, the Cardholder Verification Method (CVM), and the security capabilities supported by the terminal.

Positions: 1		2	3	4–8		1	2		
manual key entry capability		magnetic stripe read capability		chip read capability		reserved		offline plaintext PIN capability	online PIN capability
Byte 1						Byte 2			
3		4	5–8		1		2		3
signature capability		offline enciphered PIN capability		reserved		static data authentication capability		dynamic data authentication capability	card capture capability
Byte 2					Byte 3				
4		5–8							
combined DDA/ application cryptogram generation capability		reserved							
Byte 3									

[Table 4–60](#) shows the field 130 subvalues.

Table 4–60: Field 130 Subfield Values

Position	Description	Values
Byte 1		
1	Manual Key Entry Capability	1 = Yes 0 = No
2	Magnetic Strip Read Capability	1 = Yes 0 = No
3	Chip Read Capability	1 = Yes 0 = No
4–8	Reserved for future use	
Byte 2		
1	Offline Plaintext PIN Capability	1 = Yes 0 = No
2	Online PIN Capability	1 = Yes 0 = No
3	Signature Capability	1 = Yes 0 = No
4	Offline Enciphered PIN Capability	1 = Yes 0 = No
5–8	Reserved for future use	
Byte 3		
1	Static Data Authentication Capability	1 = Yes 0 = No
2	Dynamic Data Authentication Capability	1 = Yes 0 = No
3	Card Capture Capability	1 = Yes 0 = No
4	Combined DDA/Application Cryptogram Generation Capability	1 = Yes 0 = No
5–8	Reserved for Future Use	

Usage

Field 130 is required for full VSDC transactions in 0100 authorization and account verification requests and 0120 STIP advices. It is also required for full VSDC transactions in ATM cash disbursements and balance inquiries. It is not used in card or issuer authentication processing.

Field Edits

There are no field edits for field 130.

Reject Codes

There are no reject codes for field 130.

Field 131—Terminal Verification Results (TVR)

Attributes

fixed length
40 bit string; 5 bytes

Description

Field 131 is a VSDC field containing terminal-recorded offline and online processing indicators that are available to members in online message and clearing transactions.

Positions: 1	2	3	4	5	6
offline authentication not performed	static data authentication failed	chip data missing	PAN on terminal exception file	DDA failed	combined DDA/ application cryptogram generation failed
Byte 1					
7–8	1	2	3	4	5
reserved	chip and terminal have different application versions	expired application	application not yet effective	requested service not allowed for card product	new card
Byte 1	Byte 2				
6–8	1	2	3	4	5
reserved	cardholder verification was not successful	unrecognized CVM	offline PIN try exceeded	PIN entry, required, PIN pad not working or not present	PIN entry required, PIN pad present but PIN not entered
Byte 2	Byte 3				
6	7–8	1	2	3	4
online PIN entered	reserved	transaction exceeds floor limit	lower consecutive offline limit exceeded	upper consecutive offline limit exceeded	transaction selected randomly for on online
Byte 3		Byte 4			

5	6–8	1	2	3	4
merchant forced transaction online	reserved	not applicable	issuer authentication failed	script processing failed before generating final cryptogram	script processing failed after generating final cryptogram
Byte 4		Byte 5			

5–8

reserved
Byte 5

[Table 4–61](#) shows the field 131 subvalues.

Table 4–61: Field 131 Subfield Values (1 of 3)

Position	Description	Values
Byte 1		
1	Offline Data Authentication Not Performed	1 = Yes 0 = No
2	Static Data Authentication Failed	1 = Yes 0 = No
3	Chip Data Missing	1 = Yes 0 = No
4	Primary Account Number on Terminal Exception File:	1 = Yes 0 = No
5	DDA Failed	1 = Yes 0 = No
6	Combined DDA/Application Cryptogram Generation Failed	1 = Yes 0 = No
7–8	Reserved for Future Use	
Byte 2		
1	Chip and Terminal are Different Versions	1 = Yes 0 = No
2	Expired Application	1 = Yes 0 = No

Table 4–61: Field 131 Subfield Values (2 of 3)

Position	Description	Values
3	Application Not Yet Effective	1 = Yes 0 = No
4	Service Not Allowed for Card Product	1 = Yes 0 = No
5	New Card	1 = Yes 0 = No
6–8	Reserved for Future Use	

Byte 3

1	Cardholder Verification Was Not Successful	1 = Yes 0 = No
2	Unrecognized CVM	1 = Yes 0 = No
3	Offline PIN Try Limit Exceeded	1 = Yes 0 = No
4	PIN Entry Required and PIN Pad Not Working or Not Present	1 = Yes 0 = No
5	PIN Entry Required and PIN Pad Present, PIN Not Entered	1 = Yes 0 = No
6	Online PIN Entered	1 = Yes 0 = No
7–8	Reserved for Future Use	

Byte 4

1	Transaction Exceeds Floor Limit	1 = Yes 0 = No
2	Lower Consecutive Offline Limit Exceeded	1 = Yes 0 = No
3	Upper Consecutive Offline Limit Exceeded	1 = Yes 0 = No
4	Transaction Selected Randomly for Online Transmission	1 = Yes 0 = No
5	Merchant Forced Transaction Online	1 = Yes 0 = No

Table 4–61: Field 131 Subfield Values (3 of 3)

Position	Description	Values
6–8	Reserved for Future Use	
Byte 5		
1	Not Applicable	
2	Issuer Authentication Failed	1 = Yes 0 = No
3	Script Processing Failed Before Generating Final Cryptogram	1 = Yes 0 = No
4	Script Processing Failed After Generating Final Cryptogram	1 = Yes 0 = No
5–8	Reserved for Future Use	

Usage

Field 131 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements, balance inquiries, and account transfers, and 0120 STIP advices. It is also required in the following messages if Issuer Authentication failed: 0400 reversal requests and 0420 reversal advices.

Field Edits

There are no field edits for field 131.

Reject Codes

There are no reject codes for field 131.

Field 132—Unpredictable Number

Attributes

fixed length
8 hexadecimal digits; 4 bytes

Description

Field 132 is a VSDC field. It contains the number used in the generation of the cryptogram for VSDC transactions. It provides variability and uniqueness to the cryptogram.

Usage

Field 132 is required for full VSDC transactions in 0100 authorization and account verification requests and 0120 STIP advices. It is also required for full VSDC transactions in 0100 cash disbursements, balance inquiries, account transfers. It is not used in 0400 reversals or 0420 reversal advices.

Field Edits

There are no field edits for field 132.

Reject Codes

There are no reject codes for field 132.

Field 133—Terminal Serial Number

Attributes

fixed length
8 AN, EBCDIC; 8 bytes

Description

Field 133 is a VSDC field. It is also used in Visa Horizon (COPAC and VSDC formats). It contains a unique identification number of the chip terminal assigned by the manufacturer. It is used to track devices regardless of their location.

Usage

VSDC: Field 133 is optional in 0100 authorization and account verification requests, 0120 STIP advices, 0100 cash disbursements, balance inquiries and 0102 ATM confirmations. If present in the original, it is required in 0400 requests and 0420 advices.

Visa Horizon—COPAC Format: This field is required in 0100 authorization requests for COPAC-format transactions only.

Field Edits

There are no field edits for field 133.

Reject Codes

There are no reject codes for field 133.

Field 134—Visa Discretionary Data

Attributes

variable length

1 byte binary + up to 15 bytes; maximum 16 bytes

Description

Field 134 is a VSDC field. It is also used in Visa Horizon transactions (COPAC and VSDC formats). It contains the Visa discretionary part of the issuer application data that is transmitted from the card to the issuer. It comprises these subfields:

- Field 134.1—Derivation Key Index
- Field 134.2—Cryptogram Version Number
- Field 134.3—Card Verification Results (CVR)

Fields 134.1 and 134.2 are hexadecimal subfields. Field 134.3 is a bit map subfield.

Positions:

1

2

3

4–x

length	Field 134.1, derivation key index	Field 134.2, cryptogram version number	Field 134.3, card verification results	reserved
Byte 1	Byte 2	Byte 3	Byte 4–7	Byte 8–16

Usage

VSDC: Field 134 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 STIP advices. It is also required in 0400 reversal requests and 0420 reversal advices if Issuer Authentication failed.

Visa Horizon—COPAC Format: This field is required in 0100 authorization requests for COPAC-format transactions only.

Field Edits

If Field 134 is present, it must contain binary data. The length cannot exceed 15 bytes, excluding the length byte; otherwise, reject 0369 is generated.

Reject Codes

The reject codes for field 134 are:

0369 = Invalid length (length greater than 15 bytes)

Field 134.1—Derivation Key Index

Attributes

fixed length
2 hexadecimal digits; 1 byte

Description

Field 134.1 is a VSDC field. It is also used in Visa Horizon transactions (COPAC and VSDC formats). It contains an index of the issuer's list of keys for use in online card authentication, issuer authentication, and validation of the clearing cryptogram.

Usage

VSDC: Field 134.1 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 STIP advices. It is also required in 0400 reversal requests and 0420 reversal advices if Issuer Authentication failed.

Visa Horizon—COPAC and VSDC Formats: This field is required in 0100 authorization requests for COPAC-format as well as VSDC-format transactions.

Field Edits

There are no field edits for field 134.1.

Reject Codes

There are no reject codes for field 134.1.

Field 134.2—Cryptogram Version Number

Attributes

fixed length
2 hexadecimal digits; 1 byte

Description

Field 134.2 is a VSDC field. It is also used in Visa Horizon transactions (COPAC and VSDC formats). It is used to calculate the cryptogram contained in the message. It indicates which version of the cryptogram algorithm was used for ARQC, TC, ARPC, or AAC generation.

Usage

VSDC: Field 134.2 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 STIP advices. It is also required in 0400 reversal requests and 0420 reversal advices if Issuer Authentication failed.

Visa Horizon—COPAC and VSDC Formats: This field is required in COPAC as well as VSDC-format 0100 authorization requests. The CVN value 15 is valid only for Visa Horizon transactions at VSDC terminals; CVN 15 is *not* valid for a request being submitted in COPAC format. CVN01 is valid only for Visa Horizon transactions occurring at a COPAC terminal.

NOTE: *Requests with CVN 15 are force-routed to issuers. STIP responds to issuer-unavailable requests with response code 91.*

Field Edits

There are no field edits for field 134.2.

Reject Codes

There are no reject codes for field 134.2.

Valid Values

x'01' (CVN 01)— Visa Horizon—COPAC Format request; Visa Horizon card used at a COPAC terminal. Cardholder Authentication Method (CAM) ineligible.

x '0A' (CVN 10)—XCAM and issuer authentication only.

x'0C' (CVN 12)— CAM ineligible (act on CVV or iCVV).

x'0F' (CVN 15)—Visa Horizon—VSDC Format request; Visa Horizon card used at a VSDC terminal. CAM ineligible.

Field 134.3—Card Verification Results (CVR)

Attributes

variable length

1 byte binary + up to 24 bit string; maximum 4 bytes

Description

Field 134.3 is a VSDC field. It is also used in Visa Horizon transactions (COPAC and VSDC formats). It contains a series of card-recorded offline and online processing indicators that are available to members in online messages and clearing transactions. The length subfield specifies the number of *bytes* present in this field.

Positions: 1–8		1–2		3–4		5		6		7	
CVR length subfield		second cryptogram type		first cryptogram type		issuer authentication performed and failed		offline PIN verification performed		offline PIN verification failed	
Byte 1		Byte 2									
8		1		2		3		4		5	
unable to go online		last online transaction not completed		offline PIN try limit		velocity checking counters exceeded		new card		issuer authentication failed on last online transaction	
Byte 2		Byte 3									
6		7		8		1–4		5		6	
issuer authentication performed on last online transaction		application blocked because PIN try limit exceeded		static data authentication failed on last transaction and transaction declined offline		number of issuer script commands processed on last transaction		issuer script processing failed on last transaction		DDA failed on last transaction and transaction declined offline	
Byte 3						Byte 4					
7		8									
DDA performed		reserved									
Byte 4											

[Table 4–62](#) defines the subfields for field 134.3.

Table 4–62: Field 134.3 Subfield Values (1 of 2)

Position	Description	Values
Byte 1		
1–8	CVR Length Subfield	The number of bytes following the subfield
Byte 2		
1–2	Second Cryptogram Type	00 = AAC 01 = TC 10 = Second cryptogram not requested 11 = Reserved for future use
3–4	First Cryptogram Type	00 = AAC 01 = TC 10 = ARQC 11 = AAR (Not supported)
5	Issuer Authentication Performed and Failed	1 = Yes 0 = No
6	Offline PIN Verification Performed	1 = Yes 0 = No
7	Offline PIN Verification Failed	1 = Yes 0 = No
8	Unable to Go Online	1 = Yes 0 = No
Byte 3		
1	Last Online Transaction Not Complete	1 = Yes 0 = No
2	Offline PIN Try Limit Exceeded	1 = Yes 0 = No
3	Velocity Checking Counters Exceeded	1 = Yes 0 = No
4	New Card	1 = Yes 0 = No
5	Issuer Authentication Failed on Last Online Transaction	1 = Yes 0 = No

Table 4–62: Field 134.3 Subfield Values (2 of 2)

Position	Description	Values
6	Issuer Authentication Performed on Last Online Transaction	1 = Yes 0 = No
7	Application Blocked Because PIN Try Limit Exceeded	1 = Yes 0 = No
8	Static Data Authentication Failed on Last Transaction and Transaction Declined Offline	1 = Yes 0 = No

Byte 4

1–4	Number of Issuer Script Commands Processed on Last Transaction	A 4-bit numeric value with leading zeros
5	Issuer Script Processing Failed on Last Transaction	1 = Yes 0 = No
6	DDA Failed on Last Transaction and Transaction Declined Offline	1 = Yes 0 = No
7	DDA Performed	1 = Yes 0 = No
8	Reserved for future use	n/a

Usage

VSDC: Field 134.2 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 STIP advices. It is also required in 0400 reversal requests and 0420 reversal advices if Issuer Authentication failed.

Visa Horizon—COPAC and VSDC Formats: This field is required in 0100 authorization requests for COPAC-format as well as VSDC-format transactions.

Field Edits

There are no field edits for field 134.3.

Reject Codes

There are no reject codes for field 134.3.

Field 135—Issuer Discretionary Data

Attributes

variable length
30 hexadecimal digits (1 byte length, 15 bytes for data, two digits per byte);
maximum 16 bytes

Description

Field 135 is a VSDC field. It is also used in Visa Horizon transactions (COPAC and VSDC formats). It contains data defined by the issuer on the card. This field transmits the data on the card to the issuer so it can use this information for online processing.

Usage

VSDC: If field 135 is present, it is used in 0100 authorization and account verification requests and 0120 STIP advices.

Visa Horizon—COPAC and VSDC Formats: This field is optional in 0100 authorization requests for COPAC format as well as VSDC format transactions.

Field Edits

If field 135 is present, its length cannot exceed 15 bytes, excluding the length byte; otherwise, reject 0370 is generated.

Reject Codes

The reject codes for field 135 are:

0370 = Invalid length (length is greater than 15 bytes)

Field 136—Cryptogram

Attributes

fixed length
16 hexadecimal digits; 8 bytes

Description

Field 136 is a VSDC field that contains an Authorization Request Cryptogram (ARQC), Transaction Certificate (TC), or an Application Authentication Cryptogram (AAC). It is also used in Visa Horizon transactions (COPAC and VSDC formats).

NOTE: *Field 134.3—Card Verification Results (CVR), indicates which cryptogram is present in this field.*

Usage

VSDC: Field 136 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 STIP advices.

Visa Horizon—COPAC and VSDC Formats: This field is required in 0100 authorization requests for COPAC format as well as VSDC format transactions.

Field Edits

There are no field edits for field 136.

Reject Codes

There are no reject codes for field 136.

Field 137—Application Transaction Counter

Attributes

fixed length
4 hexadecimal digits; a 2 byte binary value

Description

Field 137 is a VSDC field. It contains a count of the transactions performed within the application. This field is incremented by one each time a transaction is initiated.

Usage

VSDC: Field 137 is required for full VSDC transactions in the following messages:

- 0100 authorization and account verification requests and their responses
- 0100 cash disbursement and balance inquiries and their responses
- 0120 STIP advices
- 0102 ATM confirmations
- 0400 reversal requests and their responses
- 0420 reversal advices

Field Edits

There are no field edits for field 137.

Reject Codes

There are no reject codes for field 137.

Field 138—Application Interchange Profile

Attributes

fixed length
16 bit string; 2 bytes

Description

Field 138 is a VSDC field. It provides a series of indicators that reflect the specific functions that the chip card account supports. For example, this field indicates whether cardholder verification is supported.

Positions: 1	2	3	4
reserved	static data authentication supported	dynamic data authentication supported	cardholder verification supported
Byte 1			
5	6	7	8
terminal risk management to be performed	issuer authentication supported	combined DDA/generate AC supported	reserved
Byte 1			
1–8			
reserved			
Byte 2			

[Table 4–63](#) defines the subfields for field 138.

Table 4–63: Field 138 Subfield Values (1 of 2)

Position	Description	Values
Byte 1		
1	Reserved for Visa	n/a
2	Static Data Authentication Supported	1 = Yes 0 = No

Table 4–63: Field 138 Subfield Values (2 of 2)

Position	Description	Values
3	Dynamic Data Authentication Supported	1 = Yes 0 = No
4	Cardholder Verification Supported	1 = Yes 0 = No
5	Terminal Risk Management to be Performed	1 = Yes 0 = No
6	Issuer Authentication Supported	1 = Yes 0 = No
7	Combined DDA/Generate AC is supported	1 = Yes 0 = No
8	Reserved for Visa	n/a
Byte 2		
1–8	Reserved for Visa	n/a

Usage

Field 138 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 STIP advices.

Field Edits

There are no field edits for field 138.

Reject Codes

There are no reject codes for field 138.

Field 139—ARPC Response Cryptogram and Code

Attributes

fixed length
16 hexadecimal digits +
16 bit string; 10 bytes total

Description

Field 139 is a VSDC field. It is also used in Visa Horizon transactions (COPAC and VSDC formats). Issuers set this field when they perform issuer authentication. When the issuer subscribes to Issuer Authentication and the transaction meets the processing guidelines for Issuer Authentication performance, V.I.P. sets this field.

Positions:

1	2
F139.1 ARPC cryptogram	F139.2 ARPC response code
bytes 1-8	bytes 9-10

- Position 1, Authorization Response Cryptogram (Field 139.1):** This 8-byte subfield contains an Authorization Response Cryptogram used to authenticate the issuer host system.
- Position 2, Authorization Response Cryptogram Response Code (Field 139.2):** This field contains the response value used by the issuer to calculate the ARPC. The acquirer may modify the response code value in Field 39 before sending it to the terminal. When the card generates an ARPC and compares it to the ARPC generated by the issuer, it must have access to the same value used by the issuer. This field has been added to the message to ensure that the issuer and the card are using the same value to compute the cryptogram.

Usage

- VSDC:** If issuer authentication was performed, this field is required in 0110 authorization request and account verification responses, and 0110 cash disbursement and balance inquiry responses. It is required in an 0120 advice if it was in the original.
- Visa Horizon—COPAC Format:** This field is required in 0110 authorization request responses to COPAC-format transactions only.

Field Edits

There are no field edits for field 139.

Reject Codes

There are no reject codes for field 139.

Field 142—Issuer Script

Attributes

variable length
1 byte + up to 510 hexadecimal digits; maximum 256 bytes

Description

Field 142 is a VSDC field. It is also used in Visa Horizon transactions (COPAC and VSDC formats). It contains proprietary information that the issuer wishes to communicate to the card. It allows dynamic changes to the content of the card without reissuing the card.

Usage

Field 142 is optional in 0110 authorization, account verification, cash disbursement, and balance inquiry responses. It is not present in 0120 advices.

Visa Horizon—COPAC and VSDC Formats: This field is optional in 0110 authorization request responses.

Field Edits

If field 142 is present, the one-byte length value cannot exceed the 510-hexadecimal-digit maximum.

Reject Codes

The reject codes for field 142 are:

0371 = Invalid length

Field 143—Issuer Script Results

Attributes

variable length

1 byte binary + up to 40 hexadecimal digits; maximum 21 bytes

Description

Field 143 is a VSDC field. During online processing, the issuer has the option of sending commands to the card in the authorization response. These commands instruct the card to update the card parameters. The card records the success or failure of the updates in the Issuer Script Results field.

Positions: 1–4		5–8	1–8	
length	script processing results	script sequence number	issuer script identifier	reserved
Byte 1	Byte 2, bits 1–4	Byte 2, bits 5–8	Byte 3–6	Byte 7–21

Length Subfield: The number of bytes following the length subfield.

[Table 4–64](#) defines the subfields for field 143.

Table 4–64: Field 143 Subfield Values

Position	Description	Values
Byte 1		
Byte 1 1–4	Script Processing Results	0000 = Script not performed 0001 = Script processing failed 0010 = Script processing successful
Byte 1 5–8	Script Sequence Number	0000 = Script sequence not specified 0000–1110 = Sequence number of script command (1–14) 1111 = Sequence number of script command (15 or above)
Bytes 3–5 Issuer Script Identifier		
Bytes 7–21 Reserved		

Usage

VSDC: If an issuer script result is present in the original response, field 143 is used in 0400 requests and 0420 advices.

Field Edits

If field 143 is present, its length cannot exceed 20 bytes excluding the length byte.

Reject Codes

The reject codes for field 143 are:

0372 = Invalid length

Field 144—Cryptogram Transaction Type

Attributes

fixed length
2N, 4 bit BCD (unsigned packed); 1 byte

Description

Field 144 is a VSDC field. It is also used in Visa Horizon transactions (COPAC and VSDC formats). It indicates the type of financial transaction as represented by the first two digits of the processing code. Currently, the field 3 processing code may be modified before it reaches the issuer. When the issuer generates the ARQC and compares it to the value generated by the card, it must have access to the transaction type used by the card. Field 144 ensures that the issuer and the card are using the same value to compute the cryptogram.

Usage

VSDC: Field 144 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 STIP advices.

Visa Horizon—COPAC and VSDC Formats: This field is required in 0100 authorization requests.

Field Edits

If this field is present, it must contain a BCD value (packed unsigned numbers); otherwise, the field is removed from the message.

Reject Codes

There are no reject codes for field 144.

Field 145—Terminal Country Code

Attributes

fixed length
3N, 4 bit BCD; 2 bytes

Description

Field 145 is a VSDC field. It identifies the country where the merchant terminal is located. A leading zero is required to pad the first unused half-byte of this field. The zero is a filler and is not part of the code.

Usage

Field 145 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 STIP advices.

Field Edits

If this field is present, it must contain a BCD value (packed unsigned numbers); otherwise, the field is removed from the message.

Reject Codes

There are no reject codes for field 145.

Field 146—Terminal Transaction Date

Attributes

fixed length
6N, 4 bit BCD; 3 bytes

Description

Field 146 is a VSDC field. It is also used in Visa Horizon transactions (COPAC and VSDC formats). It contains the local date on which the transaction was authorized. It is used in the calculation of the cryptogram. The format is yymmdd

where: yy = 00–99
 mm = 01–12
 dd = 01–31

Usage

VSDC: Field 146 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 STIP advices.

Visa Horizon—COPAC and VSDC Formats: This field is required in 0100 authorization requests.

Field Edits

If this field is present, it must contain a BCD value (packed unsigned numbers); otherwise, the field is removed from the message.

Reject Codes

There are no reject codes for field 146.

Field 147—Cryptogram Amount

Attributes

fixed length
12N, 4 bit BCD (unsigned packed); 6 bytes

Description

Field 147 is a VSDC field. It is also used in Visa Horizon transactions (COPAC and VSDC formats). It contains the transaction amount that the chip uses when calculating the cryptogram. It must contain numeric right-justified data with leading zeros.

Usage

VSDC: Field 147 is required for full VSDC transactions in 0100 authorization and account verification requests (with amounts equal to zero), 0100 cash disbursements and balance inquiries, and 0120 STIP advices.

Visa Horizon—COPAC and VSDC Formats: This field is required in 0100 authorization requests.

Field Edits

If this field is present, it must contain a BCD value (packed unsigned numbers); otherwise, the field is removed from the message.

Reject Codes

There are no reject codes for field 147.

Field 148—Cryptogram Currency Code

Attributes

fixed length
3N, 4 bit BCD; 2 bytes

Description

Field 148 is a VSDC field. It is also used in Visa Horizon transactions (COPAC and VSDC formats). It contains the currency code used by the chip when calculating the cryptogram. Codes are defined by ISO 4217 and are listed in Appendix E, Country and Currency Codes. A leading zero is required to pad the first unused half-byte of this field. The zero is a filler and is not part of the code.

Usage

VSDC: Field 148 is required for full VSDC transactions in 0100 authorization and account verification requests, 0100 cash disbursements and balance inquiries, and 0120 STIP advices.

Visa Horizon—COPAC and VSDC Formats: This field is required in 0100 authorization requests.

Field Edits

If this field is present, it must contain a BCD value (packed unsigned numbers); otherwise, the field is removed from the message.

Reject Codes

There are no reject codes for field 148.

Field 149—Cryptogram Cashback Amount

Attributes

fixed length
12N, 4 bit BCD (un signed packed); 6 bytes

Description

Field 149 is a VSDC field. It contains the cashback amount that the chip uses when calculating the cryptogram. It is also used in Visa Horizon transactions originating at VSDC terminals (it is not used in COPAC-format transactions).

Usage

VSDC: Field 149 is required in 0100 POS authorization and account verification requests, and 0120 STIP advices. It is not used in ATM 0100 cash disbursements or balance inquiries.

Field Edits

If this field is present, it must contain a BCD value (packed unsigned numbers); otherwise, the field is removed from the message.

Reject Codes

There are no reject codes for field 149.

Field 150—COPAC Cardholder Card Scheme Cryptogram

Attributes

fixed length
16 hexadecimal digits; 8 bytes

Description

This field contains a COPAC transaction certificate, calculated with a Visa derived key, that Visa uses to arbitrate disputes between issuer and acquirer.

Usage

This field is used in COPAC-format Visa Horizon requests. It is required in 0100 authorization requests for COPAC issuers.

NOTE: *This field is currently zero-filled.*

Field Edits

If the issuer is COPAC, this field must be present. This field cannot be present in a request for non-COPAC issuer.

Reject Codes

0518 = Invalid field for message type.

Field 151—COPAC Negative File Version and Audit Trace Numbers

Attributes

fixed length
24 N, 4-bit BCD (unsigned packed); maximum: 12 bytes

Description

This field, used in COPAC transactions, contains a 4-digit code identifying the current version of the negative file in the merchant terminal, a 12-digit cardholder card audit trace number, and an 8-digit merchant card audit trace number. An example of the entire 12 byte field is

199700010002004000010053

Positions:

1–4

5–16

17–24

Subfield 1: Negative file version number	Subfield 2: Cardholder card audit trace number	Subfield 3: Merchant card audit trace number
Byte 1–2	Byte 3–8	Byte 9–12

Positions 1–4, Negative File Version Number (Subfield 1): This 4-digit, 2-byte subfield contains a 4-digit numeric code identifying the current version of the negative file in the merchant terminal. It is expressed in a 2-digit numeric, 4-bit BCD (unsigned packed) format with a maximum of 2 bytes. For example: 1997.

Positions 5–16, Cardholder Card Audit Trace Number (Subfield 2):

This 12-digit, 6-byte subfield contains the following:

- positions 5–8: Preauthorized trace number (4 digits, 2 bytes)
- positions 9–12: Purchase trace number (4 digits, 2 bytes)
- positions 13–16: Cryptogram trace number (4 digits, 2 bytes)

The values are expressed in a 12-digit numeric, 4-bit BCD (unsigned packed) format with a maximum of 6 bytes. For example: 000100020040.

Positions 17–24, Merchant Card Audit Trace Number (Subfield 4): This 8-digit, 4-byte subfield contains the following:

- positions 17–20: Merchant Card Batch trace number (4 digits, 2 bytes)
- positions 21–24: Merchant Card Transaction trace number (4 digits, 2 bytes)

The values are expressed in an 8-digit numeric, 4-bit BCD (unsigned packed) format with a maximum of 4 bytes, for example, 00010053.

Usage

This field is used in COPAC-format Visa Horizon requests. It is required in 0100 authorization requests for COPAC issuers.

NOTE: *This field is currently zero-filled.*

Field Edits

If the issuer is COPAC, this field must be present. This field cannot be present in a request for non-COPAC issuer.

If present, this field must contain all numeric data. If BASE I rejects this field because it failed the edit, all field 151 values are changed to zeros.

Reject Codes

0518 = Invalid field for message type.

Field 192—Message Authentication Code (MAC)

Attributes

fixed length
64 bit string; 8 bytes

Description

Field 192 can be used to validate the source and the text of the message between the sender and the receiver.

Until a standard from ISO TC 68 is available, this code should be calculated using the formula given in *Financial Institution Message Authentication (Wholesale)—ANSI X9.9-1984*.

Usage

The message authentication code (MAC) must be placed in the last field of the message text. This field is included in messages only if required in bilateral agreements within a given network. It is a strictly optional field in V.I.P. messages.

STIP and Switch Advices: Field 192 is present in an STIP-generated 0120 advice if it was in the request.

Field Edits

There are no field edits for field 192.

Reject Codes

There are no reject codes for field 192.

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