CHASE Paymentech

ORBITAL GATEWAY BATCH XML

INTERFACE SPECIFICATION

DEVELOPERS GUIDE

June 2011

Version 2.2

Orbital Gateway Batch XML Interface Specification
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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

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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 Salem and Tampa (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* or *Tampa*, 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 Tampa, Florida 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.

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 999,999 records in a single file.
- 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 30 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.

2.1.3 XML Schema

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

- Request: `OrbitalRequestSchemav020.xsd`
- Response: `OrbitalResponseSchemav020.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 only SSH-RSA (SSH Version 2) keys. SSH-RSA (SSH Version 1) and SSH-DSA 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:

YY = year
MM = month
DD = day of month
hh24 = hour military
mm = 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 '2.2' (OrbitalRequestSchemav022.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 next settlement cut. This transaction should be used for immediate fulfillment.

Force and Capture

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 (Return/Credit)

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

Refund via Transaction Reference Number

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 3.3.5 **Error! Not a valid result for table.** 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 transactions types except Refunds.

SEE ALSO See *3.3.2 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 *3.3.2 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`

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.

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 Purchasing Card 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.

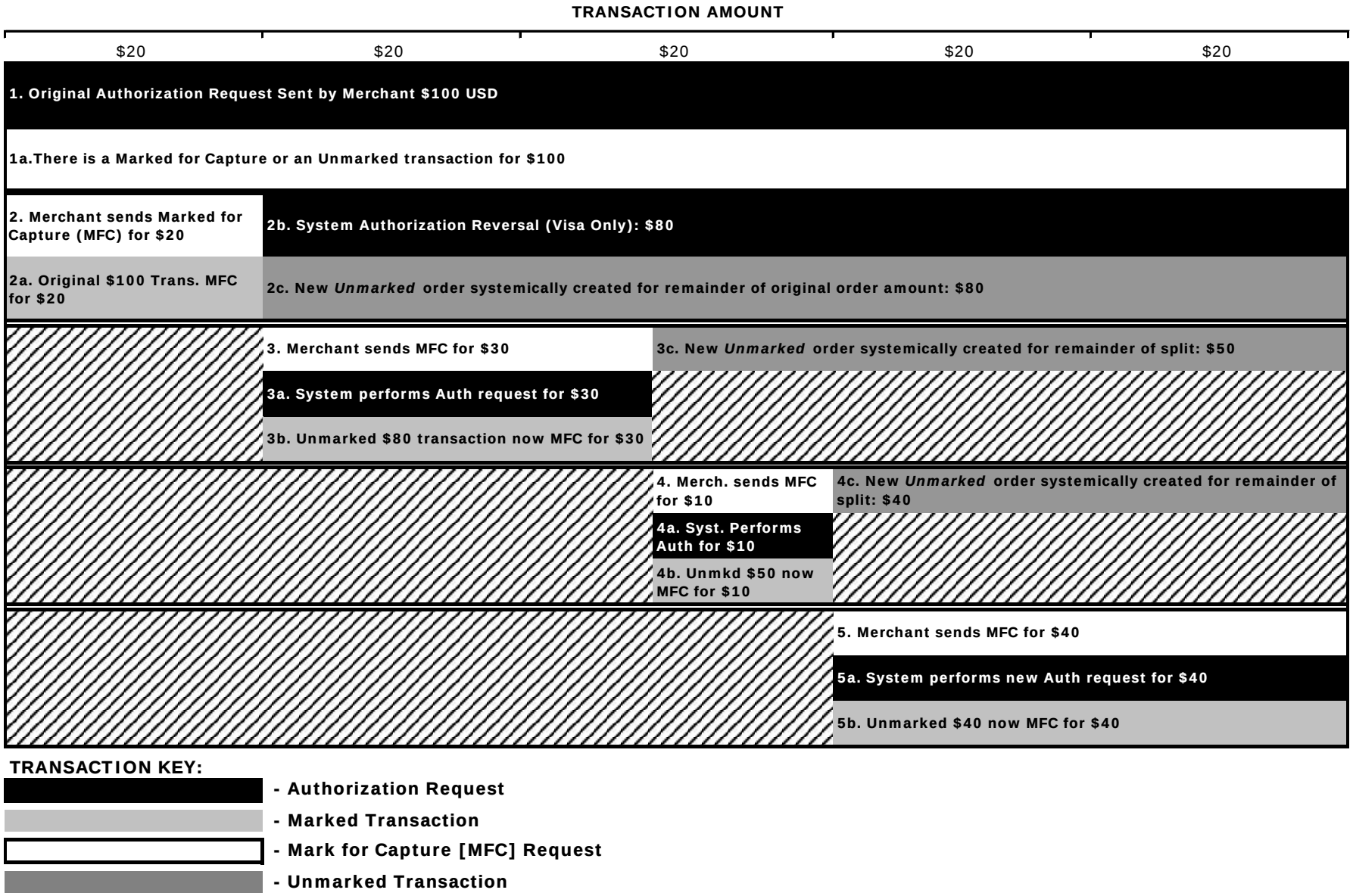
This concept is illustrated in Example 1.

Complex Type Name

Mark for Capture Request = `markForCapture`

Mark for Capture Response = `markForCaptureResp`

Example 1 Split Shipment flow



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.

- 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.

- 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:

- Transaction must not have been settled.
- 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.
- 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:

- Original authorization must have been obtained through Chase Paymentech, or the transaction will decline.
- Original authorization cannot be greater than 72 hours old.
- Reversal must be for full amount that was received in the authorization.
- 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 *3.3.3 Retry Logic*.

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 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. Gift Card Transactions
11. 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.

3.2 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 Salem and PNS/Tampa-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 transactions provide 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 `A`.
- Amount must be `0`.
- The minimum of AVS ZIP is required.
- All existing mandatory fields must continue to be submitted.

Supported Currencies

Account Verification is supported in all currencies

Platforms

BIN 000001 (Salem): Visa, MasterCard, MasterCard Diners

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

3.2.1.2 Purchasing Card

The Orbital Gateway supports the processing of procurement cards by fully supporting the enhanced data required by Visa and MasterCard for both Level 2 and Level 3 data. Additionally, for American Express, the Orbital Gateway for Salem customers supports Level 2 and enhanced Transaction Advice Addenda (TAA).

Purchasing Cards with Level 3 data are typically used in a business-to-business environment that provides and collects funds for outstanding invoices. Merchants have the ability to collect their funds in conjunction with the settlement of their credit card transactions and still provide their customer with the necessary line item detail, providing a cleaner process for both the merchant and their customer.

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 *Chapter 4 Message Definitions.* 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 Purchasing Card Level 3 Processing:

- The amount field (`<PC3Dtllinetot>`) of every line item 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.
  - `<PC3Dtllinetot>` **=** (`<PC3DtlUnitCost>` * `<PC3DtlQty>`) - `<PC3DtlDisc>`
- Additionally, the sum of all the Line Item totals (`<PC3Dtllinetot>`) cannot exceed the transaction amount (`<Amount>`) submitted for an order
  - (`<PC3Dtllinetot>` ≤ `<Amount>`).

Salem

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

However, it should be noted that the Salem host requires that transactions with attached Purchasing Card data must actually be Purchasing Cards. Settlements containing non-Purchasing Cards with accompanying Purchasing Card data will be rejected by the Salem host.

3.2.1.2.2 BIN Ranges

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

3.2.1.2.3 Processing

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

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

Purchasing Card Level 2 can be sent on Sales and Refunds, but Purchasing Card Level 3 data can only be sent on Sales.

MFC Adjustment of Level 2 Data

When processing Purchasing Card Level 2 data, the additional data can be included in either the Auth (and adjusted) or added altogether via the Mark for Capture transaction. The following scenarios describe the optional behavior:

- If the Purchasing data is submitted on the Authorization:
  - No Purchasing Card data is submitted on a Mark for Capture (whether full or partial amount). The Gateway will submit the purchasing card data presented on the authorization at settlement.
  - Purchasing Card Data is submitted on the Mark for Capture (MFC) and the MFC is for:
    - The full amount: The Purchasing Card data submitted on the MFC will override the data submitted on the Auth.
    - The partial amount: Where the amount of the MFC is less than the auth and a split transaction is generated, whatever data is submitted on the first Mark for Capture will be used on all splits. If each split should have different data, then each MFC should include the relevant purchasing card data, but that is not required.
- If the data is not submitted on the Auth, then it must be included on the MFC for it to be submitted at Settlement.
  - Where the amount submitted on the MFC is equal to the Auth, the transaction is complete and that data will be used.
  - Where the amount is less, just as described above, and a split transaction is generated, and whatever data is submitted on the first Mark for Capture will be used on all splits.

Purchasing Card Level 3

Just as with Purchasing Card Level 2, when processing Level 3 data, the additional data can either be included in the Auth (and adjusted) or added altogether via the Mark for Capture transaction. However, because of the PNS-based Purchasing Card validation rules, there is different behavior in terms of what can be done when adjusting the purchasing data via a Mark for Capture. The following scenarios describe the optional behavior:

- If the Purchasing data is submitted on the Authorization:
  - No Purchasing Card data is submitted on a Mark for Capture (whether full or partial amount). The Gateway will submit the purchasing card data presented on the authorization at settlement.
  - Purchasing Card Data is submitted on the Mark for Capture (MFC) and the MFC is for:
    - The full amount: The Purchasing Card data submitted on the MFC will override the data submitted on the Auth, as long as the amended data is still consistent with the data validation rules (PNS/Tampa customers only); otherwise the Mark for Capture request will fail.
    - The partial amount: Where the amount of the MFC is less than the Auth and a split transaction is generated, whatever data is submitted on the first Mark for Capture will be used on all splits. If each split should have different data, then each MFC should include the relevant purchasing card data. This is not required as long as the amended data is still consistent with the data validation rules (PNS/Tampa customers only); otherwise the Mark for Capture will fail.
- If the data is not submitted on the Auth, then it must be included on the MFC for it to be submitted at Settlement:
  - Where the amount submitted on the MFC is equal to the Auth, the transaction is complete and that data will be used. Again, for PNS/Tampa customers, the Purchasing Card Level 3 data must pass the data validation rules, or the MFC request will fail.
  - Where the amount is less, just as described above, and a split transaction is generated, and whatever data is submitted on the first Mark for Capture will only be used for that transaction (for Salem and PNS customers alike). All subsequent MFC requests (again both Salem and PNS) must include the Purchasing Card Level 3 data relevant to that component (and for PNS/Tampa customers it must additionally match the amount, based on the edits, of the MFC).

Additional Information

Visa and MasterCard both have subtle differences in the data necessary to properly qualify for level 2 and level 3 transactions. Additionally, there are also a few differences in data formatting between our Salem and PNS hosts. While this information is present within the message definitions in Chapter 4, summary tables are available in the Appendix section of this document. Please see *Appendix C: Purchasing Card Reference* for further information.

Virtual Terminal

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

3.2.2 European Direct Debit

European Direct Debit (EU DD) 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. This is especially true in Germany, where almost 40% of all electronic payments are made by direct debit.

3.2.2.1 How it Works

In Europe, each country operates its own direct debit network. Merchants wishing to accept direct debit throughout Europe would face the requirement to establish banking relationships and technical integration for each country in which they wish to market. Chase Paymentech Solutions has created a single technical interface for direct debit processing for multiple countries.

3.2.2.2 Processing Requirements

Merchants must contract with Chase Paymentech Solutions for acceptance of European Direct Debit. The Merchant Descriptor is defined on the vendor's system. Sending the Merchant Descriptor record does not alter the descriptor on the accountholder's statement.

The purpose of this document is to outline how a developer can code to take advantage of this method of payment within the Orbital Gateway, both in terms of the message layout and the business rules.

3.2.2.3 Virtual Terminal

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

3.2.2.4 Platforms

The Orbital Gateway only 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 3 Card Activation transaction types

Transaction Type	Description
Activate	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.
Block Activate	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.

	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. 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.
Deactivate	This transaction is for the deactivation of a live card. Passing an amount is not required for this transaction type.
Reactivate	There are two mechanisms for reactivating a card once it has been deactivated: ▪ 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:

- For Salem customers, the reversal must be performed within seven days of the original transaction.
- 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 Tampa host system at 5:00A.M. EST, regardless of what the Auto-Settle time is on the Gateway.
- 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 true Gift Card reporting is available from the Gift Card system, including Resource Online. Any questions about the 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 ATM/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 presently offers PINless Debit Processing as an option for Salem (BIN 000001) customers.

3.2.4.1 Introduction

PINless Debit is more commonly known as *Debit Bill Payment*. This is a debit transaction where neither the magnetic stripe contents nor the PIN is part of the authorization message.

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

The debit network rules for PINless Debit programs are strict, and the networks that support these transactions must approve the merchant prior to their accepting PINless Debit transactions. As a result, PINless Debit 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.

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

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

- 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 very dynamic.

  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 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 *3.3.3 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.

3.2.4.3 Profiles and Managed Billing

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.

3.2.4.4 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 transactions.

- Ability to adjust existing PINless Debit transactions.
- E-mail triggers that fire e-mails to cardholders when a PINless Debit card is no longer eligible.
- Profile and Managed Billing capability.
- 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). This method of payment is only available to Salem platform merchants (BIN 000001). The Bank Routing Number, also known as ABA# or Receiving Depository Financial Institution (RDFI) 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 Processing Requirements

Table 4 Actions that can be performed under ECP

Action	Description
Authorization (A)	An Authorization request is equivalent to check verification. The following operations are performed at this time: 1. A check against the Chase Paymentech Solutions internal negative database to determine if the account is listed as *bad*. 2. A check against the Notification of Change file is checked to see if Chase Paymentech Solutions has been alerted to new account information about this transaction. 3. Finally, the Thompson File is checked to verify that the ABA Routing is valid. Additionally, US checking accounts undergo verification against the SCAN negative file at this time. Only US checking accounts verify against SCAN. 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.
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.

Action	Description
Force and Capture (FC)	A Force and Capture request prepares a transaction for settlement without submitting a validation or verification request 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. Transactions which fail these checks are listed in the Rejected Batch of your Virtual Terminal. (see the *Orbital Virtual Terminal Users Manual* for further details).

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.

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. CVV validation is supported for all International Maestro cards where a CVV is printed on the card. Response codes and rules are identical to MasterCard credit transactions.

CAUTION Merchants who domicile in the UK must submit the SW method of payment when cards qualify as UK Maestro. These cards should not be submitted as International Maestro.

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).

3.3 Available Processing Functionalities

3.3.1 Soft Descriptors

The Soft Descriptor Records are used to define the merchant name/product description that will appear on the consumer's statement. It allows the merchant greater flexibility in describing the consumer's purchase. Soft Descriptors are supported for Visa, MasterCard, MasterCard Diners, and ECP.

It is subject to issuer discretion whether this descriptor will be displayed on the cardholder statement.

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.

3.3.1.1 Soft Descriptor Support

Support for Soft Descriptors is not globally available to all customers using the Orbital Gateway.

Salem (BIN 000001)

The Orbital Gateway supports Soft Descriptors into the Salem Host. However:

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

PNS (BIN 000002)

The Orbital Gateway supports Soft Descriptors into the PNS Host. 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 Salem Interface. See *3.3.1.3 PNS/Tampa Support* for more details.

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

3.3.1.2 Salem Support

3.3.1.2.1 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.

3.3.1.2.2 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 Entry Description (10 bytes) will appear on the consumer's statement a majority of the time. Both are required fields.

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.

3.3.1.2.3 Soft Descriptor Examples

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

```
<sDMerchantName>XYZ</sDMerchantName>
<sDProductDescription>PAYMENT1OF3</sDProductDescription>
<sDMerchantCity/>
<sDMerchantPhone>888-888-8888</sDMerchantPhone>
<sDMerchantURL/>
<sDMerchantEmail/>
```

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

```
<sDMerchantName>XYZCOMPANY</sDMerchantName>
<sDProductDescription>PYMT1OF3</sDProductDescription>
<sDMerchantCity/>
<sDMerchantPhone/>
<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/>
```

3.3.1.3 PNS/Tampa Support

3.3.1.3.1 Rules and Guidelines

Again, the support for Soft Descriptors via the PNS Host is only for customers processing through Chase Paymentech Canada.

Unlike Salem, 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.

3.3.1.3.2 Soft Descriptor Example

Example 5 PNS Soft Descriptor section

```
<sDMerchantName>XYZPAYMENT1OF3</sDMerchantName>
<sDProductDescription/>
<sDMerchantCity/>
<sDMerchantPhone/>
<sDMerchantURL/>
<sDMerchantEmail/>
```

3.3.2 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.

3.3.2.1 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 *3.3.2.4.3 Managed Billing Profiles* 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.

3.3.2.2 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.

3.3.2.3 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.

3.3.2.3.1 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.

3.3.2.3.2 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.

3.3.2.4 Business Rules

3.3.2.4.1 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.

3.3.2.4.2 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`

  `ABCDEFGHIJKLMNOPQRSTUVWXYZ`

  `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 **`&`**

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 <customerProfileOrderOverideInd> 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.

3.3.2.4.3 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 if 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.

3.3.2.4.4 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), Switch/Solo (UK Maestro), and International Maestro.

3.3.2.4.5 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.

There are new response data elements that need to be interpreted to determine the success of this Add request.

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, and Prior Auth (Force) transactions. It cannot be completed as a part of a Refund, Void, or Mark for Capture.

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 `<customerProfileOrderOverideInd>` to populate the `<comments>` tag.
- Order ID

This can be accomplished by setting the <customerProfileOrderOverideInd> 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
  - Switch Solo (Salem Host Only: BIN 000001)
    - Card Number
    - Expiration Date
    - Start Date
    - Issue Number

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:

- Purchasing Card 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 11* 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).

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
- Authorization-Capture
- Prior Authorizations
- Refund

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.

3.3.2.4.6 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 5 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 6 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 6 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 5th 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

Recurrence Pattern Needed	Corresponding CRON Expression*
	L 5 ?

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

3.3.2.4.7 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.

3.3.3 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.

3.3.3.1 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.

3.3.3.2 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.

3.3.3.3 Transaction Types Supported

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

3.3.3.4 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.

3.3.3.5 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.

3.3.3.6 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.

3.3.4 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 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 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 achange 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.

3.3.4.1 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 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 AU transaction type.

3.3.5 Partial Authorization Support

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

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.

The Orbital Gateway does support Partial Authorizations for XML and SOAP messages.

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:

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** ▪ 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 procStatus 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** ▪ File name without the .xml or .zip extension. ▪ See *2.1.1 File Naming Rules* for information on defining the file name.	M	36	A
version	E	batchFileID	**Version** • Specifies the DTD version used to validate the request file • Should be filled with '2.0' to specify this release.	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	**Sequential Presentation of the Request in the Batch File** 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. 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	void	**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. ▪ If reference number is not known, use reversalRetryNumