



ORBITAL GATEWAY

BATCH XML

INTERFACE SPECIFICATION

DEVELOPERS GUIDE

October 2018

Version 3.5

Orbital Gateway Batch XML Interface Specification

Version 3.5 October 2018

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Last Revised: 10/1/2018 4:18 PM

Change Control Log

Date	Action	Description
07/07/04	Change	Change host address.
10/20/04	Change	Remove reference to password reset dtd.
07/07/05	Add	Add comment about password reset response file.
02/28/05	Add	Newest Schema and DTD versions (v014)
02/28/05	Add	Added Support for Soft Descriptors
02/28/05	Add	Added Support for FlexCache
02/28/05	Add	Added Support for Purchasing Card Level 3
02/28/05	Add	Updated Proc Status Codes
02/28/05	Corrected	AdjustedAmount tag corrected (from AdjustedAmt)
02/28/05	Corrected	Corrected the rules regarding the SFTP logon password rules.
02/28/05	Updated	Updated the ProcStatus table to include additional or corrected error codes.
07/15/05	Updated	Added Support for FlexCache via the PNS Host
07/15/05	Updated	Deleted line that states that the Certification system is not IP authenticated. Paymentech is now IP authenticating this system as well.
07/15/05	Updated	Updated the IP Addresses used for the Frame and Dial PPP interface.
06/01/07	Updated	Updated Branding to reflect Chase Paymentech branding
06/01/07	Updated	Newest Schema version (v016)
06/01/07	Updated	Add Support for Bill Me Later
06/01/07	Updated	Add Support for European Direct Debit
12/15/08	Updated	Added Support for Managed Billing and PINless Debit. New schema version v019
05/28/09	Updated	Put into new template and edited for style and formatting
6/15/09	Updated	Add Account Verification information. Updated Response Codes, AVS Response Codes, ProcStatus Codes.
3/14/11	Updated	Add Account Updater, Purchasing Card Appendix, and Versioning. Add notes on authentication methods. Clarified ECP, Gift Card, and Profile Method of Payment notes. Updated Response Codes and ProcStatus Codes. New schema version v020
6/8/11	Updated	Add International Maestro, Account Updater for Designated Profiles, and EUDD support for Customer Profiles. Clarified requirements for Switch/Solo (UK Maestro) New schema version v022
8/16/11	Updated	Add support for ECP on Bin 000002. Add extended ECP processing and Arc/Pop Authorization Methods New schema version v023

10/13/11	Updated	Added support for Safetech Fraud Analysis on Bin 000001 Clarified notes on ECP Authorization Methods New schema version v024
03/30/12	Updated	Added additional clarifications on Safetech service.
06/26/12	Updated	Added support for Account Verification on International Maestro Added support for Purchasing Card 2/3 data for Discover (Salem Only) Clarified notes on UK Maestro and International Maestro Clarified notes on Purchasing Cards to reflect Commercial Card support
10/3/2012	Updated	Updated various response code and proc status descriptions. Updated various grammatical clarifications and typos.
4/23/2013	Updated	Added support for Card Indicators / Enhanced Authorizations Updated various sections for additional clarification.
8/18/2013	Updated	Updated various sections for additional clarification.
1/14/2014	Updated	New schema version v027 Refactored European Direct Debit (EUDD) notes ahead of 2014 changes.
4/1/14	Add/Update	Added support for Chasenet Updated host response handling of cardBrand element
8/20/14	Updated	New schema version v029 Added message details to support Transaction Surcharge for Credit/ChaseNet
9/18/14	Updated	Provided further clarifications on various data elements in message definition tables
7/2/2015	Updated	Updated New Order Request and Safetech Fraud Analysis Request messages for avsAddress1, avsAddress2, avsCity, avsDestAddress, avsDestAddress2 and avsDestCity elements. The update was for characters allowed in these elements.
8/17/2015	Updated	Updated to include Chase Pay for settlement
10/16/2015	Updated	Updated MFC message in section 3.1.5 and void message in section 3.1.6. Added notes for Chase Pay merchants.
5/10/2016	Add/Update	Updated section 3.3.1 Soft Descriptors Added section 3.3.2 Soft Merchant Descriptors Updated New Order Request XML to Soft Merchant Descriptors data elements
5/31/2016	Add/Update	Added MasterCard field length limitation for SMDMerchant ID
4/4/2016	Clarification	4.1.11 – Gift Card (FlexCache) Request Elements ccAccountNum – Added a note: OGW also supports gift cards what has account numbers with all zero's ("00000") as part of the SafeTech Fraud Analysis
4/19/2017	Clarification	3.3.8.1 – CTI Request and Response Added clarification around JCB Card Type
5/1/2017	Add/Update	6.1.4 – New Order Request Columns and 6.2.4 – New Order Response columns New EWS (Advanced Verification = AV) elements are added in New Order Request and New Order Response messages. Added new section "5.2.5.4 ECP Advanced Verification Processing Requirements". Added ECP Action Codes Also added new EWS Response Codes in the Response Code Table A.2 (P1, P2, P3, P4, P5)

9/14/2017	Update	Updated section 2.1 to correctly indicate availability of outbound file. Outbound files are available for 7 days on server
12/01/2017	Add/Update	<p>Added FX elements to 4.1.4 – New Order Request message.</p> <p>Added FX elements to 4.2.4 – New Order Response message. Added below tables.</p> <ul style="list-style-type: none"> • Rate Information Status Code • Presentment Currencies • Settlement Currencies <p>Added Section 3.1.11 Access FX</p> <p>Added FX Error Codes to A.4.3</p>
12/11/2017	Update	Updated Table 16: AVS Response Code Values with BIN 000001 and BIN 000002 column.
12/13/2017	Clarification	Added a statement under 3.1.4 to note that Ampersand "&" is a valid character.
01/11/2018	Update	Updated specification for Access FX to incorporate feedback received from product team.
03/12/2018	Update	Updated Specification to include VISA Stored Credential / Cardholder Initiated Transaction/Merchant Initiated Transaction (CIT/MIT) framework
03/12/2018	Update	Updated Specification to add Pinless Debit E-Commerce support
04/06/2018	Update	<p>Updated Specification to include Discover Stored Credential / Cardholder Initiated Transaction/Merchant Initiated Transaction (CIT/MIT) framework</p> <p>Updated Specification to include the design change for CIT/MIT framework</p> <p>Updated Specification to add Credit Voucher and Merchandise Return Authorization Messages</p> <p>Updated Appendix A to add Table 22 - VBN for CAVV Processing Changes Response Codes</p> <p>Updated Specification to include CIT/MIT Process Status in Successful Response Files</p> <p>Updated Specification to include CIT/MIT Process Status in Profile Management Responses</p> <p>Expanded description for Level 2 Data Summary fields. Changed the field requirement for TAA Records from mandatory to optional.</p> <p>Expanded description for Level 3 Data Summary fields: Detail Description and Detail Product Code</p>
04/23/2018	Update	<p>A.4.3 Process Status in Error Response File (Table 19)</p> <p>Error 6787 – fix spelling of error message. Changed “then” to “than”</p> <p>Added a new Error Code 6813 to the merchant facing response file for batch processing.</p>

05/18/2018	Update	<p>Updated Specification to include Section 3.3.8 Recurring/Incremental/Unscheduled Credential on File – Existing Relationship Outside of Framework</p> <p>Updated Specification to include Section 3.3.9 TXID Override by Merchants on Orbital profiles for CIT/MIT framework</p> <p>Updated Specification by adding 2 new columns to the CIT/MIT Message Type definitions table in section 3.3.5.1.3</p>
05/22/2018	Update	Updated Specification to add PINless Debit E-Commerce Profiles and managed Billing support
6/11/2018	Update	Appendix A.4.1: Updated Specification to include CIT/MIT Process Status Codes and Messages
07/03/2018	Update	<p>Updated Specification to include MasterCard Stored Credential / Cardholder Initiated Transaction/Merchant Initiated Transaction (CIT/MIT) framework</p> <p>Updated Specification to include DPAN MINS for VISA Credential on File – Existing Relationship Outside of Framework</p> <p>Updated Specification to include CUSE for VISA for converting a BAU profile into CIT/MIT profile</p> <p>Updated Specification to include Multi CIT functionality</p>
06/25/2018	Update	<p>Added brief description of the new Consumer Account Date field for ECP EWS which we will be receiving in the response</p> <p>Added new Consumer Account Date field for EWS in 4.2.4 New Order Response elements</p>
07/24/2018	Added	<p>Real Time Account Updater Functionality (RTAU)</p> <ul style="list-style-type: none"> • 3.4.5.2 - Real Time Account Updater (RTAU) • 3.4.5.2.1 - Supported Transaction Types and MOP's • Added new RTAU elements to 4.1.4 New Order Request • Added new RTAU elements to 4.2.4 New Order Request • Added 5.3.2 Real Time Account Updater Response Codes
8/22/2018	Clarification	<p>Adding more clarification regarding versioning around the new Consumer Account Date field for ECP EWS for the merchant.</p> <p>NOTE: this clarification will not be a version change and hence will remain the same. No new element/requirement has been added.</p>
10/01/2018	Update	<p>Updated Specification to include Discover Stored Credential / Cardholder Initiated Transaction/Merchant Initiated Transaction (CIT/MIT) framework for the following message types – CINS, MINS, CSTO, CUSE, MUSE, MRSB Updated Specification to include MINS and MUSE for Discover Credential on File – Existing Relationship Outside of Framework</p> <p>Updated Specification to include Zero value account verification for AMEX card brand for Stratus merchants</p>

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Chapter 1 Introduction

Chase Paymentech's Orbital Gateway offers a Batch Processing Interface. The functionality supported by this message specification is defined in this document.

There are two mechanisms for submitting this file format into the Orbital Gateway:

- Through the Orbital Gateway Batch SFTP (Internet) Interface
- Through the Orbital Gateway Batch FTP (Dial/Frame) Interface

The Batch Interface is supported for customers processing through the Stratus and Tandem (PNS) platforms. The functionality of the interface is limited to what is possible based on each endpoint.

Chase Paymentech maintains two proprietary Authorization and Deposit platforms. The PNS platform, which is sometimes referred to as *the Tandem*, is primarily targeted to Retail and smaller customers. The Salem platform, sometimes referred to as *the Stratus*, is primarily targeted to Card-Not-Present and larger customers. Despite the names, both systems are collocated in both Richardson, Texas, and Salem, New Hampshire. Each platform has unique processing features, and, since Orbital supports both, the features available to merchants are based on the platform they are set up on.

The Gateway processes to both platforms using identical transaction information as presented in this specification, with the exception of any features that may only be available on one of the two platforms. Throughout this document, there are references to *BIN 000001* (Salem Platform) or *BIN 000002* (PNS Platform). Please contact your Technical Analyst or Relationship Manager if you are unsure which Platform your merchant account resides on.

The Chase Paymentech Orbital Gateway described in this document operates on the basis that a merchant initially instructs the Gateway to perform an operation on the merchant's behalf. Assuming that the initial operation is successful, the Gateway returns information that the merchant must use for all subsequent operations on the transaction in question. The Gateway manages the *transaction state* on behalf of the merchant. The merchant moves the transaction between the various possible states using the messages and fields defined in this document.

1.1 Virtual Terminal

The Batch XML Interface is simply one of the optional interfaces into the Gateway. All transactions processed through the Batch Interface will be visible, identifiable, and adjustable via the Virtual Terminal. All transactions processed this way will be identified with a source of `BATCH` in the Order History.

1.2 Certification

Before aggregators, software vendors, or merchants can process using this interface, the implementation must go through the appropriate certification process with Chase Paymentech. Please work with your Chase Paymentech Representative to schedule testing and certification as necessary.

1.2.1 Mandatory Certification Requirements

The following list includes items that are required for all certification and recertification requests. This list is not necessarily all inclusive. Please speak with your Chase Paymentech Integration Consultant to discuss further.

- ChaseNet – All new certifications must validate the ability to handle all current ChaseNet methods of payment.
- Retry Logic – Mandatory for all merchants who process PINless Debit. For all merchants, in general, Retry Logic is highly recommended and a best practice when processing over the Internet.
- Profile Fetch, Profile Update, Profile Delete – If using Orbital Gateway's Profile Management or Managed Billing features, supporting Profile Fetch/Update/Delete requests is highly recommended to maintain the merchant's repository of profiles on the Orbital Gateway system.

Chapter 2 Processing Interface Description

2.1 Introduction

The Orbital Gateway Batch XML Interface allows you to submit all transaction types supported by the Orbital Gateway, such as authorization, authorization and capture, prior authorization, capture, refund, void, and an end of day (batch).

The Orbital Gateway Batch XML Interface is logically defined as follows:

- ◻ A single XML document that supports multiple merchants and up to 300,000 records in a single file. However, it is highly recommended that a single file contain 50,000 records.
 - ◻ The Request XML document is delivered by the client using a `put` process.
 - ◻ Once the Orbital Gateway has completed processing the request and creating the response file, the Response XML document can be retrieved via a `get` command.
 - ◻ There are three communication mechanisms for processing the file:
 - ◆ Internet (SFTP)
 - ◆ Frame Relay (FTP)
 - ◆ Dial PPP (FTP)
 - ◻ Availability of response files:
 - ◆ The Orbital Batch Interface always writes response files to both the primary and secondary server, regardless of which server receives the request files.
 - ◆ The response files remain on both servers for 7 days, unless they are deleted from each server manually by the user.
 - ◻ Once connected, in addition to the SFTP/FTP `get` and `put` commands to send and retrieve files, the following commands are available for use:
 - ◆ `cp` Copies file into the same directory or into another directory specified by path
 - ◆ `ls` Displays directory listing of either path or current directory if path is not specified
 - ◆ `rm` Deletes file specified by path
 - ◆ `mkdir` Creates directory specified by path
 - ◆ `rmdir` Removes directory specified by path
- WARNING** Do not rename files. Renaming files can cause files to be reprocessed.
- ◻ Because of security issues associated with Internet processing, there are some slightly different processing mechanisms between Internet and Frame Relay/Dial PPP options. The following sections outline how each interface works, along with additional information, such as prerequisites and so on.

2.1.1 File Naming Rules

Rules for file naming:

- ◻ Every file name must be unique. If a file name is reused, an error will be generated and the file will not process.
- ◻ The maximum length of the request file name (excluding the .zip or .xml extension) is 36 characters.
- ◻ Valid character in file names:
 - ◆ A-Z
 - ◆ a-z
 - ◆ 0-9
 - ◆ Dash
 - ◆ Underscore
- ◻ The file extension must be:
 - ◆ .zip, .pgp, .gpg, .asc for files delivered via Internet.
 - ◆ .xml for files delivered via Dial PPP/Frame Relay.
- ◻ The response file name will be the same as the request file name with _resp appended.

This means that, including the extension and response suffix, the maximum length for a response file name is 45 characters.

For example:

- ◆ Request file name: ABCDEFGHIJK1234567890abcdefghijk.zip
- ◆ Response file name: ABCDEFGHIJK1234567890abcdefghijk_resp.zip

2.1.2 File Processing Problems

Even if you are able to successfully transfer a file into the directory, there are various factors that could prevent the file from processing entirely. If this happens, there will still be a response file in the directory for retrieval, but none of the records in the file will be processed, and the file will contain a file response error message that identifies the reason for the failure.

Additionally, errors or unexpected behaviors can result if any characters in the request payload do not match the character encoding specified in the request.

Most messages specify "UTF-8" encoding and contain ASCII characters. The Orbital Gateway also supports "ISO-8859-1" encoding. Commonly referred to as the Latin-1 character set, messages containing French, Spanish, or other special characters may require ISO-8859-1 encoding instead.

2.1.3 XML Schema

The Chase Paymentech Orbital Gateway Batch Interface accepts and returns XML documents. The latest schema versions are:

- Request: OrbitalRequestSchemav034.xsd
- Response: OrbitalResponseSchemav034.xsd

When processing the file, the Orbital Gateway will perform the initial data validation of the Batch File format using the referenced schema.

2.2 Transmission via the Internet

2.2.1 Address

Orbital Gateway Batch certification system:

- Primary:** orbitalbatchvar.paymentech.net
Secondary: orbitalbatchvar2.paymentech.net

Orbital Gateway production system:

- Primary:** orbitalbatch.paymentech.net
Secondary: orbitalbatch2.paymentech.net

NOTES While the certification system is available for testing at all hours, it is only monitored for availability during business hours (8:00am EST - 5:30pm EST Monday - Friday). In addition, the hardware in place is designed primarily for certification testing, not load testing. If there is a need to ensure uptime outside of normal business hours, please advise your Certification Analyst of the testing requirements.

Caching IP Addresses of Orbital Gateway Batch servers is strongly discouraged. For redundancy reasons, the Orbital Gateway processing is divided amongst multiple data centers. Therefore, the DNS service should be used to determine the destination IP address for each transaction. If IP addresses are required for merchant firewall rules/purposes, these values can be obtained from your Certification Analyst.

SSH (SFTP) utilizes a key fingerprint system for verifying the authenticity of the server when the client connects. A user will be prompted to enter **yes** only when connecting for the first time. Future attempts to log on are all verified against the saved fingerprint key. The SSH client will alert you if the saved fingerprint differs from the received fingerprint on future login attempts. Based on this, it should be noted that Chase Paymentech utilizes two separate servers (and therefore two separate SSH fingerprint keys) for the Orbital Batch process. If your client is authenticating the fingerprint keys, both sets must be registered in your known

host file in order to prevent authentication errors when Chase Paymentech switches servers.

2.2.2 Transmission

Given the inherent risks associated with processing transactions over the Internet, the Orbital Gateway requires both encrypted traffic to prevent interception of the payload and authentication of the source request generation. The following sections define the transmission requirements for the Internet Batch Interface option.

2.2.2.1 SFTP

All transmissions will be made using SFTP. This means that you must first create a secure connection to the Orbital Batch server using a valid SFTP tool. The Orbital Gateway supports two forms of authentication:

- Keyboard Interactive
 - ◆ This requires a username and password, which will be provided by Chase Paymentech.
- NOTE** The SFTP password will expire periodically. See [2.4 Resetting the SFTP/FTP Password](#) for more information.
- Public key
 - ◆ This requires a Username, which will be provided by Chase Paymentech.
 - ◆ The Gateway supports SSH-RSA (SSH Version 2) and SSH-DSA keys. SSH-RSA (SSH Version 1) keys are currently not supported.
 - ◆ Public keys must be provided in the OpenSSH format. Keys in the RFC 4716 format must be converted to the OpenSSH format.
 - ◆ For assistance setting up a public key, please contact your Certification Analyst.

When the session is successfully established, you are logged in to a directory with a name that matches your assigned username. Within this directory, you can SFTP put the request files and SFTP get the response files.

When the Orbital Gateway detects the presence of a new request file, it retrieves and subsequently deletes that file from the folder.

When the response file is completed, it is placed in the same directory using the same file name as the request file with _resp appended, as described in [2.1.1 File Naming Rules](#). For example, if the request file name were file040612.zip, the response file name would be file040612_resp.zip.

2.2.2.1.1 SFTP Products

Establishing a SFTP connection requires having a SFTP client application. Chase Paymentech neither recommends nor supports any SFTP products. However, some examples of open source options are:

- OpenSSH (www.openssh.org)
- PuTTY (www.chiark.greenend.org.uk/~sgtatham/putty/)

2.2.2.2 Source Authentication

In addition to SFTP username and password authentication, the Orbital Gateway validates that the source IP is registered in a white list at Chase Paymentech. From a client implementation standpoint, this means that any activity presented on an IP address that is not registered will result in a connection failure. This is true for both the certification and production environments (which each house distinct white lists).

NOTE The white list is updated hourly. At most, merchants will have to wait an hour before processing in either the certification or production environments.

2.2.2.3 ZIP and Encrypt File

Prior to sending them via SFTP, all files must be **zipped/compressed and encrypted** using Zip-based compression software. This provides an extra measure of security that is required to ensure the request and response files are not compromised.

While Chase Paymentech does not recommend a specific Zip product, both PKZip (www.pkware.com) and WinZip (www.winzip.com) have been tested. The software should be able to zip and password-protect the file.

When the response file is retrieved, it will be zipped and password-protected as well.

NOTE The same password assigned for the SFTP username must be used for the Zip process.

2.2.2.3.1 PGP Encryption

Chase Paymentech provides support for those merchants who prefer to use PGP encryption instead of the standard "ZIP" method. In order to use PGP encryption, each merchant will need to define the file naming standard they want to use. Only one of the following can be selected:

- For Binary Files:
 - ◆ .pgp
 - ◆ .gpg
- For ASCII:
 - ◆ .asc

Merchants encrypt their request files using the Chase Paymentech public key and then submit the files via SFTP. After processing the request file, Chase Paymentech encrypts the response file using the merchant's public key and signs that encryption with the Chase Paymentech private key. Merchant's can either (1) Not verify the signature or (2) Verify the signature using the Chase Paymentech public key.

Your Chase Paymentech certification analyst can work with you to exchange the PGP public keys and to complete the setup process.

NOTE

- The same public key can be used for both test and production.
- Chase Paymentech will NOT expire its PGP public keys.
- Merchants can expire their PGP public keys but this is not recommended by Chase Paymentech.

2.3 Transmission via Frame Relay and Dial PPP

2.3.1 Connection Information

2.3.1.1 Frame Relay

This transmission method involves the installation of a frame circuit, which should be coordinated with your Sales Person/Account Manager and Certification Analyst. Installation of Frame Relay will take 45-60 days. Dial PPP can be used while waiting for frame installation.

2.3.1.2 Dial PPP

The Orbital Batch Interface provides a Dial connection Option (Dial PPP). Establishing a Dial PPP Connection for creating an FTP interface requires a username and password, which are distinct from the FTP username and password.

The dial-in phone number is **800-314-1196**.

It will take up to a week for the Dial PPP to be set up on the Chase Paymentech Host.

2.3.2 Address

Once the connection is established via Frame Relay or Dial PPP, the FTP server is located at:

Orbital Gateway Batch certification system:

Primary: 206.253.184.165

Secondary: 206.253.180.165

Orbital Gateway production system:

Primary: 206.253.184.160

Secondary: 206.253.180.160

NOTES While the certification system is available for testing at all hours, it is only monitored for availability during

business hours (8:00am EST - 5:30pm EST Monday - Friday). In addition, the hardware in place is designed primarily for certification testing, not load testing. If there is a need to ensure uptime outside of normal business hours, please advise your Certification Analyst of the testing requirements.

2.3.3 Transmission

2.3.3.1 FTP

All transmissions made over Frame Relay or Dial PPP will be made using FTP. This requires a FTP username and password, which will be provided by Chase Paymentech.

NOTE The FTP password will expire periodically. See [2.4 Resetting the SFTP/FTP Password](#) below for more information.

When the session is successfully established, you are logged in to a directory with a name that matches your assigned username. Within this directory, you can FTP put the request files and FTP get the response files.

When the Orbital Gateway detects the presence of a new request file, it retrieves and subsequently deletes that file from the folder.

When the response file is completed, it is placed in the same directory using the same file name as the request file with _resp appended, as described in [2.1.1 File Naming Rules](#). For example, if the request file name were file070612.xml, the response file name would be file070612_resp.xml.

2.3.3.2 File Compression

Unlike the Internet interface, files delivered via the Dial and Frame connection should NOT be compressed in any fashion prior to delivery. When configured to process via Batch XML, the system will be expecting a *.xml file layout. Any other file layout will result in an error. A password reset file (described below) is the only exception to this.

2.4 Resetting the SFTP/FTP Password

The SFTP/FTP (Internet/Frame Relay) passwords must be reset at least **every 90 days** or they will expire. The Zip and Dial PPP Password **do not expire** automatically.

If you have not reset the password by day 89, the system will advise you that the password is about to expire.

There are two mechanisms for resetting passwords:

- You can upload a Password File in your directory before the password expires (must be more than 7 days after the last password reset).
- You can contact the Orbital Gateway Customer Service group to reset your password for you at any time.

2.4.1 Uploading a New Password File

If it is at least 7 days and no more than 89 days since your last password change, you can connect to the Orbital Gateway and drop a password file in your directory to set a new password.

Password Rules

The password must adhere to the following rules:

- ◻ The password must contain exactly 8 characters.
- ◻ The password may contain only standard English letters, numbers, dashes, or underscores (a-z, A-Z, 0-9, -, _).
- ◻ The password must contain at least 2 letters.
- ◻ The password must contain at least 1 number.
- ◻ The new password cannot be the same as any previous password used.

Password File Layout

The password file must be an XML file in the following layout:

```
<passwordRequest>
  <userID>TESTUSER</userID>
  <password>AbC45678</password>
</passwordRequest>
```

The file can be validated using the `PasswordRequest001.xsd` schema.

Password File Name

The name of the file must be:

- ◻ `password_YYMMDDhh24mm.zip` (if delivered via Internet). Additionally, .the following extensions are also supported:
.pgp, .gpg, .asc

OR

- ◻ `password_YYMMDDhh24mm.xml` (if delivered via Frame/Dial)

where `YYMMDDhh24mm` represents the timestamp of the file creation and:

<code>YY</code>	= year
<code>MM</code>	= month
<code>DD</code>	= day of month
<code>hh24</code>	= hour military
<code>mm</code>	= minute

Password File Processing

- ❑ The password should be updated within 15 minutes of the time the file is submitted.
- ❑ A successful password change does not generate a response file. You only see a response file if the request fails.
- ❑ Neither the Zip nor the Dial PPP Connection password is changed:
 - ◆ As long as this process sets the password, the Zip password will never change.
 - ◆ The Dial PPP Connection password is never changed unless specifically requested.

2.4.2 Password Reset by Chase Paymentech

At any time, including less than 7 days since the last password change or after the password expires, you can request that Chase Paymentech reset your password for you by contacting Orbital Gateway Customer Service via:

- ❑ E-mail: GatewaySupport@ChasePaymentech.com
- ❑ Phone: 866-645-1314

When resetting the password via this mechanism, be aware that:

- ❑ The new password is system-generated—you cannot specify the new password.
The Customer Service Representative will communicate the new password to you verbally.
After 7 days, you can upload a Password File to set the password as you choose.
- ❑ Contrary to uploading a Password File, this mechanism resets not only the SFTP/FTP password, but also the Zip password for users connecting over the Internet.
- ❑ This process does NOT affect the Dial PPP Connection password.
- ❑ This change can take up to one hour from the time the Customer Service Group makes the update to take effect.

Chapter 3 Functional Processing

This chapter defines the base transactions types of the Batch Interface. More detailed definition of these transactions, data elements, and examples are provided in the Batch XML message definitions.

3.1 Transaction Types

3.1.1 Header Data

The Batch file header contains five components:

- ▣ The total number of records in the file (Request Count attribute)
 - ◆ The number of records is equal to the number of transaction request types and must equal the actual number submitted or the file will fail.
 - ◆ This number should not exceed 999,999 transactions.
- ▣ The User ID. This must equal the actual SFTP/FTP User ID name or the file will fail.
- ▣ The File Timestamp (Date and Time).
- ▣ The File ID. This must be the same as the actual file name without the .zip or .xml extension.
- ▣ The File Version.
 - ◆ To specify this version of the Batch XML format, use a value of '2.9' (OrbitalRequestSchemav029.xsd).
 - ◆ It is necessary to submit the version to take advantage of new functionality.

3.1.2 New Order

New Order is the transaction type for processing new orders. The following actions are permitted:

Authorization (Auth Only)

Authorize the supplied information, but do NOT create a settlement item. This transaction type should be used for deferred billing transactions.

Any transactions approved in this manner must be *marked for capture* in order to be settled. This can be done in the VT manually or via a Mark for Capture transaction.

SEE ALSO See [3.1.5 Mark for Capture \(MFC\)](#) for information.

Authorization and Capture (Sale)

Authorize the supplied information and mark it as captured for

Force and Capture

next settlement cut. This transaction should be used for immediate fulfillment.

Refund (Return/Credit)

Force transactions do not generate new authorizations. A *good* response simply indicates that the request has been properly formatted. The Orbital Gateway will settle the captured force during the next settlement event.

Refund via Transaction Reference Number

Instruct the Gateway to generate a refund based on the supplied information.

A Refund can be generated for a previous charge using the TxRefNum of the original transaction. If no amount is sent, the original transaction amount is refunded. If an amount is sent, that amount must be equal to or less than the original amount.

SEE ALSO See [Chapter 4 Message Definitions](#) for more details.

3.1.2.1 Profile Transactions in New Orders

The following are the Profile actions that can be executed in a New Order Transaction:

- ▣ Using Profiles for a New Order
 - ◆ One of the key transaction types is using a Profile to process a transaction.
 - ◆ Overriding Profile Data: Almost any data set in the Profile can be overridden (except card type) during a transaction that is using the Profile.
For instance, if a Profile included a fixed amount, but a particular transaction was for a different amount, it could be changed for that transaction by including a specific amount in the request.
- ▣ Adding Profiles as part of a New Order transaction
Given that, in many circumstances, an authorization needs to be performed the first time a customer is set up, the Orbital Gateway has extended the traditional Authorization transaction to enable adding a Profile in the same request.
 - ◆ Add profiles can be included with all New Order transaction types.

SEE ALSO See [3.4.3 Profiles and Managed Billing](#) for more information.

3.1.3 Gift Card Transaction Types (formerly FlexCache)

Instead of using the New Order transaction type for creating new Gift Card transactions, the FlexCache transaction type must be used.

The following Gift Card transactional capabilities are supported:

- ▣ Card Activation:
 - ◆ Single Card Activation (including Prior Activation for PNS Merchants)
 - ◆ Block Activation
 - ◆ Deactivate
 - ◆ Reactivate
- ▣ Add Value (including Prior Add Value for PNS Merchants)
- ▣ Authorization
- ▣ Redemption (including Prior Redemptions for PNS Merchants)
- ▣ Redemption Completion
- ▣ Refund
- ▣ Balance Inquiry
- ▣ Void

Gift Card transactions can also be voided by submitting a Reversal transaction request. See [3.1.6 Reversal \(Void a Previous Transaction\)](#) for further details.

Complex Type Name

FlexCache Request = flexCache
FlexCache Response = flexCacheResp

3.1.4 Profile Transaction Types

This transaction type allows for the following profile actions (see [3.4.3 Profiles and Managed Billing](#) for details):

- ▣ Add a Profile
- ▣ Delete a Profile
- ▣ Update a Profile
- ▣ Retrieve a profile

Complex Type Name

- ▣ Profile Requests:
 - Profile Add Request = customerProfileAdd
 - Profile Change Request = customerProfileChange
 - Profile Delete Request = customerProfileDelete

Profile Retrieval Request = customerProfileFetch

Profile Response for all Profile Request Types = customerProfileResp

NOTE Ampersand “&” is a valid character and can be part of a Profile Address record and also other places where an ampersand must be supplied.

3.1.5 Mark for Capture (MFC)

Mark a previously authorized transaction as being ready to be submitted for clearing. The Mark for Capture transaction type is present for future fulfillment models. A transaction can be authorized now and marked for capture at any time in the next four months.

CAUTION Authorization of certain payment options will age off after a number of days. Visa applies a window of 7 days, and MasterCard, Discover, and Amex each apply a window of 30 days. Gateway will perform an automatic re-authorization at the time of settlement if an auth is aged off.

NOTE Chase Pay merchants can process an authorization request using an online interface and submit a Sale (Mark for Capture) transaction using an XML batch interface. This flow is seamless as all necessary information needed to process a sale transaction for Chase Pay merchants is persisted by Orbital gateway from an authorization request. Chase Pay Merchants do not need any changes in their XML batch interface to process a sale transaction. Chase Pay merchants can subsequently settle sale transactions by sending batch close request without modifying XML batch interface.
(Please see 4.1.3 *Mark for Capture Request Elements* for details).

The Mark for Capture can be for any amount less than or equal to the original authorization. If the amount is less than the original auth, this is treated as a split transaction.

The split transaction also results in the creation of a new order for the balance left over from the original authorization. Adjustments to the original transaction, such as Level 2 and 3 data or amount, are also made, as required. Upon marking a portion or the remainder of the split transaction, the system will automatically attempt to obtain a new authorization for the new order.

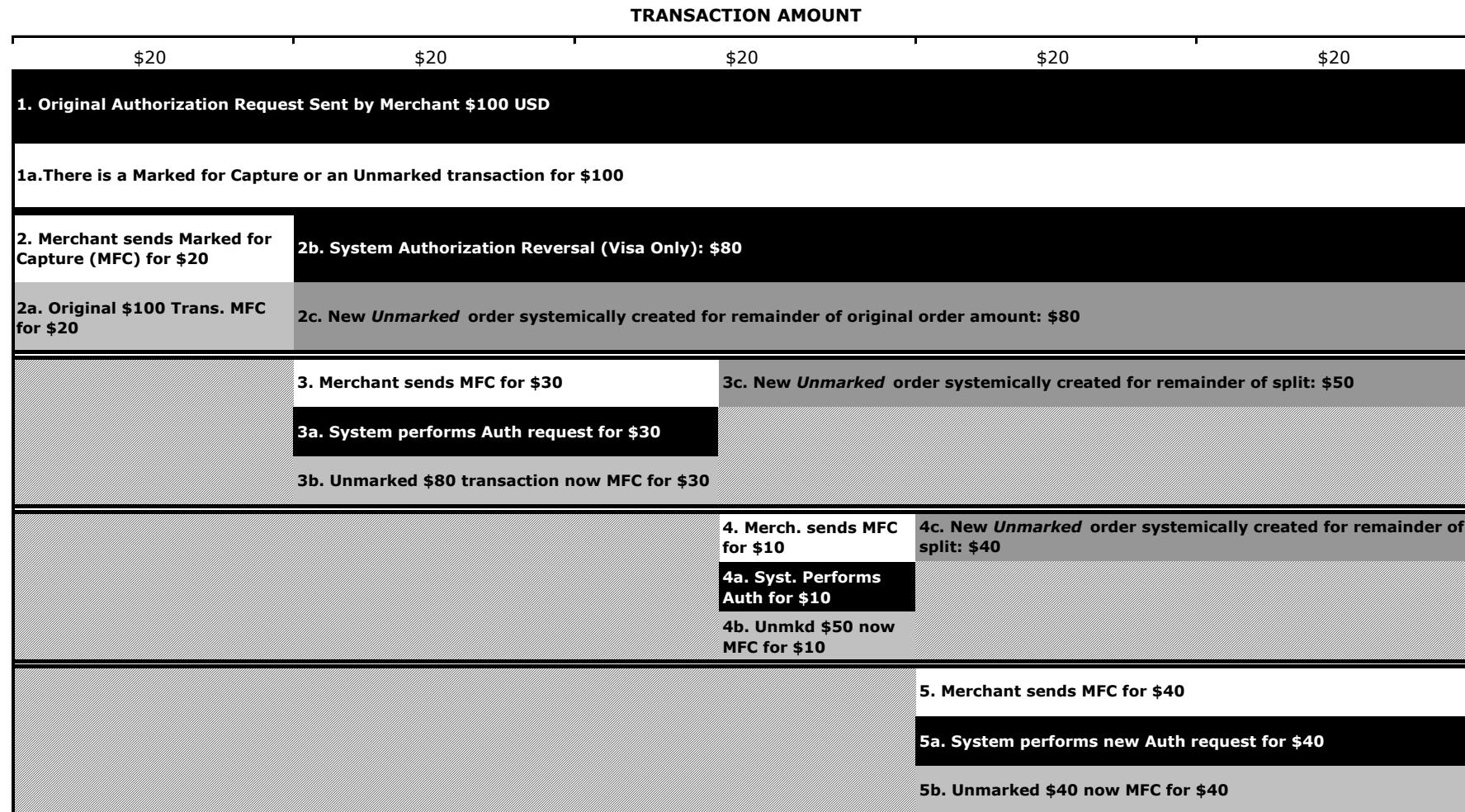
This concept is illustrated in Example 1.

Complex Type Name

Mark for Capture Request = markForCapture

Mark for Capture Response = markForCaptureResp

Example 1 Split Shipment flow



TRANSACTION KEY:

- Authorization Request
- Marked Transaction
- Mark for Capture [MFC] Request
- Unmarked Transaction

3.1.6 Reversal (Void a Previous Transaction)

This transaction is for voiding a previous transaction, either in the full amount or partial. It can be extended to also reverse the original authorization at the issuer.

A void, in and of itself, does not reverse the original authorization for any card type other than Gift Card and PINless Debit. When extending the void request to include an authorization reversal, the hold on the accountholder's open-to-buy (line-of-credit), which was reserved by the original authorization, is freed up. It is important to note that it is at the Issuer's discretion whether or not to remove the hold.

Merchants have two options for processing an authorization reversal.

- ④ The first option allows merchants to control when an authorization reversal is performed by submitting the Online Reversal Indicator element in the Reversal message.

WARNING This option is not available via the Orbital Gateway Batch XML Interface.

- ④ The second option is to allow the Gateway to submit the indicator on behalf of the merchant by setting a flag on the Administrative menu in Virtual Terminal. When a Reversal request is received, the Gateway will attempt an authorization reversal wherever applicable. In the event the original authorization doesn't meet the requirements for an authorization reversal or an error occurs while attempting an authorization reversal, the Gateway will perform a void instead.

The following requirements must be met in order to perform a void:

- ④ Transaction must not have been settled.
- ④ Transaction Reference Number from the response message of the original request must be provided. If the Transaction Reference Number is not known, merchants can submit in its place the Retry Trace Number of the original request within the `<reversalRetryNumber>` element.
- ④ Full or a partial amount must be submitted. A void for a partial amount creates a split of the original transaction into two components. A voided transaction in the amount of the partial void request and the remainder of the previous transaction in the same state the full amount was previously in (Authorized or Marked for Capture).

The following authorization reversal requirements are in addition to (or override) the void requirements:

- ④ Original authorization must have been obtained through Chase Paymentech, or the transaction will decline.
- ④ Original authorization cannot be greater than 72 hours old.
- ④ Reversal must be for full amount that was received in the authorization.
- ④ Authorization Reversals for *BIN 000001* and *BIN 000002* is supported by: Visa, MasterCard, MasterCard Diners, Discover

SEE ALSO For more information about the implementation of Retry Trace Numbers, please see [3.4.4 Retry Logic](#).

NOTE Chase Pay merchants can process an authorization request using an online interface and submit a void transaction using an XML batch interface. The void is performed if the requirements to perform void is met.

Complex Type Name

Void Request	=	void
Void Response	=	voidResp

3.1.7 End of Day

An *End of Day* request/response instructs the Gateway to submit all transactions previously marked for capture (including all successful refunds) for clearing.

Alternative End of Day methodologies include:

- **Auto-Settle** At a Merchant ID level, an account can be set up to settle automatically at any given 15-minute increment during the day and in any US-based time zone.
- **Virtual Terminal** End of Day settlement can be triggered using the Orbital Virtual Terminal as many times as desired. Please see the *Virtual Terminal User Manual* for instructions.

NOTE This transaction type must be the last transaction type in the file and can only be sent once.

Complex Type Name

End of Day Request = endOfDay
End of Day Response = endOfDayResp

3.1.8 Account Updater

An *Account Updater* request is used to supplement the Account Updater service for customer profiles on a one-off exception basis.

Please see section [3.3.4 Account Updater](#) for more details.

Complex Type Name

Account Updater Request = accountUpdater
Account Updater Response = accountUpdaterResp

3.1.9 Safetech Fraud Analysis

This transaction is used to submit a standalone Fraud Analysis request to the Safetech service, without submitting the transaction to the customer's issuing bank for financial approval.

Please see section [3.4.7 Safetech Fraud Analysis](#) for more details.

Complex Type Name

Safetech Fraud Analysis Request = safetechFraudAnalysis
Safetech Fraud Analysis Response = safetechFraudAnalysisResp

3.1.10 Transactional Order

Schema validation requires that the record types be submitted in a specific order. If the order is not followed, no records will be processed and a schema validation file response will be returned.

The correct transaction type order is:

1. File Header
2. Void
3. Mark for Capture
4. New Order
5. Customer Profile Add

6. Customer Profile Change
7. Customer Profile Delete
8. Customer Profile Retrieve
9. Account Updater
10. Safetech Fraud Analysis
11. Gift Card Transactions
12. End Of Day (Settlement) Request

All transactions must be numbered sequentially, with the first Void transaction as 1 and the last Gift Card transaction as the highest number. The total number of transactions must match the number specified in the header.

Within these transaction types (New Orders for example), it does not matter which transaction is delivered in which order as long as it is numbered correctly.

3.1.11 Access FX

Access FX is a service that Chase Merchant Services offers to multinational US and European based businesses. It allows merchants to price goods and services in a cardholder's currency and receive funding in another currency.

Access FX is designed to leverage the capabilities of the Investment Bank's (IB) foreign currency exchange services for Chase's key strategic partners by extending customized foreign exchange rates to them.

European merchants can be settled in any of 12 Access FX Settlement Currencies supported by the card brands. U.S. merchants are restricted to USD settlement. There are new elements being introduced in the NewOrderRequest and NewOrderResponse file.

Access FX is supported for Authorization, Authorization and Capture as well as Refund transactions. Orbital does not support providing the rate file to the merchants. The rate file should be obtained directly from the host (stratus) processing platform. The merchant can specify if they want Chase Merchant Services to use the default rate or reject the transaction if the Rate ID is invalid or expired. A merchant level set up must be enabled and pre-qualification is required to submit Access FX transactions for all Orbital merchants. Please refer *Table 33 Access FX Presentment Currencies* and *Table 34 Access FX Settlement Currencies* tables for submitting value of presentment currency and settlement currency respectively. Note that Access FX is supported for International Maestro, MasterCard and Visa only. Orbital does not validate method of payments as well as presentment and settlement currency codes against ISO currency table but Access FX transaction may be rejected by host (Stratus) if the transaction is submitted with invalid values.

NOTE Virtual Terminal (VT) is out of scope for Access FX. Access FX feature is available to only BIN 000001 (Stratus) merchants (Europe and USA).

3.2 Methods of Payment

3.2.1 Credit Card

3.2.1.1 Cardholder Authentication (Card Not Present)

3.2.1.1.1 Address Verification

Address Verification, also known as AVS, is a cardholder authentication mechanism available to merchants. In addition to providing merchants with an additional risk management tool, it is required by Visa and MasterCard to qualify for the lowest interchange rates and protects against certain chargeback conditions. As such, it is highly recommended by Chase Paymentech that all transactions include this information.

Some key points regarding AVS are:

- The minimum required data for AVS is the cardholder's billing postal code.
- AVS is only supported by credit cards issued in the United States, Canada, and the United Kingdom.
- For both Stratus and PNS/Tandem-routed accounts (BINs 000001 and 000002), the Orbital Gateway accepts postal codes formatted alpha-numeric with a length between 1 and 10 bytes. These postal codes are forwarded to the respective authorization hosts for approval.

Table 1 ZIP/Postal Code formats

U.S. ZIP Code	Canadian Postal Code*	U.K. Postal Code*
NNNNN	ANA NAN	AN NAA
NNNNN-NNNN	ANANAN	ANA NAA
		ANN NAA
		AAN NAA
		AANN NAA
		AANA NAA

* N = numeric; A = alphabetic

Table 2 Cards supporting AVS

U.S. AVS	Canadian AVS	U.K. AVS
Visa	Visa	Visa
MasterCard	MasterCard	UK Maestro/Solo
MasterCard Diners	MasterCard Diners	American Express
American Express	American Express	
Discover		

3.2.1.1.2 Account Verification

Account Verification provides the ability to verify accounts without financially impacting the accountholder's open-to-buy. Address Verification Service (AVS) can be verified along with the account number.

Some key points regarding Account Verification messages are:

- New Order request must be used.

- Transaction type must be an Authorization Only.
- Amount must be 0.
- AVS Zip is mandatory for American Express, otherwise optional.
- All existing mandatory fields must be submitted.

Supported Currencies

Account Verification is supported in all currencies

Platforms

BIN 000001 (Stratus): Visa, MasterCard, MasterCard Diners, International Maestro, American Express

BIN 000002 (Tandem): Visa, MasterCard, MasterCard Diners, Discover, American Express

3.2.1.2 Level 2 and Level 3 Data

These additional data fields are typically used in a business-to-business environment. Merchants have the ability to collect funds in conjunction with the settlement of procurement credit card transactions, while providing consumers with line item detail. This affords a cleaner process for both the merchant and the consumer.

The Orbital Gateway supports the processing of procurement cards, including enhanced data required by various card associations.

- Salem and PNS merchants:
 - Visa and MasterCard: Level 2 and Level 3 Data
- Additionally for Salem merchants:
 - Discover Level 2 and Line Item Detail
 - American Express Level 2 and Transaction Advice Addenda (TAA)

NOTE Level 2 and Level 3 data sets were initially supported for the subset of procurement cards known as Purchasing Cards. Orbital Gateway expanded that support to include the superset of procurement cards known as Commercial Cards. Purchasing and Commercial Cards should not vary with respect to Level 2 and Level 3 requirements. To maintain support of legacy integrations, Level 2 and Level 3 data elements are referenced in this API as Purchasing Card data.

3.2.1.2.1 Edit Checks

The Orbital Gateway performs edit checks on incoming data to ensure necessary information is present. In the event necessary information is missing from a transaction, the transaction will result in an error. Data fields that are edited by Chase Paymentech have been marked as *Conditionally Required* in [5.3.1 Appendix C Level 2 & Level 3 Data Reference](#). Additionally, there are some special edit checks specific to each host described below.

PNS

There are two key mathematical data validations specific to PNS processing for Level 3 Processing:

- The amount field (`<PC3Dt1linetot>`) of every line item must equal the Unit Cost (`<PC3Dt1UnitCost>`) multiplied by the quantity (`<PC3Dt1Qty>`) less any discounts (`<PC3Dt1Disc>`). If it does not, then this transaction will receive an error.
 - ◆
$$<PC3Dt1linetot> = (<PC3Dt1UnitCost> * <PC3Dt1Qty>) - <PC3Dt1Disc>$$
- Additionally, the sum of all the Line Item totals (`<PC3Dt1linetot>`) cannot exceed the transaction amount (`<Amount>`) submitted for an order

- ◆ (<PC3Dtlinetot> ≤ <Amount>) .

Salem

There is no mathematical validation for Level 2 or 3 for Salem customers.

However, it should be noted that the Salem host requires that transactions with attached Level 3 data must actually be Commercial Cards or Purchasing Cards. The Salem host will reject any transaction at settlement if Level 3 data is submitted on an unsupported card.

3.2.1.2.2 BIN Ranges

The BIN range assigned by the card associations can identify purchasing cards or commercial cards. BIN ranges are subject to change at the discretion of the card associations.

3.2.1.2.3 Processing

Level 2 or Level 3 data can either be sent with the original auth (via an Auth or Auth-Capture) or appended to the transaction via the Mark for Capture request, if it was not originally supplied in the authorization request.

There are different rules for adding and adjusting the data via the Mark for Capture, based on whether it is simply Level 2 data or if it is Level 3 data.

Level 2 can be sent with Sales and Refunds for both Salem and PNS merchants. Level 3 can be sent with Sales and Refunds for Salem merchants, but only on Sale transactions by PNS merchants.

MFC Adjustment of Level 2 Data

Level 2 data is supplied on either the Authorization request, in the Mark for Capture (MFC) request, or adjusted via the MFC request. The following describes four options and the associated behaviors:

- ◻ Level 2 data is only submitted with the Authorization:
 - ◆ At settlement, the Orbital Gateway uses the data presented with the Auth request.
- ◻ Level 2 Data is submitted with both the Authorization and a Mark for Capture (MFC) request for the full amount of the Authorization:
 - The data submitted with the MFC supersedes the data in the Auth in its entirety.
- ◻ Level 2 Data is submitted with both the Authorization and a Mark for Capture (MFC) request for a partial amount of the Authorization:
 - ◆ A split transaction is generated. By default, the data submitted in the first MFC is used on all subsequent splits. Each additional MFC may supersede this data with relevant Level 2 data if desired.
- ◻ Level 2 Data is only submitted with the MFC
 - ◆ At settlement, the Orbital Gateway uses the data presented with the MFC request.
 - ◆ If the amount of the MFC is less than in the authorized amount, as described above, a split transaction is generated. By default, the data submitted in the first MFC is used on all subsequent splits. Each additional MFC may supersede this data with relevant Level 2 data if desired.

MFC Adjustment of Level 3

Just as with Level 2 Data, Level 3 data may be supplied on the Authorization request, in the Mark for Capture (MFC) request, or adjusted via the MFC request. The same scenarios apply as listed above.

Additionally, PNS based amount validations are still applied when Level 3 data is supplied on MFC, and when a transaction using Level 3 data is split. Split transactions must have Level 3 data modified accordingly, or the Mark for Capture request fails.

Additional Information

Each card brand has subtle differences in the data requirements to properly qualify for Level 2 and Level 3 transactions. There are also a few differences in data formats between our Salem and PNS hosts. These are identified in the Chapter 4 message definitions, and in the Appendix summary tables. Please see [5.3.1 Appendix C: Level 2 & Level 3 Data Reference](#) for further information.

Virtual Terminal

All of the functionality supported through this interface for Level 2 and 3 is additionally available through the Orbital Gateway Virtual Terminal.

3.2.2 European Direct Debit

European Direct Debit (EUDD) is a popular method of payment for merchants marketing in Europe. While any merchant may want to accept direct debit payments, it is most important and cost effective for those merchants collecting recurring payments. Unlike in the US, many EU customers prefer to pay for recurring services by direct debit to their bank accounts.

3.2.2.1 How it Works

Prior to February 2014, each country in Europe operated its own direct debit network. Merchants wishing to accept direct debit throughout Europe faced the requirement to establish banking relationships and technical integration for each country in which they wish to market.

As of February 2014, the Single Euro Payments Area (SEPA) replaces these debit networks for the Euro-zone, while the Automated Direct Debit Instruction Service (AUDDIS) is utilized for the United Kingdom. Chase Paymentech Solutions has created a single technical interface for direct debit processing for multiple countries, based on the guidelines provided by the two governing bodies.

3.2.2.2 Processing Requirements

Merchants must contract with Chase Paymentech Solutions for acceptance of European Direct Debit.

Certain guidelines must be followed to take advantage of this method of payment. These guidelines vary based on the merchant's currency; SEPA guidelines are followed for Euro merchants, while AUDDIS guidelines are followed for Pound Sterling merchants. This section provides a high level overview of both the data elements and business rules for each.

Additional information is found in 'European Direct Debit Processing – A Merchant User Guide'. This document describes the direct debit processes in European countries supported by Chase Paymentech, including requirements, returns, mandates, available reporting, etc. Please contact your Account Executive for a copy of the document.

3.2.2.2.1 Account Details

Currency Code = EUR (Euro)

Legacy EUDD details for Euro merchants include a Basic Bank Account Number (BBAN) and an associated Bank Sort Code. As of February 2014, the International Bank Account Number (IBAN) and Bank Identified code (BIC) are used for processing a transaction.

BBAN and Bank Sort Code details are still supported for transaction requests beyond February 2014. However, transaction requests give precedence to IBAN. BBAN requests are converted to the corresponding IBAN and BIC during processing, when applicable.

Transaction responses may contain the IBAN/BIC account details, in addition to the BBAN. This is determined in the setup of your merchant account on the downstream host platform: Please check with your account executive for additional information.

Currency Code = GBP (Pound Sterling)

The Basic Bank Account Number (BBAN) and associated Bank Sort Code are used for transaction processing.

3.2.2.2 Mandate Information

Currency Code = EUR (Euro) or GBP (Pound Sterling)

Effective February 2014, three new fields involving mandate information are required to process an EUDD sale transaction. The mandate is the permission obtained to debit the customer's account.

It is strongly recommended that merchants provide the three data elements below. However, Chase Paymentech will create this data on your behalf if no mandate data is present in the transaction request.

All three elements must be submitted or all three omitted. The transaction fails when partial mandate data is submitted.

Table 3 EUDD Mandate Information

Data Element	Description
Mandate ID	The unique identifier of the mandate. Note: Format may vary by country. For GB, use 6-18 characters.
Mandate Signature Date	The date the mandate was approved by the consumer.
Mandate Type	The transaction sequence associated with the mandate such as first, recurring, last, etc.

GBP merchants may submit 'prenote' requests, which transmit mandate information without a corresponding financial transaction. This is supported by submitting full mandate information, a transType of 'FC', and an ecpActionCode of 'ND'.

3.2.2.3 Profiles and Account Information

Profiles have the ability to store and use EUDD information. An EUDD customer profile may contain the BBAN data set (BBAN, Country Code, and some combination of Bank Sort Code / Bank Branch Code / RIB), or contain the IBAN data set (IBAN, BIC, Country Code), but not both sets at the same time. Profile create requests containing both BBAN and IBAN data sets will only store the IBAN data set for future use.

EUDD profiles support all EUDD related elements, including country code and Mandate information. A profile update request to convert the EUDD account data from BBAN to IBAN must clear the original account data by submitting the tilde character ('~') in each EUDD element. The conversion from IBAN to BBAN would work in like manner.

3.2.2.4 Virtual Terminal

All of the functionality supported through this interface for European Direct Debit is additionally available through the Orbital Gateway Virtual Terminal.

3.2.2.5 Platforms

The Orbital Gateway supports the European Direct Debit method of payment through the Salem host platform (BIN 000001). This method of payment is not supported on the PNS host (BIN 00002).

3.2.3 Gift Card (formerly FlexCache)

The Orbital Gateway supports Chase Paymentech's proprietary Gift Card product (previously called FlexCache™) for both Salem and PNS customers.

3.2.3.1 Transaction Types

This section defines all the Gift Card transaction types supported by the Orbital Gateway.

NOTE While the official name of the product is no longer FlexCache, certain XML tags and messages may still reference FlexCache for the time being.

3.2.3.1.1 Card Activation

Table 4 Card Activation transaction types

Transaction Type	Description
Activate	<p>This transaction is used to activate one individual card for the first time. Merchants processing to the PNS Host can process Prior Activation transactions by additionally passing the correct prior approval code. If the valid Prior Approval code is not passed, it is treated as a new Activation request. Salem Merchants attempting to process a Prior Activation receive an error response.</p>
Block Activate	<p>Block activation provides for the ability to activate more than one card at a time. The maximum number of cards that can be activated at a time is 100. Within the Activate request, the card number of the first card in a series is defined, plus the number of additional sequential cards.</p> <p>If a Block Activation fails, none of the cards in the block are activated. The first card number that caused the Block Activation failure will be returned in the response.</p> <p>The Virtual Terminal supports the ability to perform a Block Activation of 10,000 in a single request. However, as indicated above, the online interface maximum is only 100 cards per request.</p>
Deactivate	<p>This transaction is for the deactivation of a live card. Passing an amount is not required for this transaction type.</p>
Reactivate	<p>There are two mechanisms for reactivating a card once it has been deactivated:</p> <ul style="list-style-type: none">▪ Reversing the deactivation transaction. This returns the card to the same balance prior to the deactivation transaction.▪ The card can be reactivated. In a reactivation transaction, a dollar amount must be passed, indicating how much the card should be reactivated for.

NOTE The Orbital Gateway supports \$0 activation transactions for PNS (BIN 000002).

3.2.3.1.2 Add Value

This transaction type adds value to an active card. If an Add Value is performed on an inactive card, it both activates the card and performs the add value action.

Merchants processing to the PNS Host can process Prior Add Value Transactions by additionally passing the correct prior approval code. If the valid Prior Approval code is not passed, it is treated as a new Add Value request.

Prior Add Value transactions are not supported on the Salem system; therefore, Salem merchants attempting to process a Prior Add Value will receive an error response.

3.2.3.1.3 Purchase and Refund Transactions

The following transaction types are for purchases and refunds. There are two different transaction combinations available for purchases:

- Authorization, followed by a Redemption Completion. This transaction combination is only valid for Salem-based customers.
- Redemption.

These two combinations allow for different purchase processing behavior on Gift Cards. The following sections define how each transaction type functions.

Authorization

Almost all Gift Card transaction types immediately affect the card balance, meaning they add or reduce the funds based on the result. In some circumstances, there might be a desire to perform a sale wherein an authorization is performed, and the funds are not actually moved. One reason for this, for example, might be a deferred shipment of goods.

The Authorization transaction does exactly that. It reduces the *Available to Buy* amount without reducing the actual funds.

Once the item has been shipped, performing a Redemption Completion can complete the transaction.

Generally speaking, an authorization holds the requested funds for seven days, after which the funds will be available again.

As stated above, this functionality is only available to merchants processing through the Salem Platform.

There are two different optional behaviors when managing Redemption Completions: Partial Redemption and Redemption Completion, as described below.

Partial Redemption

The Chase Paymentech Gift Card solution supports a functionality called *Partial Redemption*. If, for any reason, the amount of the original authorization exceeds the available balance when the Redemption Completion is submitted, the merchant has two options on how to treat this transaction, which is managed by submitting the element <flexPartialRedemptionInd>.

If the available balance on the card is less than the Redemption Completion Amount:

- The transaction can be declined with no amount redeemed from the card. If this is the desired behavior on a particular transaction, either do not submit this element or null-fill it.
- The transaction can be approved, with the maximum amount of the Redemption Completion fulfilled, even though it is less. The response in this circumstance would include both the requested amount and the actual redeemed amount. The behavior can be implemented by passing the <flexPartialRedemptionInd> element with a value of Y.

Redemption Completion

As stated above, a Redemption Completion is to complete an authorization. A Transaction Reference Number (<txRefNum>), which references the original transaction, is returned. Assuming the authorization approved, then a Redemption Completion `FlexAction` is submitted, including the original authorization's transaction reference number and the amount to be settled (this amount can be equal to or less than the original authorization). When an amount is less than the original amount, the hold on the entire original balance is removed, and the new amount is redeemed from the card.

As stated above, this functionality is only available to merchants processing through the Salem Platform.

Redemption

As opposed to an Authorization followed by a Redemption Completion, a Redemption request is the mechanism to perform an immediate redemption. Once completed, Redemptions can only be reversed.

Merchants processing to the PNS Host can process Prior Redemption transactions by additionally passing the correct prior approval code. If the valid Prior Approval code is not passed, it is treated as a new Redemption request.

Prior Redemption transactions are not supported on the Salem system; therefore, Salem merchants attempting to process a Prior Redemption will receive an error response.

For security reasons, most Gift Card programs require the four-digit CVD (ccPinNum) printed on the front of the card to be included with the redemption request.

Refund

This transaction type is for initiating refunds to a Gift Card. It is essentially the same as an Add Value transaction.

3.2.3.1.4 Reversals

All transaction types, excluding Balance Inquiries, can be reversed, thus returning a transaction to the state it was in prior to the action being reversed. There are two restrictions as it relates to processing Reversals:

- ④ For Salem customers, the reversal must be performed within seven days of the original transaction.
- ④ For PNS-based customers, the reversal must be performed before the next batch close. Batch closes for Gift Cards are usually performed automatically by the Tandem host system at 5:00A.M. EST, regardless of what the Auto-Settle time is on the Gateway.
- ④ For all customers, reversals assume that another action has not occurred that makes the reversal impossible.

For example, an active card can no longer have an activation reversed once a transaction has been processed. The card can only be deactivated at that point, if desired.

A reversal is accomplished by simply processing a *Void* Gift Card transaction type using the merchant information and the Transaction Reference Number of the original transaction. This is true of all reversal transaction types.

The response on a Reversal provides the same information as any other response (Current Balance, Previous Balance, Response Codes, and so on). In addition, it identifies specifically what transaction type is being reversed, such as in the `Auth` or `Redemption <flexAction>` tag.

3.2.3.1.5 Balance Inquiry

This transaction simply returns the Gift Card balance.

For security reasons, most Gift Card programs require the four-digit CVD (ccPinNum) printed on the front of the card to be included with the Balance Inquiry request.

3.2.3.2 Responses

The basic authorization response for all Gift Card transactions is the same. In other words, all responses are returned in the same basic format, with the same base minimum data elements. The transactions types that include more information are:

- Block Activations (if they fail)
- Redemption Completions with the Partial Redemption Flag

3.2.3.3 Settlement

Since transactions affect the balance of a card in real time, Gift Card transactions are not affected by the End of Day process options. Instead, transactions automatically fall into one of two buckets when viewed through the Virtual Terminal:

- Open Gift Card items (this includes all un-settled activity):
 - ◆ Authorizations that have not been redeemed (Redemption Completion)
 - ◆ Declined transactions
 - ◆ Errors
- All Redeemed items (viewable in the Review section of the Virtual Terminal).

These items are grouped on a daily basis on the same timing that the Chase Paymentech Gift Card System reports activity, which is 5A.M.-5A.M.

3.2.3.4 Reporting

All standard Gift Card reporting is available from the Gift Card system, including Resource Online. Any questions about available reports should be directed to your Account Manager.

The Virtual Terminal should not be used for Gift Card reconciliation.

3.2.4 PINless Debit

Customers can use their Debit cards as an alternative method of payment from cash, check, or credit card to pay for goods or services.

Debit transactions are always authorized on a *real-time* basis, with the actual authorization resulting in the debit of the customer's bank account. These transactions must still be captured and settled to Chase Paymentech to support funding, reporting, and associated reconciliation.

The Orbital Gateway initially supported PINless Debit only for Bill Payments. But now it has extended PINless Debit Processing capabilities to support PINless Debit in E-commerce environment. We will refer to these two capabilities as PINless Debit BillPay (also commonly known as Debit Bill Payment) and PINless Debit E-commerce.

3.2.4.1 Introduction

PINless Debit transaction is a debit transaction where neither the magnetic stripe contents nor the PIN are part of the authorization message.

PINless Debit BillPay

- Support for Stratus (BIN 000001) customers only
- PINless Debit BillPay processing is only available to merchants in select industries, specifically utilities, telephone companies, cable TV providers, some insurance companies, government entities, and financial institutions. This list could change, so you should check with your Account Manager for availability rules.
- It is mandatory to send Biller Reference Number for processing PINless Debit E-commerce transactions

PINless Debit E-commerce

- Support for Stratus (BIN 000001) customers
- Support for Tandem (BIN 000002) customers
- PINless Debit E-commerce processing is available for all Merchant Category Codes (MCCs)
- It is mandatory to send AVS information for processing PINless Debit E-commerce transactions
- Merchant URL field is introduced to capture internet address of the merchant where goods are sold

PINless Debit is supported by the **Accel, Star, NYCE, Pulse** debit networks.

Merchants assume 100% liability for PINless Debit payments. Please refer to the *Debit Bill Payment User Manual* for card association and debit network regulations.

3.2.4.2 Processing Requirements

3.2.4.2.1 PINless Debit BillPay

As a result of the specific processing rules associated with PINless Debit, the Orbital Gateway enforces specific behavior as it relates to PINless Debit BillPay:

- Only Authorization-Capture, Refund, and Void transaction types are allowed. This means:
 - ◆ No Auth Only (future fulfillment) transactions
 - ◆ No Mark for Capture
 - ◆ No Splits
 - ◆ No Force transactions
- All Merchant IDs (Transaction Divisions) enabled for PINless Debit must have Auto-Settle enabled.
- PINless Debit BIN Ranges are dynamic as eligibility is determined by the Issuers.
The Orbital Gateway imports and stores the most up-to-date PINless Card ranges. If a card is submitted as PINless Debit (as identified by the required card mnemonic) and it is not in an eligible card range, a procStatus error code of 9797 (PINless Debit: Card Number Not Eligible for PINless Debit Processing) is returned.
- A PINless Debit BillPay transaction can be reversed using the Void transaction type and must be performed within 90 minutes of the original request. After 90 minutes, a Refund must be issued.
 - ◆ Reversals are recommended in the event of an unexpected result.
 - ◆ A Retry Trace Number is required for PINless Debit reversals. This helps manage unexpected results.

SEE ALSO For more information about the implementation of Retry Trace Numbers, please see [3.4.4 Retry Logic](#).

- ◻ PINless Refunds are supported by all four debit networks. The request is the same as a PINless Sale, with the exception that the transaction type is R.
- ◻ Industry types of MOTO (MO), eCommerce (EC), Recurring (RC), and IVR (IV) are allowed for the PINless Debit method of payment.
- ◻ Approved PINless Debit transactions may return a Blank or N/A authorization code.

3.2.4.2.2 PINless Debit E-commerce

As a result of the Debit Networks enabling the ability of the acquirers to support PINless Debit in E-commerce environment, PINless Debit E-commerce supports transaction types that are relevant in E-commerce environment.

- ◻ Below transaction types are allowed for PINless Debit E-commerce:
 - ◆ Auth-Only (future fulfillment)
 - ◆ Authorization-Capture
 - ◆ Mark for Capture
 - ◆ Splits
 - ◆ Refunds
 - ◆ Reversals (Void a previous transaction)
 - ◆ Partial Authorizations

- ◻ All Merchant IDs (Transaction Divisions) enabled for PINless Debit E-commerce must have Auto-Settle enabled.
- ◻ PINless Debit BIN Ranges are dynamic as eligibility is determined by the Issuers.

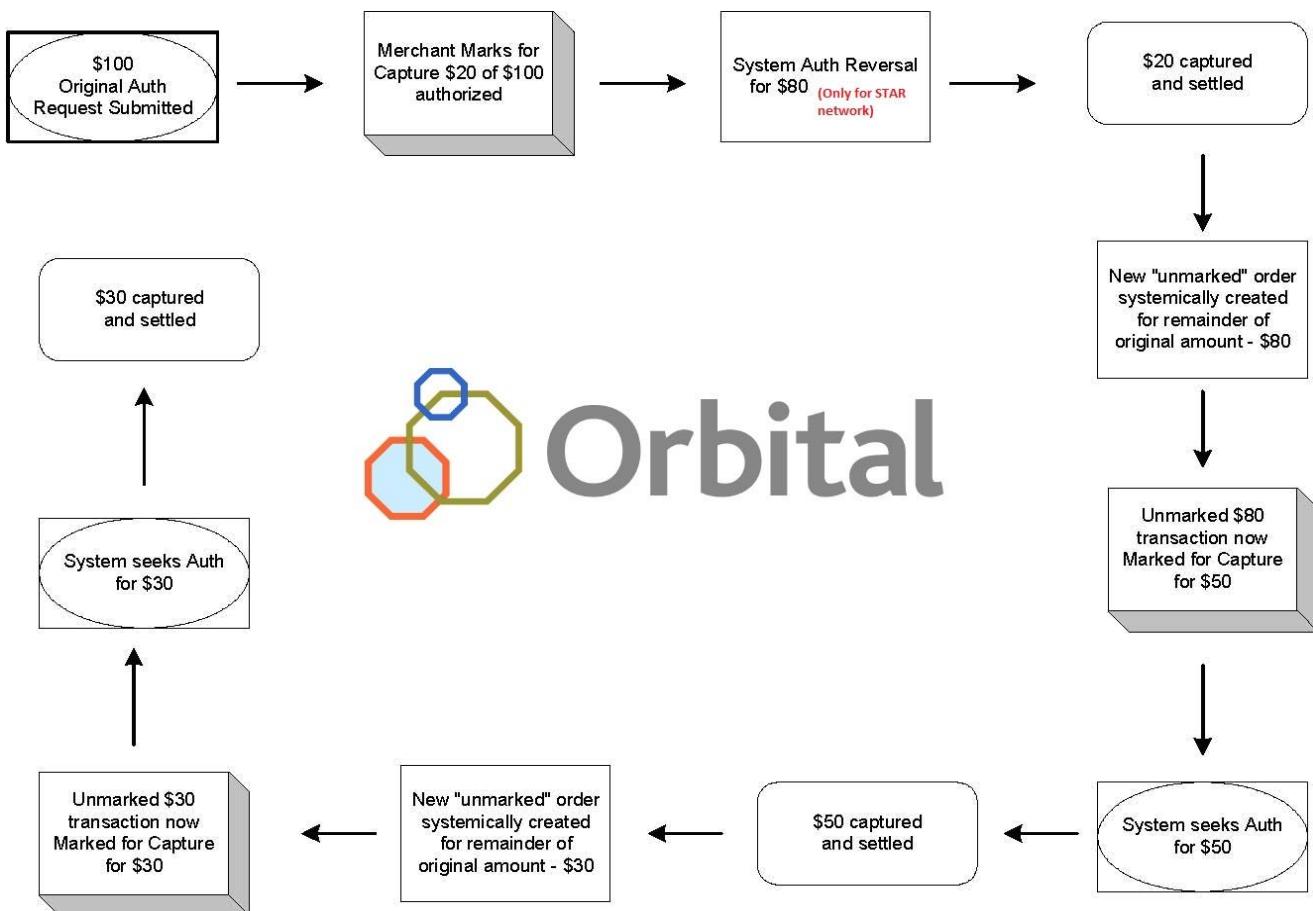
The Orbital Gateway imports and stores the most up-to-date PINless Card ranges. If a card is submitted as PINless Debit (as identified by the required card mnemonic) and it is not in an eligible card range, a procStatus error code of 9797 (PINless Debit: Card Number Not Eligible for PINless Debit Processing) is returned.

- ◻ Settlement process for PINless Debit E-commerce transactions :
 - ◆ **Stratus (BIN 000001) customers** -> Settlement process will be initiated from Orbital side when all transactions that are Marked for Capture are submitted to Stratus in a Batch at the End of the Day or as scheduled by the merchant.
 - ◆ **Tandem (BIN 000002) customers** -> Transactions will not be batched and sent but will be sent Online to Tandem for Settlements. So, the merchants do not need to separately Settle these transactions.
- ◻ In case of PINless Debit E-commerce, Reversal or Void is applicable for Auth-Only and not for Authorization-Capture transactions.
 - ◆ Reversals are recommended in the event of an unexpected result.
 - ◆ In the event of a split shipment scenario, Partial reversals may be generated.
 - ◆ A Retry Trace Number is optional for PINless Debit E-commerce reversals.

SEE ALSO For more information about the implementation of Retry Trace Numbers, please see [3.4.4 Retry Logic](#).

- ◻ PINless Debit E-commerce Refunds are supported by all five debit networks. The request is the same as a PINless Debit E-commerce Sale, with the exception that the transaction type is R.
- ◻ If merchants want to accept Partial Authorizations then, <PartialAuthInd> element in the New Order message should be used.

- ◻ Industry types of MOTO (MO), eCommerce (EC), Recurring (RC), and Installment (IN) are allowed for the PINless Debit method of payment.
- ◻ The Mark for Capture can be issued for any amount less than or equal to the original authorization. Amount greater than the approved amount cannot be captured even if MFC override configuration is enabled for the merchant. If the amount is less than the original auth, this is treated as a split transaction.
- ◻ **Split Shipment Process Flow:** A shipment can be split into two or more transactions. The Orbital automatically obtains an authorization for each portion of the transaction that is Marked for Capture. The flow chart below explains the steps that occur in a transaction that is split several times. Transactions can be split as many times as needed.



3.2.4.3 Profiles and Managed Billing

3.2.4.3.1 PINless Debit BillPay

Profiles now have the ability to store and use PINless Debit information. The Biller Reference Number is required for all profiles using PINless Debit as a method of payment. The expiration date is optional.

There are two types of eligibility verification that are done against new and existing profiles that contain PINless Debit information:

- ⌚ When updating a profile containing PINless Debit method of payment, the Gateway checks against the most current eligibility file to verify that the card information is still eligible.
 - ♦ If so, the profile is updated.
 - ♦ If it is no longer eligible, a check is performed against the Auto Update option, which, if selected, automatically converts a non-eligible PINless debit card to Visa/MasterCard Debit.
 - If the merchant has opted YES for Auto Update, the card information is converted to Visa/MasterCard Debit.
 - If the merchant has opted NO for Auto Update, an error message is returned stating that the update was unsuccessful.
- ⌚ Each time the Gateway obtains the most current eligibility file, a check is done against all existing PINless Debit profiles.
 - ♦ If the Auto Update flag is set to YES, those profiles that are no longer eligible to process as PINless Debit are converted to Visa/MasterCard Debit.
 - ♦ If the profiles are not able to be updated to Visa/MasterCard Debit or the Auto Update flag is set to NO, the status of those profiles is changed to Auto Suspend-PINless. Merchants will not be able to process Sale transactions against profiles that are in this status, and Refund attempts will generate decline error messages.

Merchants can convert the card information for existing profiles from PINless Debit to Visa/MasterCard (and vice versa) by performing a profile update.

For Profiles containing Managed Billing information, PINless Debit is only supported for Recurring Profiles. Per Visa/MasterCard Association rules, Installment or Deferred profiles do not support PINless Debit.

3.2.4.3.2 PINless Debit E-commerce

Profiles

The Orbital Gateway includes functionality called *Profile Management*, which allows customer payment information to be stored within Orbital. This information can then be accessed by a custom Profile ID (token) to process future transactions. A merchant can process transactions by simply passing a token value representing a cardholder. Using the Customer Profile ID, i.e. the token, simplifies transaction processing and mitigates data entry errors. Additionally it eliminates the need to store sensitive information in-house so you can focus on growing the business as Chase Paymentech Solutions focuses on securely processing the transactions.

Profiles now have the ability to store and use PINless Debit E-commerce information.

- ♦ Card Number and AVS information is mandatory to create a PINless Debit E-commerce Profile
- ♦ Merchant URL is optional

To utilize Profile Management merchant account must be enabled for the functionality. Please contact your account representative if you are not already set up the program. Once enabled the next step is to create customer profiles. This can be done in two ways.

- ⌚ Create a Profile as a distinct action.
- ⌚ Create a Profile as a part of a transaction request.

Once a Profile exists, it can be used to process a new transaction. The information stored in the profile is used to populate the transaction data elements. You always have the option to override any part of the Profile for a subsequent transaction. Finally, the Profile can be updated [or even deleted] at any point.

Managed Billing

Managed Billing extends the capabilities of Profile Management to include Recurring, Installment, and Deferred billings. A billing schedule can be set to start on a certain date, follow a weekly, monthly, or yearly recurrence pattern, and optionally end by a certain date or after a certain number of billings. Orbital will automatically process the transaction on behalf of the merchant in accordance with the preset schedule.

3.2.4.4 Supported Currencies

U.S. Currency

3.2.4.5 Virtual Terminal

The Orbital Virtual Terminal can display and report PINless Debit transactions. Other functionalities include:

- ▣ Ability to run PINless Debit BillPay and PINless Debit E-commerce transactions.
- ▣ Ability to adjust existing PINless Debit BillPay and PINless Debit E-commerce transactions.
- ▣ E-mail triggers that fire e-mails to cardholders when a PINless Debit card is no longer eligible.
- ▣ Profile and Managed Billing capability for PINless Debit BillPay.
- ▣ Reports that provide PINless Debit information, including:
 - ◆ Suspended Profile Report
 - ◆ PINless Debit Status Change Report
 - ◆ Managed Billing Activity Report
 - ◆ Scheduled Profile Activity Report

NOTE PINless Debit information is not included on the Auth Recycle Report.

SEE ALSO Please review the *Orbital Virtual Terminal Users Manual* for further details.

3.2.5 Electronic Check

The Orbital Gateway supports Electronic Check Processing (ECP) for eligible merchants. This method of payment is only available to Salem platform merchants (BIN 000001). Key to processing is the Bank Routing Number, also known as ABA# or Receiving Depository Financial Institution (RDFI). It is 9 bytes for US merchants. For Canadian merchants, it is 8 bytes. There should be no spaces " " or dashes "-" in the Canadian Bank Routing Number, and the proper formatting is:

FFFBBBBB

where

FFF refers to Financial Institution

BBBBB refers to Branch Number

3.2.5.1 Standard Processing Requirements

Standard ECP processing makes use of the `transType` element to determine the type of transaction required by the merchant in a 'New Order' request. The `ecpActionCode` element should be left empty or NULL for all of the transaction types below in Table 5.

Table 5 Actions that can be performed under ECP

Action	Description
Authorization (A)	An Authorization request is equivalent to check validation. The following operations are performed at this time: <ol style="list-style-type: none">1. A check against the Notification of Change file to see if Chase Paymentech Solutions has been alerted to new account information about this transaction.2. The Federal Reserve File is checked to verify that the ABA Routing is valid.3. A check is made against the Chase Paymentech Solutions internal negative database to determine if the account is listed as <i>bad</i>. <p>NOTE An approved ECP Authorization must eventually be followed by a Mark for Capture request in order to complete the transaction. If a capture is not performed, the transaction will not get funded at the time of settlement.</p>
Authorization and Capture (AC)	An Authorization and Capture request will perform the same operation as an Authorization, and will also prepare the transaction to be included with the next settlement if the Authorization is successful.
Force and Capture (FC)	A Force and Capture request prepares a transaction for settlement without submitting a validation at the time of the request.
Refund (R)	Refund requests prepare a return of the funds to a consumer's account for settlement. Authorization is not performed, but validation is still done at settlement.

All ECP activity must pass a second validation process at the time of settlement for funding to occur. This process includes the internal negative file and Notification of Change file. Salem merchants whose transactions fail these checks will see the transactions listed in the Rejected Batch of the Virtual Terminal. (see the *Orbital Virtual Terminal User's Manual* for further details).

3.2.5.2 Extended ECP Processing Requirements

Extended ECP processing makes use of both the `transType` and `ecpActionCode` elements to extend standard ECP processing to include all action codes the host platforms support. Use of this functionality is optional to process ECP transactions.

Table 6 Extended Actions that can be performed under ECP

Action	ECP Action	Description
Authorization (A)	Validate (LO)	<p>A Validate request is an ECP equivalent to \$0.00 account verification for Credit Cards. This message is available for Canadian and US merchants.</p> <p>The following operations are performed at this time:</p> <ol style="list-style-type: none"> 1. A check against the Notification of Change file to see if Chase Paymentech Solutions has been alerted to new account information about this transaction. 2. The Federal Reserve File is checked to verify that the ABA Routing is valid. 3. Finally, a check is made against the Chase Paymentech Solutions internal negative database to determine if the account is listed as <i>bad</i>. <p>NOTE An approved ECP Validate (LO) is always for \$0.00 and therefore may not be followed by a Mark for Capture request in order to complete the transaction. To capture funds, a corresponding Force & Capture (FC) or Refund (R) with a valid amount must be performed.</p>
Force and Capture (FC)	Validate and Prenote Debit (ND)	<p>A Validate and Prenote Debit request prepares a prenote transaction for the purposes of a future deposit of funds from a consumer's account for settlement.</p> <p>Authorization is not performed, but validation is still done at settlement.</p> <p>See section 3.2.5.2.1 for information on Prenotifications.</p>
Refund (R)	Validate and Prenote Credit (NC)	<p>A Validate and Prenote Credit request prepares a prenote transaction for the purposes of a future refund of funds to a consumer's account for settlement.</p> <p>Authorization is not performed, but validation is still done at settlement.</p> <p>See section 3.2.5.2.1 for information on Prenotifications.</p>

3.2.5.2.1 Prenotification Transactions

Prenotification is a zero dollar (\$0) transaction which is treated somewhat like a deposit. A prenote request is submitted without an initial Authorization. Upon settlement, the transaction is validated (NC or ND). Validations which are approved are then submitted by the settlement process to the consumer's bank. The account and routing information is then checked to ensure they exist and are accurate. The balance of funds in the consumer's account is *not* checked.

The post-settlement success or failure of a prenotification is not reported back to the Orbital Gateway. This information must be obtained from financial reporting available from Paymentech Online for Salem merchants, or from Resource Online for Tandem merchants. Contact your Account Executive for more information on these tools.

Once a Prenote request has confirmed the consumer's account is valid, a live (non-zero) transaction will be required to collect any funds from the consumer.

WARNING Per ECP regulations, six days must pass before processing a non-zero dollar deposit on a pre-noted bank account.

3.2.5.3 ECP Authorization Methods

A merchant can receive authorization from a consumer to process an ECP transaction through several different environments. Each authorization environment has certain rules and transaction data required for processing.

NOTE Standard ECP Processing supports all ECP Authorization Methods.

Table 7 ECP Authorization Methods

Authorization Method	Description
Pre-arranged Payment and Debit (Written)	<p>A single or recurring credit or debit initiated by a merchant after the Consumer has provided a one-time or standing authorization to allow an electronic funds transfer from a checking or savings account.</p> <p>Supported ECP action codes: LO, NC, ND</p> <p>Supported for US and Canadian merchants</p> <p>Customer name is required.</p>
Internet (Web)	<p>A single or recurring debit made over the Internet via a website</p> <p>Supported ECP action codes: LO, NC, ND</p> <p>Supported for US and Canadian merchants</p> <p>Customer name is required.</p>
Telephone (Tel)	<p>A single or recurring debit authorized over the telephone drawn on a consumer account.</p> <p>Supports ECP action codes: LO, NC, ND</p> <p>Supported for US and Canadian merchants</p> <p>Customer name is required</p>
Accounts Receivable (ARC)	<p>A single, one-time debit received via lockbox, drop box, or business mail box.</p> <p>Supports ECP action codes: LO</p> <p>Supported for US merchants only.</p> <p>Check serial number is required. Image reference number and customer name are optional.</p>
Point of Purchase (POP)	<p>A single, one time debit made in person at a point of sale for a consumer purchase.</p> <p>Supports ECP action codes: LO</p> <p>Supported for US merchants only.</p> <p>Check serial number is required. Image reference number, Terminal City, Terminal State, and customer name are optional.</p>

An additional value of "Empty" is also supported for Salem (Bin 000001) merchants only. This value will instruct the downstream host to use whatever default value it has stored.

A merchant may be enabled for a default value on the Orbital Gateway. If this element is left NULL, that default will be used. If no default is stored, the auth method will revert to Telephone.

3.2.5.4 ECP Advanced Verification Processing Requirements

Advanced Verification is an optional electronic check processing (ECP) service supported for Orbital Gateway merchants boarded to the Stratus (BIN 000001) host platform.

This functionality provides layer of additional customer verification across multiple transaction types by utilizing unique ECP action codes and additional customer data.

All Advanced Verification requests perform Account Status Verification (ASV) on the checking account holder beyond the standard validations performed with ECP transactions. Merchants can also request Account Owner Authentication (AOA) be performed on the account holder. The ECP action code determines whether ASV or both ASV and AOA are performed with the transaction.

Merchants can invoke ECP Advanced Verification with specific combinations of `transType` and `ecpActionCode`. Invalid combinations will result in an error in the form of a proc status message.

A new Consumer Account Date field will be returned back to the merchant. This field indicates the date when the customers check account was added or deleted from the ECP EWS Advanced Verification database. This date will only be returned to the merchant whenever they are entitled for either ASV or other ASV and AOA. **ASV (Account Status Verification) is supported with the below combinations:**

Action	ECP Action	Description
Authorization (A) and Authorization and Capture (AC)	Validate (W1)	First validation is performed as referenced in [Table 7]. If this is successful, an Electronic Check ASV is performed. W1 supports \$0 Authorization request and both non-zero Authorization (A) and non-zero Authorization and Capture (AC) requests. A Mark for Capture (MC) must be sent on a non-zero Authorization (A) before settlement can occur.
Force and Capture (FC)	Validate and Deposit (W4)	As noted in Table 7, a Force and Capture prepares settlement for transaction and defers validation until the time of settlement. If this validation is successful, a W4 will invoke an Electronic Check ASV before the deposit is completed.
Refund (R)	Validate and Refund (W6)	As noted in Table 7, a Refund request does not perform Authorization and the validation defers until the time of settlement. If this validation is successful, a W6 will invoke an Electronic Check ASV before the refund is completed.
Pre-Note (FC)	Validate and Pre-Note (W8)	As noted in Table 7, a Pre-Note request does not perform Authorization and the validation defers until the time of settlement. If the validation is successful, a W8 will invoke Electronic Check ASV. And Electronic Check Pre-Note (W8) supports Force Capture only.

ASV with AOA (Account Owner Authentication) is supported with these combinations:

Action	ECP Action	Description
Authorization (A) and Authorization and Capture (AC)	Validate (W3)	First validation is performed as referenced in [Table 7]. If this is successful, an Electronic Check ASV is performed. W3 supports \$0 Authorization request and both non-zero Authorization (A) and non-zero Authorization and Capture (AC) requests. A Mark for Capture (MC) must be sent on a non-zero Authorization (A) before settlement can occur.

		AOA specific elements must be submitted when this action code is used.
Force and Capture (FC)	Validate and Deposit (W5)	<p>As noted in Table 7, a Force and Capture prepares settlement for transaction and defers validation until the time of settlement. If this validation is successful, a W5 will invoke an Electronic Check ASV before the deposit is completed.</p> <p>AOA specific elements must be submitted when this action code is used.</p>
Refund (R)	Validate and Refund (W7)	<p>As noted in Table 7, a Refund request does not perform Authorization and the validation defers until the time of settlement. If this validation is successful, a W7 will invoke an Electronic Check ASV before the refund is completed.</p> <p>AOA specific elements must be submitted when this action code is used.</p>
Pre-Note (FC)	Validate and Pre-Note (W9)	<p>As noted in Table 7, a Pre-Note request does not perform Authorization and the validation defers until the time of settlement. If the validation is successful, a W8 will invoke Electronic Check ASV.</p> <p>Electronic Check Pre-Note (W9) supports Force Capture only.</p> <p>AOA specific elements must be submitted when this action code is used.</p>

Advanced Verification requires additional information about the checking account holder to perform and AOA. These Advanced Verification elements have some inter-dependencies which are only enforced when the ECP Action Code invokes AOA. In the event AOA is invoked and relevant AOA specific elements are not submitted, the transaction fails with a proc status error.

3.2.6 UK Maestro/Solo

Chase Paymentech Solutions offers processing of Great Britain's UK Maestro®/Solo™ debit cards for Salem merchants (BIN 000001) through the Orbital Gateway. UK Maestro/Solo functionality must be enabled at the merchant level in order to process this method of payment. Please contact your Chase Paymentech Solutions Account Representative if you wish to accept UK Maestro/Solo.

NOTE As of June 2012, the International Maestro method of payment absorbed UK Maestro / Solo. Merchants who wish to accept these cards going forward should code to process International Maestro transactions.

Legacy users of the Web Services API are not required to re-certify for International Maestro. As of the above date, any details specific to the UK Maestro / Solo data elements are no longer documented.

3.2.7 Bill Me Later

Bill Me Later® is an innovative and secure payment solution for Card-Not-Present merchants. The Bill Me Later method of payment is a non-plastic issued credit vehicle that manages the consumer payment function by providing a transactional credit decision in lieu of the standard predetermined credit line and associated authorization process. Bill Me Later allows consumers to make online/mail order purchases without inputting credit card information.

3.2.7.1 How it works

Using proprietary credit scoring and fraud detection capabilities, Bill Me Later, Inc. (formerly known as I4Commerce) screens each Bill Me Later transaction in real time, instantly decisioning all Bill Me Later requests made by customers.

3.2.7.2 Processing Requirements

Merchants must contract with Bill Me Later, Inc. for acceptance of Bill Me Later.

The Orbital Gateway enforces the following data requirements for Sale (Authorization, Authorization-Capture) transaction types:

Required:

- Account Number
- Bill To Address (avs... elements)
- Ship To Address (avsDest... elements)
- Shipping Cost (bmlShippingCost)
- Terms and Conditions Version (bmlTNCVersion)
- Customer Registration Date (bmlCustomerRegistrationDate)
- Customer Type Flag (bmlCustomerTypeFlag)
- Item Category (bmlItemCategory)
- Customer Birth Date (bmlCustomerBirthDate)
- Customer Social Security Number (bmlCustomerSSN)
- Product Delivery Method (bmlProductDeliveryType)

Optional:

- Customer Source IP (bmlCustomerIP)
- Customer E-mail (bmlCustomerEmail)
- Pre-approval Invitation Number (bmlPreapprovalInvitationNum)
- Promotional Code (bmlMerchantPromotionalCode)
- Customer Annual Income (bmlCustomerAnnualIncome)
- Customer Resident Status (bmlCustomerResidenceStatus)
- Customer Checking Account (bmlCustomerCheckingAccount)
- Customer Saving Account (bmlCustomerSavingsAccount)

NOTE Please contact your Bill Me Later Integration Analyst during the requirements definition phase prior to development to determine required fields.

3.2.7.2.1 Currencies

US Dollar Only

3.2.7.3 Other

3.2.7.3.1 Virtual Terminal

All of the functionality supported through this interface for Bill Me Later is additionally available through the Orbital Gateway Virtual Terminal.

3.2.7.3.2 Platforms

The Orbital Gateway only supports the Bill Me Later method of payment through the Salem host platform (BIN 000001). This method of payment is not supported on the PNS host (BIN 00002).

3.2.8 International Maestro

The International Maestro® payment solution provides Maestro cardholders with an easy, secure way to make Internet purchases using their Maestro cards online. MasterCard is expanding this payment functionality across Europe to give consumers the same ease-of-access to deposit accounts for their Internet purchases that they currently experience with Maestro cards for other purchases. Please contact your Chase Paymentech Solutions Account Representative if you wish to accept International Maestro.

3.2.8.1 Processing Requirements

Orbital gateway supports International Maestro for the following requests:

- All New Order message types
- Mark for Capture messages
- Voids (Including Online Reversals)
- Inquiries
- All Profile messages

International Maestro card numbers are between 13 and 19 digits. International Maestro also supplies a standard expiration date on all cards.

Associations support AVS validation for United Kingdom (UK) issued International Maestro cards only. Response codes and rules are identical to MasterCard credit transactions.

3.2.8.1.1 MasterCard SecureCode (MCSC)

Merchants who accept International Maestro are strongly encouraged to offer MasterCard Securecode validation. The first time a customer uses an International Maestro transaction, MCSC validation should be attempted, and an AAV value should be included in the transaction. MCSC Validations are also needed on subsequent transactions, unless one of the two exceptions below are applicable.

A European merchant may enroll in two International Maestro programs, *Maestro Advanced Registration Program (MARP)* or *Maestro Recurring Payment Program (MRPP)*. Both programs allow enrolled merchants to accept Maestro cards for eCommerce transactions without using MasterCard SecureCode for every transaction.

[Maestro Advanced Registration Program \(MARP\)](#)

An enrolled MARP merchant is provided with a static Accountholder Authentication Value (AAV) for use with transactions that are processed without SecureCode authentication. Once a merchant has registered in the MARP program all accountholders must go through the SecureCode process again, regardless of whether the accountholder has gone through SecureCode prior to the merchant's registration. After the accountholder has gone through SecureCode process and has been approved, the accountholder is not required to go

through SecureCode for subsequent transactions.

[Maestro Recurring Payment Program \(MRPP\)](#)

MRPP operates in a similar fashion to the MARP as described above. At time of enrollment, a static AAV value is provided. The first transaction is processed as a standard eCommerce transaction. Subsequent transactions are submitted as recurring payments along with the static AAV value. At the present time the MRPP program only supports recurring transactions. Mail order and installment billings are not permitted.

The static AAV value may be stored in the Orbital Gateway. To apply the static AAV stored by the Gateway to a transaction, set the `useStoredAAVInd` element to `Y`.

NOTE The Batch XML Interface supports use of a static AAV value stored through the Virtual Terminal.

3.2.8.2 Profiles and Managed Billing

Profiles have the ability to store and use International Maestro information. The card number is required for all profiles using International as a method of payment. The expiration date is optional.

For Profiles containing Managed Billing information, International Maestro is supported for Recurring Billings. A Static AAV value must be kept on file with the Gateway to include Managed Billing information in an International Maestro profile.

Per Association rules, International Maestro profiles do not support deferred or installment billings.

3.2.8.3 Other

3.2.8.3.1 Virtual Terminal

All of the functionality supported through this interface for International Maestro is additionally available through the Orbital Gateway Virtual Terminal.

Management of a merchant's Static AAV value is done through the General Admin page in the Virtual Terminal. Please refer to the Virtual Terminal user guide for more information.

3.2.8.3.2 Platforms

The Orbital Gateway only supports the International Maestro method of payment through the Salem host platform (BIN 000001). This method of payment is not supported on the PNS host (BIN 00002).

3.2.9 ChaseNet

ChaseNet is a proprietary payment platform for select JPMorgan Chase-issued, Visa branded credit and debit cards. Participating merchants may choose to direct all eligible JPMorgan Chase Visa Signature Debit (mnemonic CR) and Credit (mnemonic CZ) Card transactions to ChaseNet in lieu of sending them to Visa for processing. ChaseNet supports all authorization, refund and deposit transactions for eligible payment cards.

3.2.9.1 Processing

There are two ways to utilize the ChaseNet product.

- ⌚ BIN File Management

MERCHANTS use the ChaseNet BIN File to identify the specific method of payment (CR or CZ) with the transaction.

 Method of Payment Reassignment

The reassignment of the method of payment is enabled by a merchant flag on the Global or NAP platform.

If:

- ◆ the method of payment (MOP) reassignment flag is enabled;
- ◆ the ChaseNet methods of payment are enabled;
- ◆ a credit card transaction is submitted with either a Visa method of payment value (VI) or a null value; and,
- ◆ the account number falls within an eligible ChaseNet BIN:

Then:

- ◆ the transaction is sent to ChaseNet; and
- ◆ the ChaseNet method of payment, either a CR or CZ, is returned in the transaction response.

Subsequent processing of contextual transactions, such as the mark for capture for an authorized transaction, is processed with the method of payment returned by the host system in the initial authorization response.

The table below reflects the method of payment returned in the response based on the merchant flags enabled and assuming the transaction falls into a ChaseNet category.

Table 8 Method of Payment (MOP) Responses

Submit MOP	MOP Returned	MOP Reassignment Enabled: MOP Returned
VI	VI	CR
VI	VI	CZ
CR	CR	CR
CZ	CZ	CZ

The following table reflects the method of payment returned in the response based on whether the merchant is enabled for ChaseNet methods of payments and if they do not specify the method of payment in the transaction request, assuming the transaction falls in to a ChaseNet category.

Table 9 Sending a Request Without a Card Brand

Merchant Type	Submit MOP	MOP Returned	MOP Reassignment Enabled: MOP Returned
Not ChaseNet	NULL	VI	N/A
ChaseNet Only	NULL	CR or CZ	N/A
Visa and ChaseNet	NULL	VI	CR or CZ

3.2.9.2 Profiles and Managed Billing

Profiles and Managed Billing support the ChaseNet method of payments. The standard procedures are followed to use or create a profile and/or establish a managed billing schedule.

⊕ Adding a Profile

- ◆ If a specific ChaseNet method of payment mnemonic is populated in the Card Type/Brand field, for either a standalone Profile Add or as part of a financial transaction, the profile is created with the submitted method of payment.
 - ◆ If the Card Type/Brand field is null the profile is created with the method of payment returned by the host platform.
 - ◆ If the Card Type/Brand field is populated with the value AA, the Orbital Gateway will assign the appropriate mnemonic based on BIN file data and merchant settings.
- ⊕ The same rules apply when updating a profile. An AA value can also be used with a profile update request.

Please see the [3.4.3 Profiles and Managed Billing](#) section for further details.

3.2.9.3 Supported Currencies

U.S. Currency

3.2.9.4 Virtual Terminal

The Orbital Virtual Terminal also supports Chase Visa Signature Debit and Credit Card transactions. The merchant reassignment flag controls if the transaction is processed as a Visa or ChaseNet transaction. Thereafter and in Orbital Gateway reporting a ChaseNet transaction is displayed with the appropriate ChaseNet method of payment.

SEE ALSO Please review *Orbital Virtual Terminal Users Manual* for further details

3.3 Cardholder Initiated Transaction/Merchant Initiated Transaction (CIT/MIT) Framework

3.3.1 Introduction

In addition to the generation of a transaction via a cardholder initiated event, there is a significant segment of transactions where a merchant, payment facilitator (PF) or staged digital wallet operator (SDWO) uses a cardholder's payment credentials (i.e., account details) that were previously stored for future purchases. A stored credential is information (including, but not limited to, an account number or payment token) that is stored by a merchant or its agent, a payment facilitator, or a staged digital wallet operator to process future transactions.

With the introduction of the Stored Credential and Merchant Initiated Transaction Framework, data is presented with authorizations and transactions to identify stored credentials and indicate cardholder consent was obtained. Within these frameworks, transactions are presented as either a Cardholder Initiated Transaction (CIT) or Merchant Initiated Transaction (MIT). These changes apply to all regions: AP, Canada, CEMEA, LAC, Europe, and U.S. (October 2017)

Note: Within this Framework, Merchants are responsible for receiving and retaining the Transaction ID (TXID) for use on subsequent transactions.

3.3.2 Credential versus Stored Credential

When a Credential is used for a single one time use, that transaction is considered out of the Stored Credential Framework. If a Credential is instead used to set up a cardholder account that will support future purchases, that Credential use is considered within the Stored Credential Framework. The initial use of a Credential within the Framework is initiated by the cardholder, and creates a Stored Credential. The Stored Credential is intended to support more than one transaction.

All stored credential transactions must be part of the Framework. However, not all credential transactions will necessarily be part of the Framework.

To use a stored credential for a transaction, either a CIT or MIT can be submitted. When initiating a transaction using the Framework, the appropriate message type must be sent.

The following table illustrates the parameters when using both Credentials and Stored Credentials within the Framework.

Comparison of Credentials in Framework

Credential (Payment Credential) Within Framework	Stored Credential Within Framework
First transaction initiated by the cardholder/customer Can also be used to complete a single transaction or single purchase. For example, a split shipment Payment Token or PAN (Primary Account Number) PAN(Primary Account Number) or Payment Token	Account (Stored Credential) will be used for future purchases, such as card on file, wallet, recurring, etc. Future purchases will use stored information Stored Credential can be Payment Token or PAN (Primary Account Number) A stored credential can be used by either a cardholder or merchant Merchant must follow cardholder disclosure and consent requirements

3.3.3 CIT/MIT Framework Benefits

- Introduces a global standard to identify transaction intent and whether or not a cardholder is actively participating and available for authentication.
- Enables merchants, acquirers and issuers to link a series of related transactions together for consistent CIT/MIT processing.
- Allows merchant-initiated, token-based transactions to be processed without authentication data elements without which these transactions would fail. For example, merchants may accept payment tokens in the following scenarios:
 - Online payments via digital wallets that use payment tokens
 - Payment transactions from devices equipped with Magnetic Secure Transmission (MST) technology

3.3.4 Stored Credential Framework

3.3.4.1 Cardholder-Initiated Transaction (CIT)

With a CIT, the cardholder/consumer performs the transaction. A CIT can be submitted through a terminal, in store or an online checkout; available types will vary based on specification support. A CIT can use payment credentials, which can be a PAN or payment token. A CIT can also use a Stored Credential.

Typically, an initial CIT is performed using payment credentials to establish an account on file and the Stored Credential. When a CIT is performed using payment credentials, additional cardholder data such as CVV2 or chip data (as applicable) is recommended as part of the validation process to demonstrate that the cardholder is involved in the transaction. Once the account on file is created, the cardholder can also perform CITs using the Stored Credential. These Stored Credential CITs would not use CVV2 or chip data.

A CIT can be initiated to complete a purchase or create a stored credential.

1. If an amount is due at the time credentials are stored, the CIT is submitted as an authorization for a purchase transaction
2. If no amount is due when the credentials are stored, submit the CIT as an Account Verification

3.3.4.2 Merchant-Initiated Transaction (MIT)

An MIT is a transaction that relates to a previous CIT but is conducted without the consumer involvement and without cardholder validation performed. The MIT must refer to a consumer's original transaction and include the information from a prior CIT. Through an MIT, a merchant can initiate a transaction without the cardholder's participation.

Categories for MITs include:

- Standing-Instruction MITs support pre-agreed cardholder instructions for ongoing purchases of goods or services. Standing Instruction MITs are a follow-up to a CIT; for example, an Unscheduled Credential-on-File (COF) Transaction such as adding funds to a wallet account.
- Recurring MIT Transaction signifies a transaction in a series of transactions processed at fixed, regular intervals. These transactions represent an agreement between a cardholder and a merchant to initiate future transactions for the purchase of goods or services provided at regular intervals; for example, a magazine publisher charges the cardholder for a monthly subscription.
- Industry-Specific Business Practice MITs support transaction types that are a follow-up to an original cardholder-merchant interaction that was not completed with one single transaction; for example, a Reauthorization (Split Shipment) Transaction.

3.3.4.2.1 Merchant Obligations for Managing Transaction ID (TXID) for VISA or Network Reference Id (NRID) for Discover and not applicable for MasterCard

In order to properly process a transaction within the Framework, merchant identification of an authorization as a CIT or MIT is required in order to receive additional data back in the authorization response message. This data includes the Transaction ID (TXID) /Network Reference ID (NRID), a value created by the Payment Brand at the time of authorization. Merchant support of the receipt of authorization Transaction IDs/Network Reference IDs, fields and data not previously provided in authorization response messages is required. Depending on the type of message, one or two Transaction IDs (TXIDs)/Network Reference IDs (NRIDs) will be provided in authorization response messages.

In addition, merchant storage of these TXIDs/NRIDs is required for future use to supply to Chase when completing a MIT authorization message. The Transaction ID/Network Reference ID generated at the time of a CIT is provided with a subsequent corresponding MIT; this TXID/NRIDs will "link" the CIT and MIT together. With the MIT, merchant identification of a MIT, the type of MIT message, and the TXID/NRIDs previously supplied with the CIT in ongoing MIT authorization messages is required. With an initial CIT authorization response sent back to the merchant, a TXID/NRIDs is included in the Response TXID field. This Response TXID/NRIDs must be stored by the merchant and included in the Submitted TXID field when submitting a MIT transaction.

NOTE: TXID is not applicable for MasterCard.

3.3.5 Profile Use Within CIT/MIT Framework

There are two types of Orbital merchants using stored credentials:

- Merchants who store credentials within the Orbital management,
- Merchants who store the credentials outside of Orbital without use of Orbital profile management.

3.3.5.1 Profiles managed by Orbital

Orbital will maintain CIT/MIT related data on behalf of the merchants. For VISA and Discover profiles, MIT Type together with the MIT TXID/NRID will be stored in the Profile and will be visible to merchants. MIT TXID/NRID will be used by Orbital to tie subsequent MIT transactions to the very first one (the CIT Transaction), which initiated the CIT/MIT sequence set.

For MasterCard profiles, MIT Type will be stored in the profile and will be visible to merchants.

3.3.5.1.1 CIT/MIT profile Creation

Card on file profiles will need to use CIT/MIT data in order to use CIT/MIT framework.

1. Profile creation as part of CIT transaction

While initiating a new CIT transaction, a merchant will create a new profile and store the CIT/MIT information on that profile. The purpose of doing this is that during subsequent MIT transactions on that profile, Orbital will use the CIT/MIT information associated with saved profile to complete a CIT/MIT framework transaction.

2. Profile creation using Profile Add APIs

CIT/MIT profiles can also be added in a two-step process.

- a. Merchant to perform a CIT transaction which would return a Transaction ID in the response message.
- b. Merchant to then provide the received CIT/MIT Transaction ID along with the CIT/MIT related data during Add profile API call.

NOTE: The merchant will not have to perform step a. for MasterCard since a TXID is not required to create a profile using Profile Add APIs for MasterCard brand.

3. Convert an existing non-CIT/MIT profile into CIT/MIT Profile

A non-CIT/MIT profile can be converted to a CIT/MIT Profile by performing a CIT transaction on the existing non CIT/MIT profile (CIT/MIT related data fields will be available for selection). Once the transaction is complete, the corresponding CIT TXID/NRID and CIT transaction type will be stored and displayed in the Profile (now converted into a CIT/MIT profile) for future use.

For MasterCard profiles only the MIT type will be stored and displayed in the converted profile for future use.

The merchant can use the following Message types to convert a BAU profile into CIT/MIT profile:

For VISA:

- CSTO
- CGEN
- CREC
- CINS
- CUSE
- MUSE*
- MREC*
- MINS*

For Discover:

- CGEN
- CREC
- CSTO
- CINS
- CUSE
- MUSE*
- MREC*
- MINS

For MasterCard:

- CSTO
- CGEN
- CREC
- CINS
- CUSE
- MREC*
- MINS*

*See section 3.3.8 for more information on this.

NOTE: A declined MIT transaction will not create an CIT/MIT profile.

3.3.5.1.2 CIT/MIT profile update

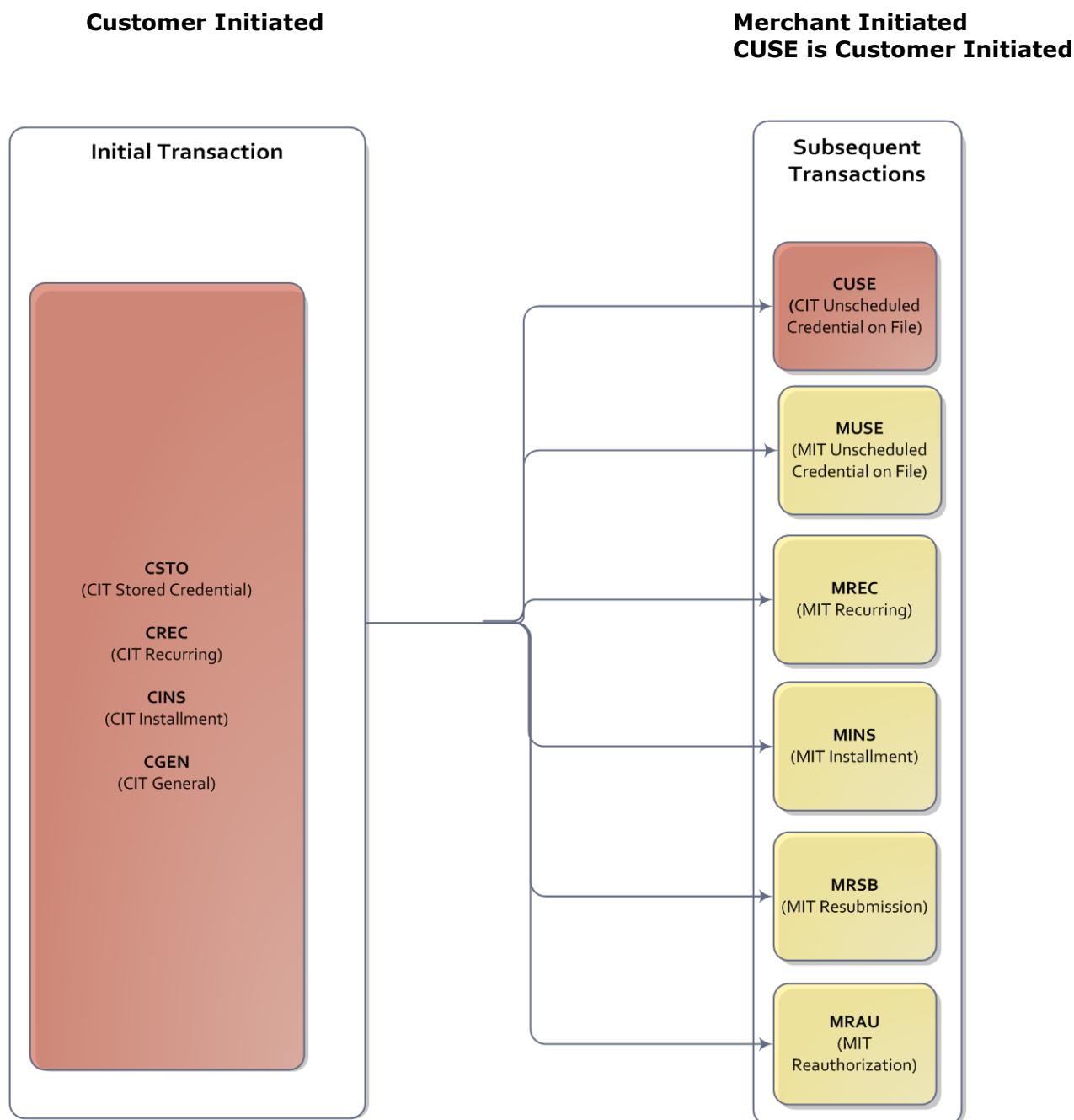
Within the CIT/MIT framework, if card account data is updated within the same brand (VISA or Discover or MasterCard) based on account updater information, that profile will remain as a CIT/MIT profile.

Within the CIT/MIT framework, if the merchant changes an existing VISA or Discover or MasterCard card number to another VISA or Discover or MasterCard card number, the profile will be converted into a non-CIT/MIT VISA or Discover or MasterCard profile. Creation of a new profile to continue CIT/MIT transactions is recommended or the profile can be converted into CIT/MIT profile again by creating another CIT transaction.

Within the CIT/MIT framework, if the merchant changes an existing VISA card number to any other non-VISA type or existing Discover to any other non-Discover type or existing MasterCard to any other non-MasterCard type, the profile will be converted into a non-CIT/MIT profile.

3.3.5.1.3 CIT/MIT Message type relationships and definitions

The diagram below depicts the relationship between the submitted initial transaction type and subsequent transaction type submissions. Note the initial submissions are all customer initiated followed by merchant initiated transactions except for an unscheduled CIT (CUSE).



The following table contains details about each message type depicted in the flow diagram above.

Code	Name	Description	Initiated by	Card Brand	Stored Credential
CSTO	Cardholder-Initiated Stored Credential	Signifies that the merchant is storing the cardholder credentials for the first time in anticipation of future stored credential transactions. Example: A cardholder sets up a customer profile for future purchases	Cardholder	Visa Discover MasterCard	Optional Optional Optional
CUSE	Cardholder-Initiated Unscheduled Credential on Files	Signifies a cardholder initiated transaction using a credential that is stored at the merchant. Example: A purchase made by a cardholder at an online retailer with the cardholder's credential on file.	Cardholder	Visa Discover MasterCard	Required Required Required
MUSE	Merchant-Initiated Unscheduled Credential on File	Signifies an unscheduled transaction initiated by the merchant, i.e., not a recurring transaction that occurs at a scheduled interval. Example: Subsequent authorization for an electronic toll collection device when the stored balance drops below a predefined threshold.	Merchant	Visa Discover	Required Required
CREC	Cardholder-Initiated Recurring Transaction	Signifies a cardholder initiating the first of a recurring series of transactions. Example: A cardholder sets up billing for an ongoing monthly gym membership.	Cardholder	Visa Discover MasterCard	Optional Optional Optional
MREC	Merchant Initiated Recurring Transaction	Signifies a transaction in a series of transactions processed at fixed, regular intervals. These transactions represent an agreement between a cardholder and a merchant to initiate future transactions for the purchase of goods or services provided at regular intervals. Example: A magazine publisher charges the cardholder for a monthly subscription.	Merchant	Visa Discover MasterCard	Required Required Required
CINS	Cardholder-Initiated	Signifies a cardholder initiating the first of a series of installment payments.	Cardholder	Visa	Optional

	Installments	Example: A cardholder sets up an agreement with a merchant to initiate one or more future transactions over a period of time for a single purchase of a good or service.		Discover MasterCard	Optional Optional
MINS	Merchant-Initiated Installment Transaction	Signifies a transaction in a series of transactions that use a stored credential and that represents a cardholder agreement for the merchant to initiate one or more future transactions over a period of time for a single purchase of a good or service. Example: A furniture retailer allows a cardholder to pay for goods purchased in installments over a pre-agreed period of time.	Merchant	Visa Discover MasterCard	Required Required Required
CGEN	Cardholder-Initiated General Transaction	Signifies cardholder-initiated transactions that can support various merchant-initiated transactions. Example: A cardholder-initiated authorization that the merchant may later use to request a re-authorization.	Cardholder	Visa Discover MasterCard	Optional Optional Optional
MRSB	Merchant-Initiated Resubmission	Signifies when a merchant performs a resubmission in cases where the merchant requested an authorization, but received a decline after the merchant has already delivered the goods or services to the cardholder. Example: A merchant receives a decline due to insufficient funds after already shipping goods and performs a resubmission transaction to obtain an approval.	Merchant	Visa Dicsover MasterCard	Optional Optional Optional
MRAU	Merchant-Initiated Reauthorization	Signifies a merchant-initiated re-authorization. Example: Merchant receives an order for several items totaling a specific amount. The items are shipped separately and split shipment transactions are created for each shipment.	Merchant	Visa Discover MasterCard	Optional Optional Optional

NOTE: Stored Credential Required will have the value of Y/N

Stored Credential Optional will have the value of Y/N/Blank

3.3.5.2 Profiles managed by Merchants

If merchants are managing card on file profiles outside of Orbital Profile Management, they need to retain required CIT/MIT information as part of the profile to be used in subsequent MIT transactions. Merchants that maintain their own profiles are responsible for maintaining and keeping CIT/MIT data elements such as: MIT TXID/NRID, MIT TYPE and Stored credential flag for VISA and Discover card brands and MIT type and Stored credential flag for MasterCard card brand.

The following three MIT data elements are required to be supplied with each MIT transactions: MIT TXID/NRID, MIT Type, and Stored Credential Flag

NOTE: Each transaction will receive a new MIT TXID/NRID.

VISA expects an original TXID (received on the CIT transaction), however, either TXID will be accepted.

Discover expects an original NRID **for MREC and MRAU transactions** (received on the CIT transaction), however, either NRID will be accepted.

TXID/NRID is not applicable to MasterCard.

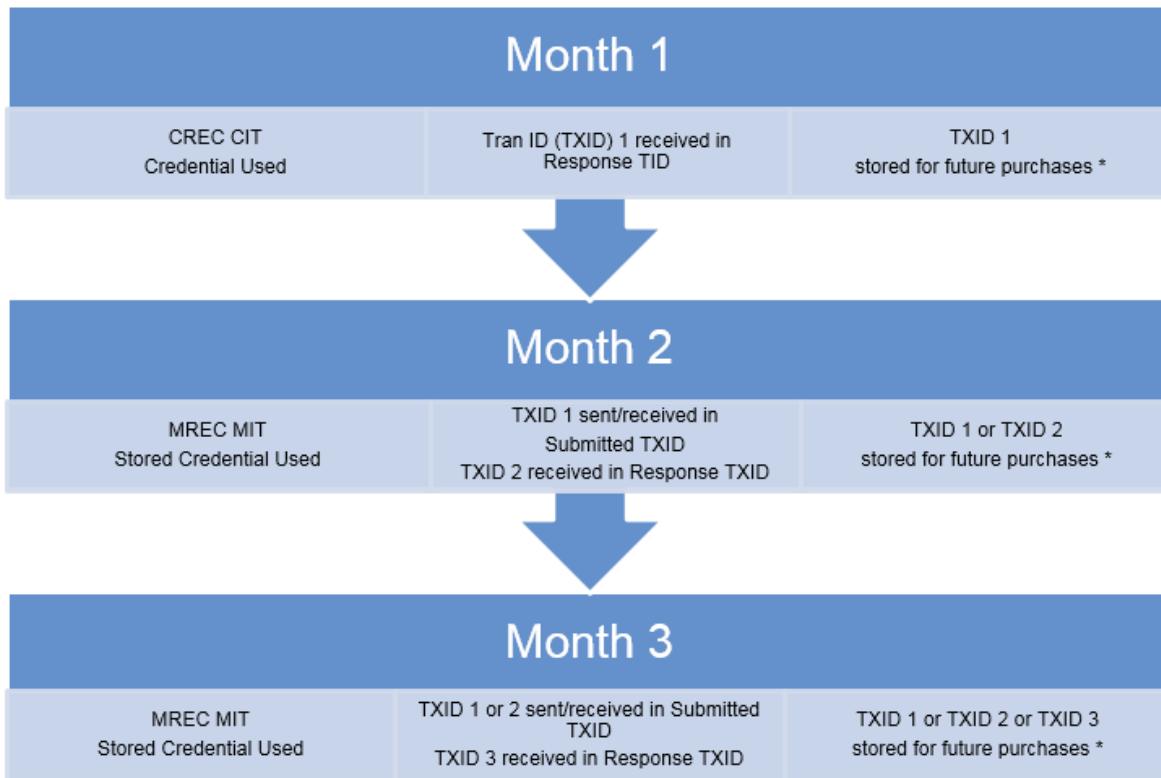
3.3.6 Managed Billing in CIT/MIT framework

The following two types of MIT transactions are eligible for Managed billing as part of the CIT/MIT framework:

- CREC
- CINS

3.3.7 Non-Managed Billing Transaction Examples

3.3.7.1 Visa Recurring (CREC and MREC) – New Relationship with Framework



* Visa preference is that the merchant store the TXID (i.e. TXID 1) from the initial CIT for future MIT purchases. Some CIT/MIT categories require use of TXID 1 for support, i.e. incremental.

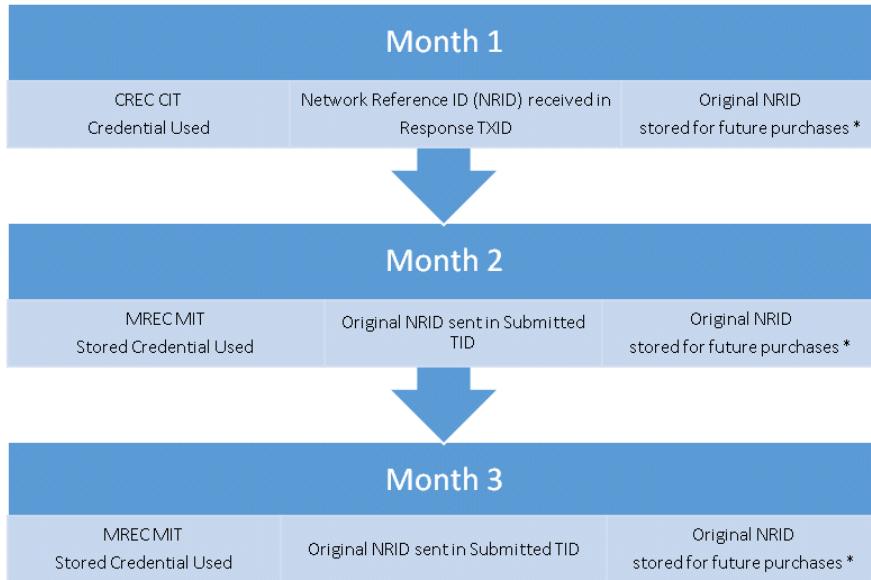
Visa Recurring (CREC and MREC) – New Relationship with Framework, (Continued)

Month 1 CREC CIT Cardholder Initiates	Month 2 MREC MIT Merchant Initiates	Month 3 and ongoing MREC MIT Merchant Initiates
<p>A cardholder decides to enroll with XYZ Gym for a membership. The cardholder is not an existing customer, so all transactions will be processed with Framework. Payment for the membership will be processed via monthly recurring transactions.</p> <p>In order for the transaction to be managed within Framework, a CIT must be performed to initiate the relationship.</p> <p>Since this is a recurring example, the CIT message type is CREC, CIT Recurring.</p> <p>With the initial enrollment, the cardholder will be billed for the first month, Month 1 of the membership.</p> <p>The cardholder presents a credential to the merchant, and the merchant performs an authorization within Framework for the purchase; this is the initial CREC CIT.</p> <p>With the CREC authorization message response, the Visa TXID will be included in the Response TXID (TXID 1) field. This TXID will be used to link all subsequent MITs to the initial CIT and must be stored.</p> <p>Since this credential will be used for future recurring transactions, this credential is considered a Stored Credential.</p>	<p>For the next month, the merchant will perform a MIT using the Stored Credential for the next recurring transaction, Month 2 of the membership. The MIT message type for this transaction will be MREC. MIT Recurring.</p> <p>The Response TXID (TXID 1) from the initial CREC CIT must be included in the Submitted TXID field of the MREC MIT.</p> <p>With the MREC message response, TXID 1 is returned in the Submitted TID field. A new Visa TXID (TXID 2) will be included in the Response TXID field.</p> <p>A TID must be stored for future purchases. It is preferred that the TID that is stored is the TXID from the initial CREC CIT (TXID 1), but TXID 1 or TXID 2 can be used for subsequent MREC MITs.</p>	<p>The merchant will perform a MIT for the next recurring transaction, Month 3 of the membership. The MIT message type for this transaction will be MREC.</p> <p>A Response TID (TXID 1 or TXID 2) must be included in the Submitted TXID field of the MREC MIT. This TXID is returned in the Submitted TXID field. A new Visa TXID (TXID 3) will be included in the Response TXID field.</p> <p>A TXID must be stored for future purchases. It is preferred that the TXID that is stored is the TXID from the initial CREC CIT (TXID 1), but either the initial CREC TXID or a new TXID sent in a MREC Response TXID (TXID 2, TXID 3, TXID XXX) field can be used for subsequent MREC MITs.</p>

*The above example is applicable to merchants who are maintaining their own profiles and therefore are responsible for storing the TXIDs.

Orbital will assume the responsibility in storing the TXID in cases where profile is stored.

3.3.7.1 Discover Recurring CIT/MIT Transaction Flow



* Discover requires that the merchant store the NRID (i.e. the Original NRID) from the initial CIT for future MIT purchases; the Stored Credential NRID is to remain unchanged for the life of the transaction relationship and must be submitted with each subsequent MREC. Please note that a newly generated NRID will be included in the Response TID in subsequent MIT transactions; this should be ignored for purposes of Stored Credential Framework processing.

Discover Recurring CIT/MIT example: CREC and MREC

Month 1 CREC CIT Cardholder Initiates	Month 2 MREC MIT Merchant Initiates	Month 3 and ongoing MREC MIT Merchant Initiates
<p>A cardholder decides to enroll with XYZ Gym for a membership. Payment for the membership will be processed via monthly recurring transactions.</p> <p>In order for the transaction to be managed within Framework, a CIT must be performed to initiate the relationship.</p> <p>Since this is a recurring example, the CIT message type is CREC, CIT Recurring.</p> <p>With the initial enrollment, the cardholder will be billed for the first month, Month 1 of the membership.</p> <p>The cardholder presents a credential to the merchant, and the merchant performs an authorization within Framework for the purchase; this is the initial CREC CIT.</p> <p>With the CREC authorization message response, the Discover Original NRID will be included in the Response TID field. This Original NRID will be used to link all subsequent MITs to the initial CIT and must be stored.</p> <p>This CIT creates the Stored Credential for future recurring transactions.</p>	<p>For the next month, the merchant will perform a MIT using the Stored Credential for the next recurring transaction, Month 2 of the membership. The MIT message type for this transaction will be MREC, MIT Recurring.</p> <p>The Response TID (Original NRID) from the initial CREC CIT must be included in the Submitted TID field of the MRECMIT authorization.</p> <p>With the MREC authorization message response, the Original NRID will be returned in the Submitted TID field. A newly generated NRID will be included in the Response TID field; this NRID should be ignored for purposes of Stored Credential Framework processing.</p> <p>The Original NRID must be stored for future MREC purchases.</p>	<p>The merchant will perform a MIT for the next recurring transaction, Month 3 of the membership. The MIT message type for this transaction will be MREC.</p> <p>The stored Original NRID must be included in the Submitted TID field of the MRECMIT authorization.</p> <p>With the MREC authorization message response, the Original NRID will be returned in the Submitted TID field. A newly generated NRID will be included in the Response TID field; this NRID should be ignored for purposes of Stored Credential Framework processing.</p> <p>The Original NRID must be stored for subsequent MRECMITs.</p>

3.3.8 Recurring/Incremental/Unscheduled Credential on File – Existing Relationship Outside of Framework

3.3.8.1 Merchant managed profile

Month Prior to Use of Framework Existing Relationship outside of Framework		
Credential Used for Recurring or Installment or Account on File Transaction	No Transaction ID (TXID/NRID) submitted Stored Credential Flag is not required MIT Type value is not required	No TXID/NRID stored
		
Month 1 within the framework		
MREC (PAN and DPAN), MINS (PAN and DPAN) or MUSE – for Recurring or Installments or Unscheduled Credential on File Transaction. Existing Stored credential used.	Blank TXID/NRID Submitted by the merchant Stored Credential Flag is Y MIT Type is MREC/MINS/MUSE	TXID1/NRID1 received in Response TXID field TXID1/NRID1 should be stored by the merchant. Not Applicable to MasterCard.
		
Month 2 within the framework		
MREC or MINS or MUSE Existing Stored credential used	TXID1/NRID1 Submitted by the merchant. Not Applicable to MasterCard. Stored Credential Flag is Y MIT Type is MREC/MINS/MUSE	TXID2/NRID2 received in Response TXID field Merchant can store TXID2/NRID2 for submitting in the subsequent transaction or they can keep using TXID1/NRID1. Not Applicable to MasterCard.

Recurring/Incremental/Unscheduled Credential on File – Existing Relationship Outside of Framework

Month(s) Prior to Use of Framework	Month/Transaction 1 MREC/MINS/MUSE MIT within Framework Merchant Initiates	Month/Transaction 2 and ongoing MREC/MINS/MUSE MIT Merchant Initiates
<p>Prior to use of Framework, a merchant has existing relationships with the customer.</p> <p>Since these are processed outside of Framework, authorizations are not identified with a Message Type.</p> <p>In addition, Transaction ID is not provided with the Authorization Response Message.</p> <p>TXID/NRID not required Stored Credential Flag is not required MIT Type is not required</p>	<p>A merchant decides to transition existing relationships with the Stored Credential Framework. Within the Framework, payments will continue to the existing cardholder account on file information, which is a Stored Credential.</p> <p>In order for transaction to be managed within Framework, a MIT must be performed to initiate the Framework support.</p> <p>For a recurring transaction, the MIT message type is MREC and the Stored Credential Flag = Y.</p> <p>Although this is an MIT transaction, the merchant will send in a blank TXID/NRID for both PAN and DPAN transactions. Not applicable to MasterCard.</p> <p>With the MREC authorization response, the TXID/NRID will be included in the Response TXID (TXID1/NRID1) field. The merchant should store the TXID1/NRID1 for use in subsequent transactions. Not applicable to MasterCard.</p> <p>For an installment type transaction, the MIT message type is MINS and the Stored Credential Flag = Y.</p> <p>Although this is an MIT transaction, the merchant will send in a blank TXID/NRID for both DPAN and PAN transactions. Not applicable to MasterCard.</p> <p>With the MINS authorization response, the TXID/NRID will be included in the Response TXID (TXID1/NRID1) field. The merchant should store the TXID1/NRID1 for</p>	<p>For the next transaction, the merchant will perform a MIT using the Stored Credential for the next recurring/installment/unscheduled credential on file transaction</p> <p>For a recurring transaction, the MIT message type is MREC and Stored Credential Flag = Y.</p> <p>The merchant will send in TXID1/NRID1 for both DPAN and PAN MIT transactions. Not applicable to MasterCard.</p> <p>With the MREC authorization response, a new TXID/NRID will be included in the Response TXID (TXID2/NRID2) field. The merchant can either continue to use TXID1/NRID1 for subsequent transactions or store TXID2/NRID2 and use it for the next transaction. Not applicable to MasterCard.</p> <p>For an installment type transaction, the MIT message type is MINS and Stored Credential Flag = Y.</p> <p>The merchant will send in TXID1 for DPAN and PAN CIT/MIT transactions. Not applicable to MasterCard.</p> <p>With the MINS authorization response, a new TXID/NRID will be included in the Response TXID (TXID2/NRID2) field. The merchant can either continue to use TXID1/NRID1 for subsequent transactions or store TXID2/NRID2</p>

	<p>use in subsequent transactions. Not applicable to MasterCard.</p> <p>For a non-recurring account on file transaction, the MIT message type is MUSE, and Stored Credential Flag = Y. Although this is an MIT transaction, the merchant will send in a blank TXID/NRID. Not applicable to MasterCard.</p> <p>With the MUSE authorization response, the TXID/NRID will be included in the Response TXID (TXID1/NRID1) field. The merchant should store the TXID1/NRID1 for use in subsequent transactions. Not applicable to MasterCard.</p>	<p>and use it for the next transaction. Not applicable to MasterCard. NRID is optional for all Discover MINS transaction request.</p> <p>For a non recurring account on file type transaction, the MIT message type is MUSE and Stored Credential Flag = Y.</p> <p>The merchant will send in TXID1/NRID1 for both DPAN and PAN CIT/MIT transactions. Not applicable to MasterCard.</p> <p>With the MUSE authorization response, a new TXID/NRID will be included in the Response TXID (TXID2/NRID2) field. The merchant can either continue to use TXID1/NRID1 for subsequent transactions or store TXID2/NRID2 and use it for the next transaction. Not applicable to MasterCard. NRID is optional for all Discover MINS transaction request.</p>
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3.3.8.2 Orbital managed profile

Month Prior to Use of Framework Existing Relationship outside of Framework		
Credential Used for Recurring or Installment or Account on File Transaction	No Transaction ID (TXID/NRID) submitted Stored Credential Flag is not required MIT Type value is not required	No TXID/NRID stored
Month 1 within the framework		
MREC (PAN and DPAN), MINS (DPAN and PAN profile) or MUSE – for Recurring, Installments or Unscheduled Credential on File Transaction. Existing Stored credential used.	Blank TXID/NRID Submitted by the merchant (Not applicable to MasterCard.) Stored Credential Flag is Y MIT Type is MREC/MINS/MUSE	TXID1/NRID1 received in Response TXID field TXID1/NRID1 stored by Orbital. Merchant has the option to store it as well. Not applicable to MasterCard.
Month 2 within the framework		
MREC, MINS or MUSE Existing Stored credential used	Blank TXID/NRID submitted by the merchant (Orbital will send the TXID1/NRID1 stored from the original transaction Response TXID. Not applicable to MasterCard.) Stored Credential Flag is Y MIT Type is MREC/MINS/MUSE	TXID2/NRID2 received in Response TXID field. Merchant has the option to store the TXID2/NRID2 returned Not applicable to MasterCard.

Recurring/Incremental/Unscheduled Credential on File – Existing Relationship Outside of Framework

Month(s) Prior to Use of Framework	Month/Transaction 1 MREC/MINS/MUSE MIT within Framework Merchant Initiates	Month/Transaction 2 and ongoing MREC/MINS/MUSE MIT Merchant Initiates
<p>Prior to use of Framework, a merchant has existing relationships.</p> <p>Since these are processed outside of Framework, authorizations are not identified with a Message Type.</p> <p>In addition, Transaction ID is not provided with the Authorization Response Message.</p> <p>TXID/NRID not required</p> <p>Stored Credential Flag is not required</p> <p>MIT Type is not required</p>	<p>A merchant decides to transition existing relationships with the Stored Credential Framework. Within the Framework, payments will continue to the existing cardholder account on file information, which is a Stored Credential.</p> <p>In order for transaction to be managed within Framework, a MIT must be performed to initiate the Framework support for a given Orbital profile:</p> <p>For a recurring transaction, the MIT message type is MREC and Stored Credential Flag = Y.</p> <p>Although this is an MIT transaction, the merchant will send in a blank TXID/NRID. This is applicable for both PAN and DPAN transactions. Not applicable to MasterCard.</p> <p>With the MREC authorization response, the TXID/NRID will be included in the Response TXID (TXID1/NRID1) field which will be stored by Orbital. Not applicable to MasterCard.</p> <p>For an installment type transaction, the MIT message type is MINS and Stored Credential Flag = Y.</p> <p>Although this is an MIT transaction, the merchant will send in a blank TXID/NRID for PAN and DPAN transactions. Not applicable to MasterCard.</p> <p>With the MINS authorization response, the VISA TXID/Discover NRID will be included in the Response TXID (TXID1/NRID1) field which will be stored by Orbital. Not applicable to MasterCard.</p> <p>For a non-recurring account on file transaction, the MIT message type is MUSE and Stored Credential Flag = Y. Although this is an MIT transaction, the merchant will send</p>	<p>For the next transaction, the merchant will perform a MIT using the Stored Credential for the next recurring/installment/unscheduled credential on file transaction</p> <p>For a recurring transaction, the MIT message type is MREC and Stored Credential Flag = Y.</p> <p>Although this is an MIT transaction, the merchant will send in a blank TXID/NRID. This is applicable for both PAN and DPAN transactions. Not applicable to MasterCard.</p> <p>With the MREC authorization response, a new TXID/NRID will be included in the Response TXID (TXID2/NRID2) field. The merchant has the option to save them. Not applicable to MasterCard.</p> <p>For an installment type transaction, the MIT message type is MINS and Stored Credential Flag = Y.</p> <p>Although this is an MIT transaction, the merchant will send in a blank TXID/NRID. This is only applicable to PAN and DPAN transactions. Not applicable to MasterCard.</p> <p>With the MINS authorization response, a new TXID/NRID will be included in the Response TXID (TXID2/NRID2) field. The merchant has the option to save them. Not applicable to MasterCard.</p>

	<p>in a blank TXID/NRID. Not applicable to MasterCard.</p> <p>With the MUSE authorization response, the VISA TXID/Discover NRID will be included in the Response TXID (TXID1/NRID1) field which will be stored by Orbital. Not applicable to MasterCard.</p>	<p>For a non-recurring account on file transaction, the MIT message type is MUSE and Stored Credential Flag = Y. Although this is an MIT transaction, the merchant will send in a blank TXID/NRID. Not applicable to MasterCard.</p> <p>With the MUSE authorization response, a new TXID/NRID will be included in the Response TXID (TXID2/NRID2) field. The merchant has the option to save them. Not applicable to MasterCard.</p>
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For VISA card Brand:

The above conversion is applicable to:

1. MREC – DPAN and PAN transactions
2. MINS – DPAN and PAN transactions
3. MUSE – DPAN and PAN transactions

For Discover card Brand:

The above conversion is applicable to:

1. MREC – DPAN and PAN transactions
2. MINS – DPAN and PAN transactions
3. MUSE – DPAN and PAN transactions
- 4.

For MasterCard card brand:

The above conversion is applicable to:

1. MREC – DPAN and PAN transactions
2. MINS – DPAN and PAN transactions

NOTE : The Conversion to CIT/MIT will not take place if the initial CIT/MIT transaction is declined.

3.3.9 TXID Override by the Merchants

For VISA or Discover CIT/MIT transactions on Orbital managed profiles, the merchant will have the option to send in a TXID/NRID at any point in time. When this happens, Orbital will take the TXID provided by the merchant to process the transactions.

NOTE: This is not applicable for MasterCard.

3.3.10 Multi CIT transactions

It is possible to initiate a new CIT transaction using an existing framework Orbital profile. The following CIT message types are valid choices for each payment brand:

VISA, the CIT transactions are – CREC, CINS, CGEN, CSTO

Discover, the CIT transactions are – CREC, CINS, CSTO and CGEN

MasterCard, the CIT transactions are – CREC, CINS, CGEN, CSTO

The merchant should store the new TXID/NRID returned in the CIT/MIT response message for VISA/Discover and use the TXID override functionality to send in the new TXID/NRID for a given transaction for use in subsequent use profile transactions.

If the merchant does not submit TXID/NRID for a subsequent transaction related to the new CIT transaction, Orbital will continue to use the original MIT type and TXID/NRID for the profile.

3.4 Available Processing Functionalities

3.4.1 Soft Descriptors

Soft Descriptor records are used to define the merchant name or product (item) which may appear on the consumer's statement. Soft Descriptor data is optional; it may be passed independently or along with Soft Merchant Descriptor data within the same transaction. Merchants may take advantage of Chase Paymentech's soft descriptor record specifications in order to submit the merchant Name and/or Product Description field which is most recognizable to the consumer. It allows the merchant greater flexibility in describing the consumer's purchase. In addition, the Merchant City/Customer Service Phone Number field allows the merchant to identify the business location or provide the consumer with a customer service phone number or URL. The soft descriptor data that is submitted is passed to the card association along with the transaction and posted on the consumer's statement, if applicable.

Soft Descriptors are supported for American Express, ChaseNet, Discover, Discover Diners, Electronic Check Processing (ECP), International Maestro, JCB, MasterCard, MasterCard Canadian Domestic Restricted Debit, PIN Debit, PINless Debit, Visa, and Visa Canadian Domestic Restricted Debit, but not supported for Bill Me Later Card types. Support for Soft Descriptors is not globally available to all customers using the Orbital Gateway and the behavior is different in downstream host platforms. Please refer to *Stratus and PNS specifications* for further details on authorization and settlement.

Chase Paymentech Risk/Credit department approval is required before sending Soft Descriptors. The merchant must also be set up to send soft descriptor records or transactions containing this information will be declined. It is subject to issuer discretion whether this descriptor will be displayed on the cardholder statement.

The tables below describes the generic Soft Descriptor terms used throughout this document along with their respective XML element names.

Table 10 Soft Descriptors - Field Names

Field Name	XML
Merchant Name	SDMerchantName
Product Description	SDProductDescription
Merchant City	SDMerchantCity
Customer Service Phone Number	SDMerchantPhone
Merchant URL	SDMerchantURL
Merchant Email Address	SDMerchantEmail

NOTE Although only some of the Soft Descriptor records can be populated with data in any given combination, all of the Soft Descriptor elements must be submitted in the transaction request. Any element that is not populated should be null-filled.

3.4.2 Soft Merchant Descriptors

Soft Merchant Descriptor records are used to define additional aggregator details. Soft Merchant Descriptor data is optional; it may be passed independently or along with Soft Descriptor data within the same transaction and may appear on the consumer statement.

Soft Merchant Descriptors are supported for American Express, ChaseNet, Discover, Discover Diners, Electronic Check Processing (ECP), International Maestro, JCB, MasterCard, MasterCard Canadian Restricted Debit, PIN Debit, PINless Debit, Visa, and Visa Canadian Domestic Restricted Debit, but not supported for Bill Me Later Card types. Support for Soft Merchant Descriptors is not globally available to all customers using the Orbital Gateway and the behavior is different in downstream host platforms. Please refer to *Stratus and PNS specifications* for further details on authorization and settlement.

Chase Paymentech Risk/Credit department approval is required before sending Soft Merchant Descriptors. It is subject to issuer discretion whether this descriptor will be displayed on the cardholder statement.

The tables below describes the generic Soft Merchant Descriptor terms used throughout this document along with their respective XML element names.

Table 11 Soft Merchant Descriptors - Field Names

Field Name	XML
DBA	SMDDBA
Merchant / Seller ID	SMDMerchantID
Merchant Contact Information	SMDContactInfo
Street	SMDStreet
City	SMDCity
Region	SMDRegion

Field Name	XML
Postal Code	SMDPostalCode
Country Code	SMDCountryCode
MCC	SMDMCC
Email	SMDEmail
Telephone Number	SMDPhoneNumber

3.4.2.1 Stratus (BIN 000001) Support

The Orbital Gateway supports Soft Descriptors into the Stratus Host for authorization and settlement. However:

- ❑ Prior Risk Department approval is required.
- ❑ The Merchant ID/Terminal ID must be enabled for Soft Descriptors on the Orbital Gateway.

See *Stratus Specifications* for more details.

3.4.2.1.1 Rules and Guidelines—Credit Card

Chase Paymentech will not generate or segregate reports by the Soft Descriptor. If the merchant wishes to see Salem reports segregated by product, the merchant must set up specific reporting divisions and deposit those transactions under that division number.

For those merchants who need to roll up several merchant names under one corporation, please contact your Chase Paymentech Representative for details on the use and regulation of the Soft Descriptors.

The description in the merchant name field should be what is most recognizable to the cardholder. It should consist of the company name and/or trade name combined with some type of description of the product or service that was purchased.

The Merchant Name can be one of 3 different lengths:

- ❑ 3 bytes
- ❑ 7 bytes
- ❑ 12 bytes

In addition, the Product Description can be appended based on the length of the Merchant Name, such that they are a combined length of 21 bytes. In other words, the options are:

- ❑ 18 bytes
- ❑ 14 bytes
- ❑ 9 bytes

Additional notes:

- ❑ The Merchant City field allows the merchant to identify the business location or provide the cardholder with a Customer Service Phone Number or URL. This is a requirement to qualify for Visa's lowest Direct Marketing interchange rate.
- ❑ If the merchant submits a backslash (\) in the merchant descriptor, it is converted to a hyphen (-) on the cardholder statement. If the merchant submits a question mark (?) in the merchant descriptor, it is converted to a space on the cardholder statement.

- ▣ There are certain American Express card types/programs that ignore the descriptors sent using Soft Descriptors. The Optima card is one of these types. The merchant should contact their American Express representative for more details.
- ▣ Non-eCommerce transactions sent with a URL do not qualify for the best interchange.
- ▣ For MasterCard MOTO and Recurring Industry Types, if the City/Phone field at the division level is not a Customer Service Phone Number, then a Customer Service Phone Number must be populated in the Merchant City/Customer Phone Number field, or the transaction will error with Response Reason Code BP (Customer Service Phone reqd. for MOTO and Recurring. MC Only).
- ▣ The Orbital Gateway will apply the asterisks (*) in the necessary locations. Please do not add these to the request.

3.4.2.1.2 Rules and Guidelines—ECP

The Automated Clearing House (ACH) uses two fields to describe the transaction to the consumer. The Merchant Name (15 bytes) will always appear on the consumer's statement, and the Product Description (10 bytes) will appear on the consumer's statement a majority of the time. Both are required fields.

The soft descriptor will only show on the consumer's statement after the transaction has settled. Chase Paymentech recommends using the Doing Business As (DBA) description/value in the Merchant Name field and the product information in the Product Description field.

When utilizing the Soft Descriptor for ECP transactions, both the Merchant Name and the Product Description are mandatory. If either is left blank, the Transaction Division default value is used for both. Soft descriptors for ECP are not applicable to facsimile draft transactions. All other soft descriptor fields are not supported.

3.4.2.2 PNS (BIN 000002) Support

The Orbital Gateway supports Soft Descriptors into the PNS Host for Settlement only. However:

- ▣ It is only supported for Chase Paymentech Canada customers.
- ▣ The Merchant ID/Terminal ID must be enabled for Soft Descriptors on the Orbital Gateway.
- ▣ The behavior is different from that of the Stratus Interface. See [PNS Specifications](#) for more details.

Unlike Stratus, the only value passed on to the cardholder statement is the Merchant Name field, which, for these customers, is a maximum of 25 bytes of data. All other Soft Descriptor fields can optionally be sent, but will not be submitted to the settlement host and will not display on the cardholder statement.

NOTE Please contact your Chase Paymentech Representative for setup information for either host.

3.4.2.3 Soft Descriptor Examples

Example 2 Soft Descriptor section for a 3 byte Merchant Descriptor with Phone number

```
<SDMerchantName>XYZ</SDMerchantName>
  <SDProductDescription>TESTPRODUCTFORSOFT</SDProductDescription>
  <SDMerchantCity></SDMerchantCity>
  <SDMerchantPhone>888-888-8888</SDMerchantPhone>
  <SDMerchantURL></SDMerchantURL>
  <SDMerchantEmail></SDMerchantEmail>
```

Example 3 Soft Descriptor section for a 12 byte Merchant Descriptor with E-mail

```
<SDMerchantName>XYZCOMPANY</SDMerchantName>
  <SDProductDescription>PYMT1OF3</SDProductDescription>
  <SDMerchantCity></SDMerchantCity>
  <SDMerchantPhone></SDMerchantPhone>
  <SDMerchantURL></SDMerchantURL>
  <SDMerchantEmail>suppt@xyz.com</SDMerchantEmail>
```

NOTE Phone, URL, and email fields can be a maximum of 13 characters therefore care should be given when supplying this data so that consumers can understand the information on their statements.

Example 4 Soft Descriptor section for ECP

```
<SDMerchantName>XYZCOMPANY12345</SDMerchantName>
<SDProductDescription>PRODUCT123</SDProductDescription>
<SDMerchantCity/>
<SDMerchantPhone/>
<SDMerchantURL/>
<SDMerchantEmail/>
```

Example 5 Soft Merchant Descriptor section for New Order Request

```
<SoftMerchantDescriptors>
  <SMDDBA></SMDDBA>
  <SMDMerchantID></SMDMerchantID>
  <SMDContactInfo></SMDContactInfo>
  <SMDStreet></SMDStreet>
  <SMDCity></SMDCity>
  <SMDRegion></SMDRegion>
  <SMDPostalCode></SMDPostalCode>
  <SMDCountryCode></SMDCountryCode>
  <SMDMCC></SMDMCC>
  <SMDEmail></SMDEmail>
  <SMDPhoneNumber></SMDPhoneNumber>
</SoftMerchantDescriptors>
```

3.4.3 Profiles and Managed Billing

The Orbital Gateway includes functionality called *Customer Profile Management*, which allows cardholder data to be stored with the Orbital Gateway. A merchant can process transactions by simply passing a token value that represents that cardholder.

Once a Profile is created, transactions can be processed, using either the online interface or the Orbital Virtual Terminal (VT), simply by referencing the Customer Profile and filling in any additional information not stored in the profile. This feature is only available to merchants using the Chase Paymentech Orbital Interface.

Released in March of 2008, Managed Billing extends the capabilities of Profiles to include Recurring, Installment, and Deferred billing. Using this feature, merchants can configure future payments that the Orbital Gateway will initiate on the desired date.

3.4.3.1 Supports both Recurring and Non-Recurring Charges

By default, Profiles do not provide a full recurring service. Although the Orbital Gateway stores all the relevant information for processing a transaction, it will not automatically process it. When using standard Profiles, merchants are required to initiate a Profile request to the Orbital Gateway and retrieve the result of that request.

Profiles can also be configured to bill automatically via a process known as Managed Billing. Merchants wishing to use Managed Billing to support recurring, installment, or deferred charges must have the Managed Billing feature enabled for their account. A Merchant Contract Addendum is required to enable this feature, so interested merchants should contact their Sales Representative or Account Executive.

SEE ALSO See [3.4.3.4.6 Managed Billing Profiles](#) for more information.

See [3.3.5 Profile use within CIT/MIT framework](#) for more information

Additionally, please reference the supplemental document *Managed Billing 101* for more information about the overall product, its features, and how merchants can use the Managed Billing features.

3.4.3.2 Benefits

There are a number of potential benefits when using the Profiles feature:

- It simplifies transaction processing. When making a transaction request, one simply references the Customer Reference Number and fills in any of the missing information.
- It eliminates risk. Since it eliminates the need to store sensitive information about a merchant's customer on their database, merchants can focus on their business, and Chase Paymentech can focus on securely processing their transactions.
- It can eliminate data entry errors when using the Virtual Terminal. By retrieving a pre-existing Profile and validating the data, it eliminates the risk of keying the wrong customer information such as Order Number (which may equate to a Membership ID) or credit card number.

3.4.3.3 Setup Information

For any Orbital Gateway Merchant ID to support Profiles, it must be configured on the Orbital System to do so. There are several different configuration aspects that must be set up.

- **Enablement** First the Merchant ID must be configured to allow Profile functionality. Any Merchant ID that is not configured to use Customer Profiles and attempts to process a Profile Action will receive an error—a Profile Error Code of 9578 (or Merchant-Bin combination is not allowed to perform profile transactions).

- **Customer Profile Hierarchy Support** Each Merchant ID must be configured to support Profiles at the Chain ID (Company) level or Merchant ID level.

NOTE Managed Billing requires that Profiles be configured at the Merchant ID level.

- **Virtual Terminal Users** If your organization will utilize Profiles on the VT in addition to the Batch XML interface, there are a few important considerations, as described in the next section.

3.4.3.3.1 Profile User Management

- **Profile Administration** For any VT User to administer Profiles (add, delete, update), that user must be provided the *right* to administer Profiles. Any existing user can be granted this additional user permission.
- **Profile Usage** For any VT User to use Profiles for processing a transaction, permission needs be granted to use profiles. Any existing user can be granted this additional User permission. The user will not be able to administer profiles, just use existing ones.
- **Profile Access Disabled** If the VT User is not enabled for any Profile access level, they will not see any of the functionality. Profiles can be disabled for one user and enabled for another user.

3.4.3.3.2 General Access Rights

- **Card Masking** The same card masking rules that currently apply to any card number viewing in the VT apply to Profile management or usage:
 - ◆ If a user's permission allows the viewing of the credit card number, then, during usage or management, that user will be allowed to see any credit card number whether maintaining a profile or using it.
 - ◆ Conversely, if a user's permission level does not allow the number to be viewed, then it cannot be viewed whether they have the right to maintain a profile or use it. However, the card can be changed or updated regardless of masking.
- **Access Levels** All existing access levels are not impacted, regardless of Profile user rights. For instance, if a user cannot submit credits, they will not be able to submit credits using Profiles.

3.4.3.4 Business Rules

3.4.3.4.1 How it works

The first step is to create a Profile. This can be done in two different fashions:

- Adding a Profile as a distinct action.
- Adding Profile as a part of an authorization request.

Once that Profile exists, it can be utilized to complete a sale or refund with any of the data elements stored in the profile. Additionally, any part of the Profile can be overridden during the subsequent transactions.

Finally, the Profile can be updated (or even deleted) at any point.

3.4.3.4.2 Customer Reference Number Options

The Customer Reference Number is the referential data element to a Profile.

Key Customer Reference Number facts:

- ◻ Must be unique (either by Merchant ID or Chain ID)
- ◻ Can be from 1 to 22 bytes in length
- ◻ Valid characters are:

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNPQRSTUVWXYZ

0123456789

- , \$ @ &

and the space character

- ◆ Please note that, although lowercase characters can be submitted, all alphabetic characters are stored in uppercase by the Orbital system. Therefore, users cannot use uppercase and lowercase values to differentiate Customer Reference Numbers.
- ◆ Because the ampersand (&) has unique properties within XML, an ampersand must be sent as &#amp;

Setting the Customer Reference Number

The merchant can either set or request that the Orbital Gateway set the Customer Reference Number.

The field `<addProfileFromOrder>` in the New Order request and the `<customerProfileFromOrderInd>` in the Profile Add request control this behavior as follows:

- A** Auto-generate the Customer Reference Number. In other words, the Orbital Gateway will assign the Customer Reference Number and return it in the response.
- S** The Orbital Gateway will use the value passed in the `<customerRefNum>` element as the Customer Reference Number.
- O** This option only relates to when a Profile is added as a part of an authorization request. In this circumstance, the value passed in the `<orderID>` element is used as the Customer Reference Number. For example, this would be used in circumstances wherein the Order ID also represents your customer's identification in your system, such as a Policy Number for an insurance company.
- D** This option only relates to when a Profile is added as a part of an authorization request. In this circumstance, the value passed in the `<comments>` element is used as the Customer Reference Number.

NOTE When using a Profile, set this field to EMPTY or null-fill:
`<addProfileFromOrder>EMPTY</addProfileFromOrder>`
This value is NOT case-sensitive.

Using the Customer Reference Number to Set Other Data Elements

The Orbital Gateway has configuration options for the Profile setup to determine how the Customer Reference Number is leveraged to populate other data sets using the `<customerProfileOrderOverrideInd>` value.

The options are:

- NO** No mapping to order data.
- OI** Pre-populate <orderID> with the Customer Reference Number.
- OD** Pre-populate the <comments> field (this field is called Order Description in the Virtual Terminal) with the Customer Reference Number.
The relevance of this feature is on the PNS platform (BIN 000002), where the <comments> field populates the Customer-Definable Data. This data can then be made available on certain Resource Online Reports. Any questions about your reports should be directed to your Relationship Manager.
- OA** Pre-populate the <orderId> and <comments> fields with the Customer Reference Number.

3.4.3.4.3 Customer Reference Number Hierarchy Setup and Usage

As stated earlier, Profiles can be created at the Merchant ID level or at the Chain level.

If a MID is configured to use Profiles at a Chain ID level, any profiles set up by any Merchant ID are available to be used by any other Merchant IDs tied to that chain. However, if the MID is set up to manage Profiles at the merchant level, any Profile set up by that Merchant ID can only be used by that Merchant ID.

For example:

Let's assume there is a single customer with two merchant IDs on the Orbital Gateway, 111111 and 222222, and that these two merchant IDs are tied to the same chain ID, 333333. Then, merchant ID 111111 sets up a new customer profile, ABC.

- ◻ If both merchant ID 111111 and merchant ID 222222 are set up to manage profiles at a chain level, then merchant ID 222222 will be able to use profile ABC.
- ◻ If either one of them is not, then merchant ID 222222 will not be able to use profile ABC.

Additional notes:

- ◻ All Merchant Profile configurations are performed at a Merchant ID level, so this cross Chain ID sharing can only be facilitated via Orbital Setup.
- ◻ In addition, given that all setup and usage of Profile IDs is done using a specific Merchant ID, the Chain ID must be known to take advantage of this feature.

As long as all the Merchant IDs are properly linked to the same chain, it will simply work. If the Merchant IDs are not correctly mapped to the same Chain ID, Merchant IDs can be remapped to new Chain IDs easily. If this feature will be used, it is recommended that the correct chaining be validated prior to going live.

- ◻ Whatever level is defined as the storage level, there can only be one version of a Customer Reference Number.

If two Merchant IDs have different customers who share the same customer identification, it is recommended that the Profile storage and usage be maintained at the Merchant ID level, as opposed to the Chain level. If the second store tried to establish the same Customer Reference Number and the setup dictated Chain level storage, then a Duplicate Customer Reference Number error (<profileProcStatus> error code of 9582) would be generated.

- ◻ Again, Managed Billing is not available for profiles configured at the Chain level.

Salem Hierarchy

For Salem Orbital Gateway customers, the Orbital Gateway hierarchy closely emulates the Salem hierarchy:

- Your Orbital Gateway MID will be the same as your Salem Division (or TD) number.
- Your Orbital Gateway Chain ID will be the same value as your Company Number (formerly known as the MA).

If the Salem Division numbers are all linked to a specific Company number, then that is how it will be set up on the Orbital Gateway.

PNS Hierarchy

For PNS Orbital Gateway customers, the Orbital Gateway hierarchy is tied to the PNS Authorization Host hierarchy. As such:

- Your Orbital Gateway MID will be the same as your PNS Authorization Merchant ID (MID) – Terminal ID (TID).
- However, there is no PNS Chain value. Therefore the Orbital Gateway assigns the next available chain value when setting up accounts for the first time.

If an organization has multiple Merchant IDs, there is no guarantee that all of those Orbital Gateway Merchant IDs will be linked under a single Chain ID. However, Merchant IDs can be moved under one chain to take advantage of this feature.

3.4.3.4.4 Profile Methods of Payment

Profiles may be associated with any one of a number of payment options. Customer details will vary based on the Method of Payment chosen. It is possible to modify a profile from one payment option to another.

Profiles may use the following payment options: Credit Card, European Direct Debit, Pinless Debit, Electronic Check (ECP), and International Maestro.

3.4.3.4.5 Profile Transaction Types

There are a number of transaction types associated with Profiles. Some of these are extensions of existing transaction types, and some are new to Profiles. This section describes how to support all Profile transaction types and some of the specific rules associated with each of them. Again, all of the functionality identified within this document is possible through the Virtual Terminal as well.

Managing Profiles

There is a set of transactions specifically set up for managing the Profile—for adding, updating, deleting, and retrieving the information.

Adding Profiles

First and foremost, a profile needs to be added to the Orbital Gateway. There are two different transaction actions that can be performed to add a profile.

Adding a Profile as a Stand-Alone Transaction

The simplest mechanism to add a Profile is to simply make a Profile Add Request. This document includes both the definition of the values necessary to complete this transaction ([4.1.5 Profile Add Request Elements](#)) and an example template of an Add Profile Request.

- ◆ Merchants supporting ChaseNet methods of payment can request that the account type be auto assigned (AA) by the Orbital Gateway for credit card profiles. The gateway assigns the account type based on the card number BIN and the methods of payment that are enabled on the merchant account. The following table describes the assignments.

Merchant Type	Card BIN = Visa	Card BIN = ChaseNet
Not ChaseNet	CC	CC
ChaseNet Only	N/A (Reject)	CR or CZ
Visa and ChaseNet	CC	CR or CZ

There are response data elements that need to be interpreted to determine the success of this Add request. Definitions are provided within this document including a sample template.

Adding Profiles during an Authorization

Since an authorization must often be performed the first time a customer is set up, the Orbital Gateway has extended the traditional Authorization transaction to enable adding a Profile in the same request.

- ◆ Any data included in the Authorization that can be saved as a part of the profile will be.
- ◆ The minimum data to create a profile must be included, or no profile will be created.
- ◆ The result of the authorization is separate from the result of the profile add step. On the same transaction, the authorization can be successful, while the Profile-Add component is not, and vice-versa. These results are mutually exclusive and should be interpreted from a response management process as such.
- ◆ Add Profiles functionality can only be included with Auth Only, Auth-Capture, Prior Auth (Force), and Refund transactions. It cannot be completed as a part of a Void or Mark for Capture.
- ◆ Regardless of the card brand mnemonic sent in the transaction request, the profile account type will be determined based on the card brand mnemonic returned from the host.
- ◆ If the card brand in the transaction request is not provided, Orbital Gateway will determine the account type based on the card brand returned in the host response, regardless of the methods of payment that are enabled on the merchant account.

Information Saved in a Profile

Whether a Profile is created via a Profile Add transaction, added on-the-fly via an Authorization transaction, or updated later via a Profile Update transaction, the following list defines what data elements can be saved as part of the Profile:

- ◆ Customer Reference Number Required and uneditable (also referred to as Profile ID)
- ◆ Customer Name
- ◆ Customer E-mail

NOTE Only available for Profile Add or Update transactions. This value is not yet available for on-the-fly Profile Adds within Authorization transactions.

- ◆ Address Information:
 - ◆ Address 1
 - ◆ Address 2
 - ◆ City
 - ◆ State
 - ◆ ZIP

- ◆ AVS Country Code
- ◆ Phone

▣ Amount

▣ Order Description

This can be set in two ways:

- ◆ By sending a specific description message in the `<comments>` tag.
- ◆ By setting the `<customerProfileOrderOverrideInd>` to populate the `<comments>` tag.

▣ Order ID

This can be accomplished by setting the `<customerProfileOrderOverrideInd>` to populate the `<orderID>` tag

▣ Payment Information

- ◆ Credit Card
 - Card Number
 - Expiration Date
- ◆ ECP (Salem Host Only: BIN 000001)
 - DDA Account Number
 - R/T (Bank Routing Number)
 - Account Type
 - Payment Delivery Method
- ◆ PINless Debit
 - Card Number
 - Biller Reference Number
- ◆ EUDD
 - Deposit Account or IBAN
 - Bank Sort Code or BIC
 - Country code of Bank
 - Mandate Signature Date
 - Mandate ID
 - Mandate Type

NOTE Profile data remains static, unless changed by a merchant initiated Profile update request. The correct Mandate Type for a given transaction may vary from the value of the initial transaction. In order to remain in alignment with SEPA or AUDDIS guidelines, updates to the field should be considered if the profile is used for subsequent billings or as a part of the Managed Billing functionality.

Information NOT Saved in a Profile

There are a number of data elements that are not added to a Profile, regardless of how it is done, including, but is not limited to:

▣ Level 2 and Level 3 Data

Updating Profiles

Once a Profile has been added, any information about the Profile can be modified, except the key Profile values (which include the Customer Reference Number, Merchant ID, and BIN). This is accomplished by sending a Profile Update transaction.

Some important keys to performing an Update:

- ▣ All Profile Update requests must include the correct Profile key values, or an error message will be returned. A list of the error messages can be found in [Table 18](#) in [Appendix A](#).
- ▣ An update requires the tags to be sent for both:
 - ◆ The data that should be changed.
 - ◆ Any fields that should be cleared.
- ▣ To clear any legacy data, the XML tag is submitted with nothing but a tilde (~), as in the example below:
`<ccExp>~</ccExp>`
- ▣ If the Customer Profile includes an amount and an update is sent with the `<amount>` tag present, but filled with a tilde character, the amount stored in the profile is changed to `NULL` in the database.
- ▣ If an XML tag is sent with a Null value (such as `<ccExp></ccExp>`), it is ignored as a part of the update process (that is, no update would occur on the `ccExp` value).
- ▣ When changing Card Types, such as from an ECP to a Credit Card, the requirements are:
 - ◆ Send the XML tag representing the new card type.
 - ◆ Submit the appropriate data for that card type.
 - ◆ Null-fill the old card type data elements using the tilde process described above.
For example, changing from an ECP transaction type to a Credit Card type, the Profile Update message should:
 - Have the Card Type defined as Credit.
 - Include the Credit Card Number and Expiration Date.
 - Send a tilde for the four ECP data elements (DDA, R/T, Account Type, and Payment Delivery Method).
 - ◆ Merchants supporting ChaseNet methods of payment can request an update of the account type by either designating the new value, and optionally any of the profile data, by requesting that the account type be auto assigned (AA). The gateway assigns the account type based on the card number BIN and the methods of payment that are enabled on the merchant account.

Retrieving a Profile

At any given time, there may be a need to retrieve the data on an existing Profile. The Retrieve Profile transaction type is available to perform this action.

Deleting a Profile

Any Profile can be deleted at any time with a Delete Profile message.

Even though a Profile has been deleted, the Customer Profile Reference Number may not be used again.

Using Profiles

One of the key functionalities is to use a Profile to process a transaction. This is accomplished by inserting the Customer Reference Number in one of the existing message types. All data that can be pre-populated by the Profile will be:

- ◻ Any relevant data should be included in the request.
- ◻ The transaction request should be completed per the normal spec in terms of which tags are mandatory. If the data exists in the Profile and the tag is mandatory, simply null-fill the tag.
- ◻ The correct values should be used based on the card type of the profile. For example, if the card type of a Profile is a credit card, then the base credit card message structure should be used to use the profile. The credit card data, again, should be null-filled.

Overriding Profile Data

Almost any data set in the Profile can be overridden during a transaction that is using the Profile. For instance, if a Profile includes a fixed amount, but a particular transaction is for a different amount, it could be changed for that transaction by including a specific amount in the Use Profile request.

The one exception to the override rule is that the payment type, such as Credit Card versus ECP, cannot be overridden. If the payment type is different, then the Profile should either be updated (if that change is permanent) or not used (if it is temporary).

By the same token, if the payment type is the same, but the data is different, it can be overridden on a single transaction, if desired.

Finally, overriding Profile data does not update the profile. If the change is permanent, an Update Profile request should be sent in.

Overriding an Expiration Date

One scenario to take into consideration when overriding data has to do with the usage of expiration dates. As defined in the spec, for a Salem customer, a null expiration date is one mechanism to submit transactions for authorization when the expiration date is unknown. By the same token, an expiration date is required for credit card transactions and must be present when using a Profile. It must also be null-filled to not override the expiration date that might be set in the Profile.

As such, if an expiration date is saved in a Profile and the desire is to override it but submit nothing because the new expiration date is unknown, the transaction should use one of the following mechanisms for supporting unknown expiration dates:

- ◻ Send four spaces: <ccExp> </ccExp>
- ◻ Zero-fill the XML Element: <ccExp>0000</ccExp>

Transaction Types

Profiles may be used on the following types of transactions:

- | | |
|-------------------------|---------------------------|
| ◻ Authorization | ◻ Refund |
| ◻ Authorization-Capture | ◻ Safetech Fraud Analysis |
| ◻ Prior Authorizations | |

Profile usage is not functional (or necessary) for:

- ◻ Voids/Reversals
- ◻ Mark for Capture
- ◻ End of Day

Industry Types

All the Industry Types that are supported by the Orbital Gateway (eCommerce, Mail Order, Recurring, and Interactive Voice Response) are supported within Profiles.

Currencies

All currencies supported by the Orbital Gateway are supported as a part of Profiles.

3.4.3.4.6 Managed Billing Profiles

Managed Billing enables merchants to configure Profiles so that Chase Paymentech will automatically run transactions in the future. Managed Billing supports Recurring, Installment, and Deferred Billings.

NOTE A merchant account can only be configured for one type of Managed Billing at a time.

Recurring Billings

Recurring billings bill cardholders for future payments according to a predefined schedule. Recurring billings can be configured to happen on a weekly, monthly, or yearly basis. Attributes such as Start Date, End Date, and Recurring Frequency must be set so that the Managed Billing system can schedule payments.

Also, since Chase Paymentech will be initiating the future transaction instead of the merchant, a choice must be made regarding Order ID generation.

Installment Billings

Installment billings are handled exactly like Recurring, except that the End Billings trigger is configured using the <mbRecurringMaxBillings> tag. However, this behavior is not enforced by the Orbital Gateway.

Deferred Billings

Deferred Billings are one-time billings that occur on a future date. The key element that needs to be set for a Deferred Billing is the Deferred Billing date.

As with Recurring Billings, since Chase Paymentech will be initiating the future transaction instead of the merchant, a choice must be made regarding Order ID generation.

Setting a Managed Billing Frequency Pattern

Frequency patterns for Managed Billing are configured using a subset of a standard CRON expression, comprising 3 fields separated by a white space.

Table 12 Managed Billing frequency pattern fields

Field Name	Allowed Values*	Allowed Special Characters*
Day-of-Month	1-31	, - * / ? L W
Month	1-12 or JAN-DEC	, - * /
Day-of-Week	1-7 or SUN-SAT	, - * / ? L #

* Not case-sensitive

Notes on frequency pattern special characters:

- The comma (,) character is used to specify additional values. For example, `MON,WED,FRI` in the `Day-of-Week` field means *the days Monday, Wednesday, and Friday*.
- The dash (-) character is used to specify ranges. For example, `10-12` in the `Month` field means *the months October, November, and December*.
- The asterisk (*) character is used to specify *all values*. For example, `*` in the `Month` field means *every month*.
- The forward slash (/) character is used to specify increments. For example, `1/3` in the `Day-of-Month` field means *every three days starting on the first day of the month*.
- The question mark (?) character is allowed for the `Day-of-Month` and `Day-of-Week` fields. It is used to specify *no specific value* for the given field. This is useful when you need to specify something in two of the fields but not the third. See Table 13 for clarification.
- The capital `L` character is allowed for the `Day-of-Month` and `Day-of-Week` fields. This character is short-hand for *last*, but it has a different meaning in each of the two fields.
 - ◆ The value `L` in the `Day-of-Month` field means *the last day of the month* (day 31 for January, day 28 for February on non leap years, and so on).
 - ◆ If used in the `Day-of-Week` field by itself, it simply means `7` or `SAT`.
 - ◆ If used in the `Day-of-Week` field after another value, it means *the last xxx day of the month* (for example, `6L` means *the last Friday of the month*).

CAUTION When using the `L` option, do not specify lists or ranges of values, as you will get confusing results.

- The capital `w` character is allowed for the `Day-of-Month` field. This character is used to specify *the weekday (Monday-Friday) nearest the given day*.

As an example, if you were to specify `15w` as the value for the `Day-of-Month` field, the meaning is *the nearest weekday to the 15th of the month*.

- ◆ If the 15th is a Saturday, the billing will occur on Friday the 14th.
- ◆ If the 15th is a Sunday, the billing will occur on Monday the 16th.
- ◆ If the 15th is a Tuesday, then the billing will occur on Tuesday the 15th.

However, if you specify `1w` as the value for `Day-of-Month` and the 1st is a Saturday, the billing will occur on Monday the 3rd, as it will not *jump over* the boundary of a month's days.

The `w` character can only be specified when the `Day-of-Month` is a single day, not a range or list of days.

- The `L` and `w` characters can also be combined for the `Day-of-Month` expression to yield `Lw`, which translates to *last weekday of the month*.
- The number sign (#) character is allowed for the `Day-of-Week` field. This character is used to specify *the nth xxx day of the month*.

For example, the value `6#3` means *the third Friday of the month* (day 6 = Friday and #3 = the 3rd one of the month).

Other examples: `2#1` means *the first Monday of the month*, and `4#5` means *the fifth Wednesday of the month*.

CAUTION If you specify `#5` and there are not five occurrences of that day in the given month, no billings will occur that month.

Table 13 Managed Billing frequency pattern examples

Recurrence Pattern Needed	Corresponding CRON Expression*
Weekly	
Every Wednesday in the month of March	? MAR WED or ? 3 WED or ? 3 4
Every Sunday, June through August	? JUN-AUG SUN
Every Monday	? * MON
Every 5 th Monday	? */5 MON
Monthly	
First day of each month	1 * ?
First day of every three months starting January	1 1/3 ?
First day of every other month (odd months)	1 1,3,5,7,9,11 ?
First day of every other month (even months)	1 2,4,6,8,10,12 ?
15th day of every month	15 * ?
Last day of every month	L * ?
Last Friday of every month	? * 6L or ? * FRIL
Third Friday of every month	? * 6#3
Nearest weekday to the first of the month	1W * ?
Last weekday of the month	LW * ?
Yearly	
1st of January	1 JAN ?
1st weekday of January	1W JAN ?
Last day of May, every year	L MAY ? or L 5 ?

* These are examples only—there are multiple ways to express most patterns.

3.4.3.4.7 Retry Logic Usage

Retry Logic, the function that allows transactions to be processed without risk of duplicating them **is not supported** for Profile Management transactions (Adds, Deletes, Retrieves, and Updates).

However, if an unknown result occurs when performing a Profile Management transaction, simply replay that transaction.

- ⌚ If the prior transaction was a success, the second attempt will simply result in a duplicate response, which will not cause any harm.
- ⌚ If the original request was not successful, the second attempt will create the desired result.

NOTE When using a Profile during an Authorization, Retry Logic is fully supported as defined in the message specification.

3.4.4 Retry Logic

Retry Logic is a function available from the Orbital Gateway for client interfaces to reprocess transactions when there is an unknown result on a XML transaction request. It is available to any merchant interfacing to the Orbital Gateway by simply adding a new value to the request message: the transaction Retry Trace Number. The Orbital Gateway uses this value to determine the uniqueness of a transaction in determining how to process the transaction.

The result is that any Client properly utilizing Retry Logic can safely reprocess transactions with an unknown result while avoiding:

- Risk of double-authorizing a transaction against a cardholder's available balance.
- Duplication (or more) of settlement items.

The basic process flow of Retry Logic is as follows:

1. A request is submitted with a Retry Trace Number and Merchant ID.
2. The Gateway validates the Retry Trace Number and Merchant ID to determine if it has processed a transaction using that value pair within the past 48-hour window.
3. If the transaction was declined or generated an error on the initial response, the next request is treated as a new request.
4. If it has not processed the pair, the Gateway treats that transaction as a new request and processes it accordingly.
5. If it has processed the pair and the request has either already been processed (the initial response is an approval) or is in process, the Orbital Gateway will immediately echo back the exact response from the initial request.

If the initial request is still in process, the Orbital Gateway will block and wait until that original response is completed. As soon as that is done, it will then echo back the same response as the original request.

The following sections outline the detailed business rules and implementation considerations associated with Retry Logic.

3.4.4.1 Retry Timing

The Orbital Gateway only retains an original Retry Trace Number/Merchant ID pair for 48 hours after submission. Any transaction that reuses these values more than 48 hours after the original transaction was submitted will be treated as a new request.

Therefore, if there is an unknown result for a transaction, that transaction must be reattempted within 48 hours or the original result must be determined through the Virtual Terminal Interface prior to regenerating the transaction.

3.4.4.2 Request Validation on Duplicate Trace Numbers

The following is a description of the message validation of the request when a retry attempt is made that matches a prior Retry Trace Number/Merchant ID combination.

- The Request Type (Auth versus Auth Capture versus Refund, and so on) must be the same. If the request type changes between transactions, an error response code of 9715 is returned, even if the Retry Trace Number/Merchant ID combination is a match.
- No other validation is associated with the XML Document request—beyond the request type and Retry Trace Number/Merchant ID, no other data between requests is matched.

If, for example, two requests with the same Retry Trace Number and Merchant ID but different card numbers are submitted within 48 hours, the second request will still be treated as a duplicate.

CAUTION It is very important when implementing Retry Logic that the Retry Trace Number process is implemented correctly. Otherwise, the same result could be returned for different requests multiple times.

WARNING If the Retry Trace Number/Merchant ID pair **does not match** a prior transaction in the previous 48-hour window, the Orbital Gateway will treat that new message as a new request and process it accordingly, even if it is a *duplicate* transaction.

3.4.4.3 Transaction Types Supported

The Retry Logic for initial transactions and retry attempts can be used for all transaction types.

3.4.4.4 Retry Error Responses

When an error occurs resulting from the client's implementation of Retry Logic:

- That request is not processed.
- An error is returned, just as other Orbital Gateway errors are returned.

3.4.4.5 Concurrency

There is no limit to the number of Retry attempts on a transaction, as long as they all occur within the 48-hour window.

However, no more than two concurrent transactions with the same Retry Trace Number/Merchant ID value pair can be in process with the Orbital Gateway at any given time. If more than two transactions are sent while the Orbital Gateway is in the midst of processing the first two, it will immediately respond with an error code of 9711 (Too many transactions to process).

If this occurs, it might be an indicator of a Client problem. There would never be a reason to have more than two concurrent requests in queue with the same Retry Trace Number on a particular MID. As such, receiving this response code could indicate that the Retry Trace Number is not always being generated uniquely when it should be or that your system is not waiting long enough for responses.

3.4.4.6 Retry Attempt Time Out

As indicated above, when a retry attempt is made while the original request is still in process, the Orbital Gateway will block and wait for that original response to be created with the intent to echo that completed response in the Retry response. However, the Orbital Gateway must return a result to the Client on all requests in no more than 90 seconds, including a retry attempt. Therefore, there is a time limit on how long the retry attempt will block and wait. If the original request response is not complete prior to this window, a Quick Response procStatus of 9710 (Timed out waiting for transaction to complete) will be returned.

If this occurs, the correct action is to make a second retry attempt of the transaction with the original request's Retry Trace Number/Merchant ID pair.

3.4.5 Account Updater

Fully managed Account Updater for Profiles is available to Salem (Bin 000001) merchants using customer profiles. The functionality is specifically designed to update merchant or chain level profiles housed on the gateway utilizing the Salem Account Updater process. Visa and MasterCard approval is required for participation. Please contact your account representative for additional

details.

Once enabled, update requests are submitted to Visa and MasterCard according to a merchant selected schedule. Visa and MasterCard typically respond to requests within three days, inclusive of the submission day. Visa and MasterCard responses may contain information regarding new card account numbers, expiration dates, account closures, etc. Based upon the actionable information returned, the Gateway automatically updates customer profiles. A scheduled report is available that lists profiles that were updated as a part of the process.

NOTE If the card account number contained within a profile is invalid or not eligible for the Transaction Division's Account Updater setup, the Account Updater request triggers a host reject.

NOTE If the card account number is invalid or the card account is closed, an associated profile is automatically suspended, preventing unsuccessful future auth or capture attempts. As with any suspended profile, the status can easily be changed to active as new information becomes available.

CAUTION An Account Updater change of account number update to a profile is suppressed if the merchant initiates a change to the account number after the request is initiated and prior to the update.

The Account Updater transaction type facilitates an additional account updater request for a specific profile, outside of the selected schedule. The request is included in the next Account Updater submission unless sent with a future scheduled date (Use <scheduledDate> to do so).

A successful Account Updater transaction returns a response record stating the profile is scheduled for Account Updater. Subsequent information provided by Visa or MasterCard is used for a profile update. This information is not returned via a response file.

3.4.5.1 Designated Profiles

In some situations, merchants may have the need to exclude a subset of customer profiles from automatic scheduling of Account Updater requests. Fully managed Account Updater may be set up to support Designated Profiles. Please see the Virtual Terminal user's manual for information on enabling this setup.

When Account Updater for Designated Profiles Only is enabled, only profiles which are specifically flagged will be submitted according to the merchant's selected schedule. This is managed through the *Account Updater Eligibility flag* of a `newOrder`, `customerProfileAdd`, and `customerProfileChange` complex types. Omitting this element is equivalent to setting the element to `N`.

The Account Updater Eligibility flag has no bearing on requests of the Account Updater transaction type.

3.4.5.2 Real Time Account Updater (RTAU)

Real Time Account Updater is a product that works alongside batch account updater to repair Visa US and Canada auth transactions with the up-to-date card information in real time, as part of the authorization flow. A merchant will have to be enabled through Merchant Services to use the RTAU service. There is no VISA enrollment required for merchants using RTAU.

Chase Merchant Services (CMS) on behalf of participating merchants will include a Real Time Account Updater request for all Visa US and Canada transactions processed through Orbital by default unless they Opt-Out of RTAU. Merchants will have the option to opt-out of real time updates at a transaction level (transaction by transaction basis) from the Virtual Terminal when placing a New Order Auth or an Auth Capture.

A Real Time Account Updater response code will be included in the authorization response back to the merchant based on certain scenarios. Refer to [RTAU Response Codes](#) for a detail description of the codes. The response will include the following:

- Updated cardholder account number (if any)
- Updated cardholder account expiration date (if any)
- Real Time Account Updater (RTAU) Response code

NOTE In the case of Use Profiles (when a transaction is submitted using a profile ID), whenever there is updated card info returned in the auth response, the profile gets updated with the latest card info but a RTAU response code (Either A, E, or J) will not be displayed or returned back to the merchant.

MERCHANTS will be able to generate a **Real Time Account Updater** report from the Virtual Terminal which will contain all the profiles that were updated in real time. This report will be introduced as part of a future release.

3.4.5.2.1 Supported Transaction Types and MOP's

The following transaction types will be supported for RTAU:

- Authorization/Auth (A)
- Auth Capture (AC)

The following MOP's are support for Real Time Account Updater:

- ChaseNet
 - Visa Signature Debit (CR)
 - Visa Signature Credit (CZ)
- Visa (VI)

3.4.6 Partial Authorization Support

The Orbital Gateway does not support Partial Authorizations on transactions in Batch files (XML or CSV). The Orbital Gateway does support Partial Authorizations for XML and SOAP messages.

Partial Authorizations predominantly occur when a branded pre-paid credit card has a smaller balance than the amount requested in an authorization. The issuer returns an authorization for the balance of the pre-paid card, and the merchant must request additional payment for the balance due.

3.4.7 Safetech Fraud Analysis

The Orbital Gateway supports the Safetech™ Fraud Tools service. This advanced fraud scoring technology is offered to Salem (Bin 000001) merchants, enabling the detection of fraud patterns that are more difficult to identify through traditional fraud management tools.

Merchants create a custom fraud analysis strategy for their business using the Safetech Agent Web Console. The Safetech service applies this strategy to provide the following benefits:

- Minimize lost sales and the associated costs of combating fraud
- Control levels of fraud exposure with customizable tools
- Maximize order conversion, increasing your revenue

The Safetech service is fully integrated with Orbital Gateway processing. Whether including additional information in an authorization request, or sending a stand-alone request, the basic process remains the same:

- ◻ A consumer navigates to the payment page to complete a purchase or bill payment.
- ◻ The Safetech Fraud Tools seamlessly capture location and device data from the consumer.
- ◻ The merchant sends an authorization request or standalone Fraud Analysis request, including any additional or optional elements available, to the Orbital Gateway.
- ◻ The Safetech service returns fraud score information in the response message to the request.
 - ◆ A dynamic suite of detectors are utilized to perform real-time checks on over 200 variables, to produce a 'score' from 1 to 99 – a higher fraud score indicates a higher risk.
- ◻ Based on the response, the merchant determines whether to complete or reject the transaction.

Please contact your Account Representative for more information on the program, including how to obtain a Safetech Merchant ID (used in addition to the merchant ID number) and the assignment of a risk analyst.

The risk analyst:

- ◻ Provides ongoing monitoring of rule strategy effectiveness, including modification of rules as needed
- ◻ Assists with creation of fraud strategy and establishment of respective custom fraud rules

3.4.7.1 Fraud Analysis Requests

Fraud scoring information may be requested from the Safetech service through either an authorization (most `newOrder` or `flexCache` messages) or a standalone Fraud Analysis request (a `SafetechFraudAnalysis` message).

All data elements submitted in the transaction are included in the fraud scoring process performed by the Safetech service, so the overall value of the fraud score result is directly related to the transaction data included in the request.

Fraud analysis requests indicate one of two available formats. The format is designated by the `fraudScoreIndicator` element in the request and echoed in the response. The two fraud scoring formats are defined below:

Fraud Score 1 (FS1)

This is the short form fraud analysis request. It limits the information supplied, as well as the information returned in the response.

Fraud Score 2 (FS2)

This is the long form fraud analysis request. It extends both the number of data fields that may be submitted, as well as the volume of data returned in the response.

The Safetech service also allows for additional shopping cart data and user defined fields to be passed on a transaction by transaction basis. These data sets may be submitted through the `kttVersionNumber`, `kttDataLength`, and `kttDataString` elements in the request message. See [5.1.1.1 Safetech Requests: Special notes on KTT elements](#) to see an example of this information.

3.4.7.2 Fraud Analysis Responses

Safetech Fraud Tools is a solution which enables a merchant to better determine the risk involved with a transaction. The Fraud Score is a numerical representation of the relative risk of each transaction that is screened. The information returned can be used to enhance any current risk program, or to develop a customized approach to risk management.

The Orbital Gateway provides the response information provided by the Safetech service; however it is the merchant's decision to proceed or not to proceed with a transaction.

Key items to remember when handling transactions which include Fraud Analysis:

- The authorization returned by the issuer and the Fraud Score response from the Safetech service are two separate and distinct values.
- The fraud score information does not impact the Merchant Selectable Response functionality provided by the Orbital Gateway. A fraud score value cannot trigger the Gateway to override an approval with a decline.
- When a transaction receives a fraud score a merchant deems unacceptable, the merchant should submit a corresponding Void or Reversal request to the Gateway to prevent the transaction from going out in settlement.

3.4.7.3 Other

Neither Level 2 and Level 3 data, nor Soft Descriptors, are supported by the Safetech service.

The Safetech service can utilize address data for countries which do not support AVS; however AVS responses are only provided by the customer's issuing bank.

EUDD merchants who utilize the Safetech service may wish to create a user defined field for the new IBAN value.

Orbital gateway supports the use of customer profiles to perform a Fraud Analysis request; however profiles may not be created as part of a standalone request to the Safetech service.

The Safetech service is also available through the Orbital Gateway Virtual Terminal. Please see the Virtual Terminal user guide for more information.

3.4.8 Card Type Indicators: Enhanced Authorizations

Card Type Indicators are enhanced authorization data elements available to merchants who utilize the Salem (Bin 000001) platform. Card Type Indicators (sometimes abbreviated as CTI) are designed to capture valuable data that helps merchants make better payment decisions – both at the time of the transaction and afterward.

This enhanced authorization data can assist with:

- Targeting special communications to preferred customers.
- Minimizing recurring payment declines.
- Reducing fraud from specific countries.
- Providing better customer service.

All businesses can identify key data points that can drive payment decisions. Examples of the information returned by Card Type Indicators include:

- Affluent cardholders, which generally have no pre-set spending limit.

- ▣ Commercial cards, which support level 2 and possibly level 3 data.
- ▣ Prepaid cards, which are less likely to support recurring payments.
- ▣ Signature Debit cards, which are backed by a checking account of some sort.
- ▣ The Country of Issuance is also returned.

3.4.8.1 CTI Requests and Responses

All New Orders for BIN 000001 merchants may request Card Type Indicators. The `cardIndicators` element should be set to `Y` for all such transactions.

Orbital Gateway performs validations when this value is present. Those validations include:

- ▣ The Bin supports Card Type Indicators
- ▣ The Message Type is supported
 - ◆ Supported Message Types: A, AC
- ▣ The Method of Payment is supported
 - ◆ Supported MOPs: Visa, MasterCard, Discover, Diners, JCB, International Maestro

The `cardIndicators` element is ignored if any of the above validations fail – a corresponding proc status error is not returned.

Additional response values are returned when `cardIndicators` is set to `Y` on supported transactions. In addition to the issuing country, each indicator is returned as a separate response element. Response indicators contain a `Y`, `N`, or `X` value, where `X` indicates the indicator is Not Applicable.

NOTE: When JCB is referenced in this section, it only applies to U.S. Stratus merchants processing USD currency. These transactions are sent to Discover for processing.

3.4.8.2 Virtual Terminal

All of the functionality supported through this interface for Card Type Indicators is additionally available through the Orbital Gateway Virtual Terminal.

Merchants may request Enhanced Authorization data on a transaction by transaction basis, or for all Virtual Terminal transactions through the General Admin screen. Please refer to the Virtual Terminal user guide for more information.

3.4.9 Refund Authorization

Visa will update acceptance rules to require that merchants send an authorization message on refund auth transactions. These authorization messages will enable issuers to update cardholder online banking statements in real time. The refund auth transactions will provide issuers with real-time information about returns, similar to that of purchases, which they must then provide to their cardholders. However, it is at the discretion of each individual issuer how quickly they apply the refund to the cardholders balance for use.

This is applicable to Visa and Chasenet. MOPs impacted are VI (Visa), VR (Visa Canadian Domestic Restricted Debit), CZ (ChaseNet Credit) and CR (ChaseNet-Signature Debit/Prepaid). Regions include US, UST, EU, CAN.

If a merchant is entitled for refund auth, an authorization message will be sent to VISA on behalf of the merchant which if approved, will result in the completion of the refund process.

- Any merchant enabled for refund authorization will not be able to perform offline refunds either in the case of a refund auth decline or as an ad hoc method of refund processing.

NOTE: For PNS(BIN 000002) merchants only, Orbital will return the refund auth response code from VISA (approval/decline) to the merchant within the refund response message.

Disclaimer: Changes in support of return authorization processing have not been scheduled for production deployment. This updated version of the specification is provided as a courtesy to allow Chase merchants and third-party integrators sufficient time to make upgrades to their respective applications or systems. Chase assumes no liability for any implementation that includes these changes prior to the scheduled deployment date.

Chapter 4 Message Definitions

This chapter contains tables describing the elements of the possible request and response messages, in the order they must be in the file:

Request Elements

- ◆ [File Header Request Elements](#)
- ◆ [Reversal \(Void\) Request Elements](#)
- ◆ [Mark for Capture Request Elements](#)
- ◆ [New Order Request Elements](#)
- ◆ [Profile Add Request Elements](#)
- ◆ [Profile Update Request Elements](#)
- ◆ [Profile Delete Request Elements](#)
- ◆ [Profile Retrieval Request Elements](#)
- ◆ [Account Updater Request Elements](#)
- ◆ [Safetech Fraud Analysis Request Elements](#)
- ◆ [Gift Card \(FlexCache\) Request Elements](#)
- ◆ [Batch Close Request Elements](#)

Response Elements

- ◆ [File Header Response Elements](#)
- ◆ [Reversal \(Void\) Response Elements](#)
- ◆ [Mark for Capture Response Elements](#)
- ◆ [New Order Response Elements](#)
- ◆ [Customer Profile Response Elements](#)
- ◆ [Account Updater Response Elements](#)
- ◆ [Safetech Fraud Analysis Response Elements](#)
- ◆ [Gift Card \(FlexCache\) Response Elements](#)
- ◆ [Batch Close Response Elements](#)
- ◆ [File Processing Error Response Elements](#)

NOTE The Response file will include either the File Processing Error Response Elements OR some combination of the other Response Elements.

Notes on Columns in the Tables

XML Type E = Element

A = Attribute

Req M = Mandatory

C = Conditional

O = Optional

Field Type A = Alphanumeric

N = Numeric

4.1 Request Elements

4.1.1 File Header Request Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
transRequest	E	N/A	Required XML Parent Tag	M	N/A	N/A
RequestCount	A	transRequest	Number of Transactions Requests in the Batch File <ul style="list-style-type: none"> ▪ Maximum number of requests for a single file is 999,999. ▪ This number MUST equal the number of transaction requests in the file. If not, the file is not processed, and a <code>procStatus</code> error code of 6786 is returned. 	M	6	N
batchFileID	E	transRequest	Required File Header Record	M	N/A	N/A
userID	E	batchFileID	SFTP/FTP User ID	M	32	A
fileDateTime	E	batchFileID	File Submission Timestamp Format: YYYYMMDDhh24mmss	M	14	N
fileID	E	batchFileID	Request File Name <ul style="list-style-type: none"> ▪ File name without the <code>.xml</code> or <code>.zip</code> extension. ▪ See 2.1.1 File Naming Rules for information on defining the file name. 	M	36	A
version	E	batchFileID	Version <ul style="list-style-type: none"> • Specifies the DTD version used to validate the request file • Should be filled with 'x.x.x' to specify this release. Where x.x.x = to the Version of this spec (found on the cover page) 	O	3	A

4.1.2 Reversal (Void) Request Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³				
void	E	transRequest	Request Type Used to Void Any Previous Transaction	M	N/A	N/A				
BatchRequestNo	A	void	<p>Sequential Presentation of the Request in the Batch File</p> <p>The transaction that is presented first in the batch should be presented as 1, the second as 2, and so on through N; where N = the value submitted in the header RequestCount attribute.</p> <p>The transactions in the file are numbered sequentially starting with Reversals, then Mark for Captures, then New Orders, and so on.</p>	M	6	N				
txRefNum	E	void	<p>Gateway transaction Reference Number</p> <ul style="list-style-type: none"> ▪ A unique value for each transaction, which is required to adjust any transaction in the Gateway, such as Mark for Capture or Void. ▪ If reference number is not known, use reversalRetryNumber tag. 	M	40	A				
txRefIdx	E	void	<p>Gateway Transaction Index</p> <ul style="list-style-type: none"> ▪ Used to identify the unique components of transactions adjusted more than one time. ▪ For a Void on the previous transaction, txRefIdx = Null. ▪ For a Void of a specific transaction, txRefIdx = value returned in response for that transaction. 	C	4	N				
adjustedAmount	E	void	<p>Amount for Partial Voids if necessary</p> <ul style="list-style-type: none"> ▪ When a specific amount is included with this tag, that amount will be voided (assuming that the amount is not greater than the transaction amount remaining). ▪ The absence of this tag on a Void transaction will perform a full Reversal. ▪ Implied decimal, including those currencies that are a zero exponent. 	O	12	N				
bin	E	void	<p>Transaction Routing Definition</p> <p>Assigned by Chase Paymentech.</p> <table style="margin-left: 20px;"> <tr> <td>000001</td> <td>Stratus</td> </tr> <tr> <td>000002</td> <td>Tandem (PNS)</td> </tr> </table>	000001	Stratus	000002	Tandem (PNS)	M	6	N
000001	Stratus									
000002	Tandem (PNS)									

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
merchantID	E	void	Gateway Merchant Account Number assigned by Chase Paymentech This account number will match that of your host platform: <ul style="list-style-type: none">▪ BIN 000001: 6-digit Stratus Division Number▪ BIN 000002: 12-digit PNS Merchant ID	M	15	N
terminalID	E	void	Merchant Terminal ID assigned by Chase Paymentech	M	3	N
orderID	E	void	Merchant-Defined Order Number Must match the <code>orderID</code> of the original transaction being Reversed.	M	22	A
reversalRetryNumber	E	void	Retry Trace Number from Original Transaction Request Provide the Retry Trace Number from the transaction that needs to be voided (in the event the Transaction Reference Number is not known).	C	16	N

4.1.3 Mark for Capture Request Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
markForCapture	E	transRequest	Request Type Used to Generate a Mark for Capture of a Previous Transaction (Auths and Forces)	M	N/A	N/A
BatchRequestNo	A	markForCapture	Sequential Presentation of the Request in the Batch File The value for the first Mark for Capture request should be one higher than that of the last Reversal request. The transactions in the file are numbered sequentially starting with Reversals, then Mark for Captures, then New Orders, and so on.	M	6	N
txRefNum	E	markForCapture	Gateway transaction Reference Number A unique value for each transaction, which is required to adjust any transaction in the Gateway, such as Mark for Capture or Void.	M	40	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
amount	E	markForCapture	Amount to be Captured Keys: <ul style="list-style-type: none">▪ Implied decimal including those currencies that are a zero exponent. For example, both \$100.00 (an exponent of 2) and ¥100 (an exponent of 0) should be sent as <amount>10000</amount>.▪ Amount must be less than or equal to the amount of the original transaction being marked for capture. If the amount submitted is less than the original transaction, the New Order will be split.	M	12	N
orderID	E	markForCapture	Merchant-Defined Order Number Must match the <code>orderID</code> of the original transaction being marked for capture.	M	22	A
bin	E	markForCapture	Transaction Routing Definition Assigned by Chase Paymentech. 000001 Stratus 000002 Tandem (PNS)	M	6	N
merchantID	E	markForCapture	Gateway Merchant Account Number assigned by Chase Paymentech This account number will match that of your host platform: <ul style="list-style-type: none">▪ BIN 000001: 6-digit Salem Division Number▪ BIN 000002: 12-digit PNS Merchant ID	M	12	N
terminalID	E	markForCapture	Merchant Terminal ID assigned by Chase Paymentech	M	3	N
taxInd	E	markForCapture	Level 2 Data - Tax type Required for Level 2 Data. 0 Not provided 1 Included 2 Non-Taxable—not valid for Visa Level 2 qualification See Level 2 & Level 3 Data Reference for further details	O	1	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
taxAmount	E	markForCapture	Level 2 Data - Tax Amount for the Purchase <ul style="list-style-type: none"> ▪ Required for Level 2 Data. ▪ Implied decimal, including those currencies that are a zero exponent. <p>See Level 2 & Level 3 Data Reference for further details</p>	O	12	N
pCardOrderID	E	markForCapture	Level 2 Data - PO Number from Customer Required for Level 2 Data. See Level 2 & Level 3 Data Reference for further details	O	17	A
pCardDestZip	E	markForCapture	Level 2 Data - Shipping Destination Zip Code for the Purchase <ul style="list-style-type: none"> ▪ Required for Level 2 Data. ▪ For Zip Code + 4, please separate with a hyphen (-). <p>See Level 2 & Level 3 Data Reference for further details</p>	O	10	A
pCardDestName	E	markForCapture	Amex Purchasing Card Data - Cardholder Ship To: Name Salem Only/Required for Amex Purchasing Card Data. See Level 2 & Level 3 Data Reference for further details	O	30	A
pCardDestAddress	E	markForCapture	Amex Purchasing Card Data - Cardholder Ship To: Address line 1 Salem Only/Required for Amex Purchasing Card Data. See Level 2 & Level 3 Data Reference for further details	O	30	A
pCardDestAddress2	E	markForCapture	Amex Purchasing Card Data - Cardholder Ship To: Address line 2 Salem Only/Required for Amex Purchasing Card Data. See Level 2 & Level 3 Data Reference for further details	O	30	A
pCardDestCity	E	markForCapture	Amex Purchasing Card Data – Cardholder Ship To: City Salem Only/Required for Amex Purchasing Card Data. See Level 2 & Level 3 Data Reference for further details	O	20	A
pCardDestStateCd	E	markForCapture	Amex Purchasing Card Data – Cardholder Ship To: State Salem Only/Required for Amex Purchasing Card Data. See Level 2 & Level 3 Data Reference for further details	O	2	A
PC3Core	E	markForCapture	Level 3 Data for Visa and MasterCard Transactions	C	N/A	N/A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
PC3FreightAmt	E	PC3Core	Level 3 Freight Amount for Shipment Total freight or shipping and handling charges. Implied decimal. See Level 2 & Level 3 Data Reference for further details	C	12	N
PC3DutyAmt	E	PC3Core	Level 3 Duty Amount for Shipment Total charges for any import and/or export duties included in this transaction. Implied decimal. See Level 2 & Level 3 Data Reference for further details	C	12	N
PC3DestCountryCd	E	PC3Core	Level 3 Destination Country Code <ul style="list-style-type: none"> ▪ The ISO-assigned code of the country to which the goods are shipped. ▪ Required for all Level 3 transactions. ▪ If no value is submitted, defaults to the United States (USA). <p>See Table 20 in Appendix A for country codes. See Level 2 & Level 3 Data Reference for further details</p>	C	3	A
PC3ShipFromZip	E	PC3Core	Level 3 Ship from Zip <ul style="list-style-type: none"> ▪ The zip/postal code of the location from which the goods are shipped. ▪ Required for best interchange rate. ▪ Cannot be all zeros or nines. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	10	A
PC3DiscAmt	E	PC3Core	Level 3 Discount Amount from Order <ul style="list-style-type: none"> ▪ The total amount of discount applied to the transaction by the merchant. Used by the merchant when a price break is given on an entire transaction rather than on unit prices. Typically, this is shown as a credit on a detailed invoice. ▪ Implied decimal. ▪ Optional. For Visa only; should not be sent for MasterCard. <p>See Level 2 & Level 3 Data Reference for further details</p>	O	12	N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
PC3VATtaxAmt	E	PC3Core	<p>Level 3 Total Amount of VAT or Other Tax</p> <ul style="list-style-type: none"> ▪ The total amount of VAT or other tax included in this transaction. ▪ Implied decimal. ▪ Optional. For Visa only; should not be sent for MasterCard. <p>See Level 2 & Level 3 Data Reference for further details</p>	O	12	N
PC3VATtaxRate	E	PC3Core	<p>Level 3 Rate of VAT or Other Tax</p> <ul style="list-style-type: none"> ▪ The total amount of VAT or other tax included (expressed in percentage terms) for this line item. ▪ 2 decimal implied. For example, 0100 = 1%. ▪ Optional. For Visa only; should not be sent for MasterCard. <p>See Level 2 & Level 3 Data Reference for further details</p>	O	4	N
PC3AltTaxInd	E	PC3Core	<p>Level 3 Alternate Tax ID</p> <ul style="list-style-type: none"> ▪ Tax ID number for the alternate tax associated with this transaction. ▪ Optional. For MasterCard only; should not be sent for Visa. ▪ Required if an amount is sent in PC3AltTaxAmt. <p>See Level 2 & Level 3 Data Reference for further details</p>	O	15	N
PC3AltTaxAmt	E	PC3Core	<p>Level 3 Alternate Tax Amount</p> <ul style="list-style-type: none"> ▪ Total Amount of alternate tax associated with this transaction. ▪ Implied decimal. ▪ Optional. For MasterCard only; should not be sent for Visa. ▪ Required if a value is sent in PC3AltTaxInd. <p>See Level 2 & Level 3 Data Reference for further details</p>	O	9	N
PC3LineItemCount	E	PC3Core	<p>Level 3 Number of Line Items</p> <ul style="list-style-type: none"> ▪ The number of Level 3 Line Item Detail items included with this transaction. ▪ The maximum number of line items is 98. ▪ At least 1 line item must be included to submit Level 3 Data. ▪ Required for Level 3 processing. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	2	N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
PC3LineItemArray	E	PC3Core	Level 3 Detail Header Required parent tag for Level 3 Line Item Detail components.	C	N/A	N/A
PC3LineItem	E	PC3LineItemArray	Parent XML Tag for Individual Level 3 Line Item Details This XML element is the parent for each Line Item Detail included in this transaction. It should be repeated for each item up to the value of PC3LineItemCount.	C	N/A	N/A
PC3DtlIndex	E	PC3LineItem	Level 3 Line Item Index <ul style="list-style-type: none"> ▪ The sequential number (1–98) of this Line Item Detail within the PC3LineItemArray included with this transaction. ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	2	N
PC3DtlDesc	E	PC3LineItem	Level 3 Line Item Detail Element – Description <ul style="list-style-type: none"> ▪ Text description of the item purchased. ▪ Cannot be all zeros. ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	35	A
PC3DtlProdCd	E	PC3LineItem	Level 3 Line Item Detail Element – Product Code <ul style="list-style-type: none"> ▪ Product code of the item purchased. ▪ Cannot be all zeros. ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	12	A
PC3DtlQty	E	PC3LineItem	Level 3 Line Item Detail Element – Number of Units <ul style="list-style-type: none"> ▪ Number of units of the item purchased. ▪ Cannot be all zeros. ▪ Implied decimal of 4. ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p> <p>NOTE The Salem host (Bin 000001) requires a minimum quantity of one. Orbital will round this up for Salem merchants if the quantity is less than one.</p>	C	13	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
PC3DtlUOM	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Unit of Measurement</p> <ul style="list-style-type: none"> ▪ The unit of measure or unit of measure code used for this line item. ▪ Required for Level 3 Data. <p>See Table 21 Unit of measure codes in Appendix A. Only known values are accepted.</p> <p>See Level 2 & Level 3 Data Reference for further details</p>	C	3	A
PC3DtlTaxAmt	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Tax Amount</p> <ul style="list-style-type: none"> ▪ The tax amount for this item. ▪ Implied decimal. ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	13	N
PC3DtlTaxRate	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Tax Rate</p> <ul style="list-style-type: none"> ▪ Tax rate applied for this item. ▪ Implied decimal of 2 as a percentage. For example: an interest rate of 6.25% should be sent as 0625. ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	5	N
PC3DtlLinetot	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Line Item Total</p> <ul style="list-style-type: none"> ▪ For PNS customers: <ul style="list-style-type: none"> - This field must equal the Unit Cost (<code>PC3DtlUnitCost</code>) multiplied by the quantity (<code>PC3DtlQty</code>) less any discounts (<code>PC3DtlDisc</code>). If it does not, then this transaction will receive an error. - Additionally, the sum of all the Line Item totals (that is, the sum of all these fields) cannot exceed the transaction amount (<code><amount></code>) submitted for this order. ▪ Implied decimal. ▪ Cannot be all zeros for either PNS or Salem. ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	13	N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
PC3DtlDisc	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Discount Amount for Line Item</p> <ul style="list-style-type: none"> ▪ Amount of the discount applied to the line item. ▪ Implied decimal. ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	13	N
PC3DtlCommCd	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Commodity Code for Line Item</p> <ul style="list-style-type: none"> ▪ The commodity code used to classify the item purchased. ▪ Required for Visa; should not be sent for MasterCard. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	12	N
PC3DtlUnitCost	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Unit Cost of Item Purchased</p> <ul style="list-style-type: none"> ▪ Unit Cost of the unit purchased. ▪ Implied decimal of 4. ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	13	N
PC3DtlGrossNet	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Gross/Net Indicator</p> <ul style="list-style-type: none"> ▪ Indicates whether tax amount is included in the item amount: Y Item amount includes tax amount N Item amount does not include tax amount <ul style="list-style-type: none"> ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	1	A
PC3DtlTaxType	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Type of Tax Being Applied</p> <p>Type of tax being applied.</p> <p>See Level 2 & Level 3 Data Reference for further details</p>	O	4	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
PC3DtlDiscInd	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Discount Indicator</p> <ul style="list-style-type: none"> ▪ Indicates whether the amount is discounted: <ul style="list-style-type: none"> Y Amount is discounted N Amount is not discounted ▪ If value = Y and Discount Amount Field (PC3DtlDisc) is blank or zero-filled, Chase Paymentech will change this field indicator to N before sending the data. ▪ Optional. For MasterCard only; should not be sent for Visa. <p>See Level 2 & Level 3 Data Reference for further details</p>	O	1	A
PC3DtlDebitInd	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Item Debit/Credit Indicator</p> <p>Valid values:</p> <ul style="list-style-type: none"> D Item extended amount is a debit. C Item extended amount is a credit. <p>Required for Level 3 Data for PNS (BIN 00002) Merchants.</p> <p>See Level 2 & Level 3 Data Reference for further details</p>	C	1	A
PC3DtlDiscountRate	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Discount Rate</p> <ul style="list-style-type: none"> ▪ The Discount Rate for this item. ▪ Implied decimal, four places. ▪ Only for Discover; Should not be sent for Visa or MasterCard ▪ Conditionally required for Level 3 Data for Salem (BIN 000001) merchants <p>See Level 2 & Level 3 Data Reference for further details</p>	C	5	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
amexTranAdvAddn1	E	markForCapture	<p>Amex Purchasing Card Data - Transaction Advice Addendum #1</p> <ul style="list-style-type: none"> The TAA Record is used to further identify the purchase associated with the charge to the cardholder. It is also used in Purchasing/Procurement card transactions to provide specific details about the transaction to the cardholder for tracking purposes. TAA should be as concise as possible, while still providing adequate information. For example, a TAA of Merchandise would not be acceptable. Salem Only/Required for Amex Purchasing Card Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	40	A
amexTranAdvAddn2	E	markForCapture	<p>Amex Purchasing Card Data - Transaction Advice Addendum #2</p> <p>Salem Only/Required for Amex Purchasing Card Data.</p> <p>See Level 2 & Level 3 Data Reference for further details</p>	C	40	A
amexTranAdvAddn3	E	markForCapture	<p>Amex Purchasing Card Data - Transaction Advice Addendum #3</p> <p>Salem Only/Required for Amex Purchasing Card Data.</p> <p>See Level 2 & Level 3 Data Reference for further details</p>	C	40	A
amexTranAdvAddn4	E	markForCapture	<p>Amex Purchasing Card Data - Transaction Advice Addendum #4</p> <ul style="list-style-type: none"> The original transaction can be updated with purchasing card information during a Mark for Capture. Salem Only/Required for Amex Purchasing Card Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	40	A
retryTrace	E	markForCapture	<p>Trace Number used for Retry Logic</p> <p><i>SEE ALSO</i> See 3.4.4 Retry Logic for information on this field.</p>	O	16	N
pinlessDebitTotalShipmnt	E	markForCapture	<p>PINless Debit Total Shipments (PINless Debit E-commerce)</p> <ul style="list-style-type: none"> The total number of expected shipments associated to a single authorization <p>Allowed values :Null , 0-99</p>	O	2	N

4.1.4 New Order Request Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
newOrder	E	transRequest	<p>Request Type Used to Generate a New Order</p> <ul style="list-style-type: none"> ▪ Auth ▪ Auth/Captures ▪ Force ▪ Force Captures ▪ Refunds <p>The specific transaction type is defined by the value of the transType element.</p>	M	N/A	N/A
BatchRequestNo	A	newOrder	<p>Sequential Presentation of the Request in the Batch File</p> <p>The value for the first New Order request should be one higher than that of the last Mark for Capture request.</p> <p>The transactions in the file are numbered sequentially starting with Reversals, then Mark for Captures, then New Orders, and so on.</p>	M	6	N
industryType	E	newOrder	<p>Industry Type of the Transaction</p> <p>MO Mail Order transaction RC Recurring Payment (not a valid choice for BIN 000002 Canadian merchants who are processing standard recurring payments; see recurringInd element for more details) EC eCommerce transaction IV IVR (PINless Debit BillPay Only) IN Installment</p>	M	2	A
transType	E	newOrder	<p>The transaction New Order Transaction Type</p> <p>A Authorization request AC Authorization and Mark for Capture FC Force-Capture request R Refund request</p>	M	2	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
bin	E	newOrder	Transaction Routing Definition Assigned by Chase Paymentech. 000001 Stratus 000002 Tandem (PNS)	M	6	N
merchantID	E	newOrder	Gateway merchant account number assigned by Chase Paymentech This account number will match that of your host platform: <ul style="list-style-type: none"> ▪ BIN 000001: 6-digit Salem Division Number ▪ BIN 000002: 12-digit PNS Merchant ID 	M	15	N
terminalID	E	newOrder	Merchant Terminal ID assigned by Chase Paymentech <ul style="list-style-type: none"> ▪ Salem Terminal IDs: presently set to 001. ▪ PNS Terminal IDs: between 001 and 999; typically 001. 	M	3	N
cardBrand	E	newOrder	Card Type/Brand for the Transaction Required for: BL Bill Me Later DP PINless Debit (Generic Value Used in Requests) EC Electronic Check ED European Direct Debit IM International Maestro Optional for: CZ ChaseNet Credit Card CR ChaseNet Signature Debit	C	2	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
ccAccountNum	E	newOrder	<p>Credit Card Number</p> <ul style="list-style-type: none"> ▪ Should be NULL for electronic check processing, European direct debit processing with an IBAN, and Profile Transactions. ▪ For Bill Me Later transactions, should be populated with either the customer's Bill Me Later account number or a Bill Me Later Bank Identification Number (BIN) followed by ten zeros (dummy account number). For example: 5049900000000000 <p>The consumer's 16-byte Bill Me Later account number will be returned on all approved transactions.</p>	C	19	AN
ccExp	E	newOrder	<p>Card Expiration Date</p> <ul style="list-style-type: none"> ▪ Format: MMYY ▪ Mandatory for all card types, except ECP, European Direct Debit, and Bill Me Later. ▪ Salem (BIN 000001) allows a <i>blank</i> to be submitted when no known expiration date exists. There are three valid mechanisms for submitting a <i>Blank</i> expiration date to the Salem Host using Orbital: <ul style="list-style-type: none"> - null-fill this XML element: <Exp/> - Send four spaces: <Exp> </Exp> - Zero-fill this XML element: <Exp>0000</Exp> <p>NOTE Please discuss this feature with your certification analyst before implementing.</p>	C	4	N
ecpCheckRT	E	newOrder	<p>Bank Routing and Transit Number for the Customer</p> <p>Conditionally required for Electronic Check processing.</p> <p>NOTES:</p> <ul style="list-style-type: none"> ▪ All US Bank Routing Numbers are 9 digits. ▪ All Canadian Bank Routing Numbers are 8 digits. ▪ Formatted FFFBBBBB where F is Financial Institution and B is Branch Number ▪ Cannot include spaces " " or dashes "-" 	C	9	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
ecpCheckDDA	E	newOrder	Customer DDA Account Number Conditionally required for Electronic Check processing.	C	17	A
ecpBankAcctType	E	newOrder	Deposit Account Type Conditionally required for Electronic Check processing: C Consumer Checking (US or Canadian) S Consumer Savings (US Only) X Commercial Checking (US Only) NOTE If this tag is missing, the host will default the value to 'C' - Consumer Checking	C	1	A
ecpAuthMethod	E	newOrder	ECP Authorization Method <ul style="list-style-type: none"> ▪ Code used to identify the method used by consumers to authorize debits to their accounts. ▪ Valid values: <ul style="list-style-type: none"> W Written I Internet (Web) – default T Telephone A Accounts Receivable (ARC) – US Merchants only P Point of Purchase (POP) – US Merchants only ▪ If no value submitted, we default this value. <p>Please see 3.2.5.3 ECP Authorization Methods for more information.</p>	O	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
ecpDelvMethod	E	newOrder	<p>ECP Payment Delivery Method</p> <ul style="list-style-type: none"> ▪ Conditionally required for Electronic Check processing. ▪ This field indicates the preferred manner to deposit the transaction: <ul style="list-style-type: none"> B Best Possible Method (US Only) Chase Paymentech utilizes the method that best fits the situation. If the RDFI is not an ACH participant, a facsimile draft is created. This should be the default value for this field. A ACH (US or Canadian) Deposit the transaction by ACH only. If the RDFI is not an ACH participant, the transaction is rejected. 	C	1	A
avsZip	E	newOrder	<p>Cardholder Billing Address Zip Code</p> <ul style="list-style-type: none"> ▪ All AVS Requests must minimally include the 5-digit Zip Code. ▪ If sending Zip Code + 4, please separate with a hyphen (-). ▪ For BIN 000001, must supply AVSzip, AVSaddress1, and AVScity in order for data to be transmitted to Host Processing System ▪ Required for Bill Me Later sale transactions. ▪ For PINless Debit E-commerce transactions, it is mandatory to send avsZip, avsAddress1 for both BIN 000001 and BIN000002 	C	10	A
avsAddress1	E	newOrder	<p>Cardholder Billing Address line 1</p> <ul style="list-style-type: none"> ▪ Should not include % ▪ For BIN 000001, must supply AVSzip, AVSaddress1, and AVScity in order for data to be transmitted to Host Processing System ▪ Required for Bill Me Later sale transactions. ▪ For PINless Debit E-commerce transactions, it is mandatory to send avsZip, avsAddress1 for both BIN 000001 and BIN000002 	C	30	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avsAddress2	E	newOrder	Cardholder Billing Address line 2 Should not include %	O	30	A
avsCity	E	newOrder	Cardholder Billing City <ul style="list-style-type: none"> ▪ Should not include % ▪ For BIN 000001, must supply AVSzip, AVSaddress1, and AVScity in order for data to be transmitted to Host Processing System ▪ Required for Bill Me Later sale transactions. 	C	20	A
avsState	E	newOrder	Cardholder Billing State <ul style="list-style-type: none"> ▪ Should not include any of the following characters: % ^ \ / ▪ Required for Bill Me Later sale transactions. 	C	2	A
avsName	E	newOrder	Cardholder Billing Name Required for Bill Me Later sale transactions, all European Direct Debit (EU DD) transactions, and all Electronic Check transactions.	C	30	A
avsPhone	E	newOrder	Cardholder Billing Phone Number AAAAEEENNNNNXXXX, where <ul style="list-style-type: none"> AAA = Area Code EEE = Exchange NNNN = Number XXXX = Extension Conditionally required for Bill Me Later sale transactions.	C	14	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³										
avsCountryCode	E	newOrder	Cardholder Billing Address Country Code <ul style="list-style-type: none"> ▪ Valid values: <table> <tr> <td>US</td> <td>United States</td> </tr> <tr> <td>CA</td> <td>Canada</td> </tr> <tr> <td>GB</td> <td>Great Britain</td> </tr> <tr> <td>UK</td> <td>United Kingdom</td> </tr> <tr> <td>" "</td> <td>Blank for all other countries</td> </tr> </table> ▪ Required if processing a U.K.-based address. ▪ Required for Bill Me Later sale transactions. 	US	United States	CA	Canada	GB	Great Britain	UK	United Kingdom	" "	Blank for all other countries	C	2	A
US	United States															
CA	Canada															
GB	Great Britain															
UK	United Kingdom															
" "	Blank for all other countries															
avsDestName	E	newOrder	Bill Me Later Cardholder Destination Billing Name Required for Bill Me Later sale transactions. Also supported on non-BML transactions which use the Safetech service.	C	30	A										
avsDestAddress	E	newOrder	Bill Me Later Cardholder Destination Address line 1 <ul style="list-style-type: none"> ▪ Should not include % ▪ Required for Bill Me Later sale transactions. Also supported on non-BML transactions which use the Safetech service. 	C	30	A										
avsDestAddress2	E	newOrder	Bill Me Later Cardholder Destination Address Line 2 <ul style="list-style-type: none"> ▪ Should not include % ▪ Optional for Bill Me Later Transactions. Also supported on non-BML transactions which use the Safetech service. 	O	30	A										
avsDestCity	E	newOrder	Bill Me Later Cardholder Destination Billing City <ul style="list-style-type: none"> ▪ Should not include % ▪ Required for Bill Me Later sale transactions. Also supported on non-BML transactions which use the Safetech service. 	C	20	A										
avsDestState	E	newOrder	Bill Me Later Cardholder Destination Billing State <ul style="list-style-type: none"> ▪ Should not include any of the following characters: % ^ \ / - ▪ Required for Bill Me Later sale transactions. Also supported on non-BML transactions which use the Safetech service. 	C	2	A										

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³										
avsDestZip	E	newOrder	Bill Me Later Cardholder Destination Address Zip Code <ul style="list-style-type: none"> ▪ All AVS Requests must minimally include the 5-digit Zip Code. ▪ If sending Zip Code + 4, please separate with a hyphen (-). ▪ Required for Bill Me Later sale transactions. Also supported on non-BML transactions which use the Safetech service. 	C	10	A										
avsDestCountryCode	E	newOrder	Bill Me Later Cardholder Destination Address Country Code <ul style="list-style-type: none"> ▪ Valid values: <table> <tr><td>US</td><td>United States</td></tr> <tr><td>CA</td><td>Canada</td></tr> <tr><td>GB</td><td>Great Britain</td></tr> <tr><td>UK</td><td>United Kingdom</td></tr> <tr><td>" "</td><td>Blank for all other countries</td></tr> </table> ▪ Required if processing a U.K.-based address. ▪ Required for Bill Me Later sale transactions. Also supported on non-BML transactions which use the Safetech service. 	US	United States	CA	Canada	GB	Great Britain	UK	United Kingdom	" "	Blank for all other countries	C	2	A
US	United States															
CA	Canada															
GB	Great Britain															
UK	United Kingdom															
" "	Blank for all other countries															
avsDestPhone	E	newOrder	Bill Me Later Cardholder Destination Phone Number AAAEEENNNNXXXX, where <table> <tr><td>AAA</td><td>= Area Code</td></tr> <tr><td>EEE</td><td>= Exchange</td></tr> <tr><td>NNNN</td><td>= Number</td></tr> <tr><td>XXXX</td><td>= Extension</td></tr> </table> Optional for Bill Me Later sale transactions. Also supported on non-BML transactions which use the Safetech service.	AAA	= Area Code	EEE	= Exchange	NNNN	= Number	XXXX	= Extension	O	14	A		
AAA	= Area Code															
EEE	= Exchange															
NNNN	= Number															
XXXX	= Extension															
useCustomerRefNum	E	newOrder	The Customer Reference Number that will be used to populate missing request fields <ul style="list-style-type: none"> ▪ Required when Using a Profile during an authorization request. ▪ This field is NOT case-sensitive. 	C	22	A										

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
addProfileFromOrder	E	newOrder	<p>Requests that a Profile be added from the Order being submitted</p> <p>Defines what the Customer Reference Number will be when creating a profile as part of an authorization:</p> <ul style="list-style-type: none"> A Auto-Generate the customerRefNum S Use customerRefNum element O Use orderID as the customerRefNum D Use comments as the CustomerRefNum 	C	1	A
customerRefNum	E	newOrder	<p>Sets the Customer Reference Number that will be used to utilize a Customer Profile on all future Orders</p> <ul style="list-style-type: none"> ▪ Required if a Profile Add request is desired as a part of an Authorization and addProfileFromOrder = s (Use customerRefNum Element). ▪ If addProfileFromOrder = A, the Customer Reference Number will be defined by the Gateway, and any value passed in this element will be ignored. <p>The valid characters include:</p> <ul style="list-style-type: none"> ▪ abcdefghijklmnopqrstuvwxyz, though all alpha characters will be saved as uppercase ▪ ABCDEFGHIJKLMNOPQRSTUVWXYZ ▪ 0123456789 ▪ - , \$ @ & and a space character, though the space character cannot be the leading character ▪ Please note that all alphabetic characters are stored in uppercase by the Orbital system. Uppercase and lowercase values cannot be used to differentiate Customer Reference Numbers. 	C	22	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
customerProfileOrderOverrideInd	E	newOrder	<p>Defines if any Order Data can be pre-populated from the Customer Reference Number (customerRefNum)</p> <p>Required when adding a Profile Add request as part of an Authorization.</p> <ul style="list-style-type: none"> NO No mapping to order data OI Use customerRefNum for orderID OD Use customerRefNum for comments OA Use customerRefNum for orderID and comments <p>Field must be empty or Null filled if including the element in a New Order request when using a profile during an authorization request. Alternatively, field can be excluded from the request if not using it.</p>	C	2	A
priorAuthCd	E	newOrder	<p>Prior Authorization Code</p> <ul style="list-style-type: none"> ▪ If a prior authorization code is available, it should be sent in this field. This reduces the risk of chargebacks. ▪ This field should not be included on an ECP transaction. ▪ This should only be sent if the transType = FC. 	O	6	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
orderID	E	newOrder	<p>Merchant-Defined Order Number</p> <ul style="list-style-type: none"> ▪ Field defined and supplied by the auth originator and echoed back in response. ▪ The first 8 characters should be unique for each transaction. <p>The valid characters include:</p> <ul style="list-style-type: none"> ▪ abcdefghijklmnopqrstuvwxyz ▪ ABCDEFGHIJKLMNOPQRSTUVWXYZ ▪ 0123456789 ▪ - , \$ @ & and a space character, though the space character cannot be the leading character ▪ PINless Debit transactions can only use uppercase and lowercase alpha (A-Z, a-z) and numeric (0-9) characters—NO special characters. <p>For BIN 000002 merchants:</p> <ul style="list-style-type: none"> ▪ If IndustryType = EC, first 16 bytes are passed to the Host Processing System ▪ If IndustryType = MO, first 9 bytes are passed to the Host Processing System 	M	22	A
amount	E	newOrder	<p>Transaction Amount</p> <p>Implied decimal, including those currencies that are a zero exponent. For example, both \$100.00 (an exponent of 2) and ¥100 (an exponent of 0) should be sent as <amount>10000</amount>.</p>	C	12	N
comments	E	newOrder	<p>Free-form comments</p> <ul style="list-style-type: none"> ▪ Merchant can fill in this field, and the information will be stored with the transaction details. ▪ For PNS customers, this field will populate the Customer Defined Data field, which is displayed in Resource Online. 	O	64	A
shippingRef	E	newOrder	<p>Shipping Tracking Reference Number</p> <p>Merchant can fill in this field, and the information will be stored with the transaction details.</p>	O	40	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
taxInd	E	newOrder	Level 2 Data - Tax Type Conditionally required for Level 2 Data. 0 Not provided 1 Included 2 Non-Taxable—Not valid for Visa Level 2 qualification <i>See Level 2 & Level 3 Data Reference for further details</i>	C	1	N
taxAmount	E	newOrder	Level 2 Data - Tax Amount for the Purchase <ul style="list-style-type: none"> ▪ Conditionally required for Level 2 Data. ▪ Implied decimal, including those currencies that are a zero exponent. <i>See Level 2 & Level 3 Data Reference for further details</i>	C	12	N
pCardOrderID	E	newOrder	PO Number or Order Number from Customer Conditionally required for Level 2 Data. <i>See Level 2 & Level 3 Data Reference for further details</i>	C	17	A
pCardDestZip	E	newOrder	Shipping Destination Zip Code for the Purchase <ul style="list-style-type: none"> ▪ Required for Level 2 Data. ▪ For Zip Code + 4, separate with a hyphen (-). <i>See Level 2 & Level 3 Data Reference for further details</i>	C	10	A
pCardDestName	E	newOrder	Amex Purchasing Card Data - Cardholder Ship To: Name Salem Only/Required for Amex Purchasing Card Data. <i>See Level 2 & Level 3 Data Reference for further details</i>	C	30	A
pCardDestAddress	E	newOrder	Amex Purchasing Card Data - Cardholder Ship To: Address line 1 Salem Only/Required for Amex Purchasing Card Data. <i>See Level 2 & Level 3 Data Reference for further details</i>	C	30	A
pCardDestAddress2	E	newOrder	Amex Purchasing Card Data - Cardholder Ship To: Address line 2 Salem Only/Required for Amex Purchasing Card Data. <i>See Level 2 & Level 3 Data Reference for further details</i>	C	30	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
pCardDestCity	E	newOrder	Amex Purchasing Card Data – Cardholder Ship To: City Salem Only/Required for Amex Purchasing Card Data <i>See Level 2 & Level 3 Data Reference for further details</i>	C	20	A
pCardDestStateCd	E	newOrder	Amex Purchasing Card Data – Cardholder Ship To: State Salem Only/Required for Amex Purchasing Card Data. <i>See Level 2 & Level 3 Data Reference for further details</i>	C	2	A
PC3Core	E	newOrder	Level 3 Data for Visa and MasterCard Transactions	C	N/A	N/A
PC3FreightAmt	E	PC3Core	Level 3 Freight Amount for Shipment Total freight or shipping and handling charges. Implied decimal. <i>See Level 2 & Level 3 Data Reference for further details</i>	C	12	N
PC3DutyAmt	E	PC3Core	Level 3 Duty Amount for Shipment Total charges for any import and/or export duties included in this transaction. Implied decimal. <i>See Level 2 & Level 3 Data Reference for further details</i>	C	12	N
PC3DestCountryCd	E	PC3Core	Level 3 Destination Country Code <ul style="list-style-type: none"> ▪ The ISO-assigned code of the country to which the goods are shipped. ▪ Required for all Level 3 transactions. ▪ If no value is submitted, defaults to the United States (USA). <i>See Table 20 ISO country codes in Appendix A.</i> <i>See Level 2 & Level 3 Data Reference for further details</i>	C	3	A
PC3ShipFromZip	E	PC3Core	Level 3 Ship From Zip Code <ul style="list-style-type: none"> ▪ The zip/postal code of the location from which the goods are shipped. ▪ Required for best interchange rate. ▪ Cannot be all zeros or all nines. <i>See Level 2 & Level 3 Data Reference for further details</i>	C	10	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
PC3DiscAmt	E	PC3Core	<p>Level 3 Discount Amount from Order</p> <ul style="list-style-type: none"> ▪ The total amount of discount applied to the transaction by the merchant. Used by the merchant when a price break is given on an entire transaction rather than on unit prices. Typically, this is shown as a credit on a detailed invoice. ▪ Implied decimal. ▪ Optional. For Visa only; should not be sent for MasterCard. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	O	12	N
PC3VATtaxAmt	E	PC3Core	<p>Level 3 Total Amount of VAT or Other Tax</p> <ul style="list-style-type: none"> ▪ The total amount of VAT or other tax included in this transaction. ▪ Implied decimal. ▪ Optional. For Visa only; should not be sent for MasterCard. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	O	12	N
PC3VATtaxRate	E	PC3Core	<p>Level 3 Rate of VAT or Other Tax</p> <ul style="list-style-type: none"> ▪ The total amount of VAT or other tax included (expressed in percentage terms) for this line item. ▪ 2 decimal implied. For example, 0100 = 1%. ▪ Optional. For Visa only; should not be sent for MasterCard. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	O	4	N
PC3AltTaxInd	E	PC3Core	<p>Level 3 Alternate Tax ID</p> <ul style="list-style-type: none"> ▪ Tax ID number for the alternate tax associated with this transaction. ▪ Optional, but required if an amount is sent in <code>PC3AltTaxAmt</code>. ▪ For MasterCard only; should not be sent for Visa. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	O	15	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
PC3AltTaxAmt	E	PC3Core	<p>Level 3 Alternate Tax Amount</p> <ul style="list-style-type: none"> ▪ Total Amount of alternate tax associated with this transaction. ▪ Implied decimal. ▪ Optional, but required if a value is sent in PC3AltTaxInd. ▪ For MasterCard only; should not be sent for Visa. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	O	9	N
PC3LineItemCount	E	PC3Core	<p>Level 3 Number of Line Items</p> <ul style="list-style-type: none"> ▪ The number of Level 3 Line Item Detail items included with this transaction. ▪ The maximum number of line items is 98. ▪ At least 1 line item must be included to submit Level 3 data. ▪ Required for Level 3 Data. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	2	N
PC3LineItemArray	E	PC3Core	<p>Level 3 Detail Header</p> <p>Required parent tag for Level 3 Line Item Detail components.</p>	C	N/A	N/A
PC3LineItem	E	PC3LineItem Array	<p>Parent XML Tag for Individual Level 3 Line Item Details</p> <p>This XML element is the parent for each Line Item Detail included in this transaction. It should be repeated for each item up to the value of PC3LineItemCount.</p>	C	N/A	N/A
PC3DtlIndex	E	PC3LineItem	<p>Level 3 Line Item Index</p> <ul style="list-style-type: none"> ▪ The sequential number (1–98) of this Line Item Detail within the PC3LineItemArray included with this transaction. ▪ Required for Level 3 Data. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	2	N
PC3DtlDesc	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Description</p> <ul style="list-style-type: none"> ▪ Text description of the item purchased. ▪ Cannot be all zeros. ▪ Required for Level 3 Data. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	35	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
PC3DtlProdCd	E	PC3LineItem	Level 3 Line Item Detail Element – Product Code <ul style="list-style-type: none"> ▪ Product code of the item purchased. ▪ Cannot be all zeros. ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	12	A
PC3DtlQty	E	PC3LineItem	Level 3 Line Item Detail Element – Number of Units <ul style="list-style-type: none"> ▪ Number of units of the item purchased. ▪ Cannot be all zeros. ▪ Implied decimal of 4. ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p> <p>NOTE The Salem host (Bin 000001) requires a minimum quantity of one. Orbital will round this up for Salem merchants if the quantity is less than one.</p>	C	13	N
PC3DtlUOM	E	PC3LineItem	Level 3 Line Item Detail Element – Unit of Measurement <ul style="list-style-type: none"> ▪ The unit of measure or unit of measure code used for this line item. ▪ Required for Level 3 Data. <p>See Table 21 Unit of measure codes in Appendix A. Only known values are accepted.</p> <p>See Level 2 & Level 3 Data Reference for further details</p>	C	3	A
PC3DtlTaxAmt	E	PC3LineItem	Level 3 Line Item Detail Element – Tax Amount <ul style="list-style-type: none"> ▪ The tax amount for this item. ▪ Implied decimal. ▪ Required for Level 3 Data. <p>See Level 2 & Level 3 Data Reference for further details</p>	C	13	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
PC3DtlTaxRate	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Tax Rate</p> <ul style="list-style-type: none"> ▪ Tax rate applied for this item. ▪ Implied decimal of 2 as a percentage. For example: an interest rate of 6.25% should be sent as 0625. ▪ Required for Level 3 Data. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	4	N
PC3DtlLinetot	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Line Item Total</p> <ul style="list-style-type: none"> ▪ For PNS customers: <ul style="list-style-type: none"> - This field must equal the Unit Cost (PC3DtlUnitCost) multiplied by the quantity (PC3DtlQty) less any discounts (PC3DtlDisc). If it does not, then this transaction will receive an error. - Additionally, the sum of all the Line Item totals (that is, the sum of all these fields) cannot exceed the transaction amount (<amount>) submitted for this order. ▪ Implied decimal. ▪ Cannot be all zeros for either PNS or Salem. ▪ Required for Level 3 Data. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	13	N
PC3DtlDisc	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Discount Amount for Line Item</p> <ul style="list-style-type: none"> ▪ Amount of the discount applied to the line item. ▪ Implied decimal. ▪ Required for Level 3 Data. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	13	N
PC3DtlCommCd	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Commodity Code for Line Item</p> <ul style="list-style-type: none"> ▪ The commodity code used to classify the item purchased. ▪ Required for Visa; should not be sent for MasterCard. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	12	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
PC3DtlUnitCost	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Unit Cost of Item Purchased</p> <ul style="list-style-type: none"> ▪ Unit Cost of the unit purchased. ▪ Implied decimal of 4. ▪ Required for Level 3 Data. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	13	N
PC3DtlGrossNet	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Gross/Net Indicator</p> <ul style="list-style-type: none"> ▪ Indicates whether tax amount is included in the item amount: <ul style="list-style-type: none"> Y Item amount includes tax amount N Item amount does not include tax amount ▪ Required for Level 3 Data. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	1	A
PC3DtlTaxType	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Type of Tax Being Applied</p> <p>Type of tax being applied.</p> <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	O	4	A
PC3DtlDiscInd	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Discount Indicator</p> <ul style="list-style-type: none"> ▪ Indicates whether the amount is discounted: <ul style="list-style-type: none"> Y Amount is discounted N Amount is not discounted ▪ If value = Y and Discount Amount Field (PC3DtlDisc) is blank or zero-filled, Chase Paymentech will change this field indicator to N before sending the data. ▪ Optional. For MasterCard only; should not be sent for Visa. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	O	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
PC3DtlDebitInd	E	PC3LineItem	<p>Level 3 Line Item Detail Element – Item Debit/Credit Indicator</p> <p>Valid values:</p> <ul style="list-style-type: none"> D Item extended amount is a debit. C Item extended amount is a credit. <p>Required for Level 3 Data for PNS (BIN 00002) Merchants. <i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	1	A
amexTranAdvAddn1	E	newOrder	<p>Amex Purchasing Card Data – Transaction Advice Addendum #1</p> <ul style="list-style-type: none"> The TAA Record is used to further identify the purchase associated with the charge to the cardholder. It is also used in Purchasing/Procurement card transactions to provide specific details about the transaction to the cardholder for tracking purposes. TAs should be as concise as possible, while still providing adequate information. For example, a TAA of Merchandise would not be acceptable. Salem Only/Conditionally required for Amex Purchasing Card Data. <p><i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	40	A
amexTranAdvAddn2	E	newOrder	<p>Amex Purchasing Card Data – Transaction Advice Addendum #2</p> <p>Salem Only/Conditionally required for Amex Purchasing Card Data. <i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	40	A
amexTranAdvAddn3	E	newOrder	<p>Amex Purchasing Card Data – Transaction Advice Addendum #3</p> <p>Salem Only/Conditionally required for Amex Purchasing Card Data. <i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	40	A
amexTranAdvAddn4	E	newOrder	<p>Amex Purchasing Card Data – Transaction Advice Addendum #4</p> <p>Salem Only/Conditionally required for Amex Purchasing Card Data. <i>See Level 2 & Level 3 Data Reference for further details</i></p>	C	40	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
retryTrace	E	newOrder	Trace Number used for Retry Logic <i>SEE ALSO</i> See 3.4.4 Retry Logic for information on this field.	O	16	N
sDMerchantName	E	newOrder	Soft Descriptor Merchant Name <ul style="list-style-type: none"> ▪ Required for Soft Descriptors. ▪ The Merchant Name field should be what is most recognizable to the cardholder (Company name or trade name). The actual length of this field is conditionally tied to Host and the Size of the <sDProductDescription> field used. <p>Stratus:</p> <ul style="list-style-type: none"> ▪ CREDIT – Three options, which conditionally affect the sDProductDescription: <ul style="list-style-type: none"> - Max 3 bytes - Max 7 bytes - Max 12 bytes ▪ ECP: <ul style="list-style-type: none"> - Max 15 bytes <p>Tandem (PNS):</p> <ul style="list-style-type: none"> ▪ Max 25 bytes 	C	25	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
sDProductDescription	E	newOrder	<p>Soft Descriptor Product Description</p> <ul style="list-style-type: none"> ▪ Required for Soft Descriptors. ▪ Provides an accurate product description. <p>Stratus:</p> <ul style="list-style-type: none"> ▪ CREDIT: <ul style="list-style-type: none"> - If sDMerchantName = 3 bytes, then Max = 18 bytes - If sDMerchantName = 7 bytes, then Max = 14 bytes - If sDMerchantName = 12 bytes, then Max = 9 bytes ▪ ECP: <ul style="list-style-type: none"> - 10 bytes Max <p>Tandem:</p> <ul style="list-style-type: none"> ▪ This field will not show on Cardholder statements for Tandem Merchants. 	C	18	A
sDMerchantCity	E	newOrder	<p>Soft Descriptor Merchant City</p> <ul style="list-style-type: none"> ▪ Tag conditionally required for Soft Descriptors. ▪ Merchant City for Retail. Field required, but should be null-filled if any Soft Descriptor data is submitted. 	C	13	A
sDMerchantPhone	E	newOrder	<p>Soft Descriptor Merchant Phone</p> <ul style="list-style-type: none"> ▪ Only one of the location Soft Descriptor values should be sent (Phone, URL, or E-mail); all others should be null-filled. ▪ This field will not show on Cardholder statements for Tandem Merchants. <p>Valid Formats:</p> <ul style="list-style-type: none"> ▪ NNN-NNN-NNNN ▪ NNN-AAAAAAA 	C	12	A
sDMerchantEmail	E	newOrder	<p>Soft Descriptor Merchant E-mail</p> <ul style="list-style-type: none"> ▪ Only one of the location Soft Descriptor values should be sent (Phone, URL, or E-mail); all others should be null-filled. ▪ This field will not show on Cardholder statements for Tandem Merchants. 	C	13	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
sDMerchantURL	E	newOrder	<p>Soft Descriptor Merchant URL</p> <ul style="list-style-type: none"> ▪ Only one of the location Soft Descriptor values should be sent (Phone, URL, or E-mail); all others should be null-filled. ▪ This field will not show on Cardholder statements for Tandem Merchants. 	C	13	A
recurringInd	E	newOrder	<p>Recurring indicator</p> <p>This tag is required for merchants that are:</p> <ul style="list-style-type: none"> ▪ Located in Canada ▪ And processing on BIN 000002 ▪ And processing recurring transactions <p>This field should not be sent when the industry code field is recurring. In Canada, the objective is to define the initial transaction collection method.</p> <p>Valid values:</p> <ul style="list-style-type: none"> RF First Recurring Transaction RS Subsequent Recurring Transactions <p>For PINless Debit E-commerce</p> <p>This tag is conditionally required for merchants that are:</p> <ul style="list-style-type: none"> ▪ Processing on BIN 000002 ▪ And processing recurring and installment transactions <p>Valid values:</p> <ul style="list-style-type: none"> RF First Recurring Transaction RS Subsequent Recurring Transactions IF First Instalment Transaction IS Subsequent Instalment Transactions 	C	2	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
euddCountryCode	E	newOrder	<p>European Direct Debit Country Code</p> <ul style="list-style-type: none"> ▪ Customer's Country Code. ▪ Valid country codes: <ul style="list-style-type: none"> AT Austria BE Belgium CY Cyprus DE Germany ES Spain FI Finland FR France GB United Kingdom GR Greece IE Ireland IT Italy LU Luxemborg MC Monaco MT Malta NL Netherlands PT Portugal SI Slovenia SK Slovak Republic ▪ Conditionally required for European Direct debit 	C	2	A
euddBankSortCode	E	newOrder	<p>European Direct Debit Bank Sort Code</p> <ul style="list-style-type: none"> ▪ Customer's Bank Sort code. ▪ Used when euddIBAN is not present. ▪ Optional for Luxemborg. Not used for Belgium. ▪ Required for other countries. 	C	10	A
euddRIBCode	E	newOrder	<p>European Direct Debit RIB</p> <ul style="list-style-type: none"> ▪ Bank Account checksum. ▪ Used when euddIBAN is not present. ▪ Required in France, Italy, Monaco, Portugal, and Spain. 	C	2	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
bmlCustomerIP	E	newOrder	Customer's IP Address Optional for Bill Me Later sale transactions.	O	45	A
bmlCustomerEmail	E	newOrder	Customer E-mail Address Optional for Bill Me Later sale transactions.	O	50	A
bmlShippingCost	E	newOrder	Total Shipping Cost of Consumer's Order Mandatory for Bill Me Later sale transactions.	C	8	N
bmlTNCVersion	E	newOrder	Terms and Conditions Number <ul style="list-style-type: none"> ▪ The Terms and Conditions Number to which the consumer agreed. ▪ Mandatory for Bill Me Later sale transactions. 	C	5	N
bmlCustomerRegistrationDate	E	newOrder	Customer Registration Date <ul style="list-style-type: none"> ▪ The date a customer registered with the merchant. ▪ Mandatory for Bill Me Later sale transactions. 	C	8	N
bmlCustomerTypeFlag	E	newOrder	Customer Type Flag <ul style="list-style-type: none"> ▪ New or Existing Customer to the Merchant (not Bill Me Later): <ul style="list-style-type: none"> N New E Existing ▪ Optional for Bill Me Later sale transactions. 	O	2	A
bmlItemCategory	E	newOrder	Item Category <ul style="list-style-type: none"> ▪ Product Description Code assigned by Bill Me Later, Inc. ▪ Mandatory for Bill Me Later sale transactions. 	C	4	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
bmlPreapprovalInvitationNum	E	newOrder	<p>Pre-Approval Invitation Number</p> <ul style="list-style-type: none"> ▪ Indicates whether the consumer has been pre-approved for Bill Me Later. - Pre-approval from a credit bureau should include the 16-digit pre-approval number. This will allow the pre-approval to be matched with the first consumer order. - Internal pre-approval should have 1 as the leftmost digit. - Pre-approvals cannot include all zeros or be blank-filled. ▪ Optional for Bill Me Later sale transactions. 	O	16	A
bmlMerchantPromotionalCode	E	newOrder	<p>Merchant Promotional Code</p> <p>Optional for Bill Me Later sale transactions.</p>	O	4	A
bmlCustomerBirthDate	E	newOrder	<p>Customer Date of Birth</p> <ul style="list-style-type: none"> ▪ Format: YYYYMMDD ▪ Mandatory for Bill Me Later sale transactions. 	C	8	N
bmlCustomerSSN	E	newOrder	<p>Customer Social Security Number</p> <ul style="list-style-type: none"> ▪ Either the full 9 digits or last 4 digits of the customer's Social Security Number. ▪ Mandatory for Bill Me Later sale transactions. 	C	9	N
bmlCustomerAnnualIncome	E	newOrder	<p>Gross Household Annual Income</p> <ul style="list-style-type: none"> ▪ Implied decimal. For example, \$100,000.00 should be sent as: <bmlCustomerAnnualIncome>10000000 </bmlCustomerAnnualIncome> ▪ Optional for Bill Me Later sale transactions. 	O	10	N
bmlCustomerResidenceStatus	E	newOrder	<p>Customer Residence Status</p> <p>Valid values:</p> <ul style="list-style-type: none"> O Own R Rent X Other <p>Optional for Bill Me Later sale transactions.</p>	O	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
bmlCustomerCheckingAccount	E	newOrder	Customer Checking Account Indicator Valid values: Y Yes, customer has a checking account N No, customer does not have a checking account Optional for Bill Me Later sale transactions.	O	1	A
bmlCustomerSavingsAccount	E	newOrder	Customer Savings Account Indicator Valid values: Y Yes, customer has a savings account N No, customer does not have a savings account Optional for Bill Me Later sale transactions.	O	1	A
bmlProductDeliveryType	E	newOrder	Delivery Type Indicator Valid values: CNC Cash and Carry DIG Digital Goods PHY Physical Delivery Required SVC Service TBD To Be Determined Optional for Bill Me Later sale transactions.	C	3	A
mbType	E	newOrder	Managed Billing Type <ul style="list-style-type: none"> ▪ Indicates the type of Managed Billing the merchant is participating in: <ul style="list-style-type: none"> R Recurring D Deferred ▪ The value submitted must be in agreement with the type of Managed Billing the merchant is configured for at Chase Paymentech. ▪ This field serves to notify the Orbital system that the transaction is a Managed Billing transaction. If this field is not sent with a Managed Billing transaction, all other Managed Billing fields are ignored. 	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
mbOrderIDGenerationMethod	E	newOrder	<p>Managed Billing Order ID Generation Method</p> <ul style="list-style-type: none"> ▪ This value is used to set the method that Orbital will use to generate the Order ID for any Managed Billing transactions. ▪ This field does NOT influence the Order ID for stand-alone transactions initiated by the merchant, VT transactions, and so on. ▪ Valid values: <ul style="list-style-type: none"> IO Use the Customer Reference Number (Profile ID). This value is made up of the capital letters I and O, not numbers. DI Dynamically generate the Order ID. This value is made up of the capital letters D and I, no numbers. 	C	2	A
mbRecurringStartDate	E	newOrder	<p>Managed Billing Recurring Start Date</p> <ul style="list-style-type: none"> ▪ Defines the future date that Orbital will begin a recurring billing cycle to the associated Profile. ▪ To allow the Managed Billing engine to properly calculate and schedule all billings, this date must be at least one day after the request date (a recurring billing cycle can never begin on the date that the request message is sent to the Orbital system). ▪ Format: MMDDYYYY 	C	8	N
mbRecurringEndDate	E	newOrder	<p>Managed Billing Recurring End Date</p> <ul style="list-style-type: none"> ▪ Defines the future date that Orbital will end a recurring billing cycle to the associated Profile. ▪ Format: MMDDYYYY ▪ This is the first of three possible recurring end triggers. Only one end trigger can be submitted per request message. 	C	8	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³												
mbRecurringNoEndDateFlag	E	newOrder	<p>Managed Billing ‘No End Date’ Indicator</p> <ul style="list-style-type: none"> ▪ Valid values: <ul style="list-style-type: none"> Y Schedule recurring transactions for an infinite amount of time. A Y in this field overrides the value, if any, in the mbRecurringEndDate field. N (or blank) Orbital will use the value of the mbRecurringEndDate field to define the recurring end date. ▪ This is the second of three possible recurring end triggers. Only one end trigger can be submitted per request message. 	C	1	A												
mbRecurringMaxBillings	E	newOrder	<p>Managed Billing Max Number of Billings</p> <ul style="list-style-type: none"> ▪ This value defines the maximum number of billings that will be allowed for a recurring billing cycle. ▪ Valid values: 1–999999 ▪ This is the third of three possible recurring end triggers. Only one end trigger can be submitted per request message. 	C	6	N												
mbRecurringFrequency	E	newOrder	<p>Managed Billing Recurring Frequency Pattern</p> <p>This pattern is a subset of a standard CRON expression, comprising 3 fields separated by white space:</p> <table border="1"> <thead> <tr> <th>Field</th><th>Allowed Values</th><th>Allowed Special Chars</th></tr> </thead> <tbody> <tr> <td>Day-of-month</td><td>1–31</td><td>, - * ? / L W</td></tr> <tr> <td>Month</td><td>1–12 or JAN–DEC</td><td>, - * /</td></tr> <tr> <td>Day-of-week</td><td>1–7 or SUN–SAT</td><td>, - * ? / L #</td></tr> </tbody> </table> <p>SEE ALSO For a full discussion of these three fields, the usage of the special characters, and multiple example values, see 3.4.3 Profiles and Managed Billing.</p>	Field	Allowed Values	Allowed Special Chars	Day-of-month	1–31	, - * ? / L W	Month	1–12 or JAN–DEC	, - * /	Day-of-week	1–7 or SUN–SAT	, - * ? / L #	C	Var	A
Field	Allowed Values	Allowed Special Chars																
Day-of-month	1–31	, - * ? / L W																
Month	1–12 or JAN–DEC	, - * /																
Day-of-week	1–7 or SUN–SAT	, - * ? / L #																

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
mbDeferredBillDate	E	newOrder	Managed Billing Deferred Billing Date <ul style="list-style-type: none"> Defines the future date that Orbital will trigger a one-time billing to the associated Profile. This date must be at least one day after the request date (a deferred billing can never take place on the date that the request message is sent to the Orbital system). Format: MMDDYYYY 	C	8	N
txRefNum	E	newOrder	Gateway Transaction Reference Number A unique value is assigned by the Gateway for each transaction. <ul style="list-style-type: none"> The only time this field is used in a New Order is to complete a Return (Refund, Credit) transaction on the card used in the original transaction from which the txRefNum was issued. If this field is submitted with any other type of New Order transaction, it is ignored. If this field is submitted with a Return, the card number and expiration date are no longer required. If no amount is sent, the original amount is refunded. If an amount is sent, it must be less than or equal to the original amount. 	C	40	A
billerReferenceNumber	E	newOrder	Biller Reference Number (PINless Debit BillPay Only) <ul style="list-style-type: none"> Reference Number the Biller (merchant) uses on their system to identify this customer. Conditionally required for PINless Debit. This tag is applicable to PINless Debit BillPay only and not to PINless Debit E-commerce transactions. 	C	25	A
pinlessDebitMerchantUrl	E	newOrder	Merchant URL (PINless Debit E-commerce Only) <ul style="list-style-type: none"> The merchant's Internet address where goods were sold This tag is required for PINless Debit E-commerce only and not to PINless Debit BillPay transactions. Example: www.abccompany.com	C	40	ANS

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
pinlessDebitTxnType	E	newOrder	<p>PINLess Debit Transaction Type</p> <ul style="list-style-type: none"> ▪ When CardBrand = DP, the value in this tag will be used to decide if the merchant wants to process a "PINLess Debit BillPay" or a "PINLess Debit E-commerce" transaction ▪ Allowed values : <ul style="list-style-type: none"> BP ->For PINLess Debit BillPay EC->For PINLess Debit E-commerce ▪ It is a mandatory tag for PINLess Debit E-commerce ▪ It is a mandatory tag for PINLess Debit BillPay(for merchants getting certified to process BillPay transactions post June 2018) ▪ Note: This tag is made backward compatible for existing BillPay merchants. So, Empty/Null value in this tag will be processed as PINLess Debit BillPay transaction only when CardBrand = DP and a valid billerReferenceNumber is sent 	M	2	A
accountUpdaterEligibility	E	newOrder	<p>Account Updater Eligibility Flag</p> <p>This field is used to designate if a customer profile created as part of a New Order should be eligible for Account Updater.</p> <ul style="list-style-type: none"> • This field only applies to Salem (Bin 000001) merchants using the "Designated Profiles" Account Updater setup option. <p>Valid values:</p> <ul style="list-style-type: none"> Y Account Updater requests for this profile may be processed. N Account Updater requests for this profile will not be processed. 	O	1	A
useStoredAAVInd	E	newOrder	<p>Use Stored AAV Indicator</p> <p>This element is conditionally required on recurring payments for International Maestro.</p> <p>Valid values:</p> <ul style="list-style-type: none"> Y Submit the Static AAV stored by Gateway with this transaction. 	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
ecpActionCode	E	newOrder	<p>ECP Action Code</p> <p>This element is conditionally required to extend the transType for additional ECP processing methods.</p> <p>Valid values:</p> <ul style="list-style-type: none"> LO Validate Only ND Validate and Pre-note (Debit)* NC Validate and Verify (Credit) W1 Advanced Verification: Validate / ASV W3 Advanced Verification: Validate / ASV and AOA W4 Advanced Verification: Validate and Deposit / ASV W5 Advanced Verification: Validate and Deposit / ASV and AOA W6 Advanced Verification: Validate and Refund / ASV W7 Advanced Verification: Validate and Refund / ASV and AOA W9 Advanced Verification: Validate and Pre-Note <p>Supported for electronic check processing.</p> <p>*Supported for GBP European Direct Debit (EUDD) processing.</p> <p>See 3.2.5.2 Extended ECP Processing Requirements for more information.</p> <p>See 5.2.5.4 ECP Advanced Verification Processing Requirements for more information.</p>	C	2	A
ecpCheckSerialNumber	E	newOrder	<p>ECP Check Serial Number</p> <p>This value corresponds to the check number on a physical check supplied by the consumer.</p> <p>This value is 9 digits for BIN 000001 merchants and 6 digits for BIN 000002.</p> <p>Must be NULL unless CardBrand = EC and ecpAuthMethod = A or P.</p> <p>See 3.2.5.3 ECP Authorization Methods for more information.</p>	C	Var	N
ecpTerminalCity	E	newOrder	<p>ECP Terminal City</p> <p>This value corresponds to the city of the point of sale the check is processed at.</p> <p>Must be NULL unless CardBrand = EC and ecpAuthMethod = P.</p> <p>See 3.2.5.3 ECP Authorization Methods for more information.</p>	C	4	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
ecpTerminalState	E	newOrder	ECP Terminal State This value corresponds to the city of the point of sale the check is processed at. Must be NULL unless CardBrand = EC and ecpAuthMethod = P. See 3.2.5.3 ECP Authorization Methods for more information.	C	2	A
ecpImageReferenceNumber	E	newOrder	ECP Check Image Reference Number Image reference number associated with a check. Must be NULL unless CardBrand = EC and ecpAuthMethod = P. See 3.2.5.3 ECP Authorization Methods for more information.	C	32	A/N
customerAni	E	newOrder	Customer Automatic Number Identification The ANI specified phone number that the customer used to place the order.	O	10	N
avsPhoneType	E	newOrder	Customer Telephone Type Indicator Valid values: D Day H Home N Night W Work This value is defaulted to H if any phone number is present and this element is either not present or null filled.	O	1	A
avsDestPhoneType	E	newOrder	Bill Me Later Cardholder Destination Telephone Type Indicator Valid values: D Day H Home N Night W Work This value is defaulted to H if any phone number is present and this element is either not present or null filled.	O	1	A
customerEmail	E	newOrder	Cardholder E-mail Address	O	50	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
customerIpAddress	E	newOrder	<p>Customer IP Address</p> <p>The single source IP address used by the customer to request a payment.</p> <p>Supports IPv4 or IPv6 formats. Punctuation marks are allowed.</p>	O	45	AN
emailAddressSubtype	E	newOrder	<p>Customer Email Address Subtype</p> <p>Used to indicate the type of email address in the <code>customerEmail</code> element.</p> <p>Valid values:</p> <ul style="list-style-type: none"> B Bill To/Buyer Email Address G Giftee Email Address <p>This value is defaulted to B if an email address is present and this element is not present or null filled.</p>	O	1	A
customerBrowserName	E	newOrder	<p>Customer Browser Type</p> <p>Used to indicate the type of web browser used by the customer to initiate the request.</p> <p>Example: MOZILLA/4.0 (COMPATIBLE; MSIE 5.0; WINDOWS 95</p>	O	60	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
shippingMethod	E	newOrder	<p>Method of Shipping To A Customer</p> <p>Valid values:</p> <ul style="list-style-type: none"> C Lowest Cost D Carrier Designated by Customer E Electronic Delivery* G Ground* I International M Military N Next Day or Overnight* O Other P Store Pickup* S Same Day* T Two Day Service* W Three Day Service* <p>For American Express, use only values marked with an asterisk.</p>	O	1	A
fraudAnalysis	E	newOrder	<p>Parent Element for Safetech Fraud Analysis Elements</p> <p>This XML element is the parent for all data used to request a fraud analysis as part of the transaction.</p>	C	N/A	N/A
fraudScoreIndicator	E	fraudAnalysis	<p>Fraud Analysis Type Indicator</p> <p>Used to request the type of fraud analysis performed on the transaction. The value in this field directly determines the scope of elements returned in the response message.</p> <p>Valid values:</p> <ul style="list-style-type: none"> 1 Short Form Request 2 Long Form Request 	C	1	N
rulesTrigger	E	fraudAnalysis	<p>Fraud Analysis Rules Return Trigger</p> <p>Determines whether the Safetech Agent Web Console rules are returned.</p> <p>Valid values:</p> <ul style="list-style-type: none"> Y Triggered rules are returned N Triggered rules are not returned 	O	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³				
safetechMerchantID	E	fraudAnalysis	<p>Safetech Merchant ID</p> <p>A value assigned by Chase Paymentech when a merchant is enabled for the Safetech service.</p> <p>This is not the same value as Transaction Division number found in the MerchantID element.</p> <p>If no value is present, a default value will be used if available. If no default is stored, the request will generate an error.</p>	O	6	A/N				
kaptchaSessionID	E	fraudAnalysis	<p>Kaptcha Session ID</p> <p>A merchant generated session ID for this fraud scoring request.</p> <p>The Safetech system recommends this value be unique for 30 days, or the Fraud Score results may not be accurate.</p>	O	32	A				
websiteShortName	E	fraudAnalysis	<p>Short Name for the Merchant's Website</p> <p>This value is used by the Safetech service for fraud score rules.</p>	O	8	A				
cashValueOfFencibleItems	E	fraudAnalysis	<p>Cash Value of Fencible Items</p> <p>The cash value of any fencible items in the order.</p> <p>This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	O	12	N				
customerDOB	E	fraudAnalysis	<p>Customer Date of Birth</p> <p>Format: YYYY-MM-DD (Including dashes)</p> <p>This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	O	10	A/N				
customerGender	E	fraudAnalysis	<p>Customer Gender</p> <p>Valid values:</p> <table style="margin-left: 40px;"> <tr> <td>F</td> <td>Female</td> </tr> <tr> <td>M</td> <td>Male</td> </tr> </table> <p>This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	F	Female	M	Male	O	1	A
F	Female									
M	Male									

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
customerDriverLicense	E	fraudAnalysis	<p>Customer Driver's License Number</p> <p>U.S. Driver's License number only.</p> <p>The Safetech service recommends this value for fraud scoring of Electronic Check (ECP) requests.</p> <p>This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	O	32	A
customerID	E	fraudAnalysis	<p>Customer ID</p> <p>A merchant generated ID for a specific customer.</p> <p>This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	O	32	A
customerIDCreationTime	E	fraudAnalysis	<p>Customer ID Creation Time</p> <p>The time the value used in the CustomerID element was created by the merchant.</p> <p>Format: Unix Epoch</p> <p>This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	O	10	N
kttVersionNumber	E	fraudAnalysis	<p>User Defined and Shopping Cart Format Indicator</p> <p>This element must contain a value of "1" as of the release of this specification if the kttDataLength and KTTDataString elements are populated.</p>	C	1	N
kttDataLength	E	fraudAnalysis	<p>User Defined or Shopping Cart Format Data Length</p> <p>Indicates the length of the value of the kttDataString element.</p> <p>This must be a 4 digit number no less than 0001 and no greater than 0999.</p>	C	4	N
kttDataString	E	fraudAnalysis	<p>User Defined or Shopping Cart Format Data String</p> <p>This field can be populated with user-defined Safetech fields, Shopping Cart Data, or both.</p> <p>Please see Safetech Requests: Special notes on KTT elements for additional information.</p>	C	Var	A/N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
cardIndicators	E	newOrder	<p>Enhanced Authorization: Card Type Indicators</p> <p>This element is optionally available to BIN 000001 merchants, to request additional response information.</p> <p>This value is ignored on unsupported transactions. See 3.4.8.1 for more information.</p> <p>Valid values:</p> <ul style="list-style-type: none"> Y Card Indicators should be returned, if available. N Card Indicators should not be returned 	O	1	A
euddBankBranchCode	E	newOrder	<p>EUDD Bank Branch Code</p> <p>Conditionally required for European Direct Debit transactions.</p> <p>Used when euddIBAN is not present.</p> <p>Required for the following countries: Greece, Italy, Monaco, Portugal, and Spain. Optional for other countries.</p>	C	10	A
euddIBAN	E	newOrder	<p>Customer's International Bank Account Number</p> <p>Conditionally required for European Direct Debit transactions.</p> <p>If populated, the Bank Identifier Code (BIC) is required.</p>	C	34	A
euddBIC	E	newOrder	<p>Customer's Bank Identifier Code (BIC)</p> <p>Conditionally required for European Direct Debit transactions.</p> <p>If populated, the International Bank Account Number (IBAN) is required.</p> <p>This field is populated with an 8 or 11 character value.</p>	C	11	A
euddMandateSignatureDate	E	newOrder	<p>EUDD Mandate Signature Date</p> <p>The date the customer signed the mandate.</p> <p>This field is strongly recommended for EUDD transactions, and Mandatory for GBP Prenote requests.</p> <p>Mandate ID and Mandate Type are required if Mandate Signature Date is present.</p> <p>See Mandate Information for more details.</p>	C	8	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
euddMandateID	E	newOrder	<p>EUDD Mandate ID</p> <p>The customer's mandate identification number.</p> <p>This field is strongly recommended for EUDD transactions, and Mandatory for GBP Prenote requests.</p> <p>Mandate Signature Date and Mandate Type are required if Mandate ID is present.</p> <p>See Mandate Information for more details.</p>	C	Varies	A
euddMandateType	E	newOrder	<p>EUDD Type of Mandate</p> <p>Valid values:</p> <ul style="list-style-type: none"> 1 First* 2 Recurrence* 3 Last* 4 One-off* 5 New 6 Cancel 7 Change from manual to electronic " " Blank (valid only if all mandate info is blank)* <p>For EUR (Euro) currency merchants, only values with an Asterisk are supported.</p> <p>This field is strongly recommended for EUDD transactions, and Mandatory for GBP Prenote requests.</p> <p>Mandate Signature Date and Mandate ID are required if Mandate Type is present.</p> <p>See Mandate Information for more details.</p>	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
txnSurchargeAmt	E	newOrder	<p>Transaction Surcharge Amount The portion of the transaction amount, up to 4%, which is a surcharge amount. Supported for Visa, Mastercard, Discover, Diners, and ChaseNet transactions only.</p> <p>NOTE This element is informational only. The Transaction Surcharge Amount does not increase the amount of the authorization. Surcharge is not supported on Account Verifications.</p>	O	8	N
avFirstName	E	newOrder	<p>Advanced Verification First Name • The first name of the checking account owner. • This field is required when avLastName is supplied, or the transaction rejects with respCode of F1 (Missing Name). • This field is required when ecpActionCode = (W3, W5, W7 or W9), and avBusinessName is not supplied, or the transaction rejects with respCode of F1 (Missing Name). • Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information.</p>	C	40	A
avLastName	E	newOrder	<p>Advanced Verification Last Name • The last name of the checking account owner. • This field is required when avFirstName field is supplied, or the transaction rejects with respCode of F1 (Missing Name). • This field is required when ecpActionCode = (W3, W5, W7 or W9), and avBusinessName field is not supplied, or the transaction rejects with respCode of F1 (Missing Name). • Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information.</p>	C	40	A
avMiddleName	E	newOrder	<p>Advanced Verification Middle Name • The middle initial or middle name of the checking account owner. • Note: If middle initial, do not use a period. Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information.</p>	C	40	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avBusinessName	E	newOrder	Advanced Verification Business Name <ul style="list-style-type: none"> The business name of the checking account owner. This field is required when <code>ecpActionCode = (W3, W5, W7 or W9)</code>, and both <code>avFirstName</code> and <code>avLastName</code> are empty, or the transaction rejects with <code>respCode</code> of F1 (Missing Name). Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	87	A
avAddressLine1	E	newOrder	Advanced Verification Address, Line 1 <ul style="list-style-type: none"> The first line of the checking account owner's address. This field must be blank when <code>ecpActionCode = W3, W5, W7 or W9</code> and <code>avFirstName</code>, <code>avLastName</code>, and <code>avBusinessName</code> are all sent, or the transaction rejects with a <code>respCode</code> of 30 (Invalid Value in Message). Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	40	A
avAddressLine2	E	newOrder	Advanced Verification Address, Line 2 <ul style="list-style-type: none"> The second line of the checking account owner's address. This field must be blank when <code>ecpActionCode = W3, W5, W7 or W9</code> and <code>avFirstName</code>, <code>avLastName</code>, and <code>avBusinessName</code> are all sent, or the transaction rejects with a <code>respCode</code> of 30 (Invalid Value in Message). Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	40	A
avCity	E	newOrder	Advanced Verification City <ul style="list-style-type: none"> The city of the checking account owner's address. This field must be blank when <code>ecpActionCode = W3, W5, W7 or W9</code> and <code>avFirstName</code>, <code>avLastName</code>, and <code>avBusinessName</code> are all sent, or the transaction rejects with a <code>respCode</code> of 30 (Invalid Value in Message). Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	25	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avIDState	E	newOrder	Advanced Verification ID State <ul style="list-style-type: none"> • State of issue of the checking account owner's presented ID. • This field must be blank when <code>ecpActionCode = W3, W5, W7 or W9</code> and <code>avFirstName</code>, <code>avLastName</code>, and <code>avBusinessName</code> are all sent, or the transaction rejects with a <code>respCode</code> of 30 (Invalid Value in Message). • Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	6	A
avZip	E	newOrder	Advanced Verification Zip Code <ul style="list-style-type: none"> • The zip code of the checking account owner's address. Valid zip code formats: NNNNN NNNNNNNNN NNNNN-NNNN • This field must be blank when <code>ecpActionCode = W3, W5, W7 or W9</code> and <code>avFirstName</code>, <code>avLastName</code>, and <code>avBusinessName</code> are all sent, or the transaction rejects with a <code>respCode</code> of 30 (Invalid Value in Message). • Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	10	A
avPhoneType	E	newOrder	Advanced Verification Phone Type <ul style="list-style-type: none"> • The phone type of the checking account owner's phone number. • Must be provided when <code>avPhoneNumber</code> is present. Valid values: H – Home W – Work " " – Blanks • Home phone (H) is the default value. • This field must be blank when <code>ecpActionCode = W3, W5, W7 or W9</code> and <code>avFirstName</code>, <code>avLastName</code>, and <code>avBusinessName</code> are all sent, or the transaction rejects with a <code>respCode</code> of 30 (Invalid Value in Message). • Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avPhoneNumber	E	newOrder	Advanced Verification Phone Number <ul style="list-style-type: none"> The phone number of the checking account owner. Must be provided when avPhoneType is present. This field must be blank when ecActionCode = W3, W5, W7 or W9 and avFirstName, avLastName, and avBusinessName are all sent, or the transaction rejects with a respCode of 30 (Invalid Value in Message). Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	10	A
avCheckSerialNumber	E	newOrder	Advanced Verification Check Serial Number <ul style="list-style-type: none"> The serial number of the checking account owner's check. This field is required when ecActionCode = W1 or W3 and ecAuthMethod = A or P. Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	15	N
avSSNTIN	E	newOrder	Advanced Verification SSN TIN <ul style="list-style-type: none"> Last four digits of the checking account owner's Social Security number or of the business Tax Identification Number. This field must be blank when ecActionCode = W3, W5, W7 or W9 and avFirstName, avLastName, and avBusinessName are all sent, or the transaction rejects with a respCode of 30 (Invalid Value in Message). Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	4	A
avDOB	E	newOrder	Advanced Verification DOB <ul style="list-style-type: none"> Date of Birth of the checking account owner. This field must be blank when ecActionCode = W3, W5, W7 or W9 and avFirstName, avLastName, and avBusinessName are all sent, or the transaction rejects with a respCode of 30 (Invalid Value in Message). Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	8	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avIDType	E	newOrder	<p>Advanced Verification ID Type</p> <ul style="list-style-type: none"> Type of identification associated with the account owner identification number Must be provided when avIDNumber is present. <p>Valid values:</p> <ul style="list-style-type: none"> 0 – Driver's License USA 1 – Military USA 2 – Passport 3 – Resident Alien ID 4 – State identification 5 – Student identification 6 – Driver's License foreign 7 – Driver's License Canada 8 – Driver's License Mexico 9 – Other primary ID foreign A – Matricula Consular card B – South America Cedula No. " " – Blank <ul style="list-style-type: none"> This field must be blank when <code>ecpActionCode = W3, W5, W7 or W9</code> and <code>avFirstName</code>, <code>avLastName</code>, and <code>avBusinessName</code> are all sent, or the transaction rejects with a <code>respCode</code> of 30 (Invalid Value in Message). Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	1	A
avIDNumber	E	newOrder	<p>Advanced Verification ID Number</p> <ul style="list-style-type: none"> Identification number of the checking account owner's presented ID. Must be provided when <code>avIDType</code> is present. This field must be blank when <code>ecpActionCode = W3, W5, W7 or W9</code> and <code>avFirstName</code>, <code>avLastName</code>, and <code>avBusinessName</code> are all sent, or the transaction rejects with a <code>respCode</code> of 30 (Invalid Value in Message). Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	28	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avState	E	newOrder	<p>Advanced Verification State</p> <ul style="list-style-type: none"> The state of the checking account owner's address. This field must be blank when <code>ecpActionCode = W3, W5, W7 or W9</code> and <code>avFirstName, avLastName, and avBusinessName</code> are all sent, or the transaction rejects with a <code>respCode</code> of 30 (Invalid Value in Message). Used only for Advanced Verification Electronic Check transactions with Account Owner Authentication. See 5.2.5.4 ECP Advanced Verification for more information. 	C	2	A
fxOptOutInd	E	newOrder	<p>Opt-out Indicator</p> <p>Indicates if the merchant is opting out or in for special rate processing and that the default currency conversion rates are used.</p> <p>Valid values:</p> <ul style="list-style-type: none"> Y = Merchant is opting out of the processing for custom IB rates. N = Default value. Merchant is opting in for the processing of custom IB rates. <p>Notes: If the <code>fxOptOutInd</code> = "Y", then all of the subsequent Access FX fields can be populated with spaces or those may not be populated at all. If the other Access FX elements are populated with <code>fxOptOutInd</code> = 'Y' then the values of other Access FX elements are dropped by Orbital without returning an error.</p> <p>If merchant is enabled for Access FX and not sending <code>fxOptOutInd</code> then proc status <code>19792: FX Missing Data</code> is returned.</p> <p>If merchant is enabled for Access FX and if merchant sends invalid value of <code>fxOptOutInd</code> then proc status <code>19791: Invalid value</code> is returned.</p> <p>If merchant is not enabled for Access FX and if merchant sends <code>fxOptOutInd</code> then proc status <code>19789: FX Merchant is not eligible</code> is returned.</p> <p>Required for Access FX transaction.</p> <p>This field can only be submitted for Access FX transaction and if sent without enabling Access FX, the value is dropped.</p>	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
fxRateHandlingInd	E	newOrder	<p>Rate Handling Indicator Indicator to allow the merchant to determine the processing of the Rate ID. If there is an issue with the Rate ID, the transaction can either be rejected or it can use a default rate ID for Deposit processing.</p> <p>Valid values:</p> <ul style="list-style-type: none"> D = Default Rate ID is used if the Rate ID cannot be determined. R = Reject the transaction if the Rate ID cannot be determined. <p>Notes: If the fxOptOutInd field = Y, this field can be blank. If the fxOptOutInd field = N", this field is mandatory.</p> <p>If the fxOptOutInd field is Y, but an invalid value is sent in the fxRateHandlingInd field, the transaction rejects with proc status 19791: Invalid value.</p> <p>If merchant is enabled for FX and sends fxOptOutInd = 'N' with blank/null value of fxRateHandlingInd then 19790: <i>FX Optout Indicator</i> and Rate Handling Indicator both must be present is returned.</p> <p>This field can only be submitted for Access FX transaction and if sent without enabling Access FX, the value is dropped.</p>	C	1	A
fxRateID	E	newOrder	<p>Rate Identifier Identifier used to indicate the exchange rate that is being used for the transaction.</p> <p>This field can only be submitted for Access FX transaction and if sent without enabling Access FX, the value is dropped.</p>	O	37	A
fxExchangeRate	E	newOrder	<p>Exchange Rate Exchange Rate is populated from the Rate file and is used for the currency conversion. Include decimal as sent Left Justified/Space filled.</p> <p>This field can only be submitted for Access FX transaction and if sent without enabling Access FX, the value is dropped.</p>	O	20	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
fxPresentmentCurrency	E	newOrder	Presentment Currency Presentment Currency involved in the transaction. Values must be in ISO Format. For example: ISO Numeric value for Euro is 978 This field can only be submitted for Access FX transaction and if sent without enabling Access FX, the value is dropped.	O	3	N
fxSettlementCurrency	E	newOrder	Settlement Currency Settlement Currency involved for Settlement. Values must be in ISO format. For example: ISO Numeric value for Euro is 978 This field can only be submitted for Access FX transaction and if sent without enabling Access FX, the value is dropped.	O	3	N
mitMsgType	E	newOrder	CIT/MIT Message Code Indicates the message type to be used for the message type records For Example: CSTO/CGEN/CINS/CEST/CUSE/CREC for customer initiated codes MUSE/MINS/MRAU/MREC/MRSB for Merchant Initiated transactions	C	4	A
mitStoredCredentialInd	E	newOrder	Stored Credential Flag Indicates that the cardholder's credentials are on-file with the merchant. Valid values are: Y – The cardholder's credentials are on-file with the merchant N – The cardholder's credentials are not on-file with the merchant " " – Blank	O	1	A
mitSubmittedTransactionID	E	newOrder	Submitted CIT/MIT Transaction ID in the Request The submitted Transaction ID returned to the merchant from a previous authorization request in a series of transaction. Transaction ID is not sent for CIT transactions, but it is a required value for MIT transactions <i>(This tag is not required for merchants/clients that use Orbital's Profile Management service. This is only required for merchants/clients who store and manage their customer payment credentials outside of Orbital)</i>	C	15	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
rtauOptOutInd	E	newOrder	<p>Opt out of Real Time Account Updater</p> <p>Identifies if the merchant is Opting Out of RTAU from happening.</p> <p><u>Valid Values:</u></p> <p>Y (Enabled/True) Merchant is opting out of RTAU. RTAU will not happen. Orbital will send this indicator to Stratus informing not to perform RTAU for that particular transaction.</p> <p>N (Blank/Null) by default. All transactions will be eligible for RTAU.</p> <p><u>Note:</u> Bin 000001 (Stratus) merchants only</p> <p>In Virtual Terminal, this field will be displayed as “Opt out of Real Time Account Updater”</p>	O	1	A

4.1.5 Profile Add Request Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³				
customerProfileAdd	E	transRequest	Request Type Used to Add a New Profile to the Orbital Gateway	M	N/A	N/A				
BatchRequestNo	A	customerProfileAdd	<p>Sequential Presentation of the Request in the Batch File</p> <p>The value for the first Profile Add request should be one higher than that of the last New Order request.</p> <p>The transactions in the file are numbered sequentially starting with Reversals, then Mark for Captures, then New Orders, and so on.</p>	M	6	N				
bin	E	customerProfileAdd	<p>Transaction Routing Definition</p> <p>Assigned by Chase Paymentech.</p> <table> <tr> <td>000001</td> <td>Stratus</td> </tr> <tr> <td>000002</td> <td>Tandem (PNS)</td> </tr> </table>	000001	Stratus	000002	Tandem (PNS)	M	6	N
000001	Stratus									
000002	Tandem (PNS)									

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
merchantID	E	customerProfileAdd	<p>Gateway merchant account number assigned by Chase Paymentech</p> <p>This account number will match that of your host platform:</p> <ul style="list-style-type: none"> ▪ BIN 000001: 6-digit Salem Division Number ▪ BIN 000002: 12-digit PNS Merchant ID 	M	15	N
customerName	E	customerProfileAdd	<p>Customer Billing Name</p> <p>This is the equivalent to the <avsnName> element used on New Order requests.</p>	O	30	A
customerRefNum	E	customerProfileAdd	<p>Sets the Customer Reference Number that will be used to utilize a Customer Profile on all future Orders</p> <ul style="list-style-type: none"> ▪ Mandatory if customerProfileFromOrderInd = s (use the customerRefNum element). ▪ If customerProfileFromOrderInd = a, the Customer Reference Number will be defined by the Orbital Gateway, and any value passed in this element will be ignored. ▪ Given that this value can be the same as the Order Number, the valid characters for this field follow the same convention as the Order ID element and include: <ul style="list-style-type: none"> - abcdefghijklmnopqrstuvwxyz - ABCDEFGHIJKLMNOPQRSTUVWXYZ - 0123456789 - , \$ @ & and a space character, though the space character cannot be the leading character - Please note that all alphabetic characters are stored in uppercase by the Orbital system. Uppercase and lowercase values cannot be used to differentiate Customer Reference Numbers. 	C	22	A
customerAddress1	E	customerProfileAdd	<p>Cardholder Billing Address line 1</p> <p>This is the equivalent to the <avsnAddress1> element used on New Order requests.</p>	O	30	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
customerAddress2	E	customerProfileAdd	Cardholder Billing Address line 2 This is the equivalent to the <avAddress2> element used on New Order requests.	O	30	A
customerCity	E	customerProfileAdd	Cardholder Billing City This is the equivalent to the <avCity> element used on New Order requests.	O	20	A
customerState	E	customerProfileAdd	Cardholder Billing State This is the equivalent to the <avState> element used on transactional requests.	O	2	A
customerZIP	E	customerProfileAdd	Cardholder Billing Address Zip Code <ul style="list-style-type: none"> ▪ All AVS requests must minimally include the 5-digit Zip Code. ▪ If sending Zip Code + 4, please separate with a hyphen (-). ▪ Conditionally required if Customer Profile Action Type = Create. ▪ This is the equivalent to the <avZip> element used on New Order requests. 	C	10	A
customerEmail	E	customerProfileAdd	Cardholder E-mail Address <ul style="list-style-type: none"> ▪ Optional if Customer Profile Action Type = Create or Update. 	O	50	A
customerPhone	E	customerProfileAdd	Cardholder Telephone Number AAAAEEENNNNXXXX, where AAA = Area Code EEE = Exchange NNNN = Number XXXX = Extension <ul style="list-style-type: none"> ▪ Optional if Customer Profile Action Type = Create or Update. ▪ There is no equivalent to this field available on New Order requests. 	O	14	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
customerCountryCode	E	customerProfileAdd	<p>Cardholder Billing Address Country Code</p> <ul style="list-style-type: none"> ▪ Valid values: <ul style="list-style-type: none"> US United States CA Canada GB Great Britain UK United Kingdom " " Blank for all other countries ▪ Required if processing a U.K.-based address. ▪ This is the equivalent to the <avscountryCode> element used on New Order requests. 	O	2	A
customerProfileOrderOverrideInd	E	customerProfileAdd	<p>Defines if any Order Data can be pre-populated from the Customer Reference Number (customerRefNum)</p> <ul style="list-style-type: none"> NO No mapping to order data OI Use customerRefNum for orderID OD Use customerRefNum for comments OA Use customerRefNum for orderID and comments 	M	2	A
customerProfileFromOrderInd	E	customerProfileAdd	<p>Customer Profile Number Generation Options</p> <ul style="list-style-type: none"> A Auto-Generate the customerRefNum S Use customerRefNum element 	M	1	A
orderDefaultDescription	E	customerProfileAdd	<p>Order Description</p> <p>The value submitted in this field will set a default value for the <comments> element used on New Order requests that use this profile.</p>	O	64	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
orderDefaultAmount	E	customerProfileAdd	<p>Transaction Amount</p> <p>This is the equivalent to the <amount> element used on New Order requests.</p> <p>Keys:</p> <ul style="list-style-type: none"> ▪ Implied decimal including those currencies that are a zero exponent. For example, both \$100.00 (an exp. of 2) and ¥100 (an exp. of 0) should be sent as: <pre><orderDefaultAmount>10000 </orderDefaultAmount></pre> <p>NOTE Currency and currency code are not passed in the request. It is implied by the Currency setup for the Merchant ID.</p>	O	12	N
customerAccountType	E	customerProfileAdd	<p>Customer's Payment Type to save in the Profile</p> <p>CC Credit Card DP PINless Debit EC Electronic Check ED European Direct Debit (EUDD) IM International Maestro CZ ChaseNet Credit Card CR ChaseNet Signature Debit AA Auto Assign (only available for ChaseNet merchants)</p>	M	2	A
status	E	customerProfileAdd	<p>Profile Status Flag</p> <p>This field is used to set the status of a Customer Profile.</p> <p>A Active I Inactive MS Manual Suspend</p>	C	Var	A
ccAccountNum	E	customerProfileAdd	<p>Customer Credit Card Number</p> <p>Required if Customer Account Type = Credit Card.</p>	C	19	AN

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³						
ccExp	E	customerProfileAdd	<p>Customer Credit Card Expiration Date</p> <ul style="list-style-type: none"> ▪ Format: MMYY ▪ Required if Customer Account Type = Credit Card. ▪ Salem (BIN 000001) allows a <i>blank</i> to be submitted when no known expiration date exists. There are three valid mechanisms for submitting a <i>Blank</i> expiration date to the Salem Host using Orbital: <ul style="list-style-type: none"> - null-fill this XML element: <Exp/> - Send four spaces: <Exp> </Exp> - Zero-fill this XML element: <Exp>0000</Exp> <p>NOTE Please discuss this feature with your certification analyst before implementing.</p>	C	4	N						
ecpCheckDDA	E	customerProfileAdd	<p>ECP (DDA) Account Number</p> <p>Required if the Customer Account Type = EC.</p>	C	17	A						
ecpBankAcctType	E	customerProfileAdd	<p>Deposit Account Type</p> <p>Required if the Customer Account Type = EC.</p> <table style="margin-left: 20px;"> <tr> <td>C</td> <td>Consumer Checking (US or Canadian)</td> </tr> <tr> <td>S</td> <td>Consumer Savings (US Only)</td> </tr> <tr> <td>X</td> <td>Commercial Checking (US Only)</td> </tr> </table>	C	Consumer Checking (US or Canadian)	S	Consumer Savings (US Only)	X	Commercial Checking (US Only)	C	1	A
C	Consumer Checking (US or Canadian)											
S	Consumer Savings (US Only)											
X	Commercial Checking (US Only)											
ecpCheckRT	E	customerProfileAdd	<p>Bank Routing and Transit Number for the Customer</p> <p>Required if the Customer Account Type = EC.</p> <p>NOTES:</p> <ul style="list-style-type: none"> ▪ All US Bank Routing Numbers are 9 digits. ▪ All Canadian Bank Routing Numbers are 8 digits. ▪ Formatted FFFBBBBB where F is Financial Institution and B is Branch Number ▪ Cannot include spaces " " or dashes "-" 	C	9	N						

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
ecpDelvMethod	E	customerProfileAdd	<p>ECP Payment Delivery Method</p> <ul style="list-style-type: none"> ▪ Required if the Customer Account Type = EC. ▪ This field indicates the preferred manner to deposit the transaction: <ul style="list-style-type: none"> B Best Possible Method (US Only) Chase Paymentech utilizes the method that best fits the situation. If the RDFI is not an ACH participant, a facsimile draft is created. This should be the default value for this field. A ACH (US or Canadian) Deposit the transaction by ACH only. If the RDFI is not an ACH participant, the transaction is rejected. 	C	1	A
switchSoloCardStartDate	E	customerProfileAdd	<p>Switch/Solo Card Activation Date</p> <ul style="list-style-type: none"> ▪ Required if the Customer Account Type = SW. ▪ Format: MMYY 	O	4	N
switchSoloIssueNum	E	customerProfileAdd	<p>Customer Switch/Solo Card Issue Number</p> <ul style="list-style-type: none"> ▪ Required if the Customer Account Type = SW. ▪ Switch/Solo incremental counter for lost or replacement cards. 	O	2	N
mbType	E	customerProfileAdd	<p>Managed Billing Type</p> <ul style="list-style-type: none"> ▪ Indicates the type of Managed Billing the merchant is participating in: <ul style="list-style-type: none"> R Recurring D Deferred ▪ The value submitted must be in agreement with the type of Managed Billing the merchant is configured for at Chase Paymentech. ▪ This field serves to notify the Orbital system that the transaction is a Managed Billing transaction. If this field is not sent with a Managed Billing transaction, all other Managed Billing fields are ignored. 	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
mbOrderIDGenerationMethod	E	customerProfileAdd	<p>Managed Billing Order ID Generation Method</p> <ul style="list-style-type: none"> ▪ This value is used to set the method that Orbital will use to generate the Order ID for any Managed Billing transactions. ▪ This field does NOT influence the Order ID for stand-alone transactions initiated by the merchant, VT transactions, and so on. ▪ Valid values: <ul style="list-style-type: none"> IO Use the Customer Reference Number (Profile ID). This value is made up of the capital letters I and O, not numbers. DI Dynamically generate the Order ID. This value is made up of the capital letters D and I, no numbers. 	C	2	A
mbRecurringStartDate	E	customerProfileAdd	<p>Managed Billing Recurring Start Date</p> <ul style="list-style-type: none"> ▪ Defines the future date that Orbital will begin a recurring billing cycle to the associated Profile. ▪ To allow the Managed Billing engine to properly calculate and schedule all billings, this date must be at least one day after the request date (a recurring billing cycle can never begin on the date that the request message is sent to the Orbital system). ▪ Format: MMDDYYYY 	C	8	N
mbRecurringEndDate	E	customerProfileAdd	<p>Managed Billing Recurring End Date</p> <ul style="list-style-type: none"> ▪ Defines the future date that Orbital will end a recurring billing cycle to the associated Profile. ▪ Format: MMDDYYYY ▪ This is the first of three possible recurring end triggers. Only one end trigger can be submitted per request message. 	C	8	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
mbRecurringNoEndDateFlag	E	customerProfileAdd	Managed Billing 'No End Date' Indicator <ul style="list-style-type: none"> ▪ Valid values: <ul style="list-style-type: none"> Y Schedule recurring transactions for an infinite amount of time. A Y in this field overrides the value, if any, in the mbRecurringEndDate field. N (or blank) Orbital will use the value of the mbRecurringEndDate field to define the recurring end date. ▪ This is the second of three possible recurring end triggers. Only one end trigger can be submitted per request message. 	C	1	A
mbRecurringMaxBillings	E	customerProfileAdd	Managed Billing Max Number of Billings <ul style="list-style-type: none"> ▪ This value defines the maximum number of billings that will be allowed for a recurring billing cycle. ▪ Valid values: 1-999999 ▪ This is the third of three possible recurring end triggers. Only one end trigger can be submitted per request message. 	C	6	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³												
mbRecurringFrequency	E	customerProfileAdd	<p>Managed Billing Recurring Frequency Pattern This pattern is a subset of a standard CRON expression, comprising 3 fields separated by white space:</p> <table border="1"> <thead> <tr> <th>Field</th><th>Allowed Values</th><th>Allowed Special Chars</th></tr> </thead> <tbody> <tr> <td>Day-of-month</td><td>1–31</td><td>, - * ? / L W</td></tr> <tr> <td>Month</td><td>1–12 or JAN–DEC</td><td>, - * /</td></tr> <tr> <td>Day-of-week</td><td>1–7 or SUN–SAT</td><td>, - * ? / L #</td></tr> </tbody> </table> <p>SEE ALSO For a full discussion of these three fields, the usage of the special characters, and multiple example values, see 3.4.3 Profiles and Managed Billing.</p>	Field	Allowed Values	Allowed Special Chars	Day-of-month	1–31	, - * ? / L W	Month	1–12 or JAN–DEC	, - * /	Day-of-week	1–7 or SUN–SAT	, - * ? / L #	C	Var	A
Field	Allowed Values	Allowed Special Chars																
Day-of-month	1–31	, - * ? / L W																
Month	1–12 or JAN–DEC	, - * /																
Day-of-week	1–7 or SUN–SAT	, - * ? / L #																
mbDeferredBillDate	E	customerProfileAdd	<p>Managed Billing Deferred Billing Date</p> <ul style="list-style-type: none"> Defines the future date that Orbital will trigger a one-time billing to the associated Profile. This date must be at least one day after the request date (a deferred billing can never take place on the date that the request message is sent to the Orbital system). Format: MMDDYYYY 	C	8	N												

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
sDMerchantName	E	customerProfileAdd	<p>Soft Descriptor Merchant Name</p> <ul style="list-style-type: none"> ▪ Required for Soft Descriptors. ▪ The Merchant Name field should be what is most recognizable to the cardholder (Company name or trade name). The actual length of this field is conditionally tied to Host and the Size of the sDProductDescription field used. <p>Stratus:</p> <ul style="list-style-type: none"> ▪ CREDIT – Three options, which conditionally affect the sDProductDescription: <ul style="list-style-type: none"> - Max 3 bytes - Max 7 bytes - Max 12 bytes ▪ ECP: <ul style="list-style-type: none"> - Max 15 bytes <p>Tandem:</p> <ul style="list-style-type: none"> ▪ Max 25 bytes. 	C	25	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
sDProductDescription	E	customerProfileAdd	<p>Soft Descriptor Product Description</p> <ul style="list-style-type: none"> ▪ Required for Soft Descriptors. ▪ Provides an accurate description. <p>Stratus:</p> <ul style="list-style-type: none"> ▪ CREDIT: <ul style="list-style-type: none"> - If softDescMercName = 3 bytes, then Max = 18 bytes - If softDescMercName = 7 bytes, then Max = 14 bytes - If softDescMercName = 12 bytes, then Max = 9 bytes ▪ ECP: <ul style="list-style-type: none"> - 10 bytes Max <p>Tandem:</p> <ul style="list-style-type: none"> ▪ This field will not show on Cardholder statements for Tandem Merchants. 	C	18	A
sDMerchantCity	E	customerProfileAdd	<p>Soft Descriptor Merchant City</p> <ul style="list-style-type: none"> ▪ Tag conditionally required for Soft Descriptors. ▪ Merchant City for Retail. Field required, but should be null-filled if any Soft Descriptor data is submitted. 	C	13	A
sDMerchantPhone	E	customerProfileAdd	<p>Soft Descriptor Merchant Phone</p> <ul style="list-style-type: none"> ▪ Only one of the location Soft Descriptor values should be sent (Phone, URL, or E-mail); all others should be null-filled. ▪ This field will not show on Cardholder statements for Tandem Merchants. <p>Valid Formats:</p> <ul style="list-style-type: none"> ▪ NNN-NNN-NNNN ▪ NNN-AAAAAAA 	C	12	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
sDMerchantEmail	E	customerProfileAdd	Soft Descriptor Merchant E-mail <ul style="list-style-type: none"> ▪ Only one of the location Soft Descriptor values should be sent (Phone, URL, or E-mail); all others should be null-filled. ▪ This field will not show on Cardholder statements for Tandem Merchants. 	C	13	A
sDMerchantURL	E	customerProfileAdd	Soft Descriptor Merchant URL <ul style="list-style-type: none"> ▪ Only one of the location Soft Descriptor values should be sent (Phone, URL, or E-mail); all others should be null-filled. ▪ This field will not show on Cardholder statements for Tandem Merchants. 	C	13	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
euddCountryCode	E	customerProfileAdd	European Direct Debit Country Code <ul style="list-style-type: none"> ▪ Customer's Country Code. ▪ Valid country codes: <ul style="list-style-type: none"> AT Austria BE Belgium CY Cyprus DE Germany ES Spain FI Finland FR France GB United Kingdom GR Greece IE Ireland IT Italy LU Luxemborg MC Monaco MT Malta NL Netherlands PT Portugal SI Slovenia SK Slovak Republic ▪ Conditionally required for European Direct Debit. 	C	2	A
euddBankSortCode	E	customerProfileAdd	European Direct Debit Bank Sort Code <ul style="list-style-type: none"> ▪ Customer's Bank Sort code. ▪ Used when euddIBAN is not present. ▪ Optional for Luxemborg. Not used for Belgium. ▪ Required for other countries. 	C	10	A
euddRIBCode	E	customerProfileAdd	European Direct Debit RIB <ul style="list-style-type: none"> ▪ Bank Account checksum. ▪ Used when EUDDIBAN is not present ▪ Required in France, Italy, Monaco, Portugal, and Spain. 	C	2	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
billerReferenceNumber	E	customerProfileAdd	Biller Reference Number (PINless Debit BillPay Only) <ul style="list-style-type: none"> ▪ Reference Number the Biller (merchant) uses on their system to identify this customer. ▪ Conditionally required for PINless Debit. 	C	25	A
pinlessDebitMerchantUrl	E	customerProfileAdd	Merchant URL (PINless Debit E-commerce Only) <ul style="list-style-type: none"> ▪ The merchant's Internet address where goods were sold ▪ This tag is required for PINless Debit E-commerce only and not to PINless Debit BillPay transactions. <p>Example: www.abccompany.com</p>	C	40	ANS
pinlessDebitTxnType	E	customerProfileAdd	PINless Debit Transaction Type <ul style="list-style-type: none"> ▪ When CardBrand = DP, the value in this tag will be used to decide if the merchant wants to process a "PINless Debit BillPay" or a "PINless Debit E-commerce" transaction ▪ Allowed values : <ul style="list-style-type: none"> BP ->For PINless Debit BillPay EC->For PINless Debit E-commerce ▪ It is a mandatory tag for PINless Debit E-commerce ▪ It is a mandatory tag for PINless Debit BillPay(for merchants getting certified to process BillPay transactions post June 2018) <p>Note: This tag is made backward compatible for existing BillPay merchants. So, Empty/Null value in this tag will be processed as PINless Debit BillPay transaction only when CardBrand = DP and a valid billerReferenceNumber is sent</p>	M	2	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
accountUpdaterEligibility	E	customerProfileAdd	<p>Account Updater Eligibility Flag</p> <p>This field is used to designate if the customer profile should be eligible for Account Updater.</p> <ul style="list-style-type: none"> • This field only applies to Stratus (Bin 000001) merchants using the “Designated Profiles” Account Updater setup option. <p>Valid values:</p> <p>Y Account Updater requests for this profile may be processed.</p> <p>N Account Updater requests for this profile will not be processed.</p>	O	1	A
euddBankBranchCode	E	customerProfileAdd	<p>EUDD Bank Branch Code</p> <p>Conditionally required for European Direct Debit transactions.</p> <p>Used when euddIBAN is not present.</p> <p>Required for the following countries: Greece, Italy, Monaco, Portugal, and Spain.</p>	C	10	A
euddIBAN	E	customerProfileAdd	<p>Customer’s International Bank Account Number</p> <p>Conditionally required for European Direct Debit transactions.</p> <p>If populated, the Bank Identifier Code (BIC) is required.</p>	C	34	A
euddBIC	E	customerProfileAdd	<p>Customer’s Bank Identifier Code (BIC)</p> <p>Conditionally required for European Direct Debit transactions.</p> <p>If populated, the International Bank Account Number (IBAN) is required.</p> <p>This field is populated with an 8 or 11 character value.</p>	C	11	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
euddMandateSignatureDate	E	customerProfileAdd	<p>EUDD Mandate Signature Date</p> <p>The date the customer signed the mandate.</p> <p>This field is strongly recommended for EUDD transactions, and Mandatory for GBP Prenote requests.</p> <p>Mandate ID and Mandate Type are required if Mandate Signature Date is present.</p> <p>See Mandate Information for more details.</p>	C	8	N
euddMandateID	E	customerProfileAdd	<p>EUDD Mandate ID</p> <p>The customer's mandate identification number.</p> <p>This field is strongly recommended for EUDD transactions, and Mandatory for GBP Prenote requests.</p> <p>Mandate Signature Date and Mandate Type are required if Mandate ID is present.</p> <p>See Mandate Information for more details.</p>	C	Varies	A
euddMandateType	E	customerProfileAdd	<p>EUDD Type of Mandate</p> <p>Valid values:</p> <ul style="list-style-type: none"> 1 First* 2 Recurrence* 3 Last* 4 One-off* 5 New 6 Cancel 7 Change from manual to electronic “ ” Blank (valid only if all mandate info is blank)* <p>For EUR (Euro) currency merchants, only values with an Asterisk are supported.</p> <p>This field is strongly recommended for EUDD transactions, and Mandatory for GBP Prenote requests.</p> <p>Mandate Signature Date and Mandate ID are required if Mandate Type is present.</p> <p>See Mandate Information for more details.</p>	C	1	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
mitMsgType	E	customerProfileAdd	CIT Code Indicates the message type to be used for the message type records.	C	4	A
mitSubmittedTransactionID	E	customerProfileAdd	Submitted Transaction ID The Submitted Transaction ID returned to the merchant from a previous CIT transaction in a series of transactions	C	15	A

4.1.6 Profile Update Request Elements

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
customerProfileChange	E	transRequest	Request Type Used to Update an Existing Profile on the Orbital Gateway	M	N/A	N/A
BatchRequestNo	A	customerProfileChange	Sequential Presentation of the Request in the Batch File The value for the first Profile Update request should be one higher than that of the last Profile Add request. The transactions in the file are numbered sequentially starting with Reversals, then Mark for Captures, then New Orders, and so on.	M	6	N
bin	E	customerProfileChange	Transaction Routing Definition Assigned by Chase Paymentech. 000001 Stratus 000002 Tandem (PNS)	M	6	N
merchantID	E	customerProfileChange	Gateway merchant account number assigned by Chase Paymentech This account number will match that of your host platform: <ul style="list-style-type: none">▪ BIN 000001: 6-digit Stratus Division Number▪ BIN 000002: 12-digit PNS Merchant ID	M	15	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
customerName	E	customerProfileChange	Customer Billing Name This is the equivalent to the <avsnName> element used on New Order requests.	O	30	A
customerRefNum	E	customerProfileChange	Customer Reference Number of the Customer Profile that will be Updated This value cannot be changed through a Profile Update action.	M	22	A
customerAddress1	E	customerProfileChange	Cardholder Billing Address line 1 This is the equivalent to the <avAddress1> element used on New Order requests.	O	30	A
customerAddress2	E	customerProfileChange	Cardholder Billing Address line 2 This is the equivalent to the <avAddress2> element used on New Order requests.	O	30	A
customerCity	E	customerProfileChange	Cardholder Billing City This is the equivalent to the <avCity> element used on New Order requests.	O	20	A
customerState	E	customerProfileChange	Cardholder Billing State This is the equivalent to the <avState> element used on transactional requests.	O	2	A
customerZip	E	customerProfileChange	Cardholder Billing Address Zip Code <ul style="list-style-type: none"> ▪ All AVS requests must minimally include the 5-digit Zip Code. ▪ If sending Zip Code + 4, please separate with a hyphen (-). ▪ This is the equivalent to the <avZip> element used on New Order requests. 	O	10	A
customerEmail	E	customerProfileChange	Cardholder E-mail Address <ul style="list-style-type: none"> ▪ Optional if Customer Profile Action Type = Create or Update. 	O	50	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
customerPhone	E	customerProfileChange	<p>Cardholder Telephone Number</p> <p>AAAAEEENNNNNXXXX, where</p> <ul style="list-style-type: none"> AAA = Area Code EEE = Exchange NNNN = Number XXXX = Extension <ul style="list-style-type: none"> ▪ Optional if Customer Profile Action Type = Create or Update. ▪ There is no equivalent to this field available on New Order requests. 	O	14	A
customerCountryCode	E	customerProfileChange	<p>Cardholder Billing Address Country Code</p> <ul style="list-style-type: none"> ▪ Valid values: US United States CA Canada GB Great Britain UK United Kingdom " " Blank for all other countries <ul style="list-style-type: none"> ▪ Required if processing a U.K.-based address. ▪ This is the equivalent to the <avsCountryCode> element used on New Order requests. 	O	2	A
customerProfileOrderOverrideInd	E	customerProfileChange	<p>Defines if any Order Data can be pre-populated from the Customer Reference Number (customerRefNum)</p> <ul style="list-style-type: none"> NO No mapping to order data OI Use customerRefNum for orderID OD Use customerRefNum for comments OA Use customerRefNum for orderID and comments 	O	2	A
orderDefaultDescription	E	customerProfileChange	<p>Order Description</p> <p>The value submitted in this field will set a default value for the <comments> element used on New Order requests that use this profile.</p>	O	64	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³																
orderDefaultAmount	E	customerProfileChange	<p>Transaction Amount</p> <p>This is the equivalent to the <amount> element used on New Order requests.</p> <p>Keys:</p> <ul style="list-style-type: none"> ▪ Implied decimal including those currencies that are a zero exponent. For example, both \$100.00 (an exp. of 2) and ¥100 (an exp. of 0) should be sent as: <pre><orderDefaultAmount>10000 </orderDefaultAmount></pre> <p>NOTE Currency and currency code are not passed in the request. It is implied by the Currency setup for the Merchant ID.</p>	O	12	N																
customerAccountType	E	customerProfileChange	<p>Customer's Payment Type to save in the Profile</p> <p>Required if the Account Type is being changed.</p> <table> <tbody> <tr><td>CC</td><td>Credit Card</td></tr> <tr><td>DP</td><td>PINless Debit</td></tr> <tr><td>EC</td><td>Electronic Check</td></tr> <tr><td>ED</td><td>European Direct Debit</td></tr> <tr><td>IM</td><td>International Maestro</td></tr> <tr><td>CZ</td><td>ChaseNet Credit Card</td></tr> <tr><td>CR</td><td>ChaseNet Signature Debit</td></tr> <tr><td>AA</td><td>Auto Assign (only available for ChaseNet merchants)</td></tr> </tbody> </table>	CC	Credit Card	DP	PINless Debit	EC	Electronic Check	ED	European Direct Debit	IM	International Maestro	CZ	ChaseNet Credit Card	CR	ChaseNet Signature Debit	AA	Auto Assign (only available for ChaseNet merchants)	C	2	A
CC	Credit Card																					
DP	PINless Debit																					
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AA	Auto Assign (only available for ChaseNet merchants)																					
ccAccountNum	E	customerProfileChange	Customer Credit Card Number	O	19	AN																
status	E	customerProfileChange	<p>Profile Status Flag</p> <p>This field is used to set the status of a Customer Profile.</p> <table> <tbody> <tr><td>A</td><td>Active</td></tr> <tr><td>I</td><td>Inactive</td></tr> <tr><td>MS</td><td>Manual Suspend</td></tr> </tbody> </table>	A	Active	I	Inactive	MS	Manual Suspend	C	Var	A										
A	Active																					
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MS	Manual Suspend																					

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³						
ccExp	E	customerProfileChange	<p>Customer Credit Card Expiration Date</p> <ul style="list-style-type: none"> ▪ Format: MMYY ▪ Stratus (BIN 000001) allows a <i>blank</i> to be submitted when no known expiration date exists. There are three valid mechanisms for submitting a <i>Blank</i> expiration date to the Stratus Host using Orbital: <ul style="list-style-type: none"> - null-fill this XML element: <Exp/> - Send four spaces: <Exp> </Exp> - Zero-fill this XML element: <Exp>0000</Exp> <p>NOTE Please discuss this feature with your certification analyst before implementing.</p>	O	4	N						
ecpCheckDDA	E	customerProfileChange	ECP (DDA) Account Number	O	17	A						
ecpBankAcctType	E	customerProfileChange	<p>Deposit Account Type</p> <p>Required if the Customer Account Type = EC.</p> <table style="margin-left: 20px;"> <tr> <td>C</td> <td>Consumer Checking (US or Canadian)</td> </tr> <tr> <td>S</td> <td>Consumer Savings (US Only)</td> </tr> <tr> <td>X</td> <td>Commercial Checking (US Only)</td> </tr> </table>	C	Consumer Checking (US or Canadian)	S	Consumer Savings (US Only)	X	Commercial Checking (US Only)	O	1	A
C	Consumer Checking (US or Canadian)											
S	Consumer Savings (US Only)											
X	Commercial Checking (US Only)											
ecpCheckRT	E	customerProfileChange	<p>Bank Routing and Transit Number for the Customer</p> <ul style="list-style-type: none"> ▪ All US Bank Routing Numbers are 9 digits. ▪ All Canadian Bank Routing Numbers are 8 digits. - Formatted FFFBBBBB where F is Financial Institution and B is Branch Number - Cannot include spaces " " or dashes "-" 	O	9	N						

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
ecpDelvMethod	E	customerProfileChange	<p>ECP Payment Delivery Method</p> <p>This field indicates the preferred manner to deposit the transaction:</p> <ul style="list-style-type: none"> B Best Possible Method (US Only) Chase Paymentech utilizes the method that best fits the situation. If the RDFI is not an ACH participant, a facsimile draft is created. This should be the default value for this field. A ACH (US or Canadian) Deposit the transaction by ACH only. If the RDFI is not an ACH participant, the transaction is rejected. 	O	1	A
switchSoloCardStartDate	E	customerProfileChange	<p>Switch/Solo Card Activation Date</p> <p>Format: MMYY</p>	O	4	N
switchSoloIssueNum	E	customerProfileChange	<p>Customer Switch/Solo Card Issue Number</p> <p>Switch/Solo incremental counter for lost or replacement cards.</p>	O	2	N
mbType	E	customerProfileChange	<p>Managed Billing Type</p> <ul style="list-style-type: none"> ▪ Indicates the type of Managed Billing the merchant is participating in: <ul style="list-style-type: none"> R Recurring D Deferred ▪ The value submitted must be in agreement with the type of Managed Billing the merchant is configured for at Chase Paymentech. ▪ This field serves to notify the Orbital system that the transaction is a Managed Billing transaction. If this field is not sent with a Managed Billing transaction, all other Managed Billing fields are ignored. 	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
mbOrderIDGenerationMethod	E	customerProfileChange	Managed Billing Order ID Generation Method <ul style="list-style-type: none"> ▪ This value is used to set the method that Orbital will use to generate the Order ID for any Managed Billing transactions. ▪ This field does NOT influence the Order ID for stand-alone transactions initiated by the merchant, VT transactions, and so on. ▪ Valid values: <ul style="list-style-type: none"> IO Use the Customer Reference Number (Profile ID). This value is made up of the capital letters I and O, not numbers. DI Dynamically generate the Order ID. This value is made up of the capital letters D and I, no numbers. 	C	2	A
mbRecurringStartDate	E	customerProfileChange	Managed Billing Recurring Start Date <ul style="list-style-type: none"> ▪ Defines the future date that Orbital will begin a recurring billing cycle to the associated Profile. ▪ To allow the Managed Billing engine to properly calculate and schedule all billings, this date must be at least one day after the request date (a recurring billing cycle can never begin on the date that the request message is sent to the Orbital system). ▪ Format: MMDDYYYY 	C	8	N
mbRecurringEndDate	E	customerProfileChange	Managed Billing Recurring End Date <ul style="list-style-type: none"> ▪ Defines the future date that Orbital will end a recurring billing cycle to the associated Profile. ▪ Format: MMDDYYYY ▪ This is the first of three possible recurring end triggers. Only one end trigger can be submitted per request message. 	C	8	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
mbRecurringNoEndDateFlag	E	customerProfileChange	<p>Managed Billing 'No End Date' Indicator</p> <ul style="list-style-type: none"> ▪ Valid values: <ul style="list-style-type: none"> Y Schedule recurring transactions for an infinite amount of time. A Y in this field overrides the value, if any, in the mbRecurringEndDate field. N (or blank) Orbital will use the value of the mbRecurringEndDate field to define the recurring end date. ▪ This is the second of three possible recurring end triggers. Only one end trigger can be submitted per request message. 	C	1	A
mbRecurringMaxBillings	E	customerProfileChange	<p>Managed Billing Max Number of Billings</p> <ul style="list-style-type: none"> ▪ This value defines the maximum number of billings that will be allowed for a recurring billing cycle. ▪ Valid values: 1–999999 ▪ This is the third of three possible recurring end triggers. Only one end trigger can be submitted per request message. 	C	6	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³												
mbRecurringFrequency	E	customerProfileChange	<p>Managed Billing Recurring Frequency Pattern</p> <p>This pattern is a subset of a standard CRON expression, comprising 3 fields separated by white space:</p> <table border="1"> <thead> <tr> <th>Field</th><th>Allowed Values</th><th>Allowed Special Chars</th></tr> </thead> <tbody> <tr> <td>Day-of-month</td><td>1–31</td><td>, – * ? / L W</td></tr> <tr> <td>Month</td><td>1–12 or JAN–DEC</td><td>, – * /</td></tr> <tr> <td>Day-of-week</td><td>1–7 or SUN–SAT</td><td>, – * ? / L #</td></tr> </tbody> </table> <p>SEE ALSO For a full discussion of these three fields, the usage of the special characters, and multiple example values, see 3.4.3 Profiles and Managed Billing.</p>	Field	Allowed Values	Allowed Special Chars	Day-of-month	1–31	, – * ? / L W	Month	1–12 or JAN–DEC	, – * /	Day-of-week	1–7 or SUN–SAT	, – * ? / L #	C	Var	A
Field	Allowed Values	Allowed Special Chars																
Day-of-month	1–31	, – * ? / L W																
Month	1–12 or JAN–DEC	, – * /																
Day-of-week	1–7 or SUN–SAT	, – * ? / L #																
mbDeferredBillDate	E	customerProfileChange	<p>Managed Billing Deferred Billing Date</p> <ul style="list-style-type: none"> Defines the future date that Orbital will trigger a one-time billing to the associated Profile. This date must be at least one day after the request date (a deferred billing can never take place on the date that the request message is sent to the Orbital system). Format: MMDDYYYY 	C	8	N												
mbCancelDate	E	customerProfileChange	<p>Managed Billing Cancel Date</p> <ul style="list-style-type: none"> This field is used to cancel a single future billing that is already scheduled. The exact date of the scheduled billing must be submitted. Format: MMDDYYYY 	C	8	N												

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
mbRestoreDate	E	customerProfileChange	Managed Billing Restore Billing Date <ul style="list-style-type: none"> ▪ This field is used to reinstate a cancelled billing. The exact date of the previously scheduled billing must be submitted in order for this action to work. ▪ Format: MMDDYYYY 	C	8	N
mbRemoveFlag	E	customerProfileChange	Managed Billing Remove Flag Valid values: Y This value is used to remove all Managed Billing settings from the associated Profile. The Profile becomes a <i>Standard</i> Profile, and any scheduled future billings are removed from the Orbital system and will not occur. N (or blank) This value has no effect on the Profile.	C	1	A
sDMerchantName	E	customerProfileChange	Soft Descriptor Merchant Name <ul style="list-style-type: none"> ▪ Required for Soft Descriptors. ▪ The Merchant Name field should be what is most recognizable to the cardholder (Company name or trade name). The actual length of this field is conditionally tied to Host and the Size of the <code>sDProductDescription</code> field used. Stratus: <ul style="list-style-type: none"> ▪ CREDIT – Three options, which conditionally affect the <code>sDProductDescription</code>: <ul style="list-style-type: none"> - Max 3 bytes - Max 7 bytes - Max 12 bytes ▪ ECP: <ul style="list-style-type: none"> - Max 15 bytes Tandem: <ul style="list-style-type: none"> ▪ Max 25 bytes. 	C	25	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
sDProductDescription	E	customerProfileChange	<p>Soft Descriptor Product Description</p> <ul style="list-style-type: none"> ▪ Required for Soft Descriptors. ▪ Provides an accurate description. <p>Stratus:</p> <ul style="list-style-type: none"> ▪ CREDIT: <ul style="list-style-type: none"> - If softDescMercName = 3 bytes, then Max = 18 bytes - If softDescMercName = 7 bytes, then Max = 14 bytes - If softDescMercName = 12 bytes, then Max = 9 bytes ▪ ECP: <ul style="list-style-type: none"> - 10 bytes Max <p>Tandem:</p> <ul style="list-style-type: none"> ▪ This field will not show on Cardholder statements for Tandem Merchants. 	C	18	A
sDMerchantCity	E	customerProfileChange	<p>Soft Descriptor Merchant City</p> <ul style="list-style-type: none"> ▪ Tag conditionally required for Soft Descriptors. ▪ Merchant City for Retail. Field required, but should be null-filled if any Soft Descriptor data is submitted. 	C	13	A
sDMerchantPhone	E	customerProfileChange	<p>Soft Descriptor Merchant Phone</p> <ul style="list-style-type: none"> ▪ Only one of the location Soft Descriptor values should be sent (Phone, URL, or E-mail); all others should be null-filled. ▪ This field will not show on Cardholder statements for Tandem Merchants. <p>Valid Formats:</p> <ul style="list-style-type: none"> ▪ NNN-NNN-NNNN ▪ NNN-AAAAAAA 	C	12	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
sDMerchantEmail	E	customerProfileChange	Soft Descriptor Merchant E-mail <ul style="list-style-type: none"> ▪ Only one of the location Soft Descriptor values should be sent (Phone, URL, or E-mail); all others should be null-filled. ▪ This field will not show on Cardholder statements for Tandem Merchants. 	C	13	A
sDMerchantURL	E	customerProfileChange	Soft Descriptor Merchant URL <ul style="list-style-type: none"> ▪ Only one of the location Soft Descriptor values should be sent (Phone, URL, or E-mail); all others should be null-filled. ▪ This field will not show on Cardholder statements for Tandem Merchants. 	C	13	A
euddCountryCode	E	customerProfileChange	European Direct Debit Bank Sort Code <ul style="list-style-type: none"> ▪ Customer's Bank Sort code. ▪ Used when euddIBAN is not present. ▪ Optional for Luxembourg. Not used for Belgium. ▪ Required for other countries. 	C	10	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³																																		
euddBankSortCode	E	customerProfileChange	European Direct Debit Country Code <ul style="list-style-type: none"> ▪ Customer's Country Code. ▪ Valid country codes: <table> <tr><td>AT</td><td>Austria</td></tr> <tr><td>BE</td><td>Belgium</td></tr> <tr><td>Cy</td><td>Cyprus</td></tr> <tr><td>DE</td><td>Germany</td></tr> <tr><td>ES</td><td>Spain</td></tr> <tr><td>FI</td><td>Finland</td></tr> <tr><td>FR</td><td>France</td></tr> <tr><td>GB</td><td>United Kingdom</td></tr> <tr><td>IE</td><td>Ireland</td></tr> <tr><td>IT</td><td>Italy</td></tr> <tr><td>LU</td><td>Luxemborg</td></tr> <tr><td>MC</td><td>Monaco</td></tr> <tr><td>MT</td><td>Malta</td></tr> <tr><td>NL</td><td>Netherlands</td></tr> <tr><td>PT</td><td>Portugal</td></tr> <tr><td>SI</td><td>Slovenia</td></tr> <tr><td>SK</td><td>Slovak Republic</td></tr> </table> 	AT	Austria	BE	Belgium	Cy	Cyprus	DE	Germany	ES	Spain	FI	Finland	FR	France	GB	United Kingdom	IE	Ireland	IT	Italy	LU	Luxemborg	MC	Monaco	MT	Malta	NL	Netherlands	PT	Portugal	SI	Slovenia	SK	Slovak Republic	C	2	A
AT	Austria																																							
BE	Belgium																																							
Cy	Cyprus																																							
DE	Germany																																							
ES	Spain																																							
FI	Finland																																							
FR	France																																							
GB	United Kingdom																																							
IE	Ireland																																							
IT	Italy																																							
LU	Luxemborg																																							
MC	Monaco																																							
MT	Malta																																							
NL	Netherlands																																							
PT	Portugal																																							
SI	Slovenia																																							
SK	Slovak Republic																																							
euddRIBCode	E	customerProfileChange	European Direct Debit RIB <ul style="list-style-type: none"> ▪ Bank Account checksum. ▪ Used when euddIBAN is not present. ▪ Required in France, Italy, Monaco, Portugal, and Spain. 	C	2	A																																		
billerReferenceNumber	E	customerProfileChange	Biller Reference Number (PINless Debit Only) <ul style="list-style-type: none"> ▪ Reference Number the Biller (merchant) uses on their system to identify this customer. ▪ Conditionally required for PINless Debit. 	C	25	A																																		

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
pinlessDebitMerchantUrl	E	customerProfileChange	Merchant URL (PINless Debit E-commerce Only) <ul style="list-style-type: none"> ▪ The merchant's Internet address where goods were sold ▪ This tag is required for PINless Debit E-commerce only and not to PINless Debit BillPay transactions. Example: www.abccompany.com	C	40	ANS
pinlessDebitTxnType	E	customerProfileChange	PINless Debit Transaction Type <ul style="list-style-type: none"> ▪ When CardBrand = DP, the value in this tag will be used to decide if the merchant wants to process a "PINless Debit BillPay" or a "PINless Debit E-commerce" transaction ▪ Allowed values : <ul style="list-style-type: none"> BP ->For PINless Debit BillPay EC->For PINless Debit E-commerce ▪ It is a mandatory tag for PINless Debit E-commerce ▪ It is a mandatory tag for PINless Debit BillPay(for merchants getting certified to process BillPay transactions post June 2018) <p>Note: This tag is made backward compatible for existing BillPay merchants. So, Empty/Null value in this tag will be processed as PINless Debit BillPay transaction only when CardBrand = DP and a valid billerReferenceNumber is sent</p>	M	2	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
accountUpdaterEligibility	E	customerProfileChange	<p>Account Updater Eligibility Flag</p> <p>This field is used to designate if the customer profile should be eligible for Account Updater.</p> <ul style="list-style-type: none"> This field only applies to Stratus (Bin 000001) merchants using the “Designated Profiles” Account Updater setup option. <p>Valid values:</p> <p>Y Account Updater requests for this profile may be processed.</p> <p>N Account Updater requests for this profile will not be processed.</p>	O	1	A
euddBankBranchCode	E	customerProfileChange	<p>EUDD Bank Branch Code</p> <p>Conditionally required for European Direct Debit transactions.</p> <p>Used when <code>euddIBAN</code> is not present.</p> <p>Required for the following countries: Greece, Italy, Monaco, Portugal, and Spain.</p>	C	10	A
euddIBAN	E	customerProfileChange	<p>Customer's International Bank Account Number (IBAN)</p> <p>Conditionally required for European Direct Debit transactions.</p> <p>If populated, the Bank Identifier Code (BIC) is required.</p>	C	34	A
euddBIC	E	customerProfileChange	<p>Customer's Bank Identifier Code (BIC)</p> <p>Conditionally required for European Direct Debit transactions.</p> <p>If populated, the International Bank Account Number (IBAN) is required.</p> <p>This field is populated with an 8 or 11 character value.</p>	C	11	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
euddMandateSignatureDate	E	customerProfileChange	<p>EUDD Mandate Signature Date</p> <p>The date the customer signed the mandate.</p> <p>This field is strongly recommended for EUDD transactions, and Mandatory for GBP Prenote requests.</p> <p>Mandate ID and Mandate Type are required if Mandate Signature Date is present.</p> <p>See Mandate Information for more details.</p>	C	8	N
euddMandateID	E	customerProfileChange	<p>EUDD Mandate ID</p> <p>The customer's mandate identification number.</p> <p>This field is strongly recommended for EUDD transactions, and Mandatory for GBP Prenote requests.</p> <p>Mandate Signature Date and Mandate Type are required if Mandate ID is present.</p> <p>See Mandate Information for more details.</p>	C	Varies	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
euddMandateType	E	customerProfileChange	<p>EUDD Type of Mandate</p> <p>Valid values:</p> <ul style="list-style-type: none"> 1 First* 2 Recurrence* 3 Last* 4 One-off* 5 New 6 Cancel 7 Change from manual to electronic “ ” Blank (valid only if all mandate info is blank)* <p>For EUR (Euro) currency merchants, only values with an Asterisk are supported.</p> <p>This field is strongly recommended for EUDD transactions, and Mandatory for GBP Prenote requests.</p> <p>Mandate Signature Date and Mandate ID are required if Mandate Type is present.</p> <p>See Mandate Information for more details.</p>	C	1	N

4.1.7 Profile Delete Request Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
customerProfileDelete	E	transRequest	Request Type Used to Delete an Existing Profile from the Orbital Gateway	M	N/A	N/A
BatchRequestNo	A	customerProfileDelete	Sequential Presentation of the Request in the Batch File The value for the first Profile Delete request should be one higher than that of the last Profile Update request. The transactions in the file are numbered sequentially starting with Reversals, then Mark for Captures, then New Orders, and so on.	M	6	N
bin	E	customerProfileDelete	Transaction Routing Definition Assigned by Chase Paymentech. 000001 Stratus 000002 Tandem (PNS)	M	6	N
merchantID	E	customerProfileDelete	Gateway merchant account number assigned by Chase Paymentech This account number will match that of your host platform: <ul style="list-style-type: none">▪ BIN 000001: 6-digit Stratus Division Number▪ BIN 000002: 12-digit PNS Merchant ID	M	15	N
customerName	E	customerProfileDelete	Customer Billing Name This is the equivalent to the <avsName> element used on New Order requests.	O	30	A
customerRefNum	E	customerProfileDelete	Customer Reference Number of the Customer Profile to Delete This value cannot be changed through a Profile Update action.	M	22	A

4.1.8 Profile Retrieval Request Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
customerProfileFetch	E	transRequest	Request Type Used to Retrieve an Existing Profile from the Orbital Gateway	M	N/A	N/A
BatchRequestNo	A	customerProfileFetch	Sequential Presentation of the Request in the Batch File The value for the first Profile Retrieve request should be one higher than that of the last Profile Delete request. The transactions in the file are numbered sequentially starting with Reversals, then Mark for Captures, then New Orders, and so on.	M	6	N
Bin	E	customerProfileFetch	Transaction Routing Definition Assigned by Chase Paymentech. 000001 Stratus 000002 Tandem (PNS)	M	6	N
merchantID	E	customerProfileFetch	Gateway merchant account number assigned by Chase Paymentech This account number will match that of your host platform: <ul style="list-style-type: none">▪ BIN 000001: 6-digit Salem Division Number▪ BIN 000002: 12-digit PNS Merchant ID	M	15	N
customerRefNum	E	customerProfileFetch	Customer Reference Number of the Customer Profile to Retrieve This value cannot be changed through a Profile Retrieval action.	C	22	A
ccAccountNum	E	customerProfileFetch	Cardholder Account Number on Profile to Retrieve This value cannot be changed through a Profile Retrieval action. Either a profile ID or a customer account value must be populated, but not both.	C	19	N
euddIBAN	E	customerProfileFetch	Customer's International Bank Account Number (IBAN) This value cannot be changed through a Profile Retrieval action. Either a profile ID or a customer account value must be populated, but not both.	C	34	A

4.1.9 Account Updater Request Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
accountUpdater	E	transRequest	Request Type Used to Retrieve an Existing Profile from the Orbital Gateway	M	N/A	N/A
BatchRequestNo	A	accountUpdater	Sequential Presentation of the Request in the Batch File The value for the first Account Updater request should be one higher than that of the last Profile Retrieve request. The transactions in the file are numbered sequentially starting with Reversals, then Mark for Captures, then New Orders, and so on.	M	6	N
bin	E	accountUpdater	Transaction Routing Definition Assigned by Chase Paymentech. 000001 Stratus 000002 Tandem (PNS) <i>Bin 000002 is not supported for Account Updater.</i>	M	6	N
merchantID	E	accountUpdater	Gateway merchant account number assigned by Chase Paymentech This account number will match that of your host platform: <ul style="list-style-type: none">▪ BIN 000001: 6-digit Stratus Division Number▪ BIN 000002: 12-digit PNS Merchant ID <i>Bin 000002 is not supported for Account Updater.</i>	M	15	N
terminalID	E	accountUpdater	Merchant Terminal ID assigned by Chase Paymentech <ul style="list-style-type: none">▪ Stratus Terminal IDs: presently set to 001.	M	3	N
customerRefNum	E	accountUpdater	Customer Reference Number of the Customer Profile to Retrieve This value cannot be changed through an Account Updater action.	M	22	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
scheduledDate	E	accountUpdater	<p>Scheduled Date</p> <p>Defines the future date that Orbital will add this profile to the set of Account Updater submissions</p> <p>Format: MMDDYYYY</p> <p>When this value is not set, the profile will automatically go into the next AU submission.</p>	O	8	N

4.1.10 Safetech Fraud Analysis Request Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
safetechFraudAnalysis	E	Request	Request Type Used to Process Fraud Analysis Transaction Types	M	N/A	N/A
BatchRequestNo	A	safetechFraudAnalysis	Sequential Presentation of the Request in the Batch File The value for the first Gift Card request should be one higher than that of the last Profile Retrieve request. The transactions in the file are numbered sequentially starting with Reversals, then Mark for Captures, then New Orders, and so on.	M	6	N
bin	E	safetechFraudAnalysis	Transaction Routing Definition Assigned by Chase Paymentech. 000001 Salem	M	6	N
merchantID	E	safetechFraudAnalysis	Gateway Merchant Account Number assigned by Chase Paymentech This account number will match that of your host platform: <ul style="list-style-type: none"> ▪ BIN 000001: 6-digit Salem Division Number 	M	15	N
terminalID	E	safetechFraudAnalysis	Merchant Terminal ID assigned by Chase Paymentech <ul style="list-style-type: none"> ▪ Salem Terminal IDs: presently set to 001. 	M	3	N
baseElements	E	safetechFraudAnalysis	Card Number identifying the Gift Card Customer	O	19	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
industryType	E	baseElements	Industry Type of the Transaction <ul style="list-style-type: none"> MO Mail Order transaction RC Recurring Payment (not a valid choice for Canadian merchants) EC eCommerce transaction IV IVR (PINless Debit Only) IN Installment 	M	2	A
cardBrand	E	baseElements	Card Type/Brand for the Transaction <p>Required for:</p> <ul style="list-style-type: none"> BL Bill Me Later DP PINless Debit (Generic Value Used in Requests) EC Electronic Check ED European Direct Debit FC Gift Card IM International Maestro <p>Optional for:</p> <ul style="list-style-type: none"> CZ ChaseNet Credit Card CR ChaseNet Signature Debit 	C	2	A
ccAccountNum	E	baseElements	Credit Card Number <ul style="list-style-type: none"> Should be NULL for electronic check processing, European Direct Debit processing w/ IBAN, and Profile Use Transactions. For Bill Me Later transactions, should be populated with either the customer's Bill Me Later account number or a Bill Me Later Bank Identification Number (BIN) followed by ten zeros (dummy account number). For example: 5049900000000000 <p>The consumer's 16-byte Bill Me Later account number will be returned on all approved transactions.</p>	C	19	AN

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³						
ccExp	E	baseElements	<p>Card Expiration Date</p> <ul style="list-style-type: none"> ▪ Format: MMYY ▪ Mandatory for all card types, except ECP, European Direct Debit, and Bill Me Later. ▪ Salem (BIN 000001) allows a <i>blank</i> to be submitted when no known expiration date exists. There are three valid mechanisms for submitting a <i>Blank</i> expiration date to the Salem Host using Orbital: <ul style="list-style-type: none"> - null-fill this XML element: <Exp/> - Send four spaces: <Exp> </Exp> - Zero-fill this XML element: <Exp>0000</Exp> <p>NOTE Please discuss this feature with your certification analyst before implementing.</p>	C	4	N						
ecpCheckRT	E	baseElements	<p>Bank Routing and Transit Number for the Customer</p> <p>Conditionally required for Electronic Check processing.</p> <p>NOTES:</p> <ul style="list-style-type: none"> ▪ All US Bank Routing Numbers are 9 digits. ▪ All Canadian Bank Routing Numbers are 8 digits. - Formatted FFFBBBBB where F is Financial Institution and B is Branch Number - Cannot include spaces " " or dashes "-" 	C	9	N						
ecpCheckDDA	E	baseElements	<p>Customer DDA Account Number</p> <p>Conditionally required for Electronic Check processing.</p>	C	17	A						
ecpBankAcctType	E	baseElements	<p>Deposit Account Type</p> <p>Conditionally required for Electronic Check processing:</p> <table style="margin-left: 20px;"> <tr> <td>C</td> <td>Consumer Checking (US or Canadian)</td> </tr> <tr> <td>S</td> <td>Consumer Savings (US Only)</td> </tr> <tr> <td>X</td> <td>Commercial Checking (US Only)</td> </tr> </table> <p>NOTE If this tag is missing, the host will default the value to 'C' - Consumer Checking</p>	C	Consumer Checking (US or Canadian)	S	Consumer Savings (US Only)	X	Commercial Checking (US Only)	C	1	A
C	Consumer Checking (US or Canadian)											
S	Consumer Savings (US Only)											
X	Commercial Checking (US Only)											

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
ecpAuthMethod	E	baseElements	<p>ECP Authorization Method</p> <ul style="list-style-type: none"> ▪ Code used to identify the method used by consumers to authorize debits to their accounts. ▪ Valid values: <ul style="list-style-type: none"> W Written I Internet (Web) – default T Telephone A Accounts Receivable (ARC) – US Merchants only P Point of Purchase (POP) – US Merchants only ▪ If no value submitted, we default this value. <p>Please see 3.2.5.3 ECP Authorization Methods for more information.</p>	O	1	A
ecpDelvMethod	E	baseElements	<p>ECP Payment Delivery Method</p> <ul style="list-style-type: none"> ▪ Conditionally required for Electronic Check processing. ▪ This field indicates the preferred manner to deposit the transaction: <ul style="list-style-type: none"> B Best Possible Method (US Only) <p>Chase Paymentech utilizes the method that best fits the situation. If the RDFI is not an ACH participant, a facsimile draft is created. This should be the default value for this field.</p> A ACH (US or Canadian) <p>Deposit the transaction by ACH only. If the RDFI is not an ACH participant, the transaction is rejected.</p> 	C	1	A
avsZip	E	baseElements	<p>Cardholder Billing Address Zip Code</p> <ul style="list-style-type: none"> ▪ All AVS Requests must minimally include the 5-digit Zip Code. ▪ If sending Zip Code + 4, please separate with a hyphen (-). ▪ For BIN 000001, must supply AVSzip, AVSaddress1, and AVScity in order for data to be transmitted to Host Processing System ▪ Required for Bill Me Later sale transactions. ▪ For PINless Debit E-commerce transactions, it is mandatory to send avszip, avsaddress1 for both BIN 000001 and BIN000002 	C	10	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³												
avsAddress1	E	baseElement s	Cardholder Billing Address line 1 <ul style="list-style-type: none"> ▪ Should not include % ▪ For BIN 000001, must supply AVSzip, AVSaddress1, and AVScity in order for data to be transmitted to Host Processing System ▪ Required for Bill Me Later sale transactions. ▪ For PINless Debit E-commerce transactions, it is mandatory to send avszip, avsaddress1 for both BIN 000001 and BIN000002 	C	30	A												
avsAddress2	E	baseElement s	Cardholder Billing Address line 2 Should not include %	O	30	A												
avsCity	E	baseElement s	Cardholder Billing City <ul style="list-style-type: none"> ▪ Should not include % ▪ For BIN 000001, must supply AVSzip, AVSaddress1, and AVScity in order for data to be transmitted to Host Processing System ▪ Required for Bill Me Later sale transactions. 	C	20	A												
avsState	E	baseElement s	Cardholder Billing State <ul style="list-style-type: none"> ▪ Should not include any of the following characters: % ^ \ / ▪ Required for Bill Me Later sale transactions. 	C	2	A												
avsName	E	baseElement s	Cardholder Billing Name Required for Bill Me Later sale transactions, all European Direct Debit (EU DD) transactions, and all Electronic Check transactions.	C	30	A												
avsPhone	E	baseElement s	Cardholder Billing Phone Number AAAAEEENNNNNXXXX, where <table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td>AAA</td> <td>=</td> <td>Area Code</td> </tr> <tr> <td>EEE</td> <td>=</td> <td>Exchange</td> </tr> <tr> <td>NNNN</td> <td>=</td> <td>Number</td> </tr> <tr> <td>XXXX</td> <td>=</td> <td>Extension</td> </tr> </table> Conditionally required for Bill Me Later sale transactions.	AAA	=	Area Code	EEE	=	Exchange	NNNN	=	Number	XXXX	=	Extension	C	14	A
AAA	=	Area Code																
EEE	=	Exchange																
NNNN	=	Number																
XXXX	=	Extension																

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avsCountryCode	E	baseElements	Cardholder Billing Address Country Code <ul style="list-style-type: none"> ▪ Valid values: US United States CA Canada GB Great Britain UK United Kingdom " " Blank for all other countries ▪ Required if processing a U.K.-based address. ▪ Required for Bill Me Later sale transactions. 	C	2	A
avsDestName	E	baseElements	Cardholder Destination Billing Name Required for Bill Me Later sale transactions.	C	30	A
avsDestAddress	E	baseElements	Cardholder Destination Address line 1 <ul style="list-style-type: none"> ▪ Should not include % ▪ Required for Bill Me Later sale transactions. 	C	30	A
avsDestAddress2	E	baseElements	Cardholder Destination Address Line 2 <ul style="list-style-type: none"> ▪ Should not include % ▪ Optional for Bill Me Later Transactions. 	O	30	A
avsDestCity	E	baseElements	Cardholder Destination Billing City <ul style="list-style-type: none"> ▪ Should not include % ▪ Required for Bill Me Later sale transactions. 	C	20	A
avsDestState	E	baseElements	Cardholder Destination Billing State <ul style="list-style-type: none"> ▪ Should not include any of the following characters: % ^ \ / - ▪ Required for Bill Me Later sale transactions. 	C	2	A
avsDestZip	E	baseElements	Cardholder Destination Address Zip Code <ul style="list-style-type: none"> ▪ All AVS Requests must minimally include the 5-digit Zip Code. ▪ If sending Zip Code + 4, please separate with a hyphen (-). ▪ Required for Bill Me Later sale transactions. 	C	10	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³										
avsDestCountryCode	E	baseElements	<p>Cardholder Destination Address Country Code</p> <ul style="list-style-type: none"> ▪ Valid values: <table> <tr><td>US</td><td>United States</td></tr> <tr><td>CA</td><td>Canada</td></tr> <tr><td>GB</td><td>Great Britain</td></tr> <tr><td>UK</td><td>United Kingdom</td></tr> <tr><td>" "</td><td>Blank for all other countries</td></tr> </table> ▪ Required if processing a U.K.-based address. ▪ Required for Bill Me Later sale transactions. 	US	United States	CA	Canada	GB	Great Britain	UK	United Kingdom	" "	Blank for all other countries	C	2	A
US	United States															
CA	Canada															
GB	Great Britain															
UK	United Kingdom															
" "	Blank for all other countries															
avsDestPhone	E	baseElements	<p>Cardholder Destination Phone Number</p> <p>AAAAEEENNNNNXXXX, where</p> <table> <tr><td>AAA</td><td>= Area Code</td></tr> <tr><td>EEE</td><td>= Exchange</td></tr> <tr><td>NNNN</td><td>= Number</td></tr> <tr><td>XXXX</td><td>= Extension</td></tr> </table> <p>Optional for Bill Me Later sale transactions.</p>	AAA	= Area Code	EEE	= Exchange	NNNN	= Number	XXXX	= Extension	O	14	A		
AAA	= Area Code															
EEE	= Exchange															
NNNN	= Number															
XXXX	= Extension															
useCustomerRefNum	E	baseElements	<p>The Customer Reference Number that will be used to populate missing request fields</p> <ul style="list-style-type: none"> ▪ Required when Using a Profile during a Fraud Analysis request. ▪ This field is NOT case-sensitive. 	C	22	A										

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
orderID	E	baseElements	<p>Merchant-Defined Order Number</p> <ul style="list-style-type: none"> ▪ Field defined and supplied by the auth originator and echoed back in response. ▪ The first 8 characters should be unique for each transaction. <p>The valid characters include:</p> <ul style="list-style-type: none"> ▪ abcdefghijklmnopqrstuvwxyz ▪ ABCDEFGHIJKLMNOPQRSTUVWXYZ ▪ 0123456789 ▪ – , \$ @ & and a space character, though the space character cannot be the leading character ▪ PINless Debit transactions can only use uppercase and lowercase alpha (A-Z, a-z) and numeric (0-9) characters—NO special characters. <p>For BIN 000002 merchants:</p> <ul style="list-style-type: none"> ▪ If IndustryType = EC, first 16 bytes are passed to the Host Processing System ▪ If IndustryType = MO, first 9 bytes are passed to the Host Processing System 	M	22	A
amount	E	baseElements	<p>Transaction Amount</p> <p>Implied decimal, including those currencies that are a zero exponent. For example, both \$100.00 (an exponent of 2) and ¥100 (an exponent of 0) should be sent as <amount>10000</amount>.</p>	C	12	N
comments	E	baseElements	<p>Free-form comments</p> <ul style="list-style-type: none"> ▪ Merchant can fill in this field, and the information will be stored with the transaction details. ▪ For PNS customers, this field will populate the Customer Defined Data field, which is displayed in Resource Online. 	O	64	A
retryTrace	E	baseElements	<p>Trace Number used for Retry Logic</p> <p>SEE ALSO See 3.4.4 Retry Logic for information on this field.</p>	O	16	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
euddCountryCode	E	baseElements	<p>European Direct Debit Country Code</p> <ul style="list-style-type: none"> ▪ Customer's Country Code. ▪ Valid country codes: <ul style="list-style-type: none"> AT Austria BE Belgium CY Cyprus DE Germany ES Spain FI Finland FR France GB United Kingdom GR Greece IE Ireland IT Italy LU Luxemborg MC Monaco MT Malta NL Netherlands PT Portugal SI Slovenia SK Slovak Republic ▪ Conditionally required for European Direct Debit. 	C	2	A
euddBankSortCode	E	baseElements	<p>European Direct Debit Bank Sort Code</p> <ul style="list-style-type: none"> ▪ Customer's Bank Sort code. ▪ Used when euddIBAN is not present. ▪ Optional for Luxemborg. Not used for Belgium. ▪ Required for other countries 	C	10	A
euddRIBCode	E	baseElements	<p>European Direct Debit RIB</p> <ul style="list-style-type: none"> ▪ Bank Account checksum. ▪ Used when euddIBAN is not present ▪ Required in France, Italy, Monaco, Portugal, and Spain. 	C	2	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
bmlCustomerIP	E	baseElements	Customer's IP Address Optional for Bill Me Later sale transactions.	O	45	A
bmlCustomerEmail	E	baseElements	Customer E-mail Address Optional for Bill Me Later sale transactions.	O	50	A
bmlShippingCost	E	baseElements	Total Shipping Cost of Consumer's Order Mandatory for Bill Me Later sale transactions.	C	8	N
bmlTNCVersion	E	baseElements	Terms and Conditions Number <ul style="list-style-type: none"> ▪ The Terms and Conditions Number to which the consumer agreed. ▪ Mandatory for Bill Me Later sale transactions. 	C	5	N
bmlCustomerRegistrationDate	E	baseElements	Customer Registration Date <ul style="list-style-type: none"> ▪ The date a customer registered with the merchant. ▪ Mandatory for Bill Me Later sale transactions. 	C	8	N
bmlCustomerTypeFlag	E	baseElements	Customer Type Flag <ul style="list-style-type: none"> ▪ New or Existing Customer to the Merchant (not Bill Me Later): <ul style="list-style-type: none"> N New E Existing ▪ Optional for Bill Me Later sale transactions. 	O	2	A
bmlItemCategory	E	baseElements	Item Category <ul style="list-style-type: none"> ▪ Product Description Code assigned by Bill Me Later, Inc. ▪ Mandatory for Bill Me Later sale transactions. 	C	4	N
bmlPreapprovalInvitationNum	E	baseElements	Pre-Approval Invitation Number <ul style="list-style-type: none"> ▪ Indicates whether the consumer has been pre-approved for Bill Me Later. - Pre-approval from a credit bureau should include the 16-digit pre-approval number. This will allow the pre-approval to be matched with the first consumer order. - Internal pre-approval should have 1 as the leftmost digit. - Pre-approvals cannot include all zeros or be blank-filled. ▪ Optional for Bill Me Later sale transactions. 	O	16	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
bmlMerchantPromotionalCode	E	baseElements	Merchant Promotional Code Optional for Bill Me Later sale transactions.	O	4	A
bmlCustomerBirthDate	E	baseElements	Customer Date of Birth <ul style="list-style-type: none"> ▪ Format: YYYYMMDD ▪ Mandatory for Bill Me Later sale transactions. 	C	8	N
bmlCustomerSSN	E	baseElements	Customer Social Security Number <ul style="list-style-type: none"> ▪ Either the full 9 digits or last 4 digits of the customer's Social Security Number. ▪ Mandatory for Bill Me Later sale transactions. 	C	9	N
bmlCustomerAnnualIncome	E	baseElements	Gross Household Annual Income <ul style="list-style-type: none"> ▪ Implied decimal. For example, \$100,000.00 should be sent as: <bmlCustomerAnnualIncome>10000000</bmlCustomerAnnualIncome> ▪ Optional for Bill Me Later sale transactions. 	O	10	N
bmlCustomerResidenceStatus	E	baseElements	Customer Residence Status Valid values: <input type="radio"/> Own <input type="radio"/> Rent <input type="radio"/> Other Optional for Bill Me Later sale transactions.	O	1	A
bmlCustomerCheckingAccount	E	baseElements	Customer Checking Account Indicator Valid values: <input type="radio"/> Y Yes, customer has a checking account <input type="radio"/> N No, customer does not have a checking account Optional for Bill Me Later sale transactions.	O	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
bmlCustomerSavingsAccount	E	baseElements	<p>Customer Savings Account Indicator</p> <p>Valid values:</p> <ul style="list-style-type: none"> Y Yes, customer has a savings account N No, customer does not have a savings account <p>Optional for Bill Me Later sale transactions.</p>	O	1	A
bmlProductDelvType	E	baseElements	<p>Delivery Type Indicator</p> <p>Valid values:</p> <ul style="list-style-type: none"> CNC Cash and Carry DIG Digital Goods PHY Physical Delivery Required SVC Service TBD To Be Determined <p>Optional for Bill Me Later sale transactions.</p>	C	3	A
billerReferenceNumber	E	baseElements	<p>Biller Reference Number (PINless Debit Only)</p> <ul style="list-style-type: none"> ▪ Reference Number the Biller (merchant) uses on their system to identify this customer. ▪ Conditionally required for PINless Debit. 	C	25	A
customerAni	E	baseElements	<p>Customer Automatic Number Identification</p> <p>The ANI specified phone number that the customer used to place the order.</p>	O	10	N
avsPhoneType	E	baseElements	<p>Customer Telephone Type Indicator</p> <p>Valid values:</p> <ul style="list-style-type: none"> D Day H Home N Night W Work <p>This value is defaulted to H if any phone number is present and this element is either not present or null filled.</p>	O	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avsDestPhoneType	E	baseElements	<p>Bill Me Later Cardholder Destination Telephone Type Indicator</p> <p>Valid values:</p> <ul style="list-style-type: none"> D Day H Home N Night W Work <p>This value is defaulted to H if any phone number is present and this element is either not present or null filled.</p>	O	1	A
customerEmail	E	baseElements	Cardholder E-mail Address	O	50	A
customerIpAddress	E	baseElements	<p>Customer IP Address</p> <p>The single source IP address used by the customer to request a payment. Supports IPv4 or IPv6 formats. Punctuation marks are allowed.</p>	O	45	AN
emailAddressSubtype	E	baseElements	<p>Customer Email Address Subtype</p> <p>Used to indicate the type of email address in the <code>customerEmail</code> element.</p> <p>Valid values:</p> <ul style="list-style-type: none"> B Bill To/Buyer Email Address G Giftee Email Address <p>This value is defaulted to B if an email address is present and this element is not present or null filled.</p>	O	1	A
customerBrowserName	E	baseElements	<p>Customer Browser Type</p> <p>Used to indicate the type of web browser used by the customer to initiate the request.</p> <p>Example: MOZILLA/4.0 (COMPATIBLE; MSIE 5.0; WINDOWS 95)</p>	O	60	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
shippingMethod	E	baseElements	<p>Method of Shipping To A Customer</p> <p>Valid values:</p> <ul style="list-style-type: none"> C Lowest Cost D Carrier Designated by Customer E Electronic Delivery* G Ground* I International M Military N Next Day or Overnight* O Other P Store Pickup* S Same Day* T Two Day Service* W Three Day Service* <p>For American Express, use only values marked with an asterisk.</p>	O	1	A
euddBankBranchCode	E	baseElements	<p>EUDD Bank Branch Code</p> <p>Conditionally required for European Direct Debit transactions.</p> <p>Used when <code>EUDDIBAN</code> is not present.</p> <p>Required for the following countries: Greece, Italy, Monaco, Portugal, and Spain.</p>	C	10	A
euddIBAN	E	baseElements	<p>Customer's International Bank Account Number (IBAN)</p> <p>Conditionally required for European Direct Debit transactions.</p> <p>If populated, the Bank Identifier Code (BIC) is required.</p>	C	34	A
euddBIC	E	baseElements	<p>Customer's Bank Identifier Code (BIC)</p> <p>Conditionally required for European Direct Debit transactions.</p> <p>This field is populated with an 8 or 11 character value.</p>	C	11	A
fraudAnalysis	E	safetechFraudAnalysis	<p>Parent Element for Safetech Fraud Analysis Elements</p> <p>This XML element is the parent for all data used to request a fraud analysis as part of the transaction.</p>	C	N/A	N/A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
fraudScoreIndicator	E	fraudAnalysis	<p>Fraud Analysis Type Indicator</p> <p>Used to request the type of fraud analysis performed on the transaction. The value in this field directly determines the scope of elements returned in the response message.</p> <p>Valid values:</p> <ul style="list-style-type: none"> 1 Short Form Request 2 Long Form Request 	C	1	N
rulesTrigger	E	fraudAnalysis	<p>Fraud Analysis Rules Return Trigger</p> <p>Determines whether the Safetech Agent Web Console rules are returned.</p> <p>Valid values:</p> <ul style="list-style-type: none"> Y Triggered rules are returned N Triggered rules are not returned 	O	1	A
safetechMerchantID	E	fraudAnalysis	<p>Safetech Merchant ID</p> <p>A value assigned by Chase Paymentech when a merchant is enabled for the Safetech service.</p> <p>This is not the same value as Transaction Division number found in the MerchantID element.</p> <p>If no value is present, a default value will be used if available. If no default is stored, the request will generate an error.</p>	O	6	A/N
kaptchaSessionID	E	fraudAnalysis	<p>Kaptcha Session ID</p> <p>A merchant generated session ID for this fraud scoring request.</p> <p>The Safetech system recommends this value be unique for 30 days, or the Fraud Score results may not be accurate.</p>	O	32	A
websiteShortName	E	fraudAnalysis	<p>Short Name for the Merchant's Website</p> <p>This value is used by the Safetech service for fraud score rules.</p>	O	8	A
cashValueOfFencibleItems	E	fraudAnalysis	<p>Cash Value of Fencible Items</p> <p>The cash value of any fencible items in the order.</p> <p>This element should only be sent when the <code>FraudScoreIndicator</code> element is set to 2.</p>	O	12	N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
customerDOB	E	fraudAnalysis	<p>Customer Date of Birth Format: YYYY-MM-DD (Including dashes) This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	O	10	A/N
customerGender	E	fraudAnalysis	<p>Customer Gender Valid values: F Female M Male This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	O	1	A
customerDriverLicense	E	fraudAnalysis	<p>Customer Driver's License Number U.S. Driver's License number only. The Safetech service recommends this value for fraud scoring of Electronic Check (ECP) requests. This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	O	32	A
customerID	E	fraudAnalysis	<p>Customer ID A merchant generated ID for a specific customer. This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	O	32	A
customerIDCreationTime	E	fraudAnalysis	<p>Customer ID Creation Time The time the value used in the CustomerID element was created by the merchant. Format: Unix Epoch This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	O	10	N
kttVersionNumber	E	fraudAnalysis	<p>User Defined and Shopping Cart Format Indicator This element must contain a value of "1" as of the release of this specification if the kttDataLength and kttDataString elements are populated.</p>	C	1	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
kttDataLength	E	fraudAnalys is	User Defined or Shopping Cart Format Data Length Indicates the length of the value of the kttDataString element. This must be a 4 digit number no less than 0001 and no greater than 0999.	C	4	N
kttDataString	E	fraudAnalys is	User Defined or Shopping Cart Format Data String This field can be populated with user-defined Safetech fields, Shopping Cart Data, or both. Please see <i>Safetech Requests: Special notes on KTT elements</i> for additional information.	C	Var	A/N

4.1.11 Gift Card (FlexCache) Request Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
flexCache	E	Request	Request Type Used to Process Gift Card Transaction Types	M	N/A	N/A
BatchRequestNo	A	flexCache	Sequential Presentation of the Request in the Batch File The value for the first Gift Card request should be one higher than that of the last Profile Retrieve request. The transactions in the file are numbered sequentially starting with Reversals, then Mark for Captures, then New Orders, and so on.	M	6	N
Bin	E	flexCache	Transaction Routing Definition Assigned by Chase Paymentech. 000001 Stratus 000002 Tandem (PNS)	M	6	N
merchantID	E	flexCache	Gateway Merchant Account Number assigned by Chase Paymentech This account number will match that of your host platform: <ul style="list-style-type: none">▪ BIN 000001: 6-digit Stratus Division Number▪ BIN 000002: 12-digit PNS Merchant ID	M	15	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
terminalID	E	flexCache	<p>Merchant Terminal ID assigned by Chase Paymentech</p> <ul style="list-style-type: none"> ▪ Stratus Terminal IDs: presently set to 001. ▪ PNS Terminal IDs: between 001 and 999; typically 001. 	M	3	N
ccAccountNum	E	flexCache	<p>Card Number identifying the Gift Card Customer</p> <p><u>NOTE:</u> A Gift Card MOP with an account number consisting of all zero's ("000000000000") is a valid account number and is supported by OGW for SafeTech Fraud Only Requests. A Fraud Score will be returned in the response message.</p>	O	19	N
orderID	E	flexCache	<p>Merchant-Defined Order Number</p> <ul style="list-style-type: none"> ▪ Field defined and supplied by the auth originator and echoed back in response. ▪ The first 8 characters should be unique for each transaction. <p>The valid characters include:</p> <ul style="list-style-type: none"> ▪ abcdefghijklmnopqrstuvwxyz ▪ ABCDEFGHIJKLMNOPQRSTUVWXYZ ▪ 0123456789 ▪ - , \$ @ & a space character, though the space character cannot be the leading character <p>For BIN 000002 merchants:</p> <ul style="list-style-type: none"> ▪ If IndustryType = EC, first 16 bytes are passed to the Host Processing System ▪ If IndustryType = MO, first 9 bytes are passed to the Host Processing System 	C	22	A
amount	E	flexCache	<p>Transaction Amount</p> <ul style="list-style-type: none"> ▪ Implied decimal, including those currencies that are a zero exponent. For example, both \$100.00 (an exponent of 2) and ¥100 (an exponent of 0) should be sent as <amount>10000</amount>. 	C	12	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³									
ccPinNum	E	flexCache	<p>Card Verification Data (CVD)/PIN</p> <p>While the CVD value can be submitted on any transaction type, the Gift Card Host will only validate the value on the following transaction types:</p> <ul style="list-style-type: none"> ▪ Authorize ▪ Redemption ▪ Balance Inquiry <p>NOTE Most gift card programs require the presence of this value in the above transaction types.</p>	O	4	N									
comments	E	flexCache	<p>Free-form comments</p> <ul style="list-style-type: none"> ▪ Merchant can fill in this field, and the information will be stored with the transaction details. ▪ For PNS customers, this field will populate the Customer Defined Data field, which is displayed in Resource Online. 	O	64	A									
shippingRef	E	flexCache	<p>Shipping Tracking Reference Number</p> <p>Merchant can fill in this field, and the information will be stored with the transaction details.</p>	O	40	A									
txRefNum	E	flexCache	<p>Gateway Transaction Reference Number</p> <p>A unique value for each transaction, which is required to adjust any transaction in the Gateway, such as a Mark for Capture or Reversal.</p>	M	40	A									
industryType	E	flexCache	<p>Industry Type of the Transaction</p> <p>MO Mail Order transaction RC Recurring Payment (not a valid choice for Canadian merchants) EC eCommerce transaction</p>	M	2	A									
flexAction	E	flexCache	<p>Transaction (or Action) Type</p> <p>Valid values:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">ACTIVATE</td> <td style="width: 33%;">REACTIVATE</td> <td style="width: 33%;">REDEMPTION</td> </tr> <tr> <td>BLOCKACTIVATE</td> <td>ADDVALUE</td> <td>REFUND</td> </tr> <tr> <td>DEACTIVATE</td> <td>AUTH</td> <td>BALANCEINQUIRY</td> </tr> </table>	ACTIVATE	REACTIVATE	REDEMPTION	BLOCKACTIVATE	ADDVALUE	REFUND	DEACTIVATE	AUTH	BALANCEINQUIRY	M	30	A
ACTIVATE	REACTIVATE	REDEMPTION													
BLOCKACTIVATE	ADDVALUE	REFUND													
DEACTIVATE	AUTH	BALANCEINQUIRY													

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
activationCount	E	flexCache	The Number of Cards in Addition to the First Card Number in the Sequence The maximum number of cards that can be activated at one time is 100. As such, the maximum number for this field is 99.	M	2	N
retryTrace	E	flexCache	Trace Number used for Retry Logic <i>SEE ALSO</i> See 3.4.4 Retry Logic for information on this field.	O	16	N
priorAuthCd	E	flexCache	Prior Authorization Code – Indicates the Transaction is a Prior Activation, Add Value, or Redemption <ul style="list-style-type: none"> ▪ If this tag is present with a value, the request is considered a Force/Prior transaction. ▪ If the value is not valid, the Gift Card host treats it as a new transaction. ▪ Prior transactions are only allowed for: <ul style="list-style-type: none"> - Activation, Add Value, and Redemption transactions (as indicated by the value in the <code>flexAction</code> tag) - PNS (BIN 000002) Merchants If a Salem-based Merchant attempts a Prior transaction, a schema error is generated. 	C	6	A
flexEmployeeNumber	E	flexCache	Employee Number Optionally available field to pass an Employee Number on the transaction. This will appear in FlexCache-generated (not Orbital Gateway) reports.	O	15	A

NOTE All further elements of the FlexCache complex type are only used by the Safetech Fraud Analysis service.

avsZip	E	flexCache	Cardholder Billing Address Zip Code <ul style="list-style-type: none"> ▪ All AVS Requests must minimally include the 5-digit Zip Code. ▪ If sending Zip Code + 4, please separate with a hyphen (-). ▪ For BIN 000001, must supply AVSzip, AVSaddress1, and AVScity in order for data to be transmitted to Host Processing System ▪ Required for Bill Me Later sale transactions. 	C	10	A
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XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³												
avsAddress1	E	flexCache	Cardholder Billing Address line 1 <ul style="list-style-type: none"> ▪ Should not include any of the following characters: % ^ \ / ▪ For BIN 000001, must supply AVSzip, AVSaddress1, and AVScity in order for data to be transmitted to Host Processing System ▪ Required for Bill Me Later sale transactions. 	C	30	A												
avsAddress2	E	flexCache	Cardholder Billing Address line 2 Should not include any of the following characters: % ^ \ /	O	30	A												
avsCity	E	flexCache	Cardholder Billing City <ul style="list-style-type: none"> ▪ Should not include any of the following characters: % ^ \ / ▪ For BIN 000001, must supply AVSzip, AVSaddress1, and AVScity in order for data to be transmitted to Host Processing System ▪ Required for Bill Me Later sale transactions. 	C	20	A												
avsState	E	flexCache	Cardholder Billing State <ul style="list-style-type: none"> ▪ Should not include any of the following characters: % ^ \ / ▪ Required for Bill Me Later sale transactions. 	C	2	A												
avsName	E	flexCache	Cardholder Billing Name Required for Bill Me Later sale transactions, all European Direct Debit (EU DD) transactions and all Electronic Check transactions.	C	30	A												
avsPhone	E	flexCache	Cardholder Billing Phone Number AAAAEEENNNNXXXX, where <table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td>AAA</td> <td>=</td> <td>Area Code</td> </tr> <tr> <td>EEE</td> <td>=</td> <td>Exchange</td> </tr> <tr> <td>NNNN</td> <td>=</td> <td>Number</td> </tr> <tr> <td>XXXX</td> <td>=</td> <td>Extension</td> </tr> </table> Conditionally required for Bill Me Later sale transactions.	AAA	=	Area Code	EEE	=	Exchange	NNNN	=	Number	XXXX	=	Extension	C	14	A
AAA	=	Area Code																
EEE	=	Exchange																
NNNN	=	Number																
XXXX	=	Extension																

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³										
avsCountryCode	E	flexCache	Cardholder Billing Address Country Code <ul style="list-style-type: none"> ▪ Valid values: <table> <tr> <td>US</td> <td>United States</td> </tr> <tr> <td>CA</td> <td>Canada</td> </tr> <tr> <td>GB</td> <td>Great Britain</td> </tr> <tr> <td>UK</td> <td>United Kingdom</td> </tr> <tr> <td>" "</td> <td>Blank for all other countries</td> </tr> </table> ▪ Required if processing a U.K.-based address. ▪ Required for Bill Me Later sale transactions. 	US	United States	CA	Canada	GB	Great Britain	UK	United Kingdom	" "	Blank for all other countries	C	2	A
US	United States															
CA	Canada															
GB	Great Britain															
UK	United Kingdom															
" "	Blank for all other countries															
avsDestName	E	flexCache	Cardholder Destination Billing Name	C	30	A										
avsDestAddress	E	flexCache	Cardholder Destination Address line 1 <ul style="list-style-type: none"> ▪ Should not include any of the following characters: % ^ \ / - 	C	30	A										
avsDestAddress2	E	flexCache	Cardholder Destination Address Line 2 <ul style="list-style-type: none"> ▪ Should not include any of the following characters: % ^ \ / - 	O	30	A										
avsDestCity	E	flexCache	Cardholder Destination Billing City <ul style="list-style-type: none"> ▪ Should not include any of the following characters: % ^ \ / - 	C	20	A										
avsDestState	E	flexCache	Cardholder Destination Billing State <ul style="list-style-type: none"> ▪ Should not include any of the following characters: % ^ \ / - 	C	2	A										
avsDestZip	E	flexCache	Cardholder Destination Address Zip Code <ul style="list-style-type: none"> ▪ All AVS Requests must minimally include the 5-digit Zip Code. ▪ If sending Zip Code + 4, please separate with a hyphen (-). 	C	10	A										

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³										
avsDestCountryCode	E	flexCache	<p>Cardholder Destination Address Country Code</p> <ul style="list-style-type: none"> ▪ Valid values: <table> <tr><td>US</td><td>United States</td></tr> <tr><td>CA</td><td>Canada</td></tr> <tr><td>GB</td><td>Great Britain</td></tr> <tr><td>UK</td><td>United Kingdom</td></tr> <tr><td>" "</td><td>Blank for all other countries</td></tr> </table> ▪ Required if processing a U.K.-based address. 	US	United States	CA	Canada	GB	Great Britain	UK	United Kingdom	" "	Blank for all other countries	C	2	A
US	United States															
CA	Canada															
GB	Great Britain															
UK	United Kingdom															
" "	Blank for all other countries															
avsDestPhone	E	flexCache	<p>Cardholder Destination Phone Number</p> <p>AAEENNNNNXXX, where</p> <table> <tr><td>AAA</td><td>= Area Code</td></tr> <tr><td>EEE</td><td>= Exchange</td></tr> <tr><td>NNNN</td><td>= Number</td></tr> <tr><td>XXXX</td><td>= Extension</td></tr> </table> <p>Optional for Bill Me Later sale transactions.</p>	AAA	= Area Code	EEE	= Exchange	NNNN	= Number	XXXX	= Extension	O	14	A		
AAA	= Area Code															
EEE	= Exchange															
NNNN	= Number															
XXXX	= Extension															
customerAni	E	flexCache	<p>Customer Automatic Number Identification</p> <p>The ANI specified phone number that the customer used to place the order.</p>	O	10	N										
avsPhoneType	E	flexCache	<p>Customer Telephone Type Indicator</p> <p>Valid values:</p> <table> <tr><td>D</td><td>Day</td></tr> <tr><td>H</td><td>Home</td></tr> <tr><td>N</td><td>Night</td></tr> <tr><td>W</td><td>Work</td></tr> </table> <p>This value is defaulted to H if any phone number is present and this element is either not present or null filled.</p>	D	Day	H	Home	N	Night	W	Work	O	1	A		
D	Day															
H	Home															
N	Night															
W	Work															

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avsDestPhoneType	E	flexCache	<p>Cardholder Destination Telephone Type Indicator</p> <p>Valid values:</p> <ul style="list-style-type: none"> D Day H Home N Night W Work <p>This value is defaulted to H if any phone number is present and this element is either not present or null filled.</p>	O	1	A
customerEmail	E	flexCache	Cardholder E-mail Address	O	50	A
customerIpAddress	E	flexCache	<p>Customer IP Address</p> <p>The single source IP address used by the customer to request a payment. Supports IPv4 or IPv6 formats. Punctuation marks are allowed.</p>	O	45	AN
emailAddressSubtype	E	flexCache	<p>Customer Email Address Subtype</p> <p>Used to indicate the type of email address in the <code>customerEmail</code> element.</p> <p>Valid values:</p> <ul style="list-style-type: none"> B Bill To/Buyer Email Address G Giftee Email Address <p>This value is defaulted to B if an email address is present and this element is not present or null filled.</p>	O	1	A
customerBrowserName	E	flexCache	<p>Customer Browser Type</p> <p>Used to indicate the type of web browser used by the customer to initiate the request.</p> <p>Example: MOZILLA/4.0 (COMPATIBLE; MSIE 5.0; WINDOWS 95)</p>	O	60	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
shippingMethod	E	flexCache	<p>Method of Shipping To A Customer</p> <p>Valid values:</p> <ul style="list-style-type: none"> C Lowest Cost D Carrier Designated by Customer E Electronic Delivery* G Ground* I International M Military N Next Day or Overnight* O Other P Store Pickup* S Same Day* T Two Day Service* W Three Day Service* <p>For American Express, use only values marked with an asterisk.</p>	O	1	A
fraudAnalysis	E	flexCache	<p>Parent Element for Safetech Fraud Analysis Elements</p> <p>This XML element is the parent for all data used to request a fraud analysis as part of the transaction.</p>	C	N/A	N/A
fraudScoreIndicator	E	fraudAnalysis	<p>Fraud Analysis Type Indicator</p> <p>Used to request the type of fraud analysis performed on the transaction. The value in this field directly determines the scope of elements returned in the response message.</p> <p>Valid values:</p> <ul style="list-style-type: none"> 1 Short Form Request 2 Long Form Request 	C	1	N
rulesTrigger	E	fraudAnalysis	<p>Fraud Analysis Rules Return Trigger</p> <p>Determines whether the Safetech Agent Web Console rules are returned.</p> <p>Valid values:</p> <ul style="list-style-type: none"> Y Triggered rules are returned N Triggered rules are not returned 	O	1	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³				
safetechMerchantID	E	fraudAnalysis	<p>Safetech Merchant ID</p> <p>A value assigned by Chase Paymentech when a merchant is enabled for the Safetech service.</p> <p>This is not the same value as Transaction Division number found in the MerchantID element.</p> <p>If no value is present, a default value will be used if available. If no default is stored, the request will generate an error.</p>	O	6	A/N				
kaptchaSessionID	E	fraudAnalysis	<p>Kaptcha Session ID</p> <p>A merchant generated session ID for this fraud scoring request.</p> <p>The Safetech system recommends this value be unique for 30 days, or the Fraud Score results may not be accurate.</p>	O	32	A				
websiteShortName	E	fraudAnalysis	<p>Short Name for the Merchant's Website</p> <p>This value is used by the Safetech service for fraud score rules.</p>	O	8	A				
cashValueOfFencibleItems	E	fraudAnalysis	<p>Cash Value of Fencible Items</p> <p>The cash value of any fencible items in the order.</p> <p>This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	O	12	N				
customerDOB	E	fraudAnalysis	<p>Customer Date of Birth</p> <p>Format: YYYY-MM-DD (Including dashes)</p> <p>This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	O	10	A/N				
customerGender	E	fraudAnalysis	<p>Customer Gender</p> <p>Valid values:</p> <table style="margin-left: 40px;"> <tr> <td>F</td> <td>Female</td> </tr> <tr> <td>M</td> <td>Male</td> </tr> </table> <p>This element should only be sent when the FraudScoreIndicator element is set to 2.</p>	F	Female	M	Male	O	1	A
F	Female									
M	Male									

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
customerDriverLicense	E	fraudAnalysis	Customer Driver's License Number U.S. Driver's License number only. The Safetech service recommends this value for fraud scoring of Electronic Check (ECP) requests. This element should only be sent when the <code>FraudScoreIndicator</code> element is set to 2.	O	32	A
customerID	E	fraudAnalysis	Customer ID A merchant generated ID for a specific customer. This element should only be sent when the <code>FraudScoreIndicator</code> element is set to 2.	O	32	A
customerIDCreationTime	E	fraudAnalysis	Customer ID Creation Time The time the value used in the <code>CustomerID</code> element was created by the merchant. Format: Unix Epoch This element should only be sent when the <code>FraudScoreIndicator</code> element is set to 2.	O	10	N
kttVersionNumber	E	fraudAnalysis	User Defined and Shopping Cart Format Indicator This element must contain a value of "1" as of the release of this specification if the <code>kttDataLength</code> and <code>kttDataString</code> elements are populated.	C	1	N
kttDataLength	E	fraudAnalysis	User Defined or Shopping Cart Format Data Length Indicates the length of the value of the <code>kttDataString</code> element. This must be a 4 digit number no less than 0001 and no greater than 0999.	C	4	N
kttDataString	E	fraudAnalysis	User Defined or Shopping Cart Format Data String This field can be populated with user-defined Safetech fields, Shopping Cart Data, or both. Please see Safetech Requests: Special notes on KTT elements for additional information.	C	Var	A/N

4.1.12 Batch Close Request Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
endOfDay	E	N/A	XML Tag that Defines the Transaction as a Batch/EOD Request	M	N/A	N/A
BatchRequestNo	A	endOfDay	Sequential Presentation of the Request in the Batch File The value for the End of Day request should be one higher than that of the last BatchRequestNo value and should equal the value submitted in the header RequestCount attribute.	M	6	N
bin	E	endOfDay	Transaction Routing Definition Assigned by Chase Paymentech. 000001 Stratus 000002 Tandem (PNS)	M	6	N
merchantID	E	endOfDay	Gateway Merchant Account Number assigned by Chase Paymentech This account number will match that of your host platform: <ul style="list-style-type: none"> ▪ BIN 000001: 6-digit Stratus Division Number ▪ BIN 000002: 12-digit PNS Merchant ID 	M	15	N
terminalID	E	endOfDay	Merchant Terminal ID assigned by Chase Paymentech <ul style="list-style-type: none"> ▪ Stratus Terminal IDs: presently set to 001. ▪ PNS Terminal IDs: between 001 and 999; typically 001. 	M	3	N

4.2 Response Elements

4.2.1 File Header Response Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
transResponse	E	N/A	Required XML Parent Tag	M	N/A	N/A

4.2.2 Reversal (Void) Response Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
voidResp	E	transResponse	XML Tag that Defines the Transaction as a Reversal Response	M	N/A	N/A
batchRequestNo	A	voidResp	Sequential Presentation of the Response in the Batch File Echoes the Batch Request Number passed in the request.	M	6	N
txRefNum	E	voidResp	Gateway Transaction Reference Number Echoes the Transaction Reference Number passed in the request.	M	40	A
txRefIdx	E	voidResp	Gateway Transaction Index <ul style="list-style-type: none"> ▪ Used to identify the unique components of transactions adjusted more than one time. ▪ Required on Void transactions; not for Mark for Captures. 	M	4	A
outstandingAmt	E	voidResp	Amount Remaining after Void	C	12	N
orderID	E	voidResp	Merchant-Defined Order Number Echoes the Order Number passed in the request.	M	22	A
bin	E	voidResp	Transaction Routing Definition Echoes the BIN sent in request.	M	6	N
merchantID	E	voidResp	Gateway Merchant Account Number assigned by Chase Paymentech Echoes the Merchant ID passed in the request.	M	16	N
terminalID	E	voidResp	Merchant Terminal ID assigned by Chase Paymentech Echoes the Terminal ID passed in the request.	M	3	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
procStatus	E	voidResp	<p>Process Status</p> <ul style="list-style-type: none"> ▪ The first data set that should be checked to determine the result of a request. ▪ The only element that is returned in all response scenarios. ▪ Identifies whether transactions have successfully passed all of the Gateway edit checks: <ul style="list-style-type: none"> ○ Success <p>All other values constitute an error condition. See Table 17 in Appendix A for definition of these error values.</p>	M	6	A
respDateTime	E	voidResp	<p>Date/Time the Transaction was Processed by Gateway</p> <p>Format: MMDDYYYYhhmmss</p>	M	14	N
procStatusMessage	E	voidResp	Text Message Associated with procStatus Value	C	Var	A
retryTrace	E	voidResp	<p>Trace Number used for Retry Logic</p> <p>Echoes the value, if any, passed in the request.</p>	C	16	N

4.2.3 Mark for Capture Response Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
markForCaptureResp	E	transResponse	XML Tag that Defines the Transaction as a Mark for Capture Response	M	N/A	N/A
batchRequestNo	A	markForCaptureResp	<p>Sequential Presentation of the Response in the Batch File</p> <p>Echoes the Batch Request Number passed in the request.</p>	M	6	N
txRefNum	E	markForCaptureResp	<p>Gateway Transaction Reference Number</p> <p>Echoes the Transaction Reference Number passed in request.</p>	M	40	A
amount	E	markForCaptureResp	<p>Amount Captured</p> <p>Echoes the Amount passed in request.</p>	C	12	N
orderID	E	markForCaptureResp	<p>Merchant-Defined Order Number</p> <p>Field defined and supplied by the auth originator and echoed back in response.</p>	C	22	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
bin	E	markForCaptureResp	Transaction Routing Definition Echoes the BIN sent in request.	M	6	N
merchantID	E	markForCaptureResp	Gateway Merchant Account Number assigned by Chase Paymentech Echoes the account number passed in request.	M	15	N
terminalID	E	markForCaptureResp	Merchant Terminal ID assigned by Chase Paymentech Echoes the Terminal ID passed in request.	M	3	N
procStatus	E	markForCaptureResp	Process Status <ul style="list-style-type: none"> ▪ The first data set that should be checked to determine the result of a request. ▪ The only element that is returned in all response scenarios. ▪ Identifies whether transactions have successfully passed all of the Gateway edit checks: <ul style="list-style-type: none"> ○ Success All other values constitute an error condition. See Table 17 in Appendix A for definition of these error values.	M	6	A
respDateTime	E	markForCaptureResp	Date/Time the Transaction was Processed by Gateway Format: MMDDYYYYhhmmss	M	14	N
txRefIdx	E	markForCaptureResp	Gateway Transaction Index <ul style="list-style-type: none"> ▪ Used to identify the unique components of transactions adjusted more than one time. ▪ Required on Void transactions; not for Mark for Captures. 	M	4	A
procStatusMessage	E	markForCaptureResp	Text Message Associated with respCode Value Conditionally sent when procStatus > 0.	C	Var	A
retryTrace	E	markForCaptureResp	Trace Number used for Retry Logic Echoes the value, if any, passed in the request.	C	16	N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
approvalStatus	E	markForCaptureResp	<p>Approval Status</p> <p>Conditional on Process Status returning a 0 (or successful) response. If so, the Approval Status identifies the result of the authorization request to the host system:</p> <ul style="list-style-type: none"> 0 Declined 1 Approved 2 Message/System Error 	C	1	N
respCode	E	markForCaptureResp	<p>Response Code</p> <p>Normalized authorization response code issued by the host system (Salem/PNS), which identifies an approval (00) or the reason for a decline or error.</p> <p>See Table 15 in Appendix A for values.</p>	M	2	A
avsRespCode	E	markForCaptureResp	<p>Address Verification Request Response</p> <p>Conditional on AVS request being sent.</p> <p>See Table 16 in Appendix A for values.</p>	M	2	A
authorizationCode	E	markForCaptureResp	<p>Issuer Approval Code</p> <p>Unique transactional-level code issued by the bank or service establishment for approvals. PINless Debit transactions could return blanks or N/A.</p>	M	6	A
respCodeMessage	E	markForCaptureResp	Text Message Associated with hostRespCode	C	80	A
hostRespCode	E	markForCaptureResp	<p>Actual Host Response Code</p> <ul style="list-style-type: none"> ▪ Exact response sent by host authorization system (non-normalized by the Gateway). ▪ For those systems that have already coded to the Salem/PNS authorization response values, they are available via this tag. 	M	3	A
hostAVSRespCode	E	markForCaptureResp	<p>Actual Host Address Verification Response Code</p> <ul style="list-style-type: none"> ▪ Exact address verification response sent by host authorization system (non-normalized by the Gateway). ▪ For those systems that have already coded to the Salem/PNS authorization response values, they are available via this tag. 	M	2	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
txnSurchargeAmt	E	markForCaptureResp	Transaction Surcharge Amount Echoes the TxnSurchargeAmt on the first capture of a transaction, if a surcharge amount was initially provided.	C	8	N

4.2.4 New Order Response Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
newOrderResp	E	transResponse	XML Tag that Defines the Transaction as a New Order Response	M	N/A	N/A
batchRequestNo	A	newOrderResp	Sequential Presentation of the Response in the Batch File Echoes the Batch Request Number passed in the request.	M	6	N
industryType	E	newOrderResp	Industry Type of the Transaction Echoes the Industry Type sent in request.	M	2	A
transType	E	newOrderResp	Transaction New Order Transaction Type Echoes the Transaction Type passed in the request.	M	2	A
bin	E	newOrderResp	Transaction Routing Definition Echoes the BIN sent in request.	M	6	N
merchantID	E	newOrderResp	Gateway Merchant Account Number assigned by Chase Paymentech Echoes the Merchant ID passed in the request.	M	15	N
terminalID	E	newOrderResp	Merchant Terminal ID assigned by Chase Paymentech Echoes the Terminal ID passed in the request.	M	3	N
ccAccountNum	E	newOrderResp	Account Number <ul style="list-style-type: none"> ▪ Value is conditionally returned for approved Bill Me Later transactions. ▪ Other methods of payment never return the card number. 	C	19	AN

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
cardBrand	E	newOrderResp	Card Type/Brand for the Transaction Returns the Card Type/Brand as processed on the host platform <ul style="list-style-type: none"> ▪ For Refunds and Force transactions, if no <code>cardBrand</code>, such as Visa or MasterCard, was sent in the request (when optional), the specific Card Brand mnemonic is returned. ▪ For PINless Debit transactions, the Card Brand is <code>DP</code> (which is a generic PINless mnemonic). 	C	2	A
orderID	E	newOrderResp	Merchant-Defined Order Number Echoes the Order Number passed in the request.	O	22	A
txRefNum	E	newOrderResp	Gateway Transaction Reference Number A unique value for each transaction, which is required to adjust any transaction in the Gateway (such as Mark for Capture or Void).	M	40	A
txRefIdx	E	newOrderResp	Gateway Transaction Index <ul style="list-style-type: none"> ▪ Used to identify the unique components of transactions adjusted more than one time. ▪ Required on Void transactions; not for Mark for Captures. 	M	4	A
respDateTime	E	newOrderResp	Date/Time the Transaction was Processed by Gateway Format: <code>MMDDYYYYhhmmss</code>	M	14	N
procStatus	E	newOrderResp	Process Status <ul style="list-style-type: none"> ▪ The first element that should be checked to determine the result of a request. ▪ The only element that is returned in all response scenarios. ▪ Identifies whether transactions have successfully passed all of the Gateway edit checks: <ul style="list-style-type: none"> ○ Success All other values constitute an error condition. See Table 17 in Appendix A for definition of these error values.	M	6	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
approvalStatus	E	newOrderResp	<p>Approval Status</p> <p>Conditional on Process Status returning a 0 (or successful) response. If so, the Approval Status identifies the result of the authorization request to the host system:</p> <ul style="list-style-type: none"> 0 Declined 1 Approved 2 Message/System Error 	C	1	N
respCode	E	newOrderResp	<p>Response Code</p> <p>Normalized authorization response code issued by the host system (Salem/PNS), which identifies an approval (00) or the reason for a decline or error.</p> <p>See Table 15 in Appendix A for values.</p>	C	2	A
avsRespCode	E	newOrderResp	<p>Address Verification Request Response</p> <p>Conditional on AVS request being sent.</p> <p>See Table 16 in Appendix A for values.</p>	C	2	A
cavvRespCode	E	newOrderResp	<p>Response Code to Verified by Visa Requests</p> <p>See Table 22 in Appendix A for values.</p>	C	1	A
authorizationCode	E	newOrderResp	<p>Issuer Approval Code</p> <p>Unique transactional-level code issued by the bank or service establishment for approvals. PINless Debit transactions could return blanks or N/A.</p>	C	6	A
mcRecurringAdvCode	E	newOrderResp	<p>Recurring Payment Advice Code</p> <p>Valid values:</p> <ul style="list-style-type: none"> 01 New account information available. Obtain new account information. 02 Try again later. Recycle transaction in 72 hours. 03 Do not try again. Obtain another type of payment from customer. <p>NOTES:</p> <ul style="list-style-type: none"> ▪ MasterCard recurring transactions only. 	C	2	N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
procStatusMessage	E	newOrderResp	Text Message Associated with respCode Value Conditionally sent when procStatus > 0.	M	Var	A
respCodeMessage	E	newOrderResp	Message Associated with hostRespCode Conditionally sent when procStatus = 0.	C	80	A
hostRespCode	E	newOrderResp	Actual Host Response Code <ul style="list-style-type: none"> ▪ Exact response sent by host authorization system (non-normalized by the Gateway). ▪ For those systems that have already coded to the Salem/PNS authorization response values, they are available via this tag. 	C	3	A
hostAVSRespCode	E	newOrderResp	Actual Host Address Verification Response Code <ul style="list-style-type: none"> ▪ Exact address verification response sent by host authorization system (non-normalized by the Gateway). ▪ For those systems that have already coded to the Salem/PNS authorization response values, they are available via this tag. 	C	2	A
customerRefNum	E	newOrderResp	Customer Reference Number to use for a Customer Profile on all future Orders Based on the customerProfileFromOrderInd field from a Profile Add: <ul style="list-style-type: none"> ▪ If customerProfileFromOrderInd = s, this field will echo the Customer Reference Number sent in the Profile Request. ▪ If customerProfileFromOrderInd = A, this field will return Customer Reference Number assigned by the Orbital Gateway. 	M	22	A
customerName	E	newOrderResp	Customer Billing Name	C	30	A
profileProcStatus	E	newOrderResp	Result Status of Profile Management Communicates the success or failure of a Profile Management request: 0 Success >0 An error condition, see Table 18 in Appendix A for values	C	6	A
profileProcStatusMsg	E	newOrderResp	Verbose Text Description associated with profileProcStatus	C	Var	A
retryTrace	E	newOrderResp	Defines the Trace Number used for Retry Logic Echo of request value, if sent.	C	16	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
retryAttempCount	E	newOrderResp	Number of Times a Transaction Result has been Returned 0 First Response (unique <code>retryTrace</code>) ≥1 The Orbital Gateway has processed this request previously and is echoing back the response. The number represents the number of requests processed by the Gateway with the same <code>retryTrace</code> number.	C	2	N
lastRetryDate	E	newOrderResp	Timestamp of Last Retry Attempt The date/time at which the PREVIOUS transaction using the same <code>retryTrace</code> value was processed by Gateway, in the format <code>yyyymmddhh24mmss</code> .	C	14	N
fraudScoreProcStatus	E	newOrderResp	Process Status of Fraud Score request <ul style="list-style-type: none"> ▪ Identifies whether transactions have successfully passed all of the Gateway edit checks related specifically to Fraud Analysis messages: 0 Success All other values constitute an error condition. See Table 17 in Appendix A for definition of these error values.	M	Var	N
fraudScoreProcMsg	E	newOrderResp	Verbose Text Description associated with FraudScoreProcStatus	C	Var	A
fraudAnalysisResponse	E	newOrderResp	Parent Element of Fraud Analysis Response Data	M	N/A	N/A
fraudScoreIndicator	E	fraudAnalysis Response	Echoes FraudScoreIndicator from the request message.	M	1	N
fraudStatusCode	E	fraudAnalysis Response	Fraud Status Code The response code returned by the Safetech service to indicating the status of the fraud analysis.	C	4	A
riskInquiryTransactionID	E	fraudAnalysis Response	Risk Inquiry Transaction ID A unique ID used to identify the fraud assessment.	C	32	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
autoDecisionResponse	E	fraudAnalysisResponse	<p>Auto Decision Response</p> <p>The auto decision response code returned by the Safetech service.</p> <p>The following is a list of valid values.</p> <ul style="list-style-type: none"> A Approved D Decline E Manager Review R Review <p>This list may expand in the future.</p>	O	1	A
riskScore	E	fraudAnalysisResponse	<p>Risk Score</p> <p>This element may be returned as null if the Safetech service was not successful in generating a fraud score.</p>	C	2	N
kaptchaMatchFlag	E	fraudAnalysisResponse	<p>Kaptcha Match Flag</p> <p>Indicates if a request to the Safetech service has a corresponding Kaptcha record.</p>	O	1	A
worstCountry	E	fraudAnalysisResponse	<p>Worst Country</p> <p>The two character ISO 3166 country code of the highest risk country associated with this customer in the last 14 days.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	C	2	A
customerRegion	E	fraudAnalysisResponse	<p>Customer Region</p> <p>The estimated region of the customer.</p> <p>The Safetech service will use lower case letters to represent a state or province, while uppercase letters indicate a county.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	C	2	A
paymentBrand	E	fraudAnalysisResponse	<p>Payment Brand</p> <p>The payment method (brand) identified by the Safetech service during Fraud Analysis.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	4	A
fourteenDayVelocity	E	fraudAnalysisResponse	<p>Fourteen Day Velocity</p> <p>The total number of prior sales by this customer within the last 14 days.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	2	A/N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
sixHourVelocity	E	fraudAnalysisResponse	<p>Six Hour Velocity</p> <p>The total number of prior sales by this customer in any six hour window over the last 14 days.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	2	A/N
customerNetwork	E	fraudAnalysisResponse	<p>Customer Network Type indicator</p> <p>A single character designation of the type of network used by the customer to initiate the transaction.</p> <p>Some possible values can include:</p> <ul style="list-style-type: none"> A Anonymous L Library H High School N Normal P Prison S Satellite <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	1	A
numberOfDevices	E	fraudAnalysisResponse	<p>Number of Devices with Transaction</p> <p>The number of devices associated with the transaction, as recorded by the Safetech service.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	3	N
numberOfCards	E	fraudAnalysisResponse	<p>Number of Cards with Transaction</p> <p>The number of cards associated with the transaction, as recorded by the Safetech service.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	3	N
numberOfEmails	E	fraudAnalysisResponse	<p>Number of Emails with Transaction</p> <p>The number of emails associated with the transaction, as recorded by the Safetech service.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	3	N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
deviceLayers	E	fraudAnalysisResponse	<p>Device Layer Description</p> <p>A period-delimited description of the Network, Flash, JavaScript, HTTP, and Browser layers of the device used by the customer to initiate the transaction, as determined by the Safetech service.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	54	A
deviceFingerprint	E	fraudAnalysisResponse	<p>Device Fingerprint</p> <p>A hash of system identifiers determined by the Safetech service to be constants for the device used by the customer.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	32	A
customerTimeZone	E	fraudAnalysisResponse	<p>Customer Time Zone</p> <p>The time zone where the customer resides, as an offset from GMT.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	4	N
customerLocalDateTime	E	fraudAnalysisResponse	<p>Customer Local Date & Time</p> <p>The local timestamp of the customer's device.</p> <p>Format: YYYY-MM-DD HH:MM</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	16	N
deviceRegion	E	fraudAnalysisResponse	<p>Device Region</p> <p>Indicates the region or state where the customer's device resides.</p> <p>This field is case sensitive. The Safetech service will use lower case letters to represent a state or province, while uppercase letters indicate a county.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	2	A
deviceCountry	E	fraudAnalysisResponse	<p>Device Country</p> <p>The ISO 3166 Country code which indicates the country where the customer's device resides.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	2	A
proxyStatus	E	fraudAnalysisResponse	<p>Proxy Status Indicator</p> <p>Indicates if the device used by the customer is using a proxy network.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	1	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
javascriptStatus	E	fraudAnalysisResponse	JavaScript Status Indicator Indicates if the device used by the customer allows use of JavaScript. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
flashStatus	E	fraudAnalysisResponse	Flash Status Indicator Indicates if the device used by the customer allows Flash. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
cookiesStatus	E	fraudAnalysisResponse	Cookies Status Indicator Indicates if the device used by the customer allows use of cookies. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
browserCountry	E	fraudAnalysisResponse	Browser Country The ISO 3166 Country code which indicates the country where the customer's browser resides. This element is only returned with a FraudScoreIndicator of 2.	O	2	A
browserLanguage	E	fraudAnalysisResponse	Browser Language The ISO 639-1 standard code which indicates the language of the customer's browser. This element is only returned with a FraudScoreIndicator of 2.	O	2	A
mobileDeviceIndicator	E	fraudAnalysisResponse	Mobile Device Indicator Indicates if the device used by the customer is a mobile device. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
mobileDeviceType	E	fraudAnalysisResponse	Mobile Device Type A description of the type of mobile device used by the customer This element is only returned with a FraudScoreIndicator of 2.	O	32	A
mobileWirelessIndicator	E	fraudAnalysisResponse	Mobile Wireless Indicator Indicates if the device used by the customer has wireless capabilities. This element is only returned with a FraudScoreIndicator of 2.	O	1	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
voiceDevice	E	fraudAnalysisResponse	Voice Device Indicator Indicates if the device used by the customer is voice controlled. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
pcRemoteIndicator	E	fraudAnalysisResponse	PC Remote Indicator Indicates if the device used by the customer is a remotely controlled computer. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
rulesDataLength	E	fraudAnalysisResponse	Rules Trigger Reply Data Length Indicates the length of the data contained in the RulesData element. Values in this element are no less than 0005 and no greater than 0999. Returned only if the RulesTrigger element is set to 'Y' on the request message.	O	4	N
rulesData	E	fraudAnalysisResponse	Rules Trigger Reply Data A comma-delimited list of the rules triggered in the Safetech service by the transaction request. Please see Safetech Responses: Special notes on Rules Triggers for additional information.	O	Var	A/N
ctiAffluentCard	E	newOrderResp	Card Indicator: Affluent Category Affluent cards have very high pre-set spending limits, if any. Returned only for BIN 000001 merchants on applicable transactions.	O	1	A
ctiCommercialCard	E	newOrderResp	Card Indicator: Commercial Card See Card Type Indicators: Enhanced Authorizations for more information. Returned only for BIN 000001 merchants on applicable transactions.	O	1	A
ctiDurbinExemption	E	newOrderResp	Card Indicator: Durbin Returned only for BIN 000001 merchants on applicable transactions.	O	1	A
ctiHealthcareCard	E	newOrderResp	Card Indicator: Healthcare Card Returned only for BIN 000001 merchants on applicable transactions.	O	1	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
ctiLevel3Eligible	E	newOrderResp	Card Indicator: Level 3 Data Eligibility See Card Type Indicators: Enhanced Authorizations for more information. Returned only for BIN 000001 merchants on applicable transactions.	O	1	A
ctiPayrollCard	E	newOrderResp	Card Indicator: Payroll Card Returned only for BIN 000001 merchants on applicable transactions.	O	1	A
ctiPrepaidCard	E	newOrderResp	Card Indicator: Prepaid Card Returned only for BIN 000001 merchants on applicable transactions.	O	1	A
ctiPINlessDebitCard	E	newOrderResp	Card Indicator: PINless Debit Eligibility See Card Type Indicators: Enhanced Authorizations for more information. Returned only for BIN 000001 merchants on applicable transactions.	O	1	A
ctiSignatureDebitCard	E	newOrderResp	Card Indicator: Signature Debit Eligibility Signature Debit refers to processing a debit card as a credit card. Returned only for BIN 000001 merchants on applicable transactions.	O	1	A
ctiIssuingCountry	E	newOrderResp	Card Indicator: Issuing Country Used to distinguish a domestic or international customer. Format: 3 alphanumeric character ISO country code. Returned only for BIN 000001 merchants on applicable transactions.	O	3	A
euddCountryCode	E	newOrderResp	EUDD Country Code Echoes the value in the request.	O	2	A
euddBankSortCode	E	newOrderResp	EUDD Bank Sort Code Echoes the value in the request.	O	10	AN
euddRibCode	E	newOrderResp	EUDD RIB Echoes the value in the request.	O	2	AN
euddBankBranchCode	E	newOrderResp	EUDD Bank Branch Code Echoes the value in the request.	O	10	AN
euddIBAN	E	newOrderResp	EUDD International Bank Account Number (IBAN) If not present in the request, this may be returned by the issuer.	O	34	AN

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
euddBIC	E	newOrderResp	EUDD Bank Identification Code If not present in the request, this may be returned by the issuer.	O	11	AN
euddMandateSignatureDate	E	newOrderResp	EUDD Mandate Signature Date Echoes the value in the request.	O	8	N
euddMandateID	E	newOrderResp	EUDD Mandate ID Echoes the value in the request.	O	35	AN
euddMandateType	E	newOrderResp	EUDD Mandate Type Echoes the value in the request.	O	1	N
avAccountStatusCode	E	newOrderResp	Advanced Verification Account Status Code <ul style="list-style-type: none">• Conditional on Advanced Verification Electronic Check transactions.• Bank account status code returned when an Account Status Verification action is taken.• See <i>5.2.5.4 ECP Advanced Verification Processing Requirements</i> for descriptions of Account Status Codes.	C	3	N
avAOAConditionCode	E	newOrderResp	Advanced Verification AOA Condition Code <ul style="list-style-type: none">• Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication.• Value returned to indicate the availability of Account Owner Authentication data.• See <i>5.2.5.4 ECP Advanced Verification Processing Requirements</i> for descriptions of Account Owner Authentication (AOA) Condition codes.	C	3	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avFullNameMatch	E	newOrderResp	<p>Advanced Verification Full Name Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches C - Conditionally (Partially) matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on all three name fields on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A
avFirstNameMatch	E	newOrderResp	<p>Advanced Verification First Name Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on the First Name field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avMiddleNameMatch	E	newOrderResp	<p>Advanced Verification Middle Name or Initial Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on Middle Name or Initial field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A
avLastNameMatch	E	newOrderResp	<p>Advanced Verification Last Name Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on the Last Name field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avBusinessNameMatch	E	newOrderResp	<p>Advanced Verification Business Name or Initial Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches C - Conditionally (Partially) matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on the Business Name field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A
avAddressMatch	E	newOrderResp	<p>Advanced Verification Address 1 and Address 2 Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches C - Conditionally (Partially) matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on the combined Address 1 and Address 2 fields on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avCityMatch	E	newOrderResp	<p>Advanced Verification State Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on the State field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A
avIDStateMatch	E	newOrderResp	<p>Advanced Verification State Identification Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on ID State field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A
avZipMatch	E	newOrderResp	<p>Advanced Verification Zip Code Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches C - Conditionally (Partially) matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on the Zip field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avPhoneMatch	E	newOrderResp	<p>Advanced Verification Phone Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches C - Conditionally (Partially) matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on the Phone field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A
avSSNTINMatch	E	newOrderResp	<p>Advanced Verification SSN or TIN Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match of the last four digits on SSN or TIN field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avDOBMatch	E	newOrderResp	<p>Advanced Verification Date of Birth Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches C - Conditionally (Partially) matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on the DOB field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A
avIDTypeMatch	E	newOrderResp	<p>Advanced Verification ID Type Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on ID Type field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
avIDNumerMatch	E	newOrderResp	<p>Advanced Verification Identification Number Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches C - Conditionally (Partially) matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on the ID Number field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A
avStateMatch	E	newOrderResp	<p>Advanced Verification State Match Code</p> <ul style="list-style-type: none"> Conditional on Advanced Verification Electronic Check transactions with Account Owner Authentication, when the corresponding data is in the New Order request. <p>Valid values:</p> <ul style="list-style-type: none"> Y - Closely or exactly matches N - No match U - No identifying data is available " " - Blank <ul style="list-style-type: none"> Notes: Indicates the results of a match on the State field on the ECP Advanced Verification for an Account Owner Authentication. It is returned when avAOAConditionCode is 000 (Normal return – no system errors). 	C	1	A
fxOptOutInd	E	newOrderResp	<p>Opt-Out Indicator</p> <p>If this field is populated the merchant is opting out of the special rate processing and the system is using the default currency conversion rates.</p> <p>Valid values:</p> <ul style="list-style-type: none"> Y = Merchant is opting out of the processing for custom IB rates. N = Default value, Merchant is opting in for the processing of custom IB rates. <p>Conditionally returned for Access FX transaction.</p>	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
fxRateHandlingInd	E	newOrderResp	<p>Rate Handling Indicator Indicator to allow the merchant to determine the processing of the Rate ID. If there is an issue with the Rate ID, the transaction can either be rejected or it can use a default rate ID for Deposit processing.</p> <p>Valid values: D = Default Rate ID is used if the Rate ID cannot be determined. R = Reject the transaction if the Rate ID cannot be determined.</p> <p>Notes: If the <i>fxOptOutInd</i> field = Y, this field can be blank. If the <i>fxOptOutInd</i> field = N", this field is mandatory.</p> <p>Conditionally returned for Access FX transaction.</p>	C	1	A
fxRateID	E	newOrderResp	<p>Rate Identifier Rate Identifier is used to indicate the exchange rate that is being used for the transaction.</p> <p>Conditionally returned for Access FX transaction.</p>	C	37	A
fxExchangeRate	E	newOrderResp	<p>Exchange Rate Exchange Rate used for the -Currency conversion. Exchange Rate is populated from the Rate file and is used for the currency conversion.</p> <p>Conditionally returned for Access FX transaction.</p>	C	20	N
fxPresentmentCurrency	E	newOrderResp	<p>Presentment Currency Presentment Currency involved in the transaction. Values must be in ISO Format. For example: ISO Numeric value for Euro is 978</p> <p>Conditionally returned for Access FX transaction.</p>	C	3	N
fxSettlementCurrency	E	newOrderResp	<p>Settlement Currency Settlement Currency involved for Settlement. Values must be in ISO format. For example: ISO Numeric value for Euro is 978</p> <p>Conditionally returned for Access FX transaction.</p>	C	3	N
fxDefaultRateInd	E	newOrderResp	<p>Default Rate Indicator (Default Rate ID) Indicates that the default RateID and Rate was used to process the record</p> <p>Valid values: Y = Default Rate ID/Rate used for processing N = Default was not used.</p> <p>Conditionally returned for Access FX transaction.</p>	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
fxRateStatus	E	newOrderResp	Rate Status Indicates the status of the rate information exchanged with Chase Merchant Services. . Valid values: Table 32 FX Rate Status Code Conditionally returned for Access FX transaction.	C	3	A
mitReceivedTransactionID	E	newOrderResp	Received Transaction ID The received Transaction ID returned to the merchant. This field will always have a value for CIT/MIT transactions.	C	15	A
avConsumerAccountDate	E	newOrderResp	EWS Consumer Account Date Advance Verification Consumer Account Date indicates the date when the customer's checking account was added or deleted from the ECP EWS Advanced Verification database <u>Conditional upon:</u> EWS Status Flag = Y/Enabled/TRUE Client Certification Flag = Y/Enabled/TRUE Date Format [MM/DD/YYYY] <u>Notes:</u> "A" = date that the account was added to the database "D" = date that the account was deleted from the database In order to receive this field in the response message, merchants will have to use Version 3.5 or higher.	C	8	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
rtauUpdatedCardNum	E	newOrderResp	<p>Updated Credit Card Number received from RTAU Response</p> <p>Conditional upon if there is an updated credit card number returned in place of the original credit card submitted in the request.</p> <p>Identifies an updated credit card number for a particular transaction when RTAU happened.</p> <p>NOTE:</p> <ul style="list-style-type: none"> 1) For Use Profile base transactions, Orbital will update the card information within the profile and only return the Profile ID back to the merchant. 2) For On-the-fly Profile base transactions, Orbital will update the card information within the profile and send the updated Card number and the Profile ID back to the merchant. 3) For Non-profile related transactions, Orbital will return the Updated card number back to the merchant. 	C	19	N
rtauUpdatedCardExp	E	newOrderResp	<p>Updated Credit Card Expiration Date received from RTAU Response</p> <p>Conditional upon if there is an updated expiration date returned for the credit card submitted in the request.</p> <p>Identifies an updated Expiration date for the credit card submitted when RTAU was done.</p> <p>Format: YYYYMM</p> <p>NOTE:</p> <ul style="list-style-type: none"> 1) For Use Profile base transactions, Orbital will update the card information within the profile and only return the Profile ID back to the merchant. 2) For On-the-fly Profile base transactions, Orbital will update the card information within the profile and send the updated Exp. date and the Profile ID back to the merchant. 3) For Non-profile related transactions, Orbital will return the Exp. Date back to the merchant 	C	6	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
rtauResponseCode	E	newOrderResp	<p>Real Time Account Updater Response Code</p> <p>For all the transactions that are eligible for RTAU, Orbital will always receive a RTAU response code.</p> <p><u>NOTE:</u> Refer to RTAU Response Code</p> <p>1) For Use Profile base transactions, Orbital will not send a RTAU response code back to the merchant as well as not display it in VT.</p> <p>In Virtual Terminal, this field will be displayed as "Real Time Account Update Response Code"</p>	C	1	A

4.2.5 Customer Profile Response Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
customerProfileResp	E	transResponse	XML Tag that Defines the Transaction as a Profile Response	M	N/A	N/A
batchRequestNo	A	customerProfileResp	<p>Sequential Presentation of the Response in the Batch File</p> <p>Echoes the Batch Request Number passed in the request.</p>	M	6	N
bin	E	customerProfileResp	<p>Transaction Routing Definition</p> <p>Echoes the BIN passed in the request.</p>	M	6	N
merchantID	E	customerProfileResp	<p>Gateway Merchant Account Number assigned by Chase Paymentech</p> <p>Echoes the Merchant ID passed in the request.</p>	M	15	N
customerName	E	customerProfileResp	Customer Billing Name	C	30	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³								
customerRefNum	E	customerProfileResp	Customer Reference Number <ul style="list-style-type: none"> ▪ If this is the response to a Profile Add request and customerProfileFromOrderInd = A, this field will return Customer Reference Number assigned by the Orbital Gateway. ▪ Otherwise, this field will echo the Customer Reference Number sent in the Profile Request. 	M	22	A								
profileAction	E	customerProfileResp	Customer Profile Action that was Requested <table> <tr> <td>CREATE</td> <td>customerProfileAdd response</td> </tr> <tr> <td>UPDATE</td> <td>customerProfileChange response</td> </tr> <tr> <td>READ</td> <td>customerProfileFetch response</td> </tr> <tr> <td>DELETE</td> <td>customerProfileDelete response</td> </tr> </table>	CREATE	customerProfileAdd response	UPDATE	customerProfileChange response	READ	customerProfileFetch response	DELETE	customerProfileDelete response	M	1	A
CREATE	customerProfileAdd response													
UPDATE	customerProfileChange response													
READ	customerProfileFetch response													
DELETE	customerProfileDelete response													
profileProcStatus	E	customerProfileResp	Result Status of Profile Management Communicates the success or failure of a Profile Management request: 0 Success >0 An error condition, see Table 18 in Appendix A for values.	C	6	A								
profileProcStatusMessage	E	customerProfileResp	Text Message Associated with ProfileProcStatus Value	C	Var	A								
customerAddress1	E	customerProfileResp	Cardholder Billing Address line 1 Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	30	A								
customerAddress2	E	customerProfileResp	Cardholder Billing Address line 2 Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	30	A								
customerCity	E	customerProfileResp	Cardholder Billing City Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	20	A								

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
customerState	E	customerProfileResp	Cardholder Billing State Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	2	A
customerZIP	E	customerProfileResp	Cardholder Billing Address Zip Code Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	10	A
customerEmail	E	customerProfileResp	Cardholder E-mail Address Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	50	A
customerPhone	E	customerProfileResp	Cardholder Telephone Number Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	14	A
customerCountryCode	E	customerProfileResp	Cardholder Billing Country Code Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	2	A
profileOrderOverrideInd	E	customerProfileResp	Whether any Order Data can be pre-populated from the Customer Reference Number (CustomerRefNum) Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved. NO No mapping to order data OI Use <customerRefNum> for <orderID> OD Use <customerRefNum> for <comments> OA Use <customerRefNum> for <orderID> and <comments>	M	2	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
orderDefaultDescription	E	customerProfileResp	Order Description Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	64	A
orderDefaultAmount	E	customerProfileResp	Defaulted Transaction Amount Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	12	N
status	E	customerProfileResp	Current Status of the Profile A Active I Inactive MS Manual Suspend	C	Var	A
ccAccountNum	E	customerProfileResp	Customer Credit Card Number Data conditionally returned depending on the request type	C	19	AN
ccExp	E	customerProfileResp	Customer Credit Card Expiration Date Data conditionally returned depending on the request type	C	4	N
ecpCheckDDA	E	customerProfileResp	ECP (DDA) Account Number Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	17	N
ecpBankAcctType	E	customerProfileResp	Deposit Account Type Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	1	A
ecpCheckRT	E	customerProfileResp	Bank Routing and Transit Number for the Customer Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	9	N
ecpDelvMethod	E	customerProfileResp	ECP Payment Delivery Method Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	1	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
switchSoloCardStartDate	E	customerProfileResp	Switch/Solo Card Activation Date Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	4	N
switchSoloIssueNum	E	customerProfileResp	Customer Switch/Solo Card Issue Number Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	2	N
mbType	E	customerProfileResp	Managed Billing Type R Recurring D Deferred	C	1	A
mbOrderIdGenerationMethod	E	customerProfileResp	Managed Billing Order ID Generation Method IO Use the Customer Reference Number (Profile ID). DI Dynamically generate the Order ID.	C	2	A
mbRecurringStartDate	E	customerProfileResp	Managed Billing Recurring Start Date <ul style="list-style-type: none">▪ The date that Orbital began/will begin a recurring billing cycle to the associated Profile.▪ Format: MMDDYYYY	C	8	N
mbRecurringEndDate	E	customerProfileResp	Managed Billing Recurring End Date <ul style="list-style-type: none">▪ Defines the future date that Orbital ended/will end a recurring billing cycle to the associated Profile.▪ Format: MMDDYYYY	C	8	N
mbRecurringNoEndDateFlag	E	customerProfileResp	Managed Billing 'No End Date' Indicator Y Recurring transactions are scheduled for an infinite amount of time. A Y in this element overrides the value, if any, in the mbRecurringEndDate element. N (or blank) Orbital is using the value of the mbRecurringEndDate element to define the recurring end date.	C	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
mbRecurringMaxBillings	E	customerProfileResp	Managed Billing Max Number of Billings <ul style="list-style-type: none"> The maximum number of billings that will be allowed for a recurring billing cycle. Valid values: 1–999999 	C	6	N
mbRecurringFrequency	E	customerProfileResp	Managed Billing Recurring Frequency Pattern This pattern is a subset of a standard CRON expression, comprising 3 fields separated by white space. SEE ALSO For a full discussion of these three fields, the usage of the special characters, and multiple example values, see 3.4.3 Profiles and Managed Billing .	C	Var	A
mbDeferredBillDate	E	customerProfileResp	Managed Billing Deferred Billing Date Format: MMDDYYYY	C	8	N
sDMerchantName	E	customerProfileResp	Soft Descriptor Merchant Name	C	25	A
sDProductDescription	E	customerProfileResp	Soft Descriptor Product Description	C	18	A
sDMerchantCity	E	customerProfileResp	Soft Descriptor Merchant City	C	13	A
sDMerchantPhone	E	customerProfileResp	Soft Descriptor Merchant Phone	C	12	A
sDMerchantEmail	E	customerProfileResp	Soft Descriptor Merchant E-mail	C	13	A
euddCountryCode	E	customerProfileResp	European Direct Debit Country Code	C	2	A
euddBankSortCode	E	customerProfileResp	European Direct Debit Bank Sort Code	C	10	A
euddRIBCode	E	customerProfileResp	European Direct Debit RIB	C	2	A
billerReferenceNumber	E	customerProfileResp	Biller Reference Number (PINless Debit BillPay Only) Echoed from Request.	C	25	A
pinlessDebitMerchantUrl	E	customerProfileResp	Merchant URL (PINless Debit E-commerce Only) Echoed from Request.	C	40	ANS
pinlessDebitTxnType	E	customerProfileResp	PINless Debit Transaction Type Echoed from Request.	M	2	A
accountUpdaterEligibility	E	customerProfileResp	Account Updater Eligibility Flag	C	1	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
euddBankBranchCode	E	customerProfileResp	EUDD Bank Branch Code Echoes the value in the request.	O	10	AN
euddIBAN	E	customerProfileResp	EUDD International Bank Account Number (IBAN) Echoes the value in the request.	O	34	AN
euddBIC	E	customerProfileResp	EUDD Bank Identification Code Echoes the value in the request.	O	11	AN
euddMandateSignatureDate	E	customerProfileResp	EUDD Mandate Signature Date Echoes the value in the request.	O	8	N
euddMandateID	E	customerProfileResp	EUDD Mandate ID Echoes the value in the request.	O	35	AN
euddMandateType	E	customerProfileResp	EUDD Mandate Type Echoes the value in the request.	O	1	N
mitMsgType	E	customerProfileResp	CIT/MIT Code Echoes the value in the request.	C	4	A
mitSubmittedTransactionID	E	customerProfileResp	Submitted MIT Transaction ID Echoes the value in the request.	C	15	A

4.2.6 Account Updater Response Elements

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
accountUpdaterResp	E	transResponse	XML Tag that Defines the Transaction as an Account Updater Response	M	N/A	N/A
batchRequestNo	A	accountUpdater Resp	Sequential Presentation of the Response in the Batch File Echoes the Batch Request Number passed in the request.	M	6	N
bin	E	accountUpdater Resp	Transaction Routing Definition Echoes the BIN passed in the request.	M	6	N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
merchantID	E	accountUpdater Resp	Gateway Merchant Account Number assigned by Chase Paymentech Echoes the Merchant ID passed in the request.	M	15	N
terminalID	E	accountUpdater Resp	Gateway Terminal ID Number assigned by Chase Paymentech Echoes the Terminal ID passed in the request.	M	3	N
customerRefNum	E	accountUpdater Resp	Customer Reference Number Echoes the Profile ID (customerRefNum) passed in the request.	C	22	N
scheduledDate	E	accountUpdater Resp	Scheduled Date that was Requested for Account Updater Echoes the future Scheduled Date of the request, if such a date was specified.	C	8	A
procStatus	E	accountUpdater Resp	Result Status of Profile Management Communicates the success or failure of a Profile Management request: 0 Success >0 An error condition, see Table 18 in Appendix A for values.	M	6	A
procStatusMessage	E	accountUpdater Resp	Text Message Associated with ProfileProcStatus Value	C	Var	A
respDateTime	E	accountUpdater Resp	Time the Transaction was Processed by Gateway Format: MMDDYYYYHH24MISS	C	15	A

4.2.7 Safetech Fraud Analysis Response Elements

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
safetechFraudAnalysis Resp	E	transResponse	XML Tag that Defines the Transaction as a Fraud Analysis Response	M	N/A	N/A
batchRequestNo	A	safetechFraud AnalysisResp	Sequential Presentation of the Response in the Batch File Echoes the Batch Request Number passed in the request.	M	6	N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
industryType	E	safetechFraudAnalysisResp	Industry Type of the Transaction Echoes the Industry Type sent in request.	M	2	A
bin	E	safetechFraudAnalysisResp	Transaction Routing Definition Echoes the BIN passed in the request.	M	6	N
merchantID	E	safetechFraudAnalysisResp	Gateway Merchant Account Number assigned by Chase Paymentech Echoes the Merchant ID sent in request.	M	15	N
terminalID	E	safetechFraudAnalysisResp	Merchant Terminal ID assigned by Chase Paymentech Echoes the Terminal ID sent in request.	M	3	N
cardBrand	E	safetechFraudAnalysisResp	Card Type/Brand for the Transaction Returns the Card Type/Brand as processed on the host platform <ul style="list-style-type: none"> ▪ For Refunds and Force transactions, if no cardBrand, such as Visa or MasterCard, was sent in the request (when optional), the specific Card Brand mnemonic is returned. ▪ For PINless Debit transactions, the Card Brand is DP (which is a generic PINless mnemonic). 	C	2	A
ccAccountNum	E	safetechFraudAnalysisResp	Gift Card Account Number Echoes the Account Number sent in request.	M	19	AN
orderID	E	safetechFraudAnalysisResp	Merchant-Defined Order Number Field defined and supplied by the authorization originator and echoed back in response.	C	22	A
txRefNum	E	safetechFraudAnalysisResp	Gateway Transaction Reference Number A unique value for each transaction, which is required to Void (Reverse) a transaction.	M	40	A
respDateTime	E	safetechFraudAnalysisResp	Date/Time the Transaction was Processed by Gateway Format: MMDDYYYYhhmmss	M	14	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
procStatus	E	safetechFraudAnalysisResp	<p>Process Status</p> <ul style="list-style-type: none"> ▪ The first data set that should be checked to determine the result of a request. ▪ The only element that is returned in all response scenarios. ▪ Identifies whether transactions have successfully passed all of the Gateway edit checks: <p>0 Success</p> <p>All other values constitute an error condition. See Table 17 in Appendix A for definition of these error values.</p>	M	6	A
approvalStatus	E	safetechFraudAnalysisResp	<p>Approval Status</p> <p>Conditional on:</p> <ul style="list-style-type: none"> ▪ Process Status returning a 0 or successful response. ▪ Only returned if performing a MFC on a Gift Card Type. <p>If present, the approval status identifies the result of the authorization request to the host system:</p> <p>0 Decline</p> <p>1 Approved</p> <p>2 Message/System Error</p>	C	1	N
respCode	E	safetechFraudAnalysisResp	<p>Response Code</p> <ul style="list-style-type: none"> ▪ Normalized authorization response code issued by the host system (Salem/PNS), which identifies an approval (00) or the reason for a decline or error. ▪ Conditionally returned when ProcStatus = 0. <p>See Table 15 in Appendix A for values.</p>	C	2	A
procstatusMessage	E	safetechFraudAnalysisResp	Text Message Associated with respCode Value	C	Var	A
respCodeMessage	E	safetechFraudAnalysisResp	Message Associated with hostRespCode	C	80	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
hostRespCode	E	safetechFraudAnalysisResp	Actual Host Response Code <ul style="list-style-type: none"> Exact response sent by host authorization system (non-normalized by the Gateway). For those systems that have already coded to the Salem/PNS authorization response values, they are available via this tag. 	C	3	A
retryTrace	E	safetechFraudAnalysisResp	Defines the Trace Number used for Retry Logic Echo of request value, if sent.	C	16	N
retryAttempCount	E	safetechFraudAnalysisResp	Number of Times a Transaction Result has been Returned <p>0 First Response (unique retryTrace)</p> <p>≥1 The Orbital Gateway has processed this request previously and is echoing back the response. The number represents the number of requests processed by the Gateway with the same retryTrace number.</p>	C	2	N
lastRetryDate	E	safetechFraudAnalysisResp	Timestamp of Last Retry Attempt The date/time at which the PREVIOUS transaction using the same retryTrace value was processed by Gateway, in the format yyyy-mm-dd hh24:mm:ss.	C	14	N
customerRefNum	E	safetechFraudAnalysisResp	Customer Reference Number to use for a Customer Profile on all future Orders Based on the customerProfileFromOrderInd field from a Profile Add: <ul style="list-style-type: none"> If customerProfileFromOrderInd = s, this field will echo the Customer Reference Number sent in the Profile Request. If customerProfileFromOrderInd = a, this field will return Customer Reference Number assigned by the Orbital Gateway. 	M	22	A
customerName	E	safetechFraudAnalysisResp	Customer Billing Name	C	30	A
profileProcStatus	E	safetechFraudAnalysisResp	Result Status of Profile Management Communicates the success or failure of a Profile Management request: <p>0 Success</p> <p>>0 An error condition, see Table 18 in Appendix A for values</p>	C	6	A
profileProcStatusMsg	E	safetechFraudAnalysisResp	Verbose Text Description associated with ProfileProcStatus	C	Var	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
fraudAnalysisResponse	E	safetechFraudAnalysisResp	Parent Element of Fraud Analysis Response Data	M	N/A	N/A
fraudScoreIndicator	E	fraudAnalysisResponse	Echoes FraudScoreIndicator from the request message.	M	1	N
fraudStatusCode	E	fraudAnalysisResponse	Fraud Status Code The response code returned by the Safetech service to indicating the status of the fraud analysis.	C	4	A
riskInquiryTransactionID	E	fraudAnalysisResponse	Risk Inquiry Transaction ID A unique ID used to identify the fraud assessment.	C	32	A
autoDecisionResponse	E	fraudAnalysisResponse	Auto Decision Response The auto decision response code returned by the Safetech service. The following is a list of valid values. A Approved D Decline E Manager Review R Review This list may expand in the future.	O	1	A
riskScore	E	fraudAnalysisResponse	Risk Score This element may be returned as null if the Safetech service was not successful in generating a fraud score.	C	2	N
kaptchaMatchFlag	E	fraudAnalysisResponse	Kaptcha Match Flag Indicates if a request to the Safetech service has a corresponding Kaptcha record.	O	1	A
worstCountry	E	fraudAnalysisResponse	Worst Country The two character ISO 3166 country code associated with this customer in the last 14 days. This element is only returned with a FraudScoreIndicator of 2.	C	2	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
customerRegion	E	fraudAnalysis Response	<p>Customer Region</p> <p>The estimated region of the customer.</p> <p>The Safetech service will use lower case letters to represent a state or province, while uppercase letters indicate a county.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	C	2	A
paymentBrand	E	fraudAnalysis Response	<p>Payment Brand</p> <p>The payment method (brand) identified by the Safetech service during Fraud Analysis.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	4	A
fourteenDayVelocity	E	fraudAnalysis Response	<p>Fourteen Day Velocity</p> <p>The total number of prior sales by this customer within the last 14 days.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	2	A/N
sixHourVelocity	E	fraudAnalysis Response	<p>Six Hour Velocity</p> <p>The total number of prior sales by this customer in any six hour window over the last 14 days.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	2	A/N
customerNetwork	E	fraudAnalysis Response	<p>Customer Network Type indicator</p> <p>A single character designation of the type of network used by the customer to initiate the transaction.</p> <p>Some possible values can include:</p> <ul style="list-style-type: none"> A Anonymous L Library H High School N Normal P Prison S Satellite <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	1	A
numberOfDevices	E	fraudAnalysis Response	<p>Number of Devices with Transaction</p> <p>The number of devices associated with the transaction, as recorded by the Safetech service.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	3	N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
numberOfCards	E	fraudAnalysis Response	Number of Cards with Transaction The number of cards associated with the transaction, as recorded by the Safetech service. This element is only returned with a FraudScoreIndicator of 2.	O	3	N
numberOfEmails	E	fraudAnalysis Response	Number of Emails with Transaction The number of emails associated with the transaction, as recorded by the Safetech service. This element is only returned with a FraudScoreIndicator of 2.	O	3	N
deviceLayers	E	fraudAnalysis Response	Device Layer Description A period-delimited description of the Network, Flash, JavaScript, HTTP, and Browser layers of the device used by the customer to initiate the transaction, as determined by the Safetech service. This element is only returned with a FraudScoreIndicator of 2.	O	54	A
deviceFingerprint	E	fraudAnalysis Response	Device Fingerprint A hash of system identifiers determined by the Safetech service to be constants for the device used by the customer. This element is only returned with a FraudScoreIndicator of 2.	O	32	A
customerTimeZone	E	fraudAnalysis Response	Customer Time Zone The time zone where the customer resides, as an offset from GMT. This element is only returned with a FraudScoreIndicator of 2.	O	4	N
customerLocalDateTim e	E	fraudAnalysis Response	Customer Local Date & Time The local timestamp of the customer's device. Format: YYYY-MM-DD HH:MM This element is only returned with a FraudScoreIndicator of 2.	O	16	N
deviceRegion	E	fraudAnalysis Response	Device Region Indicates the region or state where the customer's device resides. This field is case sensitive. The Safetech service will use lower case letters to represent a state or province, while uppercase letters indicate a county. This element is only returned with a FraudScoreIndicator of 2.	O	2	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
deviceCountry	E	fraudAnalysis Response	<p>Device Country</p> <p>The ISO 3166 Country code which indicates the country where the customer's device resides.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	2	A
proxyStatus	E	fraudAnalysis Response	<p>Proxy Status Indicator</p> <p>Indicates if the device used by the customer is using a proxy network.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	1	A
javascriptStatus	E	fraudAnalysis Response	<p>JavaScript Status Indicator</p> <p>Indicates if the device used by the customer allows use of JavaScript.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	1	A
flashStatus	E	fraudAnalysis Response	<p>Flash Status Indicator</p> <p>Indicates if the device used by the customer allows Flash.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	1	A
cookiesStatus	E	fraudAnalysis Response	<p>Cookies Status Indicator</p> <p>Indicates if the device used by the customer allows use of cookies.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	1	A
browserCountry	E	fraudAnalysis Response	<p>Browser Country</p> <p>The ISO 3166 Country code which indicates the country where the customer's browser resides.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	2	A
browserLanguage	E	fraudAnalysis Response	<p>Browser Language</p> <p>The ISO 639-1 standard code which indicates the language of the customer's browser.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	2	A
mobileDeviceIndicator	E	fraudAnalysis Response	<p>Mobile Device Indicator</p> <p>Indicates if the device used by the customer is a mobile device.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	1	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
mobileDeviceType	E	fraudAnalysisResponse	Mobile Device Type A description of the type of mobile device used by the customer This element is only returned with a FraudScoreIndicator of 2.	O	32	A
mobileWirelessIndicator	E	fraudAnalysisResponse	Mobile Wireless Indicator Indicates if the device used by the customer has wireless capabilities. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
voiceDevice	E	fraudAnalysisResponse	Voice Device Indicator Indicates if the device used by the customer is voice controlled. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
pcRemoteIndicator	E	fraudAnalysisResponse	PC Remote Indicator Indicates if the device used by the customer is a remotely controlled computer. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
rulesDataLength	E	fraudAnalysisResponse	Rules Trigger Reply Data Length Indicates the length of the data contained in the RulesData element. Values in this element are no less than 0005 and no greater than 0999. Returned only if the RulesTrigger element is set to 'Y' on the request message.	O	4	N
rulesData	E	fraudAnalysisResponse	Rules Trigger Reply Data A comma-delimited list of the rules triggered in the Safetech service by the transaction request. Please see Safetech Responses: Special notes on Rules Triggers for additional information.	O	Var	A/N
euddCountryCode	E	safetechFraudAnalysisResp	EUDD Country Code Echoes the value in the request.	O	2	A
euddBankSortCode	E	safetechFraudAnalysisResp	EUDD Bank Sort Code Echoes the value in the request.	O	10	AN
euddRibCode	E	safetechFraudAnalysisResp	EUDD RIB Echoes the value in the request.	O	2	AN

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
euddBankBranchCode	E	safetechFraudAnalysisResp	EUDD Bank Branch Code Echoes the value in the request.	O	10	AN
euddIBAN	E	safetechFraudAnalysisResp	EUDD International Bank Account Number (IBAN) If not present in the request, this may be returned by the issuer.	O	34	AN
euddBIC	E	safetechFraudAnalysisResp	EUDD Bank Identification Code If not present in the request, this may be returned by the issuer.	O	11	AN

4.2.8 Gift Card (FlexCache) Response Elements

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
flexCacheResp	E	transResponse	XML Tag that Defines the Transaction as a Gift Card Response	M	N/A	N/A
batchRequestNo	A	flexCacheResp	Sequential Presentation of the Response in the Batch File Echoes the Batch Request Number passed in the request.	M	6	N
bin	E	flexCacheResp	Transaction Routing Definition Echoes the BIN passed in the request.	M	6	N
merchantID	E	flexCacheResp	Gateway Merchant Account Number assigned by Chase Paymentech Echoes the Merchant ID sent in request.	M	15	N
terminalID	E	flexCacheResp	Merchant Terminal ID assigned by Chase Paymentech Echoes the Terminal ID sent in request.	M	3	N
orderID	E	flexCacheResp	Merchant-Defined Order Number Field defined and supplied by the authorization originator and echoed back in response.	C	22	A
ccAccountNum	E	flexCacheResp	Gift Card Account Number Echoes the Account Number sent in request.	M	19	N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
flexAcctBalance	E	flexCacheResp	Current Balance of the Gift Card The Balance after the result of the request transaction. This information is returned in all Gift Card response messages.	M	12	N
flexAcctPriorBalance	E	flexCacheResp	Prior Balance of the Gift Card Balance prior to the result of the request transaction. This information is returned in all Gift Card response messages.	M	12	N
flexAcctExpireDate	E	flexCacheResp	Gift Card Expiration Date <ul style="list-style-type: none"> ▪ The Expiration Date of the Gift Card, if any, is returned in all response messages. ▪ Format: MMYY 	M	6	N
txRefNum	E	flexCacheResp	Gateway Transaction Reference Number A unique value for each transaction, which is required to Void (Reverse) a transaction.	M	40	A
txRefIdx	E	flexCacheResp	Gateway Transaction Index <ul style="list-style-type: none"> ▪ Used to identify the unique components of transactions adjusted more than one time. ▪ Required for Void transactions. 	M	4	A
procStatus	E	flexCacheResp	Process Status <ul style="list-style-type: none"> ▪ The first data set that should be checked to determine the result of a request. ▪ The only element that is returned in all response scenarios. ▪ Identifies whether transactions have successfully passed all of the Gateway edit checks: <ul style="list-style-type: none"> 0 Success All other values constitute an error condition. See Table 17 in Appendix A for definition of these error values.	M	6	A
procstatusMessage	E	flexCacheResp	Text Message Associated with respCode Value	C	Var	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³						
approvalStatus	E	flexCacheResp	<p>Approval Status</p> <p>Conditional on:</p> <ul style="list-style-type: none"> ▪ Process Status returning a 0 or successful response. ▪ Only returned if performing a MFC on a Gift Card Type. <p>If present, the approval status identifies the result of the authorization request to the host system:</p> <table> <tr><td>0</td><td>Decline</td></tr> <tr><td>1</td><td>Approved</td></tr> <tr><td>2</td><td>Message/System Error</td></tr> </table>	0	Decline	1	Approved	2	Message/System Error	C	1	N
0	Decline											
1	Approved											
2	Message/System Error											
authorizationCode	E	flexCacheResp	<p>Issuer Approval Code</p> <p>Unique transactional-level code issued by the bank or service establishment for approvals.</p>	C	6	A						
respCode	E	flexCacheResp	<p>Response Code</p> <ul style="list-style-type: none"> ▪ Normalized authorization response code issued by the host system (Salem/PNS), which identifies an approval (00) or the reason for a decline or error. ▪ Conditionally returned when ProcStatus = 0. <p>See Table 15 in Appendix A for values.</p>	C	2	A						
hostRespCode	E	flexCacheResp	<p>Actual Host Response Code</p> <ul style="list-style-type: none"> ▪ Exact response sent by host authorization system (non-normalized by the Gateway). ▪ For those systems that have already coded to the Salem/PNS authorization response values, they are available via this tag. 	C	3	A						
ccPinNumRespCode	E	flexCacheResp	<p>Card Verification Value Request Response</p> <p>Conditional on card verification request being sent.</p>	M	1	A						
batchFailedAcctnum	E	flexCacheResp	<p>Card Number in a Block Activation Sequence that caused a Block Activation Failure</p> <p>Conditionally returned on a Block Activation failure.</p>	C	19	N						
flexRequestedAmount	E	flexCacheResp	<p>Transaction Amount Submitted in the Request</p> <ul style="list-style-type: none"> ▪ Implied decimal. 	C	12	N						

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
flexRedeemedAmt	E	flexCacheResp	Actual Amount Redeemed on a Redemption Completion <ul style="list-style-type: none"> ▪ flexPartialRedemptionInd must be set to y in request. ▪ Implied decimal. ▪ Conditionally returned. Regardless of whether the amount redeemed is less than or equal to the requested amount, it will be identified in this tag. 	C	12	N
flexHostTrace	E	flexCacheResp	Gateway Transaction Reference Number A unique value for each transaction, which is required to adjust any transaction in the Gateway (such as Mark for Capture or Void/Reversal).	C	40	N
flexAction	E	flexCacheResp	Transaction (or Action) Type Performed in the Request Echoes the Action sent in request.	M	30	A
respDateTime	E	flexCacheResp	Date/Time the Transaction was Processed by Gateway Format: MMDDYYYYhhmmss	M	14	N
fraudScoreProcStatus	E	flexCacheResp	Process Status of Fraud Score request <ul style="list-style-type: none"> ▪ Identifies whether transactions have successfully passed all of the Gateway edit checks related specifically to Fraud Analysis messages: <ul style="list-style-type: none"> 0 Success All other values constitute an error condition. See Table 17 in Appendix A for definition of these error values.	M	Var	N
fraudScoreProcMsg	E	flexCacheResp	Verbose Text Description associated with FraudScoreProcStatus	C	Var	A
fraudAnalysisResponse	E	flexCacheResp	Parent Element of Fraud Analysis Response Data	M	N/A	N/A
fraudScoreIndicator	E	fraudAnalysis Response	Echoes FraudScoreIndicator from the request message.	M	1	N
fraudStatusCode	E	fraudAnalysis Response	Fraud Status Code The response code returned by the Safetech service to indicating the status of the fraud analysis.	C	4	A
riskInquiryTransaction ID	E	fraudAnalysis Response	Risk Inquiry Transaction ID A unique ID used to identify the fraud assessment.	C	32	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
autoDecisionResponse	E	fraudAnalysisResponse	<p>Auto Decision Response</p> <p>The auto decision response code returned by the Safetech service.</p> <p>The following is a list of valid values.</p> <ul style="list-style-type: none"> A Approved D Decline E Manager Review R Review <p>This list may expand in the future.</p>	O	1	A
riskScore	E	fraudAnalysisResponse	<p>Risk Score</p> <p>This element may be returned as null if the Safetech service was not successful in generating a fraud score.</p>	C	2	N
kaptchaMatchFlag	E	fraudAnalysisResponse	<p>Kaptcha Match Flag</p> <p>Indicates if a request to the Safetech service has a corresponding Kaptcha record.</p>	O	1	A
worstCountry	E	fraudAnalysisResponse	<p>Worst Country</p> <p>The two character ISO 3166 country code of the highest risk country associated with this customer in the last 14 days.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	C	2	A
customerRegion	E	fraudAnalysisResponse	<p>Customer Region</p> <p>The estimated region of the customer.</p> <p>The Safetech service will use lower case letters to represent a state or province, while uppercase letters indicate a county.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	C	2	A
paymentBrand	E	fraudAnalysisResponse	<p>Payment Brand</p> <p>The payment method (brand) identified by the Safetech service during Fraud Analysis.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	4	A
fourteenDayVelocity	E	fraudAnalysisResponse	<p>Fourteen Day Velocity</p> <p>The total number of prior sales by this customer within the last 14 days.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	2	A/N

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
sixHourVelocity	E	fraudAnalysis Response	<p>Six Hour Velocity</p> <p>The total number of prior sales by this customer in any six hour window over the last 14 days.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	2	A/N
customerNetwork	E	fraudAnalysis Response	<p>Customer Network Type indicator</p> <p>A single character designation of the type of network used by the customer to initiate the transaction.</p> <p>Some possible values can include:</p> <ul style="list-style-type: none"> A Anonymous L Library H High School N Normal P Prison S Satellite <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	1	A
numberOfDevices	E	fraudAnalysis Response	<p>Number of Devices with Transaction</p> <p>The number of devices associated with the transaction, as recorded by the Safetech service.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	3	N
numberOfCards	E	fraudAnalysis Response	<p>Number of Cards with Transaction</p> <p>The number of cards associated with the transaction, as recorded by the Safetech service.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	3	N
numberOfEmails	E	fraudAnalysis Response	<p>Number of Emails with Transaction</p> <p>The number of emails associated with the transaction, as recorded by the Safetech service.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	3	N
deviceLayers	E	fraudAnalysis Response	<p>Device Layer Description</p> <p>A period-delimited description of the Network, Flash, JavaScript, HTTP, and Browser layers of the device used by the customer to initiate the transaction, as determined by the Safetech service.</p> <p>This element is only returned with a FraudScoreIndicator of 2.</p>	O	54	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
deviceFingerprint	E	fraudAnalysis Response	Device Fingerprint A hash of system identifiers determined by the Safetech service to be constants for the device used by the customer. This element is only returned with a FraudScoreIndicator of 2.	O	32	A
customerTimeZone	E	fraudAnalysis Response	Customer Time Zone The time zone where the customer resides, as an offset from GMT. This element is only returned with a FraudScoreIndicator of 2.	O	4	N
customerLocalDateTime	E	fraudAnalysis Response	Customer Local Date & Time The local timestamp of the customer's device. Format: YYYY-MM-DD HH:MM This element is only returned with a FraudScoreIndicator of 2.	O	16	N
deviceRegion	E	fraudAnalysis Response	Device Region Indicates the region or state where the customer's device resides. This field is case sensitive. The Safetech service will use lower case letters to represent a state or province, while uppercase letters indicate a county. This element is only returned with a FraudScoreIndicator of 2.	O	2	A
deviceCountry	E	fraudAnalysis Response	Device Country The ISO 3166 Country code which indicates the country where the customer's device resides. This element is only returned with a FraudScoreIndicator of 2.	O	2	A
proxyStatus	E	fraudAnalysis Response	Proxy Status Indicator Indicates if the device used by the customer is using a proxy network. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
javascriptStatus	E	fraudAnalysis Response	JavaScript Status Indicator Indicates if the device used by the customer allows use of JavaScript. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
flashStatus	E	fraudAnalysis Response	Flash Status Indicator Indicates if the device used by the customer allows Flash. This element is only returned with a FraudScoreIndicator of 2.	O	1	A

XML Name	XML Type¹	XML Parent Element	Description	Req²	Max Char	Field Type³
cookiesStatus	E	fraudAnalysis Response	Cookies Status Indicator Indicates if the device used by the customer allows use of cookies. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
browserCountry	E	fraudAnalysis Response	Browser Country The ISO 3166 Country code which indicates the country where the customer's browser resides. This element is only returned with a FraudScoreIndicator of 2.	O	2	A
browserLanguage	E	fraudAnalysis Response	Browser Language The ISO 639-1 standard code which indicates the language of the customer's browser. This element is only returned with a FraudScoreIndicator of 2.	O	2	A
mobileDeviceIndicator	E	fraudAnalysis Response	Mobile Device Indicator Indicates if the device used by the customer is a mobile device. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
mobileDeviceType	E	fraudAnalysis Response	Mobile Device Type A description of the type of mobile device used by the customer This element is only returned with a FraudScoreIndicator of 2.	O	32	A
mobileWirelessIndicator	E	fraudAnalysis Response	Mobile Wireless Indicator Indicates if the device used by the customer has wireless capabilities. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
voiceDevice	E	fraudAnalysis Response	Voice Device Indicator Indicates if the device used by the customer is voice controlled. This element is only returned with a FraudScoreIndicator of 2.	O	1	A
pcRemoteIndicator	E	fraudAnalysis Response	PC Remote Indicator Indicates if the device used by the customer is a remotely controlled computer. This element is only returned with a FraudScoreIndicator of 2.	O	1	A

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
rulesDataLength	E	fraudAnalysisResponse	Rules Trigger Reply Data Length Indicates the length of the data contained in the RulesData element. Values in this element are no less than 0005 and no greater than 0999. Returned only if the RulesTrigger element is set to 'Y' on the request message.	O	4	N
rulesData	E	fraudAnalysisResponse	Rules Trigger Reply Data A comma-delimited list of the rules triggered in the Safetech service by the transaction request. Please see <i>Safetech Responses: Special notes on Rules Triggers</i> for additional information.	O	Var	A/N

4.2.9 Batch Close Response Elements

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
endofDayResp	E	transResponse	XML Tag that Defines the Transaction as a Batch/EOD Response	M	N/A	N/A
batchRequestNo	A	endofDayResp	Sequential Presentation of the Response in the Batch File Echoes the Batch Request Number passed in the request and should equal the value submitted in the header RequestCount attribute.	M	6	N
bin	E	endofDayResp	Transaction Routing Definition Echoes the BIN passed in the request.	M	6	N
merchantID	E	endofDayResp	Gateway Merchant Account Number assigned by Chase Paymentech Echoes the Merchant ID passed in the request.	M	15	N
terminalID	E	endofDayResp	Merchant Terminal ID assigned by Chase Paymentech Echoes the Terminal ID passed in the request.	M	3	N

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
procStatus	E	endofDayResp	<p>Process Status</p> <ul style="list-style-type: none"> ▪ The first data set that should be checked to determine the result of a request. ▪ The only element that is returned in all response scenarios. ▪ Identifies whether transactions have successfully passed all of the Gateway edit checks: <ul style="list-style-type: none"> 0 Success <p>All other values constitute an error condition. See Table 17 in Appendix A for definition of these error values.</p>	M	6	A
batchSeqNum	E	endofDayResp	<p>Batch Sequence Number</p> <p>An internal Batch Number Identifier that can be tied back to any Final Batch Settlement event.</p>	M	32	A
procStatusMessage	E	endofDayResp	Text Message Associated with ProcStatus Value	M	Var	A

4.2.10 File Processing Error Response Elements

If there is an error processing the requests in the request file, the response file will contain these elements, rather than the response elements described above.

XML Name	XML Type ¹	XML Parent Element	Description	Req ²	Max Char	Field Type ³
QuickResponse		N/A	<p>XML Tag that Defines the File as a File Processing Error Response</p> <p>If this result is returned as a response:</p> <ul style="list-style-type: none"> ▪ It will be the only response—there will be no header and no individual responses. ▪ It means that the request file has not processed at any level. The procStatus code and message will indicate the failure reason. 	C	N/A	N/A
procStatus		QuickResponse	<p>Process Status</p> <p>Reason code for the File Processing error. See Table 19 in Appendix A for definition of these error values.</p>	M	6	A
procStatusMessage		QuickResponse	Text Message Associated with ProcStatus Value	M	Var	A

Chapter 5 Sample Batch XML Files

This chapter contains a sample request file and two response files: a successful response and a file processing error response. These samples illustrate the XML format in which the requests must ultimately be presented to the Orbital Gateway and in which the Gateway will present the responses to you.

NOTE The samples in this chapter do not illustrate all of the possible elements you can include in a request.
The comments within the sample code are for illustrative purposes only.

5.1 Request File

The sample request file below contains 30 example transactions:

1. Void: Full Amount
2. Void: Partial Amount
3. Mark for Capture
4. Mark for Capture: adding Visa Level 2/3 data to the original Auth
5. Mark for Capture: adding American Express Purchasing card data to the original Auth
6. New Order: Auth, eCommerce, Credit Card
7. New Order: Auth/Capture, Mail Order, Credit Card, Visa Level 2/3 Data
8. New Order: Auth/Capture, Recurring, Credit Card
9. New Order: Force/Capture, Recurring, Credit Card
10. New Order: Refund, Recurring, Credit Card
11. New Order: Auth/Capture, Recurring, Switch/Solo
12. New Order: Auth/Capture, Recurring, Electronic Check
13. New Order: Auth/Capture, PINless Debit BillPay
14. New Order: Auth/Capture, Recurring, Credit Card, American Express Purchasing Card Data
15. New Order: Auth/Capture, Recurring, Credit Card, adding a Profile (Merchant Sets Profile ID)
16. New Order: Auth/Capture, Recurring, Credit Card, adding a Profile (PTI Sets Profile ID)
17. New Order: Auth/Capture, Recurring, Credit Card, adding a Profile (Profile ID = Order ID)
18. New Order: Auth/Capture, Recurring, Credit Card, by using a Profile
19. New Order: Auth/Capture, Recurring, Credit Card, and will generate an error response
20. New Order: Auth/Capture, Recurring, Credit Card, and will generate a decline response
21. Profile Add: Credit Card
22. Profile Add: Switch/Solo
23. Profile Add: Electronic Check
24. Profile Add: PINless Debit
25. Profile Add: Will generate an error response
26. Profile Change: Change the expiration date
27. Profile Change: Change from a Credit Card to an Electronic Check
28. Profile Delete
29. Profile Retrieve
30. Batch Close (End of Day)

31. New Order: Auth/Capture, PINless Debit E-commerce
32. Mark for Capture: PINless Debit E-commerce

Example 6 Sample Request File

```
<?xml version="1.0" encoding="UTF-8"?>
<transRequest RequestCount="30" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:noNamespaceSchemaLocation="C:\OrbitalRequestSchemav014.xsd">
    <batchFileID>
        <userID>TESTUSER</userID>
        <fileDateTime>20040422130025</fileDateTime>
        <fileID>12345678901234567890</fileID>
        <version>2.9</version>
    </batchFileID>
    <!-- Void: Full Amount -->
    <void BatchRequestNo="1">
        <txRefNum>7TFB415D712346681E5C11D79002FA8C144C8OKM</txRefNum>
        <txRefIdx/>
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <terminalID>001</terminalID>
        <orderID>test12345abc</orderID>
        <retryTrace>10000000000000001</retryTrace>
    </void>
    <!-- Void: Partial Amount -->
    <void BatchRequestNo="2">
        <txRefNum>3EFB415D74CE06681E5C11D79002FA8C144C8ABA</txRefNum>
        <txRefIdx/>
        <adjustedAmount>00000000010</adjustedAmount>
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <terminalID>001</terminalID>
        <orderID>test12345def</orderID>
        <retryTrace>10000000000000002</retryTrace>
    </void>
    <!-- Mark for Capture -->
    <markForCapture BatchRequestNo="3">
        <txRefNum>3EFB416556A20CDC5AF5DF698BF651FD44769765</txRefNum>
        <amount>000000000600</amount>
        <orderID>1234567890123456789012</orderID>
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <terminalID>001</terminalID>
        <retryTrace>10000000000000003</retryTrace>
    </markForCapture>
    <!-- Mark for Capture: adding Visa Level 2 data to the original Auth -->
    <markForCapture BatchRequestNo="4">
        <txRefNum>AB12CD6556A20CDC5AF5DF698BF651FD44769765</txRefNum>
        <amount>000000000600</amount>
        <orderID>1234567890123456789012</orderID>
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <terminalID>001</terminalID>
        <taxInd>2</taxInd>
        <taxAmount>000000000000</taxAmount>
        <pCardOrderID>12345678901234567</pCardOrderID>
    </markForCapture>

```

```
<pCardDestZip>54321-0123</pCardDestZip>
<retryTrace>10000000000000004</retryTrace>
</markForCapture>
<!-- Mark for Capture: adding American Express Purchasing card data to original Auth -->
<markForCapture BatchRequestNo="5">
  <txRefNum>12QS41C556A20CDC5AF5DF698BF651FD44769765</txRefNum>
  <amount>000000000600</amount>
  <orderID>1234567890123456789012</orderID>
  <bin>000001</bin>
  <merchantID>123456</merchantID>
  <terminalID>001</terminalID>
  <taxInd>2</taxInd>
  <taxAmount>000000000000</taxAmount>
  <pCardOrderID>12345678901234567</pCardOrderID>
  <pCardDestZip>54321-0123</pCardDestZip>
  <pCardDestName>Joe Jones</pCardDestName>
  <pCardDestAddress>12345 Main Street</pCardDestAddress>
  <pCardDestAddress2>Suite 2523</pCardDestAddress2>
  <pCardDestCity>Salem</pCardDestCity>
  <pCardDestStateCd>NH</pCardDestStateCd>
  <amexTranAdvAddn1>Order Information 1111111111111111111111111111</amexTranAdvAddn1>
  <amexTranAdvAddn2>Order Information 22222222222222222222222222</amexTranAdvAddn2>
  <amexTranAdvAddn3>Order Information 33333333333333333333333333</amexTranAdvAddn3>
  <amexTranAdvAddn4>Order Information 444444444444444444444444</amexTranAdvAddn4>
  <retryTrace>1000000000000005</retryTrace>
</markForCapture>
<!-- New Order: Auth, eCommerce, Credit Card -->
<newOrder BatchRequestNo="6">
  <industryType>EC</industryType>
  <transType>A</transType>
  <bin>000001</bin>
  <merchantID>123456</merchantID>
  <terminalID>001</terminalID>
  <ccAccountNum>5454545454545454</ccAccountNum>
  <ccExp>0405</ccExp>
  <avsZip>33556-1234</avsZip>
  <avsAddress1>101 Nowhere Street</avsAddress1>
  <avsAddress2>Apt 0</avsAddress2>
  <avsCity>Tampa</avsCity>
  <avsState>FL</avsState>
  <avsName>Billy Smith</avsName>
  <orderID>10000000000000000006</orderID>
  <amount>000000001000</amount>
  <comments>Test #1</comments>
  <shippingRef>FED EX WB 1234567</shippingRef>
  <retryTrace>1000000000000006</retryTrace>
</newOrder>
```

```
<!-- New Order: Auth/Capture, Mail Order, Credit Card, Visa Level 2 Data -->
<newOrder BatchRequestNo="7">
    <industryType>MO</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <ccAccountNum>401288888881</ccAccountNum>
    <ccExp>0405</ccExp>
    <avsZip>33556-1234</avsZip>
    <avsAddress1>101 Nowhere Street</avsAddress1>
    <avsAddress2>Apt 0</avsAddress2>
    <avsCity>Tampa</avsCity>
    <avsState>FL</avsState>
    <avsName>Billy Smith</avsName>
    <orderID>10000000000000000007</orderID>
    <amount>00000001000</amount>
    <comments>Test #2</comments>
    <shippingRef>FED EX WB 1234567</shippingRef>
    <taxInd>1</taxInd>
    <taxAmount>000000000100</taxAmount>
    <pCardOrderID>12345678901234567</pCardOrderID>
    <pCardDestZip>12345-6789</pCardDestZip>
    <retryTrace>10000000000000007</retryTrace>
</newOrder>
<!-- New Order: Auth/Capture, Recurring, Credit Card -->
<newOrder BatchRequestNo="8">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <ccAccountNum>5454545454545454</ccAccountNum>
    <ccExp>0405</ccExp>
    <orderID>10000000000000000008</orderID>
    <amount>00000001000</amount>
    <comments>Test #3</comments>
    <shippingRef>FED EX WB 1234567</shippingRef>
    <retryTrace>1000000000000008</retryTrace>
</newOrder>
<!-- New Order: Force/Capture, Recurring, Credit Card -->
<newOrder BatchRequestNo="9">
    <industryType>RC</industryType>
    <transType>FC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <ccAccountNum>5454545454545454</ccAccountNum>
    <ccExp>0405</ccExp>
    <avsZip>33556-1234</avsZip>
    <avsAddress1>101 Nowhere Street</avsAddress1>
```

```
<avsAddress2>Apt 0</avsAddress2>
<avsCity>Tampa</avsCity>
<avsState>FL</avsState>
<avsName>Billy Smith</avsName>
<priorAuthCd>123456</priorAuthCd>
<orderID>10000000000000000009</orderID>
<amount>00000001000</amount>
<comments>Test #1</comments>
<shippingRef>FED EX WB 1234567</shippingRef>
<retryTrace>1000000000000009</retryTrace>
</newOrder>
<!-- New Order: Refund, Recurring, Credit Card -->
<newOrder BatchRequestNo="10">
    <industryType>RC</industryType>
    <transType>R</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <ccAccountNum>5454545454545454</ccAccountNum>
    <ccExp>0405</ccExp>
    <avsZip>33556-1234</avsZip>
    <avsAddress1>101 Nowhere Street</avsAddress1>
    <avsAddress2>Apt 0</avsAddress2>
    <avsCity>Tampa</avsCity>
    <avsState>FL</avsState>
    <avsName>Billy Smith</avsName>
    <orderID>100000000000000010</orderID>
    <amount>00000001000</amount>
    <comments>Test #1</comments>
    <shippingRef>FED EX WB 1234567</shippingRef>
    <retryTrace>1000000000000010</retryTrace>
</newOrder>
<!-- New Order: Auth/Capture, Recurring, Switch/Solo -->
<newOrder BatchRequestNo="11">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <cardBrand>SW</cardBrand>
    <ccAccountNum>6759509995000129553</ccAccountNum>
    <ccExp>0405</ccExp>
    <switchSoloIssueNum>03</switchSoloIssueNum>
    <switchSoloCardStartDate>1201</switchSoloCardStartDate>
    <orderID>10000000000000000011</orderID>
    <amount>00000001000</amount>
    <comments>Test #1</comments>
    <shippingRef>FED EX WB 1234567</shippingRef>
    <retryTrace>1000000000000011</retryTrace>
</newOrder>
<!-- New Order: Auth/Capture, Recurring, Electronic Check -->
```

```

<newOrder BatchRequestNo="12">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <cardBrand>EC</cardBrand>
    <ecpCheckRT>123456789</ecpCheckRT>
    <ecpCheckDDA>12345678901234567</ecpCheckDDA>
    <ecpBankAcctType>C</ecpBankAcctType>
    <ecpAuthMethod>I</ecpAuthMethod>
    <ecpDelvMethod>B</ecpDelvMethod>
    <avsName>Billy Smith</avsName>
    <orderID>100000000000000000012</orderID>
    <amount>000000001000</amount>
    <comments>Test #1</comments>
    <shippingRef>FED EX WB 1234567</shippingRef>
    <retryTrace>10000000000000012</retryTrace>
</newOrder>
<!-- New Order: Auth/Capture, PINless Debit BillPay -->
<newOrder BatchRequestNo="13">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <cardBrand>DP</cardBrand>
    <ccAccountNum>5999012345678905</ccAccountNum>
    <ccExp>0415</ccExp>
    <avsZip>33556-1234</avsZip>
    <avsAddress1>101 Nowhere Street</avsAddress1>
    <avsAddress2>Apt 0</avsAddress2>
    <avsCity>Tampa</avsCity>
    <avsState>FL</avsState>
    <avsName>Billy Smith</avsName>
    <orderID>100000000000000000013</orderID>
    <amount>000000001000</amount>
    <comments>Test #2</comments>
    <retryTrace>10000000000000013</retryTrace>
    <billerReferenceNumber>DebitRef123456</billerReferenceNumber>
    <pinlessDebitTxnType>BP</pinlessDebitTxnType> ← send BP for PINless Debit BillPay
</newOrder>

<!-- New Order: Auth/Capture, Recurring, Credit Card, AMEX Purchasing Card Data -->
<newOrder BatchRequestNo="14">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <ccAccountNum>371449635398431</ccAccountNum>

```



```

<!-- New Order: Auth/Capture, Recurring, Credit Card, adding a Profile (PTI Sets Profile ID) -->
<newOrder BatchRequestNo="16">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <ccAccountNum>5454545454545454</ccAccountNum>
    <ccExp>0405</ccExp>
    <avsZip>33556-1234</avsZip>
    <avsAddress1>101 Nowhere Street</avsAddress1>
    <avsAddress2>Apt 0</avsAddress2>
    <avsCity>Tampa</avsCity>
    <avsState>FL</avsState>
    <avsName>Billy Smith</avsName>
    <addProfileFromOrder>A</addProfileFromOrder>
    <customerProfileOrderOverrideInd>OI</customerProfileOrderOverrideInd>
    <orderId>100000000000000000016</orderId>
    <amount>000000001000</amount>
    <comments>Test #1</comments>
    <shippingRef>FED EX WB 1234567</shippingRef>
    <retryTrace>10000000000000016</retryTrace>
</newOrder>
<!-- New Order: Auth/Capture, Recurring, Credit Card, adding a Profile (Profile ID = Order ID) -->
<newOrder BatchRequestNo="17">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <ccAccountNum>5454545454545454</ccAccountNum>
    <ccExp>0405</ccExp>
    <avsZip>33556-1234</avsZip>
    <avsAddress1>101 Nowhere Street</avsAddress1>
    <avsAddress2>Apt 0</avsAddress2>
    <avsCity>Tampa</avsCity>
    <avsState>FL</avsState>
    <avsName>Billy Smith</avsName>
    <addProfileFromOrder>O</addProfileFromOrder>
    <orderId>100000000000000000017</orderId>      ← use for customerRefNum of new Profile
    <profileOrderOverrideInd>NO</profileOrderOverrideInd>
    <amount>000000001000</amount>
    <comments>Test #1</comments>
    <shippingRef>FED EX WB 1234567</shippingRef>
    <retryTrace>10000000000000017</retryTrace>
</newOrder>
<!-- New Order: Auth/Capture, Recurring, Credit Card, by using a Profile -->
<newOrder BatchRequestNo="18">
    <industryType>RC</industryType>

```

```
<transType>AC</transType>
<bin>000001</bin>
<merchantID>123456</merchantID>
<terminalID>001</terminalID>
<useCustomerRefNum>ABCDEFGHIJKLMNPQRSTUVWXYZ</useCustomerRefNum>
<orderID/>
<amount/>
<retryTrace>100000000000000018</retryTrace>
</newOrder>
<!-- New Order: Auth/Capture, Recurring, Credit Card, will generate an error response --&gt;
&lt;newOrder BatchRequestNo="19"&gt;
&lt;industryType&gt;RC&lt;/industryType&gt;
&lt;transType&gt;AC&lt;/transType&gt;
&lt;bin&gt;000001&lt;/bin&gt;
&lt;merchantID&gt;123456&lt;/merchantID&gt;
&lt;terminalID&gt;001&lt;/terminalID&gt;
&lt;ccAccountNum&gt;5000000000000000&lt;/ccAccountNum&gt; ← Invalid account number
&lt;ccExp&gt;0405&lt;/ccExp&gt;
&lt;avsZip&gt;33556-1234&lt;/avsZip&gt;
&lt;avsAddress1&gt;101 Nowhere Street&lt;/avsAddress1&gt;
&lt;avsAddress2&gt;Apt 0&lt;/avsAddress2&gt;
&lt;avsCity&gt;Tampa&lt;/avsCity&gt;
&lt;avsState&gt;FL&lt;/avsState&gt;
&lt;avsName&gt;Billy Smith&lt;/avsName&gt;
&lt;orderID&gt;10000000000000000019&lt;/orderID&gt;
&lt;amount&gt;000000001000&lt;/amount&gt;
&lt;comments&gt;Test #1&lt;/comments&gt;
&lt;shippingRef&gt;FED EX WB 1234567&lt;/shippingRef&gt;
&lt;retryTrace&gt;100000000000000019&lt;/retryTrace&gt;
&lt;/newOrder&gt;
<!-- New Order: Auth/Capture, Recurring, Credit Card, will generate a decline response --&gt;
&lt;newOrder BatchRequestNo="20"&gt;
&lt;industryType&gt;RC&lt;/industryType&gt;
&lt;transType&gt;AC&lt;/transType&gt;
&lt;bin&gt;000001&lt;/bin&gt;
&lt;merchantID&gt;123456&lt;/merchantID&gt;
&lt;terminalID&gt;001&lt;/terminalID&gt;
&lt;ccAccountNum&gt;5454545454545454&lt;/ccAccountNum&gt;
&lt;ccExp&gt;0405&lt;/ccExp&gt;
&lt;avsZip&gt;33556-1234&lt;/avsZip&gt;
&lt;avsAddress1&gt;101 Nowhere Street&lt;/avsAddress1&gt;
&lt;avsAddress2&gt;Apt 0&lt;/avsAddress2&gt;
&lt;avsCity&gt;Tampa&lt;/avsCity&gt;
&lt;avsState&gt;FL&lt;/avsState&gt;
&lt;avsName&gt;Billy Smith&lt;/avsName&gt;
&lt;orderID&gt;10000000000000000020&lt;/orderID&gt;
&lt;amount&gt;000000053000&lt;/amount&gt;
&lt;comments&gt;Test #1&lt;/comments&gt;
&lt;shippingRef&gt;FED EX WB 1234567&lt;/shippingRef&gt;
&lt;retryTrace&gt;100000000000000020&lt;/retryTrace&gt;
&lt;/newOrder&gt;</pre>
```

```
<!-- Profile Add: Credit Card -->
<customerProfileAdd BatchRequestNo="21">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>10000000000000000020</customerRefNum>
    <customerAddress1>101 Nowhere Street</customerAddress1>
    <customerAddress2>Apt 0</customerAddress2>
    <customerCity>Tampa</customerCity>
    <customerState>FL</customerState>
    <customerZip>33556-1234</customerZip>
    <customerProfileOrderOverrideInd>OA</customerProfileOrderOverrideInd>
    <customerProfileFromOrderInd>S</customerProfileFromOrderInd>
    <orderDefaultAmount>00000001000</orderDefaultAmount>
    <customerAccountType>CC</customerAccountType>
    <ccAccountNum>54545454545454</ccAccountNum>
    <ccExp>0405</ccExp>
</customerProfileAdd>
<!-- Profile Add: Switch/Solo -->
<customerProfileAdd BatchRequestNo="22">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerAddress1>101 Nowhere Street</customerAddress1>
    <customerAddress2>Apt 0</customerAddress2>
    <customerCity>Tampa</customerCity>
    <customerState>FL</customerState>
    <customerZip>33556-1234</customerZip>
    <customerProfileOrderOverrideInd>NO</customerProfileOrderOverrideInd>
    <customerProfileFromOrderInd>A</customerProfileFromOrderInd>
    <orderDefaultDescription>12345678901234567890ABCDEFGHIJ</orderDefaultDescription>
    <orderDefaultAmount>00000001000</orderDefaultAmount>
    <customerAccountType>SW</customerAccountType>
    <ccAccountNum>6759509995000129553</ccAccountNum>
    <ccExp>0405</ccExp>
    <switchSoloCardStartDate>1201</switchSoloCardStartDate>
    <switchSoloIssueNum>5</switchSoloIssueNum>
</customerProfileAdd>
<!-- Profile Add: Electronic Check -->
<customerProfileAdd BatchRequestNo="23">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>10000000000000000022</customerRefNum>
    <customerAddress1>101 Nowhere Street</customerAddress1>
    <customerAddress2>Apt 0</customerAddress2>
    <customerCity>Tampa</customerCity>
    <customerState>FL</customerState>
    <customerZip>33556-1234</customerZip>
    <customerProfileOrderOverrideInd>OI</customerProfileOrderOverrideInd>
    <customerProfileFromOrderInd>S</customerProfileFromOrderInd>
```

```
<orderDefaultDescription>12345678901234567890ABCDEFGHIJ</orderDefaultDescription>
<orderDefaultAmount>000000001000</orderDefaultAmount>
<customerAccountType>EC</customerAccountType>
<ecpCheckDDA>12345678901234567</ecpCheckDDA>
<ecpBankAcctType>C</ecpBankAcctType>
<ecpCheckRT>123456789</ecpCheckRT>
<ecpDelvMethod>B</ecpDelvMethod>
</customerProfileAdd>
<!-- Profile Add: PINless Debit BillPay -->
<customerProfileAdd BatchRequestNo="24">
<bin>000001</bin>
<merchantID>123456</merchantID>
<customerName>Billy Smith</customerName>
<customerRefNum>10000000000000000000123</customerRefNum>
<customerAddress1>101 Nowhere Street</customerAddress1>
<customerAddress2>Apt 0</customerAddress2>
<customerCity>Tampa</customerCity>
<customerState>FL</customerState>
<customerZip>33556-1234</customerZip>
<customerProfileOrderOverrideInd>OI</customerProfileOrderOverrideInd>
<customerProfileFromOrderInd>S</customerProfileFromOrderInd>
<orderDefaultDescription>12345678901234567890ABCDEFGHIJ</orderDefaultDescription>
<orderDefaultAmount>000000001000</orderDefaultAmount>
<customerAccountType>DP</customerAccountType>
<ccAccountNum>5999012345678905</ccAccountNum>
<ccExp>0112</ccExp>
<billerReferenceNumber>Biller Ref 123456</billerReferenceNumber>
<pinlessDebitTxnType>BP</pinlessDebitTxnType>
</customerProfileAdd>
<!-- Profile Add: PINless Debit E-commerce -->
<customerProfileAdd BatchRequestNo="24">
<bin>000001</bin>
<merchantID>123456</merchantID>
<customerName>Billy Smith</customerName>
<customerRefNum>10000000000000000000123</customerRefNum>
<customerAddress1>101 Nowhere Street</customerAddress1>
<customerAddress2>Apt 0</customerAddress2>
<customerCity>Tampa</customerCity>
<customerState>FL</customerState>
<customerZip>33556-1234</customerZip>
<customerProfileOrderOverrideInd>OI</customerProfileOrderOverrideInd>
<customerProfileFromOrderInd>S</customerProfileFromOrderInd>
<orderDefaultDescription>12345678901234567890ABCDEFGHIJ</orderDefaultDescription>
<orderDefaultAmount>000000001000</orderDefaultAmount>
<customerAccountType>DP</customerAccountType>
<ccAccountNum>5999012345678905</ccAccountNum>
<ccExp>0112</ccExp>
<pinlessDebitMerchantUrl>www.abc.com</pinlessDebitMerchantUrl>
<pinlessDebitTxnType>EC</pinlessDebitTxnType>
</customerProfileAdd>
```

```

<!-- Profile Add: Will generate an error response -->
<customerProfileAdd BatchRequestNo="25">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>100000000000000000000023</customerRefNum>
    <customerAddress1>101 Nowhere Street</customerAddress1>
    <customerAddress2>Apt 0</customerAddress2>
    <customerCity>Tampa</customerCity>
    <customerState>FL</customerState>
    <customerZip>33556-1234</customerZip>
    <customerProfileOrderOverrideInd>01</customerProfileOrderOverrideInd>
    <customerProfileFromOrderInd>S</customerProfileFromOrderInd>
    <orderDefaultDescription>12345678901234567890ABCDEFGHIJ</orderDefaultDescription>
    <orderDefaultAmount>00000001000</orderDefaultAmount>
    <customerAccountType>EC</customerAccountType> ← missing required ECP tags
</customerProfileAdd>
<!-- Profile Change: Change the expiration date -->
<customerProfileChange BatchRequestNo="26">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerRefNum>100000000000000000000020</customerRefNum>
    <ccExp>0412</ccExp>
</customerProfileChange>
<!-- Profile Change: Change from a Credit Card to an Electronic Check -->
<customerProfileChange BatchRequestNo="27">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerRefNum>100000000000000000000020</customerRefNum>
    <customerAccountType>EC</customerAccountType>
    <ccAccountNum>~</ccAccountNum>
    <ccExp>~</ccExp>
    <ecpCheckDDA>12345678901234567</ecpCheckDDA>
    <ecpBankAcctType>C</ecpBankAcctType>
    <ecpCheckRT>123456789</ecpCheckRT>
    <ecpDelvMethod>B</ecpDelvMethod>
</customerProfileChange>
<!-- Profile Delete -->
<customerProfileDelete BatchRequestNo="28">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerRefNum>100000000000000000000020</customerRefNum>
</customerProfileDelete>
<!-- Profile Retrieve -->
<customerProfileFetch BatchRequestNo="29">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerRefNum>100000000000000000000021</customerRefNum>
</customerProfileFetch>
<!-- Batch Close (End of Day) -->
<endOfDay BatchRequestNo="30"> ← = RequestCount from header

```

```
<bin>000001</bin>
<merchantID>123456</merchantID>
<terminalID>001</terminalID>
</endOfDay>
</transRequest>
<!-- New Order: Auth/Capture, PINless Debit E-commerce -->
<newOrder BatchRequestNo="31">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <cardBrand>DP</cardBrand>
    <ccAccountNum>5999012345678905</ccAccountNum>
    <ccExp>0415</ccExp>
    <avsZip>33556-1234</avsZip>
    <avsAddress1>101 Nowhere Street</avsAddress1>
    <avsAddress2>Apt 0</avsAddress2>
    <avsCity>Tampa</avsCity>
    <avsState>FL</avsState>
    <avsName>Billy Smith</avsName>
    <orderID>1000000000000000000013</orderID>
    <amount>000000001000</amount>
    <pinlessDebitTxnType>EC</pinlessDebitTxnType> ← send EC for PINless Debit E-commerce
    <pinlessDebitMerchantUrl>www.unitedairlines.com</pinlessDebitMerchantUrl>
</newOrder>
<!-- Mark for Capture : For PINless Debit E-commerce -->
<markForCapture BatchRequestNo="32">
    <txRefNum>3EFB416556A20CDC5AF5DF698BF651FD44769765</txRefNum>
    <amount>000000000600</amount>
    <orderID>1234567890123456789012</orderID>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <retryTrace>1000000000000003</retryTrace>
    <splitShipmentInd>3</splitShipmentInd>
</markForCapture>
```

5.1.1.1 Safetech Requests: Special notes on KTT elements

Requests made to the Safetech service may extend beyond the standard short or long form request formats. The Safetech service allows for a variable-length data string which can be customized on a transaction by transaction basis. This data is populated in an element called the `kttDataString`.

The Data String may contain any combination of two types of data:

- User defined Safetech fields
- Shopping cart data

User Defined (UDF) values are custom data elements, defined by the merchant through the Safetech Agent Web Console.

UDF elements are individually passed within the Data String to the Safetech service using a special string of characters. The convention used is to concatenate the following pieces of data:

"U" + Field Name + "=" + Field value + "&|"

For example, let's say a customer used a special promotional coupon, found through a social media promotion. Here is an example of possible UDF fields included for that transaction:

UPROMOCODE=X6Y3Z1&|UCUSTOMERREFERAL=SocialMedia&|UDISCOUNTGIVEN=10.00&|

Shopping cart data is intended to provide an itemized receipt of the purchase to the Safetech service. Each line item detail is pipe delimited.

Each line item contains five ampersand-delimited sub elements. The sub elements are defined below:

- T = Type
- I = Item
- D = Description
- Q = Quantity
- P = Price (w/ implied decimal)

For example, let's say a customer wants to buy two tickets and a parking pass to take a date to a baseball game. Here is an example of possible Shopping Cart Data for that transaction:

T=Tickets&I=FridayNightBaseballGame&D=SeatsBehindHomePlate&Q=2&P=20000&|T=StadiumParking&I=FridayNightBaseBallGame&D=VIPParkingPass&Q=1&P=2000&|

CAUTION Ampersands, equal signs, and pipe characters may be included as part of a sub element, but **must** be URI Encoded. Never URI encode an actual delimiter.

The total length of all data in the `kttDataString` element must be submitted in the `kttDataLength` element. The current maximum length of `kttDataString` is 999 characters. Please note: the element must be submitted as a four digit number with leading zero(es).

NOTE While Safetech KTT Data requires the use of ampersands, this character is not conducive to well-formed XML messages. For requests using this field, the concept of CDATA may be necessary.

CDATA is defined as element data wrapped in the following: `<![CDATA[]]>`. Escaping these characters will add the "`<![CDATA[...]]>`" characters themselves to the data string, which should result in a host decline.

Invalid messages will result in either a DTD error or authentication failure.

5.2 Response Files

This section includes two sample response files:

- *Example 7* represents a successful response to the request file in *Example 6*.
- *Example 8* represents a response file where the request file failed to process.

Example 7 Successful Response File

```
<?xml version="1.0" encoding="UTF-8"?>
<transResponse>
    <!-- Response to Void: Full Amount -->
    <voidResp batchRequestNo="1">
        <txRefNum>7TFB415D712346681E5C11D79002FA8C144C8OKM</txRefNum>
        <txRefIdx>1</txRefIdx>
        <orderID>test12345abc</orderID>
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <terminalID>001</terminalID>
        <procStatus>0</procStatus>
        <respDateTime>04222004130500</respDateTime>
        <retryTrace>10000000000000001</retryTrace>
    </voidResp>
    <!-- Response to Void: Partial Amount -->
    <voidResp batchRequestNo="2">
        <txRefNum>7TFB415D712346681E5C11D79002FA8C144C8OKM</txRefNum>
        <txRefIdx>1</txRefIdx>
        <outstandingAmt>000000000590</outstandingAmt>
        <orderID>test12345def</orderID>
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <terminalID>001</terminalID>
        <procStatus>0</procStatus>
        <respDateTime>04222004130501</respDateTime>
        <retryTrace>10000000000000002</retryTrace>
    </voidResp>
    <!-- Response to Mark for Capture -->
    <markForCaptureResp batchRequestNo="3">
        <txRefNum>3EFB416556A20CDC5AF5DF698BF651FD44769765</txRefNum>
        <amount>000000000600</amount>
        <orderID>1234567890123456789012</orderID>
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <terminalID>001</terminalID>
        <procStatus>0</procStatus>
        <respDateTime>04222004130502</respDateTime>
        <txRefIdx>2</txRefIdx>
        <retryTrace>10000000000000003</retryTrace>
    </markForCaptureResp>
    <!-- Response to Mark for Capture: adding Visa Level 2 data to original Auth -->
    <markForCaptureResp batchRequestNo="4">
        <txRefNum>AB12CD6556A20CDC5AF5DF698BF651FD44769765</txRefNum>
        <amount>000000000600</amount>
        <orderID>1234567890123456789012</orderID>
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <terminalID>001</terminalID>
        <procStatus>0</procStatus>
        <respDateTime>04222004130503</respDateTime>
    </markForCaptureResp>

```

```

<txRefIdx>2</txRefIdx>
<retryTrace>10000000000000004</retryTrace>
</markForCaptureResp>
<!-- Response to Mark for Capture: adding American Express Purchasing card data to
     original Auth -->
<markForCaptureResp batchRequestNo="5">
<txRefNum>12QS41C556A20CDC5AF5DF698BF651FD44769765</txRefNum>
<amount>000000000600</amount>
<orderID>1234567890123456789012</orderID>
<bin>000001</bin>
<merchantID>123456</merchantID>
<terminalID>001</terminalID>
<procStatus>0</procStatus>
<respDateTime>04222004130504</respDateTime>
<txRefIdx>2</txRefIdx>
<retryTrace>10000000000000005</retryTrace>
</markForCaptureResp>
<!-- Response to New Order: Auth, eCommerce, Credit Card -->
<newOrderResp batchRequestNo="6">
<industryType>EC</industryType>
<transType>A</transType>
<bin>000001</bin>
<merchantID>123456</merchantID>
<terminalID>001</terminalID>
<cardBrand>MC</cardBrand>
<orderID>10000000000000000006</orderID>
<txRefNum>W1D4FY41C556A20CDC5AF5DF698BF651FD447697</txRefNum>
<txRefIdx>0</txRefIdx>
<respDateTime>04222004130505</respDateTime>
<procStatus>0</procStatus>
<approvalStatus>1</approvalStatus>
<respCode>00</respCode>
<avrsRespCode>H</avrsRespCode>
<authorizationCode>tntC09</authorizationCode>
<procStatusMessage>APPROVED</procStatusMessage>
<hostRespCode>100</hostRespCode>
<hostAVSRespCode>Y</hostAVSRespCode>
<retryTrace>1000000000000006</retryTrace>
<retryAttemptCount>0</retryAttemptCount>
</newOrderResp>
<!-- Response to New Order: Auth/Capture, Mail Order, Credit Card, Visa Level 2 Data -->
<newOrderResp batchRequestNo="7">
<industryType>MO</industryType>
<transType>AC</transType>
<bin>000001</bin>
<merchantID>123456</merchantID>
<terminalID>001</terminalID>
<cardBrand>VI</cardBrand>
<orderID>10000000000000000007</orderID>
<txRefNum>E5R3R141C556A20CDC5AF5DEFGDF698BF651FD44</txRefNum>
<txRefIdx>0</txRefIdx>

```

← **Successful**
← **Approved**
← **Approval**
← **Zip Match/Locale match**

```

<respDateTime>04222004130506</respDateTime>
<procStatus>0</procStatus> ← Successful
<approvalStatus>1</approvalStatus> ← Approved
<respCode>00</respCode> ← Approval
<avsRespCode>H</avsRespCode> ← Zip Match/Locale match
<authorizationCode>tntC09</authorizationCode>
<procStatusMessage>APPROVED</procStatusMessage>
<hostRespCode>100</hostRespCode>
<hostAVSRespCode>Y</hostAVSRespCode>
<retryTrace>10000000000000007</retryTrace>
<retryAttemptCount>0</retryAttemptCount>

</newOrderResp>
<!-- Response to New Order: Auth/Capture, Recurring, Credit Card -->
<newOrderResp batchRequestNo="8">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <cardBrand>MC</cardBrand>
    <orderID>10000000000000000008</orderID>
    <txRefNum>W1D4FY41C556A20CDC5AF5DF698BF651FD447697</txRefNum>
    <txRefIdx>0</txRefIdx>
    <respDateTime>04222004130507</respDateTime>
    <procStatus>0</procStatus> ← Successful
    <approvalStatus>1</approvalStatus> ← Approved
    <respCode>00</respCode> ← Approval
    <avsRespCode>H</avsRespCode> ← Zip Match/Locale match
    <authorizationCode>tntC09</authorizationCode>
    <procStatusMessage>APPROVED</procStatusMessage>
    <hostRespCode>100</hostRespCode>
    <hostAVSRespCode>Y</hostAVSRespCode>
    <retryTrace>1000000000000008</retryTrace>
    <retryAttemptCount>0</retryAttemptCount>
</newOrderResp>
<!-- Response to New Order: Force/Capture, Recurring, Credit Card -->
<newOrderResp batchRequestNo="9">
    <industryType>RC</industryType>
    <transType>FC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <cardBrand>MC</cardBrand>
    <orderID>10000000000000000008</orderID>
    <txRefNum>VBG97HJ9K456A20CDC5AF5DF698BF651FD447697</txRefNum>
    <txRefIdx>0</txRefIdx>
    <respDateTime>04222004130508</respDateTime>
    <procStatus>0</procStatus>
    <approvalStatus>1</approvalStatus>
    <procStatusMessage>APPROVED</procStatusMessage>

```

```
<retryTrace>100000000000000010</retryTrace>
<retryAttempCount>0</retryAttempCount>
</newOrderResp>
<!-- New Order: Refund, Recurring, Credit Card -->
<newOrderResp batchRequestNo="10">
<industryType>RC</industryType>
<transType>R</transType>
<bin>000001</bin>
<merchantID>123456</merchantID>
<terminalID>001</terminalID>
<cardBrand>MC</cardBrand>
<orderID>1000000000000000000010</orderID>
<txRefNum>87HGT23EV56A20CDC5AF5DF698BF651FD447697</txRefNum>
<txRefIdx>0</txRefIdx>
<respDateTime>04222004130509</respDateTime>
<procStatus>0</procStatus>
<approvalStatus>1</approvalStatus>
<procStatusMessage>APPROVED</procStatusMessage>
<retryTrace>100000000000000010</retryTrace>
<retryAttempCount>0</retryAttempCount>
</newOrderResp>
<!-- Response to New Order: Auth/Capture, Recurring, Switch/Solo -->
<newOrderResp batchRequestNo="11">
<industryType>RC</industryType>
<transType>AC</transType>
<bin>000001</bin>
<merchantID>123456</merchantID>
<terminalID>001</terminalID>
<cardBrand>SW</cardBrand>
<orderID>1000000000000000000011</orderID>
<txRefNum>K2JH65SGB656A20CDC5AF5DF698BF651FD447697</txRefNum>
<txRefIdx>0</txRefIdx>
<respDateTime>04222004130510</respDateTime>
<procStatus>0</procStatus>
<approvalStatus>1</approvalStatus>
<respCode>00</respCode>
<authorizationCode>tntC09</authorizationCode>
<procStatusMessage>APPROVED</procStatusMessage>
<hostRespCode>100</hostRespCode>
<retryTrace>100000000000000011</retryTrace>
<retryAttempCount>0</retryAttempCount>
</newOrderResp>
<!-- Response to New Order: Auth/Capture, Recurring, Electronic Check -->
<newOrderResp batchRequestNo="12">
<industryType>RC</industryType>
<transType>AC</transType>
<bin>000001</bin>
<merchantID>123456</merchantID>
<terminalID>001</terminalID>
<cardBrand>EC</cardBrand>
<orderID>1000000000000000000012</orderID>
```

```

<txRefNum>G765RF3DA156A20CDC5AF5DF698BF651FD447697</txRefNum>
<txRefIdx>0</txRefIdx>
<respDateTime>04222004130511</respDateTime>
<procStatus>0</procStatus>
<approvalStatus>1</approvalStatus>
<respCode>00</respCode>
<authorizationCode>tntC09</authorizationCode>
<procStatusMessage>APPROVED</procStatusMessage>
<hostRespCode>100</hostRespCode>
<retryTrace>1000000000000005</retryTrace>
<retryAttemptCount>0</retryAttemptCount>
</newOrderResp>
<!-- Response to New Order: Auth/Capture, PINless Debit BillPay -->
<newOrderResp batchRequestNo="13">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <cardBrand>SP</cardBrand>
    <orderID>100000000000000000013</orderID>
    <txRefNum>JP3WSDB67R46A20CDC5AF5DF698BF651FD447654</txRefNum>
    <txRefIdx>0</txRefIdx>
    <respDateTime>04222004130511</respDateTime>
    <procStatus>0</procStatus>
    <approvalStatus>1</approvalStatus>
    <respCode>00</respCode>
    <avsRespCode>H</avsRespCode>
    <authorizationCode>tntC10</authorizationCode>
    <procStatusMessage>APPROVED</procStatusMessage>
    <hostRespCode>100</hostRespCode>
    <hostAVSRespCode>Y</hostAVSRespCode>
    <retryTrace>1000000000000013</retryTrace>
    <retryAttemptCount>0</retryAttemptCount>
</newOrderResp>

<!-- Response to New Order: Auth/Capture, Recurring, Credit Card, AMEX Purchasing Card Data -->
<newOrderResp batchRequestNo="14">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <cardBrand>AX</cardBrand>
    <orderID>100000000000000000014</orderID>
    <txRefNum>T12WSDB67R46A20CDC5AF5DF698BF651FD447697</txRefNum>
    <txRefIdx>0</txRefIdx>
    <respDateTime>04222004130512</respDateTime>
    <procStatus>0</procStatus>
    <approvalStatus>1</approvalStatus>

```

```

<respCode>00</respCode>
<avsRespCode>H</avsRespCode>
<authorizationCode>tntC09</authorizationCode>
<procStatusMessage>APPROVED</procStatusMessage>
<hostRespCode>100</hostRespCode>
<hostAVSRespCode>Y</hostAVSRespCode>
<retryTrace>100000000000000014</retryTrace>
<retryAttemptCount>0</retryAttemptCount>
</newOrderResp>
<!-- Response to New Order: Auth/Capture, Recurring, Credit Card, adding a Profile
      (Merchant Sets Profile ID) -->
<newOrderResp batchRequestNo="15">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <cardBrand>MC</cardBrand>
    <orderID>100000000000000000015</orderID>
    <txRefNum>X34VF12AQ956A20CDC5AF5DF698BF651FD447697</txRefNum>
    <txRefIdx>0</txRefIdx>
    <respDateTime>04222004130513</respDateTime>
    <procStatus>0</procStatus>
    <approvalStatus>1</approvalStatus>
    <respCode>00</respCode>
    <avsRespCode>H</avsRespCode>
    <authorizationCode>tntC09</authorizationCode>
    <procStatusMessage>APPROVED</procStatusMessage>
    <hostRespCode>100</hostRespCode>
    <hostAVSRespCode>Y</hostAVSRespCode>
    <customerRefNum>ABCDEFGHIJKLMNPQRSTUVWXYZ</customerRefNum>           ← echoed from request
    <customerName>Billy Smith</customerName>           ← echoed from request
    <profileProcStatus>0</profileProcStatus>
    <profileProcStatusMsg>GOOD</profileProcStatusMsg>
    <retryTrace>1000000000000015</retryTrace>
    <retryAttemptCount>0</retryAttemptCount>
</newOrderResp>
<!-- Response to New Order: Auth/Capture, Recurring, Credit Card, adding a Profile (PTI
      Sets Profile ID) -->
<newOrderResp batchRequestNo="16">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <cardBrand>MC</cardBrand>
    <orderID>100000000000000000016</orderID>
    <txRefNum>B65WS54D9J56A20CDC5AF5DF698BF651FD447697</txRefNum>
    <txRefIdx>0</txRefIdx>
    <respDateTime>04222004130514</respDateTime>
    <procStatus>0</procStatus>

```

```

<approvalStatus>1</approvalStatus>
<respCode>00</respCode>
<avsRespCode>H</avsRespCode>
<authorizationCode>tntC09</authorizationCode>
<procStatusMessage>APPROVED</procStatusMessage>
<hostRespCode>100</hostRespCode>
<hostAVSRespCode>Y</hostAVSRespCode>
<customerRefNum>1</customerRefNum>
<customerName>Billy Smith</customerName>
<profileProcStatus>0</profileProcStatus>
<profileProcStatusMsg>GOOD</profileProcStatusMsg>
<retryTrace>1000000000000016</retryTrace>
<retryAttempCount>0</retryAttempCount>
</newOrderResp>
<!-- Response to New Order: Auth/Capture, Recurring, Credit Card, adding a Profile
      (Profile ID = Order ID) -->
<newOrderResp batchRequestNo="17">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <cardBrand>MC</cardBrand>
    <orderID>1000000000000000000000000000000017</orderID>
    <txRefNum>C1QAZ3NH2Y6RA20CDC5AF5DF698BF651FD447697</txRefNum>
    <txRefIdx>0</txRefIdx>
    <respDateTime>04222004130515</respDateTime>
    <procStatus>0</procStatus>
    <approvalStatus>1</approvalStatus>
    <respCode>00</respCode>
    <avsRespCode>H</avsRespCode>
    <authorizationCode>tntC09</authorizationCode>
    <procStatusMessage>APPROVED</procStatusMessage>
    <hostRespCode>100</hostRespCode>
    <hostAVSRespCode>Y</hostAVSRespCode>
    <customerRefNum>1000000000000000000000000000000017</customerRefNum>
    <customerName>Billy Smith</customerName>
    <profileProcStatus>0</profileProcStatus>
    <profileProcStatusMsg>GOOD</profileProcStatusMsg>
    <retryTrace>100000000000000017</retryTrace>
    <retryAttempCount>0</retryAttempCount>
</newOrderResp>
<!-- Response to New Order: Auth/Capture, Recurring, Credit Card, by using a Profile -->
<newOrderResp batchRequestNo="18">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <cardBrand>MC</cardBrand>
    <orderID>1000000000000000000000000000000016</orderID>

```

← generated by Chase Paymentech
← echoed from request

← echoed from request

← set to Order ID

```

<txRefNum>Z0AS2H67JHG6A20CDC5AF5DF698BF651FD447697</txRefNum>
<txRefIdx>0</txRefIdx>
<respDateTime>04222004130516</respDateTime>
<procStatus>0</procStatus>
<approvalStatus>1</approvalStatus>
<respCode>00</respCode>
<avsRespCode>H</avsRespCode>
<authorizationCode>tntC09</authorizationCode>
<procStatusMessage>APPROVED</procStatusMessage>
<hostRespCode>100</hostRespCode>
<hostAVSRespCode>Y</hostAVSRespCode>
<retryTrace>100000000000000018</retryTrace>
<retryAttemptCount>0</retryAttemptCount>
</newOrderResp>
<!-- Response to New Order: Auth/Capture, Recurring, Credit Card, will generate an error response -->
<newOrderResp batchRequestNo="19">
  <industryType>RC</industryType>
  <transType>AC</transType>
  <bin>000001</bin>
  <merchantID>123456</merchantID>
  <terminalID>001</terminalID>
  <orderID>10000000000000000000000008</orderID>
  <respDateTime>04222004130517</respDateTime>
  <procStatus>839</procStatus>          ← Error validating card/account number checksum
  <procStatusMessage>PWS_ERR_VALIDATION_PAN_LUHN</procStatusMessage>
  <retryTrace>1000000000000019</retryTrace>
  <retryAttemptCount>0</retryAttemptCount>
</newOrderResp>
<!-- New Order: Auth/Capture, Recurring, Credit Card, will generate a decline response -->
<newOrderResp batchRequestNo="20">
  <industryType>RC</industryType>
  <transType>AC</transType>
  <bin>000001</bin>
  <merchantID>123456</merchantID>
  <terminalID>001</terminalID>
  <cardBrand>MC</cardBrand>
  <orderID>10000000000000000000000020</orderID>
  <txRefNum>M12EDHG65S36A20CDC5AF5DF698BF651FD447697</txRefNum>
  <txRefIdx>0</txRefIdx>
  <respDateTime>04222004130505</respDateTime>
  <procStatus>0</procStatus>
  <approvalStatus>0</approvalStatus>
  <respCode>41</respCode>          ← Lost/Stolen
  <avsRespCode>H</avsRespCode>
  <procStatusMessage>Lost / Stolen</procStatusMessage>
  <respCodeMessage></respCodeMessage>
  <hostRespCode>502</hostRespCode>
  <hostAVSRespCode>Y</hostAVSRespCode>
  <retryTrace>1000000000000020</retryTrace>
  <retryAttemptCount>0</retryAttemptCount>

```

```

</newOrderResp>
<!-- Response to Profile Add: Credit Card -->
<customerProfileResp batchRequestNo="21">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>1000000000000000000021</customerRefNum> ← echoed from request
    <profileAction>C</profileAction> ← Create
    <profileProcStatus>0</profileProcStatus> ← Successful
    <profileProcStatusMessage>Profile Request Processed</profileProcStatusMessage>
</customerProfileResp>
<!-- Response to Profile Add: Switch/Solo -->
<customerProfileResp batchRequestNo="22">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>2</customerRefNum> ← generated by Chase Paymentech
    <profileAction>C</profileAction> ← Create
    <profileProcStatus>0</profileProcStatus> ← Successful
    <profileProcStatusMessage>Profile Request Processed</profileProcStatusMessage>
</customerProfileResp>
<!-- Response to Profile Add: Electronic Check -->
<customerProfileResp batchRequestNo="23">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>1000000000000000000022</customerRefNum> ← echoed from request
    <profileAction>C</profileAction> ← Create
    <profileProcStatus>0</profileProcStatus> ← Successful
    <profileProcStatusMessage>Profile Request Processed</profileProcStatusMessage>
</customerProfileResp>
<!-- Response to Profile Add: PINless Debit -->
<customerProfileResp batchRequestNo="24">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>10000000000000000000123</customerRefNum> ← echoed from request
    <profileAction>C</profileAction> ← Create
    <profileProcStatus>0</profileProcStatus> ← Successful
    <profileProcStatusMessage>Profile Request Processed</profileProcStatusMessage>
    <billerReferenceNumber>Biller Ref 123456</billerReferenceNumber> ← echoed from request
</customerProfileResp>
<!-- Response to Profile Add: Will generate an error response -->
<customerProfileResp batchRequestNo="25">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>1000000000000000000023</customerRefNum> ← echoed from request
    <profileAction>C</profileAction>
    <profileProcStatus>9584</profileProcStatus>

```

```

<profileProcStatusMessage>Missing Electronic Check Account
Information</profileProcStatusMessage>
</customerProfileResp>
<!-- Response to Profile Change: Change the expiration date -->
<customerProfileResp batchRequestNo="26">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>1000000000000000000000000000000020</customerRefNum>
    <profileAction>U</profileAction>                                ← Update
    <profileProcStatus>0</profileProcStatus>                         ← Successful
    <profileProcStatusMessage>Profile Request Processed</profileProcStatusMessage>
</customerProfileResp>
<!-- Response to Profile Change: Change from a Credit Card to an Electronic Check -->
<customerProfileResp batchRequestNo="27">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>1000000000000000000000000000000020</customerRefNum>
    <profileAction>U</profileAction>                                ← Update
    <profileProcStatus>0</profileProcStatus>                         ← Successful
    <profileProcStatusMessage>Profile Request Processed</profileProcStatusMessage>
</customerProfileResp>
<!-- Response to Profile Delete -->
<customerProfileResp batchRequestNo="28">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>1000000000000000000000000000000020</customerRefNum>
    <profileAction>D</profileAction>                                ← Delete
    <profileProcStatus>0</profileProcStatus>                         ← Successful
    <profileProcStatusMessage>Profile Request Processed</profileProcStatusMessage>
</customerProfileResp>
<!-- Response to Profile Retrieve -->
<customerProfileResp batchRequestNo="29">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>1000000000000000000000000000000021</customerRefNum>      ← echoed from request
    <profileAction>R</profileAction>                                ← Retrieve
    <profileProcStatus>0</profileProcStatus>                         ← Successful
    <profileProcStatusMessage>Profile Request Processed</profileProcStatusMessage>
    <customerAddress1>101 Nowhere Street</customerAddress1>
    <customerAddress2>Apt 0</customerAddress2>
    <customerCity>Tampa</customerCity>
    <customerState>FL</customerState>
    <customerZIP>33556-1234</customerZIP>
    <profileOrderOverrideInd>OI</profileOrderOverrideInd>
    <orderDefaultDescription>12345678901234567890ABCDEFHIJ</orderDefaultDescription>
    <orderDefaultAmount>000000001000</orderDefaultAmount>
    <cardBrand>EC</cardBrand>

```

```
<ecpCheckDDA>12345678901234567</ecpCheckDDA>
<ecpBankAcctType>C</ecpBankAcctType>
<ecpCheckRT>123456789</ecpCheckRT>
<ecpDelvMethod>B</ecpDelvMethod>
</customerProfileResp>
<!-- Batch Close (End of Day) -->
<endofDayResp batchRequestNo="30">
<bin>000001</bin>
<merchantID>123456</merchantID>
<terminalID>001</terminalID>
<procStatus>0</procStatus>
<batchSeqNum>1234567890123456</batchSeqNum>
</endofDayResp>
</transResponse>
<!-- Response to New Order: Auth/Capture, PINless Debit E-commerce -->
<newOrderResp batchRequestNo="31">
<industryType>RC</industryType>
<transType>AC</transType>
<bin>000001</bin>
<merchantID>123456</merchantID>
<terminalID>001</terminalID>
<cardBrand>SP</cardBrand>
<orderID>100000000000000000013</orderID>
<txRefNum>JP3WSDB67R46A20CDC5AF5DF698BF651FD447654</txRefNum>
<txRefIdx>0</txRefIdx>
<respDateTime>04222004130511</respDateTime>
<procStatus>0</procStatus>
<approvalStatus>1</approvalStatus>
<respCode>00</respCode>
<avsRespCode>H</avsRespCode>
<authorizationCode>tntC10</authorizationCode>
<procStatusMessage>APPROVED</procStatusMessage>
<hostRespCode>100</hostRespCode>
<hostAVSRespCode>Y</hostAVSRespCode>
<retryTrace>10000000000000013</retryTrace>
<retryAttemptCount>0</retryAttemptCount>
</newOrderResp>
```

```
<!-- Response to Mark for Capture for PINLess Debit E-commerce -->
<markForCaptureResp batchRequestNo="32">
    <txRefNum>3EFB416556A20CDC5AF5DF698BF651FD44769765</txRefNum>
    <amount>000000000600</amount>
    <orderID>1234567890123456789012</orderID>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <procStatus>0</procStatus>
    <respDateTime>04222004130502</respDateTime>
    <txRefIdx>2</txRefIdx>
    <retryTrace>10000000000000003</retryTrace>
</markForCaptureResp>
```

Example 8 Batch Processing Failure Response File

```
<?xml version="1.0" encoding="UTF-8"?>
<transResponse>
    <QuickResponse>
        <procStatus>6786</procStatus>
        <procStatusMessage>The actual amount of transactions do not match the amount specified by the sender in the batch file</procStatusMessage>
    </QuickResponse>
</transResponse>
```

5.2.1.1 Safetech Responses: Special notes on Rules Triggers

Requests to the Safetech service include an element labeled `RulesTrigger`. This element in the request message will ask the Safetech service to return the discreet set of rules or validations applied by the Safetech service for this transaction.

Information on triggered rules is returned in the `RulesData` element of the response message. This element is a specially delimited text string that indicates how many rules were triggered and what those rules were.

NOTE The setup and management of rules is done through the Safetech Agent Web Console.

The data string returned begins with the number of rules which were triggered by the transaction. This four digit number is always followed by a “=” delimiter, and then a comma delimited list of the rules triggered. There is no delimiter on the end of the string.

An example of this response data is listed below:

0003=1234,338,2974642135

If no rules are triggered, the data will return as listed below:

0000=

The length of the string is returned in a separate `RulesDataLength` element. The maximum length of this string is 999 characters. The string will end with a “+” delimiter if the data returned by the Safetech service exceeds this length.

5.3 Response Handling – Best Practices

Response files can contain multiple response codes for each transaction request, based on the source of the response and the type of transaction submitted to us. Here is a list of questions that should be asked when parsing a file, to make sure that all use cases are accounted for.

1 – Did the file succeed, or was an error thrown for the entire file?

- a. Failed files receive quick response messages. If a response file contains the <QuickResponse> tag, then an error has occurred that caused the file to fail.

Quick Response Example 1:

```
<?xml version="1.0" encoding="UTF-8"?>
<transResponse>
    <QuickResponse>
        <procStatus>6786</procStatus>
        <procStatusMessage>The actual amount of transactions do not match the amount
            specified by the sender in the batch file</procStatusMessage>
    </QuickResponse>
</transResponse>
```

Quick Response Example 2:

```
<?xml version="1.0" encoding="UTF-8"?>
<transResponse>
    <QuickResponse>
        <procStatus>6810</procStatus>
        <procStatusMessage>File name has exceeded the maximum number of
            characters</procStatusMessage>
    </QuickResponse>
</transResponse>
```

2 – On a per transaction basis, did the transaction succeed at the Gateway level, or did the Orbital Gateway generate an error?

- a. Gateway Errors are called “Proc Status” errors. A proc status of 0 (zero) indicates a success, while any other number indicates the gateway has detected a failure in format, validation, schema, or logic.

Proc Status Example 1:

```
<newOrderResp batchRequestNo="31">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <orderID>10000000000000000000000008</orderID>
    <respDateTime>04222004130517</respDateTime>
    <procStatus>841</procStatus>           ← Error validating card/account number range
    <procStatusMessage>PWS_ERR_VALIDATION_PAN_RANGE</procStatusMessage>
    <retryTrace>1000000000000019</retryTrace>
    <retryAttemptCount>0</retryAttemptCount>
</newOrderResp>
```

Proc Status Example 2:

```
<markForCaptureResp batchRequestNo="31">
    <txRefNum></txRefNum>
    <amount>00000000600</amount>
    <orderID>1234567890123456789012</orderID>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <procStatus>351</procStatus>           ← The MFC request contained an amount
                                            greater than the corresponding auth
    <procStatusMessage>This industry type does not allow a capture greater than
the value of the auth</procStatusMessage>
    <respDateTime>04222004130503</respDateTime>
    <txRefIdx></txRefIdx>
    <retryTrace>1000000000000004</retryTrace>
</markForCaptureResp>
```

- b. When a transaction creates a profile as part of the request, a separate status request tag is used to pertain specifically to the profile. This is necessary when, for example, a NewOrder request attempts to build a customer profile 'on the fly.' Response messages may include both a 'Proc Status' and a 'Profile Proc Status' value for the same transaction.

Profile Proc Status Example:

```
<customerProfileResp batchRequestNo="28">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>1000000000000000000020</customerRefNum>
    <profileAction>C</profileAction>
    <profileProcStatus>9579</profileProcStatus>
    <profileProcStatusMessage>Profile: Merchant-Bin not active </profileProcStatusMessage>
</customerProfileResp>
```

Profile Proc Status Example 2:

```
<newOrderResp batchRequestNo="17">
  <industryType>RC</industryType>
  <transType>AC</transType>
  <bin>000001</bin>
  <merchantID>123456</merchantID>
  <terminalID>001</terminalID>
  <cardBrand>MC</cardBrand>
  <orderID>100000000000000000017</orderID>           ← echoed from request
  <txRefNum>C1QAZ3NH2Y6RA20CDC5AF5DF698BF651FD447697</txRefNum>
  <txRefIdx>0</txRefIdx>
  <respDateTime>04222004130515</respDateTime>
  <procStatus>0</procStatus>           ← The transaction succeeded
  <approvalStatus>1</approvalStatus>
  <respCode>00</respCode>
  <avsRespCode>H</avsRespCode>
  <authorizationCode>tntC09</authorizationCode>
  <procStatusMessage>APPROVED</procStatusMessage>
  <hostRespCode>100</hostRespCode>
  <hostAVSRespCode>Y</hostAVSRespCode>
  <customerRefNum>100000000000000000017</customerRefNum>
  <customerName>Billy Smith</customerName>
  <profileProcStatus>0</profileProcStatus>           ← The profile also succeeded
  <profileProcStatusMsg>GOOD</profileProcStatusMsg>
  <retryTrace>1000000000000017</retryTrace>
  <retryAttemptCount>0</retryAttemptCount>
</newOrderResp>
```

3 – When applicable, did the transaction succeed at the host/issuer level?

a. New Order Authorizations, Gift Card transactions, and certain Mark For Capture scenarios (when the auth has aged or the transaction was previously split) should reach out to the customer's Card Issuing Bank for approval. This process is separate of the Gateway's validations, and separate tags will appear in the response when an issuer response is returned.

Address Verification (AVS) and Card Verification Value (CVV) validation are always done by the issuer when applicable. This is because only the card issuer will know the Address and CVV of the card they have given the consumer. CVV validation is not supported in the Batch XML format.

Issuer Decline example:

```
<newOrderResp batchRequestNo="20">
  <industryType>RC</industryType>
  <transType>AC</transType>
  <bin>000001</bin>
  <merchantID>123456</merchantID>
  <terminalID>001</terminalID>
  <cardBrand>MC</cardBrand>
  <orderID>1000000000000000000020</orderID>
  <txRefNum>M12EDHG65S36A20CDC5AF5DF698BF651FD447697</txRefNum>
  <txRefIdx>0</txRefIdx>
  <respDateTime>04222004130505</respDateTime>
  <procStatus>0</procStatus>           ← Transaction Succeeded at gateway Level
  <approvalStatus>0</approvalStatus>
  <respCode>05</respCode>      ← Issuer Decline: Do Not Honor (a generic decline)
  <avsRespCode>H</avsRespCode>          ← Gateway's Normalized AVS Response code
  <procStatusMessage>Lost / Stolen</procStatusMessage>
  <respCodeMessage></respCodeMessage>
  <hostRespCode>530</hostRespCode>           ← Host's Response code
  <hostAVSRespCode>Y</hostAVSRespCode>        ← Host's AVS Response code
  <retryTrace>1000000000000020</retryTrace>
  <retryAttemptCount>0</retryAttemptCount>
</newOrderResp>
```

Issuer Approval Example:

```
<markForCaptureResp BatchRequestNo="3">
  <txRefNum>3EFB416556A20CDC5AF5DF698BF651FD44769765</txRefNum>
  <amount>000000000600</amount>
  <orderID>1234567890123456789012</orderID>
  <bin>000001</bin>
  <merchantID>123456</merchantID>
  <terminalID>001</terminalID>
  <procStatus>0</procStatus>           ← The MFC Request was successful
  <procStatusMessage>Approved/procStatusMessage>
  <respDateTime>04222004130503</respDateTime>
  <txRefIdx>1</txRefIdx>           ← This is the first capture on this Auth
  <retryTrace>10000000000000004</retryTrace>
  <approvalStatus>1</approvalStatus>           ← This request triggered an Auth
  <respCode>00</respCode>           ← The Auth was approved by the issuer
  <avsRespCode></avsRespCode>           ← The issuer response did not include AVS
  <authorizationCode>987123</authorizationCode>
  <respCodeMessage>Approved</respCodeMessage>
  <hostRespCode>100</hostRespCode>           ← Host's Response code
  <hostAVSRespCode></hostAVSRespCode>
</markForCaptureResp>
```

5.3.1 Safetech Fraud Analysis Data Handling

Safetech fraud scoring can be requested in one of two ways: As part of a transaction; using the **NewOrder** or **FlexCache** complex types and in parallel to the host approval/decline, or as a standalone request; using the **SafetechFraudAnalysis** complex type.

Prior to sending the request information to the Safetech service, the Gateway ensures all the minimally required is present and properly formatted. Orbital Gateway returns the **FraudAnalysisProcStatus** element to indicate if the data passed the necessary validations. A value of zero indicates success. Any other value indicates an error.

If the Fraud Analysis is successful, the Safetech service will return several additional elements to the Orbital Gateway. These elements are contained in a parent element called **FraudAnalysisResponse**, common to each complex type that supports the Safetech service.

The Safetech service may return either a short or long form response message, depending on the **FraudScoreIndicator** provided in the request message.

Fraud Score 1

This is the short form response from the Safetech service. At minimum, a Fraud Status code is returned. Additionally, the following elements may be returned:

- ▢ Risk Inquiry Transaction ID
- ▢ Fraud Score Auto Decision Response
- ▢ Risk Score
- ▢ Kaptcha Match Flag
- ▢ Rules Triggered

Fraud Score 2

This is the long form response from the Safetech service. All of the short form elements may be returned in the response message. In addition to the response information listed above, the response may include over 25 additional data elements.

For more information on these elements, please refer to [*D.2 Safetech Response Element Reference, 4.2.7 Safetech Fraud Analysis Response Elements*](#), or your documentation for the Safetech Agent Web Console.

Appendix A **Codes Reference**

This appendix contains tables describing the codes that you might receive in a response message.

A.1 Action Key

Many of the tables in this appendix have an Action column. Table 14 describes what action the values displayed in the Action column indicate that you should take.

Table 14 Action column key

Action	Description
Call	Call your Chase Paymentech Customer Service representative for assistance.
Cust.	Try to resolve with customer or obtain alternate payment method.
Fix	There is an invalid value being sent. Fix and resend.
None	No action required.
Resend	Send this transaction back at any time.
Voice	Perform a voice authorization per instructions provided by Chase Paymentech.
Wait	Wait 2–3 days before resending or try to resolve with the customer.

A.2 Response Codes

Table 15 describes the different values for the <respCode> element in a response message.

Table 15 Response code values

Code	Definition	Status	Action *	Host Code Stratus	Host Code Tandem
00	Approved	Approved	None	100, 102	00, 100, 102
01	Call/Refer to Card Issuer	Decline	Voice	401	01
02	Refer to Card Issuer's Special Conditions	Decline	Voice	N/A	02
03	Invalid Merchant Number	Error	Fix	231	03
04	Pickup	Decline	Cust.	501	04
05	Do Not Honor	Decline	Cust.	530	05
06	Other Error	Decline	Cust.	594	06
07	Stop Deposit Order	Decline	Cust.	570	N/A
08	Approved Authorization, Honor with Identification	Approved	None	N/A	08
09	Revocation of Authorization	Decline	Cust.	571	N/A
10	Default Call	Decline	Voice	402	N/A
11	Approved Authorization, VIP Approval	Approved	None	N/A	11
12	Invalid Transaction Type	Decline	Cust.	606	12

Table 15 Response code values

Code	Definition	Status	Action*	Host Code Stratus	Host Code Tandem
13	Bad Amount	Decline	Fix	592	13
14	Invalid Credit Card Number	Decline	Fix	591	14
15	Default Call Low Fraud	Decline	Voice	442	N/A
16	Default Call Medium Fraud	Decline	Voice	443	N/A
17	Default Call High Fraud	Decline	Voice	444	N/A
18	Default Call Unavailable Fraud	Decline	Voice	445	N/A
19	Re-enter Transaction	Error	Resend	N/A	19
20	Floor Low Fraud	Decline	Cust.	332	N/A
21	Floor Medium Fraud	Decline	Cust.	333	N/A
22	Floor High fraud	Decline	Cust.	334	N/A
23	Floor Unavailable Fraud	Decline	Cust.	335	N/A
24	Validated	Approved	None	101	101
26	Pre-noted	Approved	None	103	103
27	No Reason to Decline	Approved	None	104	N/A
28	Received and Stored	Approved	None	105	N/A
29	Provided Authorization	Approved	None	106	N/A
30	Invalid Value in Message	Error	Fix	225	30
31	Request Received	Approved	None	107	N/A
32	BIN Alert	Approved	None	110	N/A
33	Card is Expired	Decline	Cust.	522	33
34	Approved for Partial	Approved	None	111	N/A
35	Zero Amount	Error	Fix	203	N/A
36	Bad Total Authorization Amount	Error	Fix	205	N/A
37	Invalid Secure Payment Data	Error	Fix	245	N/A
38	Merchant not MC SecureCode Enabled	Decline	Call	246	N/A
39	Previously Processed Transaction	Error	Fix	109	N/A
40	Requested Function not Supported	Error	Call or Fix	N/A	40
41	Lost/Stolen	Decline	Cust.	502	N/A
42	Account Not Active	Decline	Cust.	N/A	15
43	Lost/Stolen Card	Decline	Cust.	N/A	43
44	Account Not Active	Decline	Cust.	N/A	N/A

Table 15 Response code values

Code	Definition	Status	Action*	Host Code Stratus	Host Code Tandem
45	Duplicate Transaction	Decline	Cust.	551	N/A
46	Blanks not Passed in Reserved Field	Decline	Fix	248	N/A
50	Positive ID	Decline	Cust.	802	N/A
52	Processor Decline	Decline	Cust.	303	N/A
56	Restraint	Decline	Cust.	806	N/A
58	Transaction not Permitted to Terminal	Error	Call	N/A	58
59	Soft AVS	Decline	Cust.	260	N/A
60	Do Not Honor Low Fraud	Decline	Cust.	532	N/A
61	Do Not Honor Medium Fraud	Decline	Cust.	533	N/A
62	Do Not Honor High fraud	Decline	Cust.	534	N/A
63	Do Not Honor Unavailable Fraud	Decline	Cust.	535	N/A
64	CVV2/CVC2 Failure	Decline	Cust.	531	N/A
65	Invalid Amex CID	Decline	Cust.	811	N/A
66	Other Error	Error	Fix	204	N/A
68	Invalid CC Number	Error	Fix	201	N/A
69	Does not Match MOP	Error	Fix	233	N/A
71	No Account	Decline	Fix	825	N/A
72	Invalid Institution Code	Decline	Fix	602	N/A
73	Method of Payment is Invalid for Merchant	Error	Fix	834	834
74	Invalid Expiration Date	Decline	Cust.	605	54
75	Bad Amount	Error	Fix	202	N/A
77	Invalid Amount	Decline	Fix	607	N/A
78	Missing Companion Data	Error	Fix	227	N/A
79	Invalid Merchant	Error	Fix	833	N/A
80	Invalid MOP for Division	Error	Fix	239	N/A
81	Call Low Fraud	Decline	Voice	432	N/A
82	Call Medium Fraud	Decline	Voice	433	N/A
83	Call High Fraud	Decline	Voice	434	N/A
84	Call Unavailable Fraud	Decline	Voice	435	N/A
85	Duplicated Order #	Error	Fix	234	N/A
86	Auth Recycle Host down	Error	Wait	236	N/A

Table 15 Response code values

Code	Definition	Status	Action*	Host Code Stratus	Host Code Tandem
87	Invalid Currency	Error	Fix	238	N/A
88	Invalid Purch. Level 3	Error	Fix	243	N/A
89	Credit Floor	Decline	Cust.	302	N/A
91	Approved Low Fraud	Approved	None	112	N/A
92	Approved Medium Fraud	Approved	None	113	N/A
93	Approved High Fraud	Approved	None	114	N/A
94	Approved Fraud Service Unavailable	Approved	None	115	N/A
95	Invalid Data Type	Error	Fix	226	N/A
96	Invalid Record Sequence	Error	Fix	228	N/A
97	Percents Not Total 100	Error	Fix	229	N/A
98	Issuer Unavailable	Decline	Resend	301	N/A
99	No Answer/Unable to send	Error	Resend	000	99
A1	Payments Not Total Order	Error	Fix	230	N/A
A2	Bad Order Number	Error	Fix	232	N/A
A3	FPO Locked	Error	Wait	235	N/A
A4	FPO Not Allowed	Error	Call	237	N/A
A5	Auth Amount Wrong	Error	Fix	240	N/A
A6	Illegal Action	Error	Fix	241	N/A
A8	Invalid Start Date	Error	Fix	251	N/A
A9	Invalid Issue Number	Error	Fix	252	N/A
B1	Invalid Transaction Type	Error	Fix	253	N/A
B2	Account Previously Activated	Decline	Cust	580	N/A
B3	Unable to Void Transaction	Error	Fix	581	18
B5	Not on File	Decline	Fix	304	N/A
B7	Fraud	Decline	Cust.	503	N/A
B8	Bad Debt	Decline	Cust.	504	N/A
B9	On Negative File	Decline	Cust.	505	N/A
BA	Under 18 Years Old	Decline	Cust.	540	N/A
BB	Possible Compromise	Decline	Cust.	541	N/A
BC	Bill To Not Equal To Ship To	Decline	Cust.	542	N/A
BD	Invalid Pre-approval Number	Decline	Cust.	543	N/A

Table 15 Response code values

Code	Definition	Status	Action*	Host Code Stratus	Host Code Tandem
BE	Invalid Email Address	Decline	Cust.	544	N/A
BF	PA ITA Number Inactive	Decline	Cust.	545	N/A
BG	Blocked Account	Decline	Cust.	546	N/A
BH	Address Verification Failed	Decline	Cust.	547	N/A
BI	Not on Credit Bureau	Decline	Cust.	548	N/A
BJ	Previously Declined	Decline	Cust.	549	N/A
BK	Closed Account, New Account Closed	Decline	Cust.	550	N/A
BL	Re-Authorization	Decline	Cust.	560	N/A
BM	Re-Authorization – No Match	Decline	Cust.	561	N/A
BN	Re-Authorization – Timeframes Exceeded	Decline	Cust.	563	N/A
BO	Stand In Rules	Decline	Cust.	905	N/A
BP	Customer Service Phone Number required on Transaction Types 1 (MO/TO) and 2 (Recurring). MC Only	Error	Fix	257	N/A
BQ	Issuer has Flagged Account as Suspected Fraud. (Discover Only)	Decline	Cust.	596	N/A
BR	Invalid MCC Sent	Error	Fix	249	N/A
BS	New Card Issued	Decline	Cust.	595	N/A
C1	Invalid Issuer	Decline	Cust.	506	N/A
C2	Invalid Response Code	Decline	Fix	507	N/A
C3	Excessive PIN Try	Decline	Cust.	508	N/A
C4	Over Limit	Decline	Cust.	509	N/A
C5	Over Freq Limit	Decline	Cust.	510	N/A
C6	Over Sav Limit	Decline	Cust.	511	N/A
C7	Over Sav Freq	Decline	Cust.	512	N/A
C9	Over Credit Freq	Decline	Cust.	514	N/A
D1	Invalid For Credit	Decline	Fix	515	N/A
D2	Invalid For Debit	Decline	Fix	516	N/A
D3	Rev Exceed Withdrawal	Decline	Cust.	517	N/A
D4	One Purchasing Limit	Decline	Cust.	518	N/A
D5	On Negative File	Decline	Cust.	519	519
D6	Changed Field	Decline	Fix	520	N/A

Table 15 Response code values

Code	Definition	Status	Action*	Host Code Stratus	Host Code Tandem
D7	Insufficient Funds	Decline	Cust.	521	N/A
D8	Encrypted Data Bad	Decline	Fix	523	96
D9	Altered Data	Decline	Fix	524	N/A
E3	Invalid Prefix	Decline	Fix	601	N/A
E4	Invalid Institution	Decline	Fix	603	N/A
E5	Invalid Cardholder	Decline	Fix	604	N/A
E6	BIN Block	Decline	Fix	610	N/A
E7	Stored	Approved	None	704	N/A
E8	Invalid Transit Routing Number	Error	Fix	750	750
E9	Unknown Transit Routing Number	Error	Fix	751	751
F1	Missing Name	Error	Fix	752	N/A
F2	Invalid Account Type	Error	Fix	753	N/A
F3	Account Closed	Error	Cust.	754	754
F4	No Account/Unable To Locate	Error	Fix	755	755
F5	Account Holder Deceased	Error	Cust.	756	756
F6	Beneficiary Deceased	Error	Cust.	757	757
F7	Account Frozen	Error	Cust.	758	758
F8	Customer Opt Out	Error	Cust.	759	759
F9	ACH Non-Participant	Error	Cust.	760	760
G1	No Pre-note	Error	Fix	761	N/A
G2	No Address	Error	Fix	762	N/A
G3	Invalid Account Number	Error	Fix	763	763
G4	Authorization Revoked by Consumer	Error	Cust.	764	764
G5	Customer Advises Not Authorized	Error	Cust.	765	765
G6	Invalid CECP Action Code	Error	Fix	766	N/A
G7	Invalid Account Format	Error	Fix	767	767
G8	Bad Account Number Data	Error	Fix	768	N/A
G9	No Capture	Decline	N/A	801	N/A
GA	Account Non-Convertible	Decline	N/A	769	769
H1	No Credit Function	Decline	N/A	803	N/A
H2	No Debit Function	Decline	N/A	804	N/A

Table 15 Response code values

Code	Definition	Status	Action*	Host Code Stratus	Host Code Tandem
H3	Rev Exceed Withdrawal	Decline	Cust.	805	N/A
H4	Changed Field	Decline	N/A	807	N/A
H5	Terminal Not Owned	Decline	N/A	808	N/A
H6	Invalid Time	Decline	Fix	809	N/A
H7	Invalid Date	Decline	Fix	810	N/A
H8	Invalid Terminal Number	Decline	Fix	812	N/A
H9	Invalid PIN	Decline	Cust.	813	38
I1	Block Activation Failed – Card Range Not Set Up for MOD 10	Error	Fix	582	N/A
I2	Block Activation Failed – E-mail or Fulfillment Flags were set to Y	Error	Fix	583	N/A
I3	Declined – Issuance Does Not Meet Minimum Amount	Declined	Cust	584	N/A
I4	Declined – No Original Auth Found	Decline	Cust	585	N/A
I5	Declined – Outstanding Auth, Funds On Hold	Decline	Cust	586	N/A
I6	Activation Amount Incorrect	Decline	Fix	587	N/A
I7	Block Activation Failed – Account Not Correct Or Block Size Not Correct	Decline	Fix	588	N/A
I8	Mag Stripe CVD Value Failed	Decline	Fix	589	N/A
I9	Max Redemption Limit Met	Decline	Fix	590	N/A
J1	No Manual Key	Decline	Fix	814	N/A
J2	Not Signed In	Decline	Fix	815	N/A
J3	Excessive PIN Try	Decline	Cust.	816	N/A
J4	No DDA	Decline	Fix	817	N/A
J5	No SAV	Decline	Fix	818	N/A
J6	Excess DDA	Decline	Cust.	819	N/A
J7	Excess DDA FREQ	Decline	Cust.	820	N/A
J8	Excess SAV	Decline	Cust.	821	N/A
J9	Excess SAV FREQ	Decline	Cust.	822	N/A
K1	Excess Card	Decline	Cust.	823	N/A
K2	Excess Card Freq	Decline	Cust.	824	N/A
K3	Reserved Future	Decline	N/A	826	N/A

Table 15 Response code values

Code	Definition	Status	Action*	Host Code Stratus	Host Code Tandem
K4	Reserved Closing	Decline	N/A	827	N/A
K5	Dormant	Decline	Cust.	828	N/A
K6	NSF	Decline	Cust.	829	N/A
K7	Future RD Six	Decline	N/A	830	N/A
K8	Future RD Seven	Decline	N/A	831	N/A
K9	Transaction Code Conflict	Decline	Fix	832	N/A
L1	In Progress	Decline	Wait	901	N/A
L2	Process Unavailable	Error	Resend	902	N/A
L3	Invalid Expiration	Error	Fix	903	N/A
L4	Invalid Effective	Error	Fix	904	N/A
L5	Invalid Issuer	Decline	Fix	N/A	15
L6	Transaction Not Allowed For Cardholder	Decline	Cust.	N/A	57
L7	Unable to Determine Network Routing	Error	Call	N/A	92
L8	System Error	Error	Call	N/A	97
L9	Database Error	Error	Call	N/A	98
M1	Merchant Override Decline	Decline	Cust.	Merchant Selectable Response	Merchant Selectable Response
ND	Account number appears on European Direct Debit negative file	Decline	Cust	719	N/A
P1	ECP - Advanced Verification service- Account Status Verification and/or AOA data is in a positive status.	Approved	None	116	N/A
P2	ECP Account Verification/AOA Decline	Decline	Cust.	575	N/A
P3	No Information Found	Decline	Cust.	576	N/A
P4	ECP Account Verification Decline	Decline	Cust.	578	N/A
P5	Not ACH Eligible	Decline	Cust.	579	N/A
PR	Refund Not Allowed – Refund Requested on a Star only BIN or BIN not Found	Error	Fix	599	N/A
R1	Blocked Card Number Prefix	Decline	Cust.	269	N/A
R2	Blocked Card Number	Decline	Cust.	270	N/A
R3	Blocked Issuing Country	Decline	Cust.	271	N/A
R4	Ceiling Limit	Decline	Cust.	275	N/A

Table 15 Response code values

Code	Definition	Status	Action*	Host Code Stratus	Host Code Tandem
R5	Not Authorized to Send Record	Decline	Cust	258	N/A
R6	Authorization Not Found	Decline	Cust.	307	N/A
R7	Amount Mismatch	Decline	Cust.	306	N/A
R8	Already Reversed or Nothing to Reverse	Decline	Cust.	305	N/A
R9	Authorization Code or Response Date Invalid	Decline	Cust.	262	N/A
S1	Electronic Processing Not Supported	Decline	Cust.	747	N/A

A.3 AVS Response Codes

Table 16 describes the different values for the <avRespCode> field in a response message.

Table 16 AVS response code values

Code	AVS Message	BIN
1	No address supplied	BIN 000001
2	Bill-to address did not pass Auth Host edit checks	BIN 000001
3	AVS not performed	BIN 000001
4	Issuer does not participate in AVS	BIN 000002
5	Edit-error - AVS data is invalid	BIN 000001
6	System unavailable or time-out	BIN 000001 / BIN 000002
7	Address information unavailable	BIN 000001 / BIN 000002
8	Transaction Ineligible for AVS	BIN 000002
9	Zip Match/Zip4 Match/Locale match	BIN 000001
A	Zip Match/Zip 4 Match/Locale no match	BIN 000001 / BIN 000002
B	Zip Match/Zip 4 no Match/Locale match	BIN 000001
C	Zip Match/Zip 4 no Match/Locale no match	BIN 000001
D	Zip No Match/Zip 4 Match/Locale match	BIN 000001
E	Zip No Match/Zip 4 Match/Locale no match	BIN 000001
F	Zip No Match/Zip 4 No Match/Locale match	BIN 000001 / BIN 000002
G	No match at all	BIN 000001 / BIN 000002
H	Zip Match/Locale match	BIN 000002
J	Issuer does not participate in Global AVS	BIN 000001
JA	International street address and postal match	BIN 000001

Table 16 AVS response code values

Code	AVS Message	BIN
JB	International street address match. Postal code not verified.	BIN 000001
JC	International street address and postal code not verified.	BIN 000001
JD	International postal code match. Street address not verified.	BIN 000001
M2	Cardholder name, billing address, and postal code matches	BIN 000001
M3	Cardholder name and billing code matches	BIN 000001
M4	Cardholder name and billing address match	BIN 000001
M5	Cardholder name incorrect, billing address and postal code match	BIN 000001
M6	Cardholder name incorrect, billing postal code matches	BIN 000001
M7	Cardholder name incorrect, billing address matches	BIN 000001
M8	Cardholder name, billing address and postal code are all incorrect	BIN 000001
M9	Cardholder name matches	BIN 000001
N3	Address matches, ZIP not verified.	BIN 000002
N4	Address and ZIP code not verified due to incompatible formats	BIN 000002
N5	Address and ZIP code match (International only)	BIN 000002
N6	Address not verified (International only)	BIN 000002
N7	ZIP matches, address not verified	BIN 000002
N8	Address and ZIP code match (International only)	BIN 000002
N9	Address and ZIP code match (UK only)	BIN 000002
R	Issuer does not participate in AVS	BIN 000002
UK	Unknown	BIN 000001
X	Zip Match/Zip 4 Match/Address Match	BIN 000002
Z	Zip Match/Locale no match	BIN 000002
<i>blank</i>	Not applicable (non-Visa)	BIN 000001 / BIN 000002

A.4 Process Status Codes and Messages

The tables in this section describe the codes and related response messages for:

- [Successful Response Files](#)
- [Profile Management Responses](#)

Error Response Files

A.4.1 Process Status in Successful Response Files

Table 17 describes the possible values for the <procStatus> element and the associated <procStatusMsg> element in successful response files that indicate the success or failure of an individual request. The Action column indicates what action you should take in response to the message.

NOTE The codes are listed sequentially.

Table 17 Process Status and Process Status Message values

Code	Message/Description	Action*
1	PWS_UNKNOWN_ERROR	Resend
2	PWS_NETWORK_ERROR	Resend
3	PWS_DB_ERROR Unknown Database Issues	Resend
40	Cannot Get to Authorizer Service	Resend
54	Industry Type is Currently Not Supported for Merchant and BIN	Fix
205	PWS_DB_EXCEPTION_ERROR	Resend
208	PWS_ERROR_FAILED_TO_CONNECT	Resend
301	PWS_NW_OPEN_ERROR	Resend
303	PWS_NW_READ_ERROR	Resend
328	PWS_ERROR_BAD_REVERSAL_AMOUNT An invalid amount submitted on a Partial Void Request	Fix
329	PWS_ERROR_BAD_REQUEST_AMOUNT	Fix
330	PWS_ERROR_ALREADY_CAPTURED	Fix
331	PWS_ERROR_INVALID_ACTION	Fix
333	PWS_ERROR_MISSING_TRANSACTION_REFERENCE_INDEX	Fix
335	PWS_ERROR_SPLIT_AUTH_NOT_ALLOWED_ALREADY_MARKED	Fix
348	PWS_DID_NOT_ALLOW_A_CAPTURE_REQUEST_BECAUSE_THE_ORIGINAL_AUTH_WAS_NOT_SUCCESSFUL Cannot Void a Transaction in which the Mark for Capture Failed	Fix
350	The amount requested cannot be zero	Fix
351	This industry type does not allow a capture greater than the value of the auth	Fix
354	Re-Auth failed. This error is returned when a re-auth is attempted behind-the-scenes by the Gateway (usually in the case of a split transaction) and fails at the host.	Call
355	There is nothing to capture This error is returned when a Capture attempt is made on prior authorization, but there is no amount left to capture.	Fix

400	PWS_MANDATORY_FIELDS_ERROR	Fix
410	FE_NETWORK_ERROR (cannot connect to eHost)	Resend
411	FE_INTERRUPTED_SESSION (i/o problem while connecting to eHost)	Resend
516	The Merchant ID/Acquiring BIN ID is invalid or missing. Message rejected	Fix
518	This merchant is not active until ... [This error is returned when a Merchant Account has been setup, but with an Activation date in the future of the present date].	Call Customer Service
519	This merchant is inactive	Call Customer Service
521	eHost has received a badly formatted message [This error is returned when required fields are missing]	Fix
523	An invalid TID was received [Terminal ID]	Fix
801	PWS_ERR_VALIDATION_AMOUNT	Fix
803	PWS_ERR_VALIDATION_AVSADDRESS	Fix
804	PWS_ERR_VALIDATION_AVSZIPCODE	Fix
806	PWS_ERR_VALIDATION_BIN	Fix
811	PWS_ERR_VALIDATION_CUSTOMERADDR	Fix
812	PWS_ERR_VALIDATION_CUSTOMEREMAIL	Fix
814	PWS_ERR_VALIDATION_CUSTOMERNAME	Fix
817	PWS_ERR_VALIDATION_CUSTOMERPHONE	Fix
818	PWS_ERR_VALIDATION_CVV2	Fix
822	PWS_ERR_VALIDATION_ISSUENUM	Fix
823	PWS_ERR_VALIDATION_LANGUAGE	Fix
825	PWS_ERR_VALIDATION_MERCHANTID	Fix
826	PWS_ERR_VALIDATION_ORDERDESCRIPTION	Fix
827	PWS_ERR_VALIDATION_ORDERID	Fix
831	PWS_ERR_VALIDATION_TAXAMT	Fix
832	PWS_ERR_VALIDATION_TAXINCLUDED	Fix
833	PWS_ERR_VALIDATION_TERMINALID	Fix
834	PWS_ERR_VALIDATION_TRANSDATE	Fix
835	PWS_ERR_VALIDATION_TRANSTIME	Fix
836	PWS_ERR_VALIDATION_ECOM	Fix
838	PWS_ERR_VALIDATION_ACNUMBER	Fix
839	PWS_ERR_VALIDATION_PAN_LUHN	Fix
840	PWS_ERR_VALIDATION_PAN_LENGTH	Fix
841	PWS_ERR_VALIDATION_PAN_RANGE	Fix

842	PWS_ERR_VALIDATION_EXP_DATE_FORMAT	Fix
844	PWS_ERR_VALIDATION_EXP_DATE_TOO_NEW	Fix
845	PWS_ERR_VALIDATION_START_DATE_FORMAT	Fix
846	PWS_ERR_VALIDATION_START_DATE_TOO_NEW	Fix
847	PWS_ERR_VALIDATION_PAN_FORMAT	Fix
848	PWS_ERR_VALIDATION_CURRENCY_FORMAT	Fix
849	PWS_ERR_VALIDATION_CURRENCY_UNSUPPORTED	Fix
850	PWS_ERR_VALIDATION_CURRENCY_BAD_EXPONENT	Fix
851	PWS_ERR_VALIDATION_MERCHANT_UNSUPPORTED	Fix
852	PWS_ERR_VALIDATION_BRAND_UNSUPPORTED	Fix
853	PWS_ERR_VALIDATION_BRAND_PAN_MISMATCH	Fix
881	The LIDM you supplied # does not match with any existing transaction (Cannot void or Mark a Transaction because the TxRefNum does match a transaction)	Fix
882	LOCKED_DOWN (Cannot mark or unmark transaction)	Fix
885	Error Validating Amount. Must be Numeric, Equal to Zero or Greater	Fix
886	Zero Dollar Auth: ZIP is Mandatory	Fix
887	Reversal: Invalid Reversal Indicator [%s]. Must be one of the following values: [YN]	Fix
888	Invalid ECP Routing Number	Fix
934	Expiry Date Cannot Be Empty	Fix
9549	Cannot [] for profile ID [] and MID []. Profile is not active	Fix
9591	Profile Mismatch Error: Invalid Profile Method of Payment for Transaction	Fix
9601	Account Updater is not enabled	Call
9718	Invalid AVS Country Code [%s]. Supported values are [CA], [GB], [UK], or [US]	Fix
9719	Invalid Date Length: Format is YYYYMM	Fix
9720	Soft Desc: Merchant not activated for soft descriptors	Fix
9721	Soft Desc: Merchant Name is required if soft descriptor data is sent	Fix
9722	Soft Desc: Merchant Name exceeds max length of [%s] for %s transactions	Fix
9723	Soft Desc: [%s] cannot contain leading spaces	Fix
9724	Soft Desc: [%s] exceeds max length of [%s]	Fix
9725	Soft Desc: Product Description cannot be present if Merchant Name is > %s	Fix
9726	Soft Desc: Product Description length cannot exceed [%s] if Merchant Name length is between %s and %s	Fix
9727	Soft Desc: Too many Merchant descriptors. Never send more than one of the following: City, phone, url OR email	Fix
9728	Soft Desc: [%s] is not allowed for ECP transactions	Fix

9729	Soft Desc: Invalid format for Merchant Phone. Must be nnn-nnn-aaaa or nnn-aaaaaaaa	Fix
9732	Invalid PCard 2 Data in Request	Fix
9735	Gift Card: Invalid Block Activation Count.	Fix
9737	Gateway is Down	Resend
9738	Database Connection Problem: Cannot acquire Database Connection	Resend
9739	Invalid Approval Code: Special Characters are not allowed	Fix
9740	Invalid CAVV Value	Fix
9743	Pcard 3 data was sent in parent split, but is missing in current request	Fix
9744	If Alt Tax is sent Alt Tax ID is required	Fix
9745	Three reasons could result in this error: Pcard 3 data can only be sent with MC and VI cards. Pcard 3 data cannot be sent on this request type. Pcard 3 data can only be sent with US or Canadian currency.	Fix
9746	Line item count must be between 1 and 98 inclusive	Fix
9747	Line item detail number [%s] is missing	Fix
9748	Cannot send Pcard 3 data without sending Pcard 2 field	Fix
9749	Minimal Pcard 3 base data missing or invalid	Fix
9750	Minimal Pcard 3 line item data missing or invalid on index	Fix
9751	Line Item Count does not match the number of line items sent	Fix
9752	Invalid debit indicator for Bin 000002 in index. Must be 'D' or 'C'	Fix
9753	Invalid Gross/Net for Bin 000002 in index. Must be 'Y' or 'N'	Fix
9754	Amount hash error, negative total on line item data index	Fix
9755	Amount hash error on line item data index. Total = [%s] Hash = [%s]	Fix
9756	Detail totals do not match requested amount	Fix
9757	Invalid Country Code	Fix
9758	Invalid Unit of Measure in index	Fix
9760	PCard 3: Invalid Discount Indicator in Line Item	Fix
9761	PCard 3: Invalid or Out of Order Line Item number	Fix
9762	PCard3: Invalid Discount Amount in Line Item	Fix
9765	The field is missing, invalid, or has exceeded the max length	Fix
9766	The Bill Me Later Card Type [BL] is Not Allowed with this transaction.	Fix
9767	Bill Me Later Generic Error Code	Fix
9768	Invalid [Values. Must be one of the following values: XXX or empty	Fix
9769	BML: Mandatory Field [Customer Birth Date] is missing for [New (N)] Customer Type	Fix

9781	Pinless Debit: A versioned interface is required to use Pinless Debit functionalities.	Fix
9782	Pinless Debit: Biller Reference Number is required for all PINLess Debit Bill Pay transactions Biller Reference Number is required for all Pinless Debit transactions.	Fix
9783	Pinless Debit: Expiration Date is required for Pinless Debit Profiles.	Fix
9784	Pinless Debit: Profile is not Pinless Debit or is an invalid status to convert to credit card.	Fix
9785	PINLess Debit: Invalid Pinless Debit Transaction type [%s]. Valid values are: (Empty or BP for Bill Pay) or (EC for ECommerce)	Fix
9786	PINLess Debit: Invalid Currency: [%s]. Currency Must Be USD [840] for PINLess Debit ECommerce transactions.	Fix
9787	PINLess Debit: PIN is not required for PINLess Debit ECommerce transactions.	Fix
9788	PINLess Debit: AVS Address Line 1 and ZIP code are required for PINLess Debit ECommerce transactions.	Fix
9789	PINLess Debit: The PINLess Debit ECommerce is Only Allowed with [%s] Transactions.	Fix
9793	PINless Debit: Invalid. The field is missing, invalid, or has exceeded the max length.	Fix
9794	PINless Debit: The PINLess Debit Bill Pay Transactions are not allowed with [%s]The PINless Debit Card Type [DP] is Not Allowed with [%s] Transactions.	Fix
9795	PINless Debit: The PINLess Debit Bill Pay is Only Allowed with [%s] Transactions.The PINless Debit Card Type [DP] is Only Allowed with [%s] Transactions	Fix
9796	PINless Debit: The PINLess Debit ECommerce is Only Allowed with Industry Type of [%s].The PINless Debit Card Type [DP] must be sent with Industry Type of [%s].	Fix
9797	PINless Debit: Card Number Not Eligible for PINless Debit Processing	Fix
9798	PINLess Debit: IV Industry Type Is For PINLess Debit Processing Only.	Fix
9799	PINLess Debit: Inquiry Trace Number is required to perform an inquiry lookup.	Fix
9806	Refund by TxRefNum only valid when Original Transaction was Auth or Auth Capture	Fix
9807	Refund by TxRefNum must be for less than or equal to Original Transaction amount	Fix
9810	Partial online reversals are not allowed	Fix
9811	Online reversals are not allowed for cardtype [x].	Fix
9812	Age of auth is [x] minutes, max age for online reversal of this method of payment is [x] minutes.	Fix
10005	Invalid Data in Request	Fix
10011	Response timed out waiting for Authorization Host	Resend
11001	Locked Down: Unable to Perform a Partial Void on Industry Type: [RE].	Fix
All other 10000 - 11000	GATEWAY SYSTEM ERROR CONDITIONS This encompasses various processing errors.	Resend
19716	Invalid AVS Zip Code. Valid formats are []	Fix
19717	Invalid Recurring Indicator []. Supported values are [].	Fix

19718	A specific element is restricted to a specific method of payment.	Fix
19719	A specific element has an invalid value [], allowed values are [].	Fix
19720	Either mcSecureCodeAAV or useStoredAAVInd [but not both] must be present	Fix
19721	Static AAV is not on file for merchantID [%s]	Fix
19722	Industry type must be one of [%s] for Card Brand [%s]	Fix
19725	Invalid EUDD Country Code: [%s] for Currency: [%s], Valid values are: [%s]	Fix
19726	Invalid Transaction Type for ECP Action Code	Fix
19727	Invalid ECP Action code for Currency	Fix
19728	Invalid Transaction type for Industry	Fix
19729	Invalid ECP Auth Method for ECP Action Code	Fix
19730	Invalid ECP Auth Method for Currency	Fix
19731	Invalid ECP Auth Method for ECP Delivery Method	Fix
19732	Invalid ECP Auth Method: Other dependency	Fix
19733	Invalid currency when Check Serial Number is provided	Fix
19734	Check Serial Number cannot be longer than [] for BIN []	Fix
19735	Invalid ECP Delivery Method for ECP Back Acct Type	Fix
19736	Invalid ECP Delivery Method for Transaction Type	Fix
19737	Invalid ECP Delivery Method for Currency	Fix
19738	Invalid amount for ECP transaction	Fix
19739	Invalid amount for ECP transaction	Fix
19740	Missing Data for ECP Auth Method	Fix
19741	Element [] cannot be empty when [] is provided.	Fix
19742	Invalid [Element]:[Value]. Must be one of the following values:	Fix
19743	[Message Type]: [Element] is required	Fix
19744	[] is not supported for BIN []	Fix
19745	Fraud Analysis: Unable to perform Fraud Analysis. The associated transaction failed	Call
19746	Invalid Transaction Type for Fraud Analysis	Fix
19755	Error validating card/account number for signature debit eligibility	Fix
19758	Invalid DPAN Indicator Value. Valid values are [%s].	Fix
19759	Invalid AEVV length.	Fix
19760	Cryptogram Not Expected When DPAN Indicator Value is [%s].	Fix
19761	Cryptogram Expected When DPAN Indicator Value is [%s].	Fix
19762	AEVV Expected Only When DPAN Indicator Value is [%s].	Fix
19763	CAVV Expected When DPAN Indicator Value is [%s] And Industry Type is [%s].	Fix

19764	DPAN Indicator [%s] Not Expected When Industry Type is [%s].	Fix
19765	Cryptogram Not Expected When Industry Type is [%s].	Fix
19766	Recurring Indicator Expected When Industry Type is [%s] And DPAN Indicator Value is [%s].	Fix
19789	FX: Merchant is Not Eligible	Fix
19790	FX: Optout Indicator And Rate Handling Indicator Both Must Be Present	Fix
19791	FX: Invalid Value in, Field[%s], Value[%s], Expected[%s]	Fix
19792	FX: Missing Data [%s]	Fix

Profile Errors

9550	Invalid Customer Reference Number From Order Indicator	Fix
9551	Invalid Customer Reference Number	Fix
9552	System Failure. Unable To Perform Customer Profile Request at This Time.	Call
9553	Invalid Action Indicator	Fix
9555	Invalid BIN	Fix
9556	Invalid Merchant ID	Fix
9557	Invalid Name	Fix
9558	Invalid Address	Fix
9559	Invalid Address 2	Fix
9560	Invalid City	Fix
9561	Invalid State	Fix
9562	Invalid ZIP	Fix
9563	Invalid Email	Fix
9564	Invalid Phone	Fix
9565	Invalid Order Description	Fix
9566	Invalid Amount	Fix
9567	Invalid Account Type Indicator	Fix
9568	Invalid Account Number	Fix
9569	Invalid Account Expire Date	Fix
9570	Invalid ECP Account DDA	Fix
9571	Invalid ECP Account Type Indicator	Fix
9572	Invalid ECP Account Route	Fix
9573	Invalid ECP Bank Payment Delivery Method	Fix
9574	Invalid Switch Solo Start Date	Fix
9575	Invalid Switch Solo Issue Number	Fix

9576	Unable to Perform Profile Transaction. The Associated Transaction Failed.	Call
9577	Invalid Order Override Indicator	Fix
9578	Merchant-Bin combination is not allowed to perform profile transactions.	Call
9579	Merchant-Bin is not active.	Call
9580	Cannot process profile for Cust Ref Num and MID combination. A database error has occurred	Call
9581	Cannot process profile. Profile does not exist for Cust Ref Num and MID.	Fix
9582	Cannot process profile. Profile already exists for Cust Ref Num and MID.	Fix
9583	Missing Switch Solo Account Information. Either start date or issue number is required.	Fix
9584	Missing Electronic Check Account Information.	Fix
9585	Missing Credit Card Account Information.	Fix
9587	Auto-Gen Cust Ref Num Error.	Call
9588	Unable to Determine Profile Action from Auth Request	Fix
9589	Cannot Create Profile: A Customer Profile Name is Required	Fix
9592	Invalid Profile Status Requested	Fix
9594	The Profile's status prohibits the type of transaction being attempted.	Fix
9595	Account Updater Scheduled Date is Invalid	Fix
9596	Account Updater Scheduled Date is in the past	Fix
9597	Invalid Account Updater request	Fix
9598	Invalid Profile Fetch: Either Cust Ref Num or Account Number, but not both, must be present	Fix

Retry Errors

9710	Message expired during retry	Resend
9711	Too many transactions to process	Wait & Resend
9712	Request timeout - Please try again	Resend
9713	Invalid MIME header - Merchant ID in MIME does not match XML message	Fix
9714	Invalid MIME header- Trace number must be between 1 and 9999999999999999	Fix
9715	The retry request did not match the original request for this trace number	Fix
9719	Invalid Date Length: Format is YYYYMM	Fix

IP Authentication Errors

9716	Security Information is Missing	Call Customer Service
9717	Security Information - agent/chain/merchant is missing	Call Customer Service

Managed Billing Errors

9850	Managed Billing features are not supported for Bill Me Later or Pinless Debit	Fix
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	transaction types	
9851	Merchant account is not configured to use Managed Billing features	Call
9852	Profile level for merchant account is set to 'chain-level.' In order to use Managed Billing, the profile level must be set to 'merchant-level'	Call
9853	Invalid Order ID Generation Method. Use a valid value.	Fix
9854	Invalid Managed Billing Type for merchant	Call
9861	Deferred Billing Date must be a valid date (at least 1 day in the future – and at most 365 days in the future)	Fix
9862	Recurring Start Date must be a valid date at least 1 day in the future	Fix
9863	Only one Recurring End Date Trigger can be selected	Fix
9864	Invalid Recurring No End Date flag. Must be 'Y' or 'N'.	Fix
9865	Invalid Max Number of Recurring Billings.	Fix
9866	Recurring End Date must be a valid date at least 1 day greater than Recurring Start Date	Fix
9867	One of the 3 available Recurring Triggers must be set	Fix
9868	Invalid Recurring Format	Fix
9869	Industry Type of 'IN' can only be used when merchant is configured for a Managed Billing type of Recurring	Fix
9871	Missing Default Managed Billing values. All values must be set in transaction payload	Fix
9873	Cancel Date must be a valid date	Fix
9874	Daily Frequency Patterns are not accepted	Fix
9875	Scheduling is not complete. Contact Gateway Support.	Call
9876	Profile is locked for update in progress	Call
9877	Cancel or Restore Payment requests must be made separately from other Managed Billing Profile updates	Fix
9878	Future payment date could not be found to cancel	Fix
9879	Cancelled payment date could not be found to restore	Fix
9880	Start Date and End Date range is too small for selected recurring frequency (there are no possible future billings)	Fix
9881	Existing deferred payment is already in progress	Fix
9882	User does not have proper privileges to set-up a Managed Billing profile	Call
9883	Industry type of Recurring is not allowed to be set-up as Deferred Managed Billing type	Fix
9884	Error occurred while searching for transaction related to retry trace ID	Call
9885	Failed to find transaction associated with retry trace ID	Fix
19811	MIT Profile Cannot be used in NON MIT Scenario	Fix
19812	MIT Profile was created for [MIT CODE STORED IN PROFILE]. Only following values are allowed in MIT message type [MUSE, CUSE, MRAU, MRSB, MREC, MINS]	Fix

	(for VISA) MIT Profile was created for [MIT CODE STORED IN PROFILE]. Only following values are allowed in MIT message type [MRAU, MREC] (for Discover)	
19794	MIT: Invalid Stored Credential flag [Incorrect Value Submitted in request].	Fix
19795	Invalid Method of Payment (Card Brand)	Fix
19796	MIT: Original transaction id is mandatory for merchant initiated transactions.	Fix
19797	MIT: Invalid Original transaction id [123456789012*4a], special characters are not allowed.	Fix
19798	MIT: Original transaction id is not expected for customer initiated transactions	Fix

A.4.2 Process Status in Profile Management Responses

Table 18 describes the possible values for the <profileProcStatus> element and the associated <profileProcStatusMsg> or <profileProcStatusMessage> element that indicate the success or failure of an individual Profile Management request. The Action column indicates what action you should take in response to the message.

Table 18 Profile Process Status code and message response values

Code	Message/Description	Action*
0	Profile Action Successful	None
9550	Invalid Customer Reference Number From Order Indicator	Fix
9551	Invalid Customer Reference Number	Fix
9552	System Failure. Unable To Perform Customer Profile Request at This Time.	Call
9553	Invalid Action Indicator	Fix
9555	Invalid BIN	Fix
9556	Invalid Merchant ID	Fix
9557	Invalid Name	Fix
9558	Invalid Address	Fix
9559	Invalid Address 2	Fix
9560	Invalid City	Fix
9561	Invalid State	Fix
9562	Invalid ZIP	Fix
9563	Invalid Email	Fix
9564	Invalid Phone	Fix
9565	Invalid Order Description	Fix
9566	Invalid Amount	Fix
9567	Invalid Account Type Indicator	Fix
9568	Invalid Account Number	Fix
9569	Invalid Account Expire Date	Fix

Code	Message/Description	Action*
9570	Invalid ECP Account DDA	Fix
9571	Invalid ECP Account Type Indicator	Fix
9572	Invalid ECP Account Route	Fix
9573	Invalid ECP Bank Payment Delivery Method	Fix
9574	Invalid Switch Solo Start Date	Fix
9575	Invalid Switch Solo Issue Number	Fix
9576	Unable to Perform Profile Transaction. The Associated Transaction Failed.	Call
9577	Invalid Order Override Indicator	Fix
9578	Merchant-Bin combination is not allowed to perform profile transactions.	Call
9579	Merchant-Bin is not active.	Call
9580	Cannot process profile for Cust Ref Num and MID combination. A database error has occurred	Call
9581	Cannot process profile. Profile does not exist for Cust Ref Num and MID.	Fix
9582	Cannot process profile. Profile already exists for Cust Ref Num and MID.	Fix
9583	Missing Switch Solo Account Information. Either start date or issue number is required.	Fix
9584	Missing Electronic Check Account Information.	Fix
9585	Missing Credit Card Account Information.	Fix
9587	Auto-Gen Cust Ref Num Error.	Call
9588	Unable to Determine Profile Action from Auth Request	Fix
9589	Cannot Create Profile: A Customer Profile Name is Required	Fix
9592	Invalid Profile Status Requested	Error
19793	MIT: Invalid MIT message type [MIT Code passed in Request][Only CSTO, CGEN, CREC, CINS, MUSE, MREC, MINS are allowed while using NON MIT Profile] (for VISA) Invalid MIT message type [MIT Code passed in Request][Only CGEN, CREC and MREC are allowed while using NON MIT Profile]. (for Discover)	Fix
19810	MIT: Transaction id is mandatory in order to create MIT Profile	Fix
19814	MIT Profile contains invalid MIT Message Type [MIT CODE STORED IN PROFILE]. Only [CSTO, CGEN, CREC and CINS] are allowed (for VISA) MIT Profile contains invalid MIT Message Type [MIT CODE STORED IN PROFILE]. Only [CGEN, CREC] are allowed (for Discover)	Fix
19814	New MIT Profile cannot be added while using an existing MIT Profile [Profile ID Sent in the request].	Fix

A.4.3 Process Status in Error Response Files

Table 19 describes the possible values for the <procStatus> element and the associated <procStatusMessage> element that indicate the reason for the failure to process the request file. The Action column indicates what action you should take in response to the message.

Table 19 Error Response File process status code and message values

Code	Message/Description	Action*
6782	Batch file name already exists in the database	Resend
6786	The actual amount of transactions do not match the amount specified by the sender in the batch file	Resend
6787	The sender has sent more than one file per zip	Resend
6791	Total batch size specified by sender in batch file is too large	Fix
6795	User tried to send a clear text xml file when set-up for sending password protected zip files	Resend
6796	User id specified in the batchFileID xml element does not match the user id stored in the database	Resend
6798	File id specified in the batchFileID xml element does not match the name of the actual xml file	Resend
6799	The name of the zip file and the payload file zipped inside do not match	Resend
6801	Zip file needs to be encrypted	Fix
6802	The BatchRequestNo attribute needs to be sequential	Fix
6813	The Pcard 3 index must be unique and in sequential order	Fix
6902	Zip Exception	Fix
6903	SAX Exception – This will be sent back to the sender with exact schema violation	Fix

A.5 Level 3 Data Codes

This section contains tables describing the *ISO country codes* and *unit of measure codes* that can be used in Level 3 data elements.

Table 20 ISO country codes

ISO Code	Country
AFG	AFGANISTAN
ALB	ALBANIA
DZA	ALGERIA
ASM	AMERICAN SAMOA

ISO Code	Country
LBY	LIBYAN ARAM JAMAHIRAYA
LIE	LIECHTENSTEIN
LTU	LITHUANIA
LUX	LUXEMBOURG

Table 20 ISO country codes

ISO Code	Country
AND	ANDORRA
AGO	ANGOLA
AIA	AIGUILLA
ATA	ANTARCTICA
ATG	ANTIGUA & BARBUDA
ARG	ARGENTINA
ABW	ARUBA
AUD	AUSTRALIA
AUT	AUSTRIA
AZE	AZERBAIJAN
BHS	BAHAMAS
BHR	BAHRAIN
BGD	BANGLADESH
BRB	BARBADOS
BLR	BELARUS
BEL	BELGIUM
BLZ	BELIZE
BEN	BENIN
BMU	BERMUDA
BTN	BHUTAN
BOL	BOLIVIA
BIH	BOSNIA & HERZEGOWINA
BWA	BOTSWANA
BVT	BOUVET ISLAND
BRA	BRAZIL
IOT	BRITISH INDIAN OCEAN TERRITORY
BRN	BRUNEI DARUSSALAM
BGR	BULGARIA
BFA	BURKINA FASO
BDI	BURUNDI
KHM	CAMBODIA
CMR	CAMEROON
CAN	CANADA

ISO Code	Country
MAC	MACAU
MDG	MADAGASCAR
MWI	MALAWI
MYR	MALAYSIA
MDV	MALDIVES
MLI	MALI
MLT	MALTA
MHL	MARSHALL ISLANDS
MTQ	MARTINQUE
MRT	MAURITANIA
MUS	MAURITIUS
MEX	MEXICO
FSM	MICRONESIA, FEDERATED STATES OF
MDA	MOLDOVA, REPUBLIC OF
MCO	MONACO
MNG	MONGOLIA
MNE	MONTENEGRO
MSR	MONTSERRAT
MAR	MOROCCO
MOZ	MOZAMBIQUE
NRU	NAURU
NPL	NEPAL
NLD	NETHERLANDS
ANT	NETHERLANDS ANTILLES
NCL	NEW CALEDONIA
NZD	NEW ZEALAND
NIC	NICARAGUA
NER	NIGER
NGA	NIGERIA
NIU	NIUE
NFK	NORFOLK ISLAND
MNP	NORTHERN MARIANA ISLAND
NOR	NORWAY

Table 20 ISO country codes

ISO Code	Country
CPV	CAPE VERDE
CYM	CAYMAN ISLAND
CAF	CENTRAL AFRICAN REPUBLIC
TCD	CHAD
CHL	CHILE
CHN	CHINA
CXR	CHRISTMAS ISLAND
CCK	COCOS KEELING ISLANDS
COL	COLOMBIA
COM	COMOROS
COD	CONGO, THE DEMOCRATIC REPUBLIC OF
COK	COOK ISLANDS
CRI	COSTA RICA
CIV	COTE D'IVOIRE
HRV	CROATIA (local name: Hrvatska)
CYP	CYPRUS
CZE	CZECH REPUBLIC
DNK	DENMARK
DJI	DJIBOUTI
DMA	DOMINICA
DOM	DOMINICAN REPUBLIC
ECU	ECUADOR
EGY	EGYPT
SLV	EL SALVADOR
GNQ	EQUATORIAL GUINEA
EST	ESTONIA
ETH	ETHIOPIA
FLK	FALKLAND ISLANDS (MALVINAS)
FRO	FAROE ISLANDS
FJI	FIJI
FIN	FINLAND
FRA	FRANCE

ISO Code	Country
OMN	OMAN
PAK	PAKISTAN
PLW	PALAU
PSE	PALASTINIAN TERRITORY, OCCUPIED
PAN	PANAMA
PNG	PAPUA NEW GUINEA
PRY	PARAGUAY
PER	PERU
PHL	PHILIPPINES
PCN	PITCAIRN
POL	POLAND
PRT	PORTUGAL
PRI	PUERTO RICO
QAT	QATAR
REU	REUNION
ROU	ROMANIA
RUS	RUSSIAN FEDERATION
RWA	RWANDA
SHN	SAINT HELENA
KNA	SAINT KITTS AND NEVIS
LCA	SAINT LUCIA
SPM	SAINT PIERRE & MIQUELON
VCT	SAINT VINCENT & THE GRENADINES
WSM	SAMOA
SMR	SAN MARINO
STP	SAO TOME & PRINCIPE
SAU	SAUDI ARABIA
SEN	SENEGAL
SRB	SERBIA
SYC	SEYCHELLES
SLE	SIERRA LEONE
SGD	SINGAPORE

Table 20 ISO country codes

ISO Code	Country
GUF	FRENCH GUIANA
PYF	FRENCH POLYNESIA
ATF	FRENCH SOUTHERN TERRIORIES
GAB	GABON
GMB	GAMBIA
GEO	GEORGIA
DEU	GERMANY
GHA	GHANA
GIB	GIBRALTAR
GRC	GREECE
GRL	GREENLAND
GRD	GRENADA
GLP	GUADELOUPE
GUM	GUAM
GTM	GUATEMALA
GIN	GUINEA
GNB	GUINEA-BISSAU
GUY	GUYANA
HTI	HAITI
HMD	HEARD & MCDONALD ISLANDS
VAT	HOLY SEE (VATICAN CITY STATE)
HND	HONDURAS
HKD	HONGKONG
HUN	HUNGARY
ISL	ICELAND
IND	INDIA
IDN	INDONESIA
IRQ	IRAQ
IRL	IRELAND
ISR	ISRAEL
ITA	ITALY
JAM	JAMAICA
JPY	JAPAN

ISO Code	Country
SVK	SLOVAKIA
SVN	SLOVENIA
SLB	SOLOMON ISLANDS
SOM	SOMALIA
ZAD	SOUTH AFRICA
ESP	SPAIN
LKA	SRI LANKA
SUR	SURINAME
SJM	SVALBARD & JAN MAYEN ISLANDS
SWZ	SWAZILAND
SWE	SWEDEN
CHE	SWITZERLAND
SYR	SYRIAN ARAB REPUBLIC
TWN	TAIWAN, PROVINCE OF CHINA
TJK	TAJIKISTAN
TZA	TANZANIA, UNITED REPUBLIC OF
THA	THAILAND
TLS	TIMOR-LESTE
TGO	TOGO
TKL	TOKELAU
TON	TONGA
TTO	TRINIDAD & TOBAGO
TUN	TUNISIA
TUR	TURKEY
TKM	TURKMENISTAN
TCA	TURKS & CAICOS ISLANDS
TUV	TUVALU
UGA	UGANDA
UKR	UKRAINE
ARE	UNITED ARAB EMIRATES
GBR	UNITED KINGDOM
USA	UNITED STATES
UMI	UNITED STATES MINOR OUTLYING ISLANDS

Table 20 ISO country codes

ISO Code	Country
JOR	JORDAN
KEN	KENYA
KIR	KIRBATI
PRK	KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF
KOR	KOREA, REPUBLIC OF
QZZ	KOSOVO, UNITED NATIONS INTERIM ADMINISTRATION IN
KWT	KUWAIT
KGZ	KYRGYZSTAN
LAO	LAO PEOPLE'S DEMOCRATIC REPUBLIC
LVA	LATVIA
LBN	LEBANON
LSO	LESOTHO
LBR	LIBERIA

ISO Code	Country
QZZ	UNMIK
URY	URUGUAY
UZB	UZBEKISTAN
VUT	VANUATU
VEN	VENEZUELA
VNM	VIETNAM
VGB	VIRGIN ISLANDS (BRITISH)
VIR	VIRGIN ISLANDS (U.S.)
WLF	WALLIS & FUTUNA ISLANDS
ESH	WESTERN SAHARA
YEM	YEMEN
ZMB	ZAMBIA

Table 21 Unit of measure codes

UoM Code	Unit Name
ACR	Acre
ASM	Alcoholic strength by mass
ASV	Alcoholic strength by volume
AMP	Ampere
AMH	Ampere-hour (3,6 kC)
ARE	Are (100 m ²)
BAR	Bar
BLL	Barrel (petroleum) (158,987 dm ³)
BQL	Becquerel
BIL	Billion EUR
MLD	Billion US
BFT	Board foot
BHP	Brake horse power (245,7 watts)
BTU	British thermal unit (1,055

UoM Code	Unit Name
KTN	Kilotonne
KVR	Kilovar
KVT	Kilovolt
KVA	Kilovolt-ampere
KWT	Kilowatt
KWH	Kilowatt-hour
KNT	Knot (1 nautical mile per hour)
LEF	Leaf
GLL	Liquid gallon (3,78541 dm ³)
PTL	Liquid pint (0,473176 dm ³)
QTL	Liquid quart (0,946353 dm ³)
LTR	Litre (1dm ³)
LPA	Litre of pure alcohol
CWI	(Long) hundredweight GB

Table 21 Unit of measure codes

UoM Code	Unit Name
	kilojoules)
BUA	Bushel (35,2391 dm3)
BUI	Bushel (36,36874 dm3)
CDL	Candela
CCT	Carrying capacity in metric tonnes
CNT	Cental GB (45,359237 kg)
CGM	Centigram
CLT	Centilitre
CMT	Centimetre
DTN	Centner, metric (100 kg)
WCD	Cord (3,63 m3)
COU	Coulomb
CKG	Coulomb per kilogram
CMQ	Cubic centimeter
DMQ	Cubic decimeter
INQ	Cubic inch
MTQ	Cubic metre
MQH	Cubic metre per hour
MQS	Cubic metre per second
MMQ	Cubic millimetre
YDQ	Cubic yard
FTQ	Cubit foot
CUR	Curie
DAY	Day
DAA	Decare
DLT	Decilitre
DMT	Decimetre
DTN	Decitonne
CEL	Degree Celsius
FAH	Degree Fahrenheit
	Degree Kelvin: see <i>Kelvin</i>
DPT	Displacement tonnage
DZN	Dozen
DZP	Dozen packs

UoM Code	Unit Name
	(50,802345 kg)
LTN	Long ton GB, US (1,0160469 t)
LUM	Lumen
LUX	Lux
MHZ	Megahertz
MAL	Megalitre
MAM	Megametre
MPA	Megapascal
MVA	Megavolt-ampere (1000 KVA)
MAW	Megawatt
MWH	Megawatt-hour (100 kW/h)
MTR	Metre
MTS	Metre per second
MSK	Metre per second squared
CTM	Metric carat (200 mg = 2.10-4 kg)
TNE	Metric ton (1000 kg)
MLD	Milliard
MBR	Millibar
MCU	Millicurie
MGM	Milligram
MLT	Millilitre
MMT	Millimetre
MIO	Million
HMQ	Million cubic metres
MIU	Million international units
MIN	Minute
MON	Month
NMI	Nautical mile (1852 m)
NTT	Net (register) ton
NEW	Newton
NMB	Number
NAR	Number of articles
NBB	Number of bobbins
NCL	Number of cells

Table 21 Unit of measure codes

UoM Code	Unit Name
DZR	Dozen pairs
DCP	Dozen pieces
DRL	Dozen rolls
DRM	Drachm GB (3,887935 g)
DRI	Dram GB (1,771745 g)
DRA	Dram US (3,887935 g)
BLD	Dry barrel (115,627 dm3)
GLD	Dry gallon (4,404884 dm3)
PTD	Dry pint (0,55061 dm3)
QTD	Dry quart (1,101221 dm3)
FAR	Farad
OZI	Fluid ounce (28,413 cm3)
OZA	Fluid ounce (29,5735 cm3)
FOT	Foot (0,3048 m)
GLI	Gallon (4,546092 dm3)
GBQ	Gigabecquerel
GWH	Gigawatt-hour (1 million kW/h)
GII	Gill (0,142065 dm3)
GIA	Gill (11,8294 cm3)
GRN	Grain GB, US (64,798910 mg)
GRM	Gram
GFI	Gram of fissile isotopes
GGR	Great gross (12 gross)
GRO	Gross
GRT	Gross (register) ton
SAN	Half year (six months)
HAR	Hectare
HBA	Hectobar
HGM	Hectogram
DTH	Hectokilogram
HLT	Hectolitre
HPA	Hectolitre of pure alcohol
HMT	Hectometre

UoM Code	Unit Name
NIU	Number of international units
NMP	Number of packs
NMR	Number of pairs
NPL	Number of parcels
NPT	Number of parts
NRL	Number of rolls
OHM	Ohm
ONZ	Ounce GB, US (28,349523 g)
APZ	Ounce GB, US (31,10348 g)
PAL	Pascal
DWT	Pennyweight GB, US (1,555174 g)
PCE	Piece
PTI	Pint (0,568262 dm3)
LBR	Pound GB, US (0,45359237 kg)
PGL	Proof gallon
QTI	Quart
QAN	Quarter (of a year)
QTR	Quarter, GB (12,700586 kg)
DTN	Quintal, metric (100 kg)
RPM	Revolution per minute
RPS	Revolution per second
SCO	Score
SCR	Scrumple GB, US (1,295982 g)
SEC	Second
SET	Set
SHT	Shipping ton
SST	Short standard
STN	Short ton GB, US (0,90718474 t)
SIE	Siemens
CMK	Square centimeter
DMK	Square decimeter
FTK	Square foot
INK	Square inch

Table 21 Unit of measure codes

UoM Code	Unit Name
HTZ	Hertz
HUR	Hour
CEN	Hundred
BHX	Hundred boxes
HIU	Hundred international units
CLF	Hundred leaves
CNP	Hundred packs
CWA	Hundredweight US (45,3592 kg)
INH	Inch (25,4 mm)
JOU	Joule
KEL	Kelvin
KBA	Kilobar
KGM	Kilogram
KPH	Kilogram of caustic potash
KSH	Kilogram of caustic soda
KNS	Kilogram of named substance
KNI	Kilogram of nitrogen
KPP	Kilogram of phosphonic anhydride
KPP	Kilogram of phosphorus pentoxide
KPH	Kilogram of potassium hydroxide
KPO	Kilogram of potassium oxide
KSH	Kilogram of sodium hydroxide
KSD	Kilogram of substance 90% dry
KUR	Kilogram of uranium
KMQ	Kilogram per cubic meter
KGS	Kilogram per second
KHZ	Kilohertz
KJO	Kilojoule
KMT	Kilometre
KMH	Kilometre per hour
KPA	Kilopascal

UoM Code	Unit Name
KMK	Square kilometer
MTK	Square metre
MIK	Square mile
MMK	Square millimeter
TDK	Square yard
WSD	Standard
ATM	Standard atmosphere (101325 Pa)
SMI	(Statute) mile (1609,344 m)
STI	Stone GB (6,350293 kg)
ATT	Technical atmosphere (98066,5 Pa)
DAD	Ten days
TPR	Ten pairs
MIL	Thousand
TAH	Thousand ampere-hour
MBF	Thousand board feet (2,36 m3)
TQD	Thousand cubic metres per day
MBE	Thousand standard brick equivalent
TSH	Ton of steam per hour
TNE	Tonne (1000 kg)
TSD	Tonne of substance 90% dry
TRL	Trillion EUR
BIL	Trillion US
APZ	Troy Ounce
LBT	Troy pound, US (373,242 g)
VLT	Volt
WTT	Watt
WHR	Watt-hour
WEB	Weber
WEE	Week
YRD	Yard
ANN	Year

A.6 Verified by Visa CAVV Response Codes

Table 22 describes the possible values for the <visaVbVRespCode> element, which will be included in a response to a Verified by Visa Card Authentication Verification Value (CAVV) request or a Discover Card Authentication Verification Value.

Table 22 Verified by Visa CAVV response code values

Code	Description
<i>blank</i>	CAVV Not Present or CAVV not verified, issuer has not selected CAVV verification option
0	CAVV could not be verified or CAVV data was not provided when expected
1	CAVV failed verification – cardholder authentication
2	CAVV passed verification – cardholder authentication
3	CAVV passed verification – attempted authentication CAVV Attempt: A 3-D Secure authentication value of 7 from the Issuer ACS indicates authentication was attempted. (Determined that the Issuer ACS generated this value from the use of Visa CAVV keys).
4	CAVV failed verification – attempted authentication CAVV Failed Validation – Attempt: A 3-D Secure authentication value of 7 from Visa's ACS indicates that an authentication attempt was performed. (Determined that Visa generated this value from the use of CAVV keys).
5	Reserved for Future Use – NOT USED
6	CAVV not verified, issuer not participating in CAVV verification
7	CAVV failed verification – attempted authentication (CAVV generated with Visa Key) A 3-D Secure Authentication Results Code value of 07 from Visa Attempts Service indicates that an authentication attempt was performed.
8	CAVV passed verification – attempted authentication (CAVV generated with Visa Key)
9	CAVV failed verification – attempted authentication (CAVV generated with Visa Key – Issuer ACS unavailable)
A	CAVV passed verification – attempted authentication
B	CAVV passed verification – attempted authentication, no liability shift
C	CAVV was not verified – attempted authentication
D	CAVV was not verified – Cardholder authentication

Appendix B

General Card Validation

There are three common edits that catch the greatest majority of bad card numbers:

- ◻ MOD 10 check digit
- ◻ Credit card prefix check
- ◻ Credit card length validation

B.1 MOD 10 Check Digit

The MOD 10 check digit calculation validates the credit card by calculating the last digit of the card number based on a calculation performed upon all the digits preceding it. This operation, called a MOD 10 check-digit routine, is illustrated in Example 9.

Example 9 Calculating the MOD 10 check digit for card number 5240159910151573

5	2	4	0	1	5	9	9	1	0	1	5	1	5	7	Remove the check digit from the card number—in this example 3. Then start from the right and proceed to the left until all digits are multiplied by weight (2 and 1 alternately).			
															$7 * 2 = 14$	sum = 1 + 4	= 5	
															$5 * 1 = 5$	sum = sum(5)	+ 5	= 10
															$1 * 2 = 2$	sum = sum(10)	+ 2	= 12
															$5 * 1 = 5$	sum = sum(12)	+ 5	= 17
															$1 * 2 = 2$	sum = sum(17)	+ 2	= 19
															$0 * 1 = 0$	sum = sum(19)	+ 0	= 19
															$1 * 2 = 2$	sum = sum(19)	+ 2	= 21
															$9 * 1 = 9$	sum = sum(21)	+ 9	= 30
															$9 * 2 = 18$	sum = sum(30)	+ 1 + 8	= 39
															$5 * 1 = 5$	sum = sum(39)	+ 5	= 44
															$1 * 2 = 2$	sum = sum(44)	+ 2	= 46
															$0 * 1 = 0$	sum = sum(46)	+ 0	= 46
															$4 * 2 = 8$	sum = sum(46)	+ 8	= 54
															$2 * 1 = 2$	sum = sum(54)	+ 2	= 56
															$5 * 2 = 10$	sum = sum(56)	+ 1 + 0	= 57

sum = 57

sum MOD 10 ➔ 57 MOD 10 = 7

10 - 7 = 3

check digit of 5240159910151573 is 3

Example 10 Sample check digit routine, written in C

```
/* The operator for module arithmetic in C is % */
long mod10(card,card_len_1);      /* module 10 check digit function */
char * card;                      /* credit card number */
short card_len;                   /* card length */

{
    register int count;           /* a counter */
    register int weight;          /* weight to apply to digit being checked */
    register int sum;             /* sum of weights */
    register int digit;           /* digit being checked */
    long mod;

    weight = 2;
    sum = 0;

    /* compute the sum */
    for (count = card_len -1; count>=0; count=count-1)
    {
        digit = weight * (card[count]-'0');

        /* add both the tens digit and the ones digit to the sum */
        sum = sum + (digit / 10) + (digit % 10);

        if (weight == 2)
            weight =1;
        else
            weight = 2;
    }

    /* subtract the ones digit of the sum from 10 and return the ones digit of that result */
    mod = (10: sum%10) % 10;
    return (mod);
}
```

B.2 Card Prefix Check

The prefix check is the comparison of the first few digits of each card number to a list of known prefixes.

Table 23 Credit card prefixes

Card Type	Prefix
American Express/Optima	37, 34
Bill Me Later	504990, 621993
Carte Blanche	389
Diners Club	30, 36, 381-388
Discover (Novus)	60110, 60112, 60113, 60114, 60119
JCB	3528-3589
MasterCard	51-55
PINless Debit	See 3.2.4 PINless Debit
Visa/Delta	4

B.3 Card Length Check

The number of digits for each card is constant, allowing a validation to be performed by verifying the number of digits for each card number.

Table 24 Credit card number lengths

Card Type	Length
American Express/Optima	15
Bill Me Later	16
Carte Blanche	14
Diners Club	14
Discover (Novus)	16
JCB	16
International Maestro	13-19
MasterCard	16
PINless Debit	12-19
Switch/Solo (BIN 000001 ONLY)	16, 18, or 19
Visa/Delta	13 or 16

Appendix C Level 2 & Level 3 Data Reference

This appendix contains tables highlighting the requirements for processing Purchase Cards or Commercial Cards. Please see section [3.2.1.2 Level 2 and Level 3](#) for more information.

C.1 Level 2 Data Summary

Each card type that supports Level 2 processing maintains its own standards for the data elements therein. Below is a summary of each potential field; listed as Mandatory, Conditional, Optional, or Non Applicable. Fields left as N/A should be null filled unless otherwise stated in [4.1.4 New Order Request Elements](#) or [4.1.3 Mark for Capture Request Elements](#).

Legend:

- M – Mandatory
- C – Conditional (See accompanying notes)
- O – Optional
- N/A – Not Applicable: Corresponding Tag should be null filled or left out of message

Table 25 Salem (Bin 000001) Level 2 information

Data Type	Visa	MasterCard	Discover	Amex	Notes
Purchase Order #	M	M	M	O	17 characters, Alphanumeric only
Destination Zip	M	M	M	M	Allows for 5 digit, 9 digit, or Canadian zip
Tax Indicator	O	O	O	O	Visa does not allow level 2 transactions to be tax exempt. Tax exempt merchants should attempt level 3 processing.
Tax Amount	M	M	M	O	<ul style="list-style-type: none"> • This may not be zero to qualify for Level 2. • Acceptable thresholds vary by card type.
Requestor Name	N/A	N/A	N/A	M	30 alphanumeric characters
Destination Address (1 & 2)	N/A	N/A	N/A	M	30 alphanumeric characters per line <ul style="list-style-type: none"> • Aa – Zz • 0 – 9 • {} , _ - # @ [] / `
Destination City	N/A	N/A	N/A	M	20 alphanumeric characters
Destination State	N/A	N/A	N/A	C	<ul style="list-style-type: none"> • 2 alphabetic characters • Optional for Canada, Mandatory for U.S.
TAA Records	N/A	N/A	N/A	O	<ul style="list-style-type: none"> • TAA records are extended P Card information. • Up to four free-form records are allowed. • Contact Amex or your Account Executive for info on what data is expected in these fields

Table 26 PNS (Tandem - Bin 000002) Level 2 information

Data Type	Visa	MasterCard	Notes
Purchase Order #	M	M	17 characters, Alphanumeric only
Destination Zip	M	M	Allows for 5 digit, 9 digit, or Canadian zip

Data Type	Visa	MasterCard	Notes
Tax Indicator	M	M	Visa does not allow level 2 transactions to be tax exempt. Tax exempt merchants should attempt level 3 processing.
Tax Amount	M	M	This may not be zero to qualify as level 2. Acceptable thresholds vary by card type.

C.2 Level 3 Data Summary

Level 3 data can be thought of in two sections – Order Data, and Line Item data. Order Data is submitted once per transaction, and Line Item data is submitted recursively for as many line items are needed in the transaction (maximum of 98). The below tables describe both sections of Level 3 processing.

Legend:

- M – Mandatory
- C – Conditional (See accompanying notes)
- O – Optional
- N/A – Not Applicable: Tag should be null filled or left out of the message

Table 27 Salem (Bin 000001) Level 3 information

Data Type	Visa	MasterCard	Discover	Notes
Level 2 Data	C	M	C	<ul style="list-style-type: none"> • Both card types require the Destination Zip Code be sent. • All Level 2 fields are required to process level 3 on MasterCard transactions.
Freight Amount	M	M	N/A	Highlights the amount of the purchase which is for shipping.
Duty Amount	M	M	N/A	Highlights the amount of the purchase which is for duty.
Ship From ZIP	M	M	N/A	Allows for 5 digit, 9 digit, or Canadian zip
Destination Country Code	C	C	N/A	This defaults to USA if not submitted. See Table 20 ISO country codes for further reference
Discount Amount	M	N/A	N/A	Visa only: A listing of any discount given to the order as a whole, as opposed to a discount on a particular line item.
VAT Tax Amount	O	O	N/A	Value Add Tax or other Tax Amount included in total sale
VAT Tax Rate	O	N/A	N/A	Value Add Tax or other Tax Rate included in total sale
Alternate Tax Amount	N/A	O	N/A	Equivalent to VAT Tax Amount for MasterCard
Alternate Tax Rate	N/A	O	N/A	Equivalent to VAT Tax Rate for MasterCard
Line Item Data	M	M	M	A transaction must include 1-98 line items to qualify. Each data element below is submitted once per line item for all line items.
Detail Index	M	M	M	The line item number. "This is line item ___ of [Total # of Line items]"
Detail Description	M	M	M	An alphanumeric description of the Line Item. <ul style="list-style-type: none"> • 26 characters for Visa, 35 for MasterCard

Data Type	Visa	MasterCard	Discover	Notes
				<ul style="list-style-type: none"> Description defined by the merchant. Cannot be all spaces or zeros in order to qualify for the interchange adjustment.
Detail Product Code	M	M	M	These values are defined by the Card Issuer. Cannot be all spaces or all zeros in order to qualify for the interchange adjustment.
Detail Quantity	M	M	M	<p>The quantity of said items submitted</p> <ul style="list-style-type: none"> 13 digits, with 4 implied decimals Mastercard: This value is rounded to a 5 digit integer. The minimum amount is 1. - MC example: Submit 1239999 (meaning 123.9999), MC receives 124
Detail Unit of Measure	M	M	M	See Level 3 Data Codes for accepted values.
Detail Tax Amount	O	O	M	Lists the amount of the line item which is Tax
Detail Tax Rate	O	O	M	<p>Lists the tax rate applied to this transaction.</p> <ul style="list-style-type: none"> 5 digits, with 3 implied decimal places - Example: Submit 14287, which means 14.287% The hundredths place is truncated off for Visa - 12345 is truncated to mean 12.34%
Detail Line Total	M	M	M	Generally this is Price * Quantity.
Detail Discount	O	O	N/A	The discount applied, if any, to this specific line item.
Detail Commodity Code	M	N/A	M	Accepted values of this field are defined by Visa.
Detail Unit Cost	M	C	M	<ul style="list-style-type: none"> 4 implied decimals Mastercard: Required for the UK if transaction exceeds a minimum threshold
Detail Gross Net	M	M	N/A	Indicates if Tax is included in this line item. Must be Y or N.
Detail Tax Type	N/A	O	N/A	Four alphabetic characters.
Detail Discount Indicator	N/A	M	N/A	Indicates if a discount was applied.
Detail Debit Indicator	O	O	N/A	This field is only used by PNS.
Detail Discount Rate	N/A	N/A	M	Discover only. 4 implied decimals.

Table 28 PNS (Tandem - Bin 000002) Level 3 information

Data Type	Visa	MasterCard	Notes
-----------	------	------------	-------

Data Type	Visa	MasterCard	Notes
Level 2 Data	C	M	<ul style="list-style-type: none"> Both card types require the Destination Zip Code be sent. All Level 2 fields are required to process level 3 on MasterCard transactions.
Freight Amount	M	M	Highlights the amount of the purchase which is for shipping.
Duty Amount	M	M	Highlights the amount of the purchase which is for duty.
Ship From ZIP	M	M	Allows for 5 digit, 9 digit, or Canadian zip
Destination Country Code	C	C	This defaults to USA if not submitted. See Table 20 ISO country codes for further reference
Discount Amount	M	N/A	Visa only: A listing of any discount given to the order as a whole, as opposed to a discount on a particular line item.
VAT Tax Amount	O	O	Value Add Tax or other Tax Amount included in total sale
VAT Tax Rate	O	N/A	Value Add Tax or other Tax Rate included in total sale
Alternate Tax Amount	N/A	O	Equivalent to VAT Tax Amount for MasterCard
Alternate Tax Rate	N/A	O	Equivalent to VAT Tax Rate for MasterCard
Line Item Data	M	M	A transaction must include 1-98 line items to qualify. Each data element below is submitted once per line item for all line items.
Detail Index	M	M	The line item number. "This is line item __ of [Total # of Line items]"
Detail Description	M	M	An alphanumeric description of the Line Item. <ul style="list-style-type: none"> 35 characters for both Visa and MasterCard All letters must be in CAPS
Detail Product Code	M	M	These values are defined by the Card Issuer.
Detail Quantity	M	M	The quantity of said items submitted <ul style="list-style-type: none"> 13 digits, with 4 implied decimals
Detail Unit of Measure	M	M	See A.5 Level 3 Data Codes for accepted values.
Detail Tax Amount	O	O	Lists the amount of the line item which is Tax
Detail Tax Rate	O	O	PNS does not require this value.
Detail Line Total	M	M	Generally this is Price * Quantity.
Detail Discount	O	O	The discount applied, if any, to this specific line item.
Detail Commodity Code	M	N/A	Accepted values of this field are defined by Visa.
Detail Unit Cost	M	M	4 implied decimals

Data Type	Visa	MasterCard	Notes
Detail Gross Net	M	M	Indicates if Tax is included in this line item. Must be Y or N.
Detail Tax Type	N/A	N/A	Four alphabetic characters.
Detail Discount Indicator	N/A	N/A	Indicates if a discount was applied.
Detail Debit Indicator	M	M	Implies that the line item total amount is being added (a Debit) or subtracted (a Credit) to the total of the purchase. <ul style="list-style-type: none">• Must be a D or a C.
Detail Discount Rate	N/A	N/A	Discover Only. Only supported on Salem (Bin 000001).

Appendix D **Safetech Fraud Analysis Reference**

This appendix contains tables highlighting the requirements for including the Safetech service with transaction processing. Please see section [3.4.7 Safetech Fraud Analysis](#) for more information.

D.1 Request Element Reference

The Safetech service is supported in the `newOrder`, `flexCache`, and `safetechFraudAnalysis` request types. All elements directly related to the Safetech service are contained in the `fraudAnalysis` parent element and listed below.

The short form request is listed below as FS1. The long form request is listed as FS2.

Legend:

- M – Mandatory
- C – Conditional (See accompanying notes)
- O – Optional
- N/A – Not Applicable: Tag should be null filled or left out of the message

Table 29 Safetech Request Element Information

Data Type	FS1	FS2	Notes
fraudAnalysis	M	M	Parent element of Fraud Analysis elements. Must be present to submit a request to the Safetech Service
fraudScoreIndicator	M	M	Used to indicate if the request falls under the short (FS1) or long (FS2) forms
rulesTrigger	O	O	Used to prompt the Safetech service to return all of the rules enabled in the Safetech Web Console which the transaction triggered
safetechMerchantID	M	M	A static value issued to a merchant as part of the setup process. Can be defaulted through the Virtual Terminal
kaptchaSessionID	O	O	A unique session ID for the Safetech service.
websiteShortName	O	O	This can be defaulted as part of the setup process.
cashValueOfFencibleItems	N/A	O	This element has two implied decimal points.
customerDOB	N/A	O	Format: YYYY-MM-DD, including dashes.
customerGender	N/A	O	Indicates the customer is Male or Female.
customerDriverLicense	N/A	O	This element is recommended for ECP transactions.
customerID	N/A	O	This value is merchant-generated and does not have to imply a tokenized customer profile.
customerIDCreationTime	N/A	O	A unix timestamp for the previous element.
kttVersionNumber	C	C	A hardcoded version number. All fields beginning with ktt are optional fields tied to shopping cart data and/or custom rule triggers. Unless all three KTT elements are included in the request, no KTT data is forwarded to the Safetech Service.

Data Type	FS1	FS2	Notes
kttDataLength	C	C	This is the numeric length of the following element. All fields beginning with ktt are optional fields tied to shopping cart data and/or custom rule triggers. Unless all three KTT elements are included in the request, no KTT data is forwarded to the Safetech Service.
kttDataString	C	C	A distinctly formatted string of shopping cart and/or custom rule trigger data. All fields beginning with ktt are optional fields tied to shopping cart data and/or custom rule triggers. Unless all three KTT elements are included in the request, no KTT data is forwarded to the Safetech Service.

D.2 Safetech Response Element Reference

The Safetech service may return data to a merchant through the `newOrderResponse`, `flexCacheResponse`, or `safetechFraudAnalysisResponse` elements. In addition to the corresponding `fraudAnalysisProcStatus` and `fraudAnalysisProcMsg` elements, additional response data is included in the `fraudAnalysisResponse` parent element within the response message.

The short form response is listed below as FS1. The long form response is listed as FS2

Legend: M – Mandatory
 C – Conditional (See accompanying notes)
 O – Optional
 N/A – Not Applicable: Tag will be null filled or left out of the message

Table 30 Safetech Response Element Information

Data Type	FS1	FS2	Notes
fraudAnalysisResponse	M	M	Parent Element for Safetech data elements
fraudScoreIndicator	M	M	This echoes the request element, indicating a short or long form response.
fraudStatusCode	C	C	This is the Safetech service's equivalent to a host response code. The format is unique to the service. Please refer to the Safetech Web Console for additional notes.
riskInquiryTransactionID	C	C	The Safetech service's equivalent to an Order ID.
autoDecisionResponse	O	O	A recommendation of action from the Safetech service, determined by settings in the Safetech Web Console
riskScore	C	C	A numeric rating of the risk involved in the transaction. Fraud scoring must be successful to receive a value.
kaptchaMatchFlag	O	O	Kaptcha is a process within the Safetech service. This element is the result of that validation.
worstCountry	N/A	O	The riskiest country associated with the persona of the customer.
customerRegion	N/A	O	An estimation of the region of the customer Lower case is a state/province. Upper case is a country.

Data Type	FS1	FS2	Notes
paymentBrand	N/A	O	The method of payment, as identified by the Safetech service.
fourteenDayVelocity	N/A	O	A count of prior transactions by the customer in the last 14 days.
sixHourVelocity	N/A	O	Similar to the previous element, but under a more focused window
customerNetwork	N/A	O	An indicator to add detail to the location of the customer
numberOfDevices	N/A	O	This element and the two following elements are additional customer information collected by the Safetech service as part of scoring the transaction
numberOfCards	N/A	O	
numberOfEmails	N/A	O	
deviceLayers	N/A	O	A period-delimited collection of five layers of device information collected by the Safetech service. When progressing from layers one through five, data becomes less precise. The layers are defined as 1 Network/OS/SSL layer 2 Flash layer 3 Javascript layer 4 HTTP layer 5 Browser layer
deviceFingerprint	N/A	O	A hash of device constants.
customerTimeZone	N/A	O	This element and the following element are used to identify the local time of the customer.
customerLocalDateTime	N/A	O	
deviceRegion	N/A	O	This element and the twelve following elements are all technology information about the customer, as identified by the Safetech fraud tools.
deviceCountry	N/A	O	
proxyStatus	N/A	O	
javascriptStatus	N/A	O	
flashStatus	N/A	O	
cookiesStatus	N/A	O	
browserCountry	N/A	O	
browserLanguage	N/A	O	

Data Type	FS1	FS2	Notes
mobileDeviceIndicator	N/A	O	
mobileDeviceType	N/A	O	
mobileWirelessIndicator	N/A	O	
voiceDevice	N/A	O	
pcRemoteIndicator	N/A	O	
rulesDataLength	C	C	The numeric length of the data in the next element.
rulesData	C	C	This is a delimited list of all rules the transaction invoked in the Safetech service. This response element is conditional on use of the rulesTrigger response element.

D.3 Safetech Response Codes

The Safetech service returns a response code for any approved or declined request. This is returned in the Fraud Status Code element of the response message.

The first character of the fraud status code can be used to identify the type of response returned from the Safetech service. Possible values for this field include:

- Ⓐ A – Successful fraud score
- Ⓑ K – Fraud system error
- Ⓒ T – No fraud score – internal error
- Ⓓ X – Pre authorization check
- Ⓔ Y – Post authorization check

The following chart lists possible fraud status codes.

Table 31 Fraud Status Codes

Fraud Status Code	Description
Y001	Authorization timed out. Fraud scoring inquiry not attempted.
X001	Merchant not enabled for Safetech fraud scoring
X002	MOP not supported for Safetech fraud scoring
X003	Action Code not supported for Safetech fraud scoring
X004	Transaction Type not supported for Safetech fraud scoring
X005	Safetech Merchant ID not sent on transaction
X006	Safetech Merchant ID supplied does not match the division setup on file
X008	Invalid Shopping Cart Data. Fraud scoring inquiry not attempted.
X009	Invalid User-Defined Field Data. Fraud scoring inquiry not attempted.

A000	Fraud score successful
A001	Fraud score replayed from historical database.
T998	Internal server error where the fraud system is unreachable
T999	Fraud system unreachable
K201	The version number is missing. Internal to Chase Paymentech.
K202	The mode is missing.
K203	The Merchant ID is missing.
K204	The Session ID is missing
K205	The Fraud Score Transaction ID is missing.
K211	The Currency Code is missing.
K212	The Total Authorization Amount is missing.
K221	The Email Address is missing.
K222	The Phone Number is missing.
K223	The Website ID is missing.
K231	The Payment Type is missing.
K232	A Payment Type of Card is missing.
K233	The Payment Type of MICR is missing. MICR is the Magnetic Ink Character Recognition (MICR) line on a check.
K235	The Payment Token (Amount) is missing
K241	The customer IP Address is missing.
K251	The merchant acknowledgement flag is missing.
K261	The POST is missing
K271	The Product Type code is missing.
K272	The Product Item code is missing.
K273	The Product Description is missing.
K274	The Product Quantity is missing.
K275	The Product Price is missing.
K301	The Version Number is invalid.
K302	The Mode is invalid.
K303	The merchant ID is invalid.
K304	The Session ID is invalid.
K305	The Fraud Score Transaction ID is invalid.
K311	The currency code is invalid.
K312	The total authorization amount is invalid.
K321	The customer's email address is invalid.
K322	The customer's phone number is invalid.

K323	The Website ID is invalid.
K324	The format of the Fraud Score response is invalid.
K331	The payment type of the transaction is invalid.
K332	The card used as payment is invalid.
K333	The Payment Type of MICR is invalid. MICR is the Magnetic Ink Character Recognition (MICR) line on a check.
K336	The Bill Me Later account number is invalid.
K341	The customer IP address is invalid.
K351	The merchant acknowledgement flag is invalid.
K362	The shopping cart data is invalid.
K371	The Product Type code is invalid.
K372	The Product Item code is invalid.
K373	The Product Description is invalid.
K374	The Product Quantity is invalid.
K375	The Product Price is invalid.
K399	The label either doesn't exist or was associated with the wrong data type.
K401	Extra data was included in the transaction.
K402	The payment types were mis-matched.
K403	A customer phone number was sent in, but was unnecessary.
K404	A Payment Token was sent in that was unnecessary.
K501	A Scoring request was sent in that was not authorized.
K502	A merchant ID was sent in that was not authorized.
K503	An IP address was sent in that was not authorized.
K504	A password was used that was not authorized.
K601	A system error occurred.
K701	A header is missing from the transaction.

D.4 Access FX Codes

Access FX Rate Status Code indicates the status of the rate information exchanged with Chase Merchant Services.

Table 32 FX Rate Status Code

Rate Information Status Code	Description
000	Valid Rate ID
001	Invalid Rate ID
002	Missing Rate ID
003	Expired Rate ID
004	Invalid ACTION code not supported. Missing Product Record Request
005	Invalid ACTION code to Rate file ACTION
006	No Default Rate ID, last valid Rate ID used
007	Opt Out selected, no custom rates applied
008	Invalid MOP. Not supported
009	Opt Out Indicator invalid
010	Rate Handling Indicator invalid
011	Rate ID and Rate Mismatch
012	Other

Table 33 Access FX Presentment Currencies

Presentment Currencies	ISO Currency Codes	Currency Decimals
Afghan Afghani	971	2
Albanian Lek	008	2
Algerian Dinar	012	2
Angolan Kwanza	973	2
Argentine Peso	032	2
Armenian Dram	051	2
Aruban Guilder	533	2
Australian Dollar	036	2
Azerbaijanian Manat	944	2
Bahamian Dollar	044	2
Bangladeshi Taka	050	2
Barbados Dollar	052	2
Belarussian Ruble	933	2
Belize Dollar	084	2

Bermudian Dollar	060	2
Bolivian Boliviano	068	2
Bosnia & Herzegovina Convertible Marks	977	2
Botswana Pula	072	2
Brazilian Real	986	2
British Pound	826	2
Brunei Dollar	096	2
Bulgarian Lev	975	2
Burundi Franc	108	0
Bhutanese Ngultrum	064	2
CFA Franc BCEAO	952	0
CFA Franc BEAC	950	0
CFP Franc	953	0
Canadian Dollar	124	2
Cambodian Riel	116	2
Cape Verdi Escudo	132	2
Cayman Islands Dollar	136	2
Chilean Peso	152	0
Chinese Yuan Renminbi	156	2
Colombian Peso	170	2
Comoro Franc	174	0
Congolese Franc	976	2
Costa Rican Colon	188	2
Czech Koruna	203	2
Danish Krone	208	2
Djibouti Franc	262	0
Dominican Peso	214	2
East Caribbean Dollar	951	2
Egyptian Pound	818	2
El Salvador Colon	222	2
Ethiopian Birr	230	2
Euro	978	2
Falkland Islands Pound	238	2
Fiji Dollar	242	2
Gambian Dalasi	270	2
Georgian Lari	981	2
Ghanaian Cedi	936	2
Gibraltar Pound	292	2
Guatemala Quetzal	320	2
Guinea Franc	324	2
Guinea-Bissau Peso	624	2

Guyanese Dollar	328	2
Haitian Gourde	332	2
Honduras Limpera	340	2
Hong Kong Dollar	344	2
Hungarian Forint	348	2
Iceland Krona	352	2
Indian Rupee	356	2
Indonesian Rupiah	360	2
Israeli New Shekel	376	2
Jamaican Dollar	388	2
Japanese Yen	392	0
Kazakhstan Tenge	398	2
Kenyan Shilling	404	2
Kyrgyzstan Som	417	2
Laos Kip	418	0
Lebanese Pound	422	2
Lesotho Loti	426	2
Liberian Dollar	430	2
Macau Pataca	446	2
Malagasy Ariary	969	2
Malawi Kwacha	454	2
Malaysian Ringgit	458	2
Maldives Rufiyaa	462	2
Mauritania Ouguiya	478	2
Mauritius Rupee	480	2
Mexican Peso	484	2
Moldovan Leu	498	2
Mongolia Tugrik	496	2
Moroccan Dirham	504	2
Mozambique New Metical	943	2
Myanmar Kyat	104	2
Namibia Dollar	516	2
Nepalese Rupee	524	2
Netherlands Antillean Guilder	532	2
New Guinea Kina	598	2
New Zealand Dollar	554	2
Nicaraguan Cordoba Oro	558	2
Nigerian Naira	566	2
Norwegian Krone	578	2
Pakistan Rupee	586	2
Panamanian Balboa	590	2
Paraguay Guarani	600	0

Peruvian Nuevo Sol	604	2
Philippines Peso	608	2
Polish Zloty	985	2
Qatari Rial	634	2
Romania Leu	946	2
Russian Ruble	643	2
Rwanda Franc	646	0
St. Helena Pound	654	2
Samoan Tala	882	2
Sao Tome & Principe Dobra	678	2
Saudi Riyal	682	2
Seychelles Rupee	690	2
Sierra Leonean Leone	694	2
Singapore Dollar	702	2
Solomon Islands Dollar	090	2
Somali Shilling	706	2
South African Rand	710	2
South Korean Won	410	0
Sri Lanka Rupee	144	2
Suriname Dollar	968	2
Swaziland Lilangeni	748	2
Swedish Krona	752	2
Swiss Franc	756	2
Taiwan Dollar (New)	901	2
Tajikistan Somoni	972	2
Tanzanian Shilling	834	2
Thai Baht	764	2
Tonga Pa'anga	776	2
Trinidad & Tobago Dollar	780	2
Turkish Lira	949	2
Uganda Shilling	800	2
Ukrainian Hryvnia	980	2
United Arab Emirates Dirham	784	2
Uruguayan Peso	858	2
U.S. Dollar	840	2
Uzbekistan Sum	860	2
Vanuatu Vatu	548	0
Vietnamese Dong	704	0
Yemeni Rial	886	2
Zambia Kwacha	967	2
Zimbabwe Dollar	716	2

Table 34 Access FX Settlement Currencies

AUD (Australia Dollar)
CHF (Switzerland France)
DKK (Denmark Krone)
EUR (Euro Member Countries)
GBP (United Kingdom Pound)
HKD (Hong Kong Dollar)
JPY (Japan Yen)
NOK (Norway Krone)
NZD (New Zealand Dollar)
SEK (Sweden Krona)
USD (United States Dollar)
ZAR (South African Rand)

5.3.2 Real Time Account Updater Response Codes (RTAU Response Codes)

Response Codes	Description
A	Match made; new account number
C	Match made; account closed
E	Match made; new expiration date
I	Real-Time Account Update not done; Bypass flag prevented account update request.
J	Match made; new account number and new expiration date.
K	Real-Time Account Update not done; merchant not enrolled
N	No match; Non-participating BIN
Q	Match made; issuer requests merchant contact cardholder (ChaseNet (U.S. only) or VISA (U.S./Canada only))
V	Match made; account number and expiration date unchanged.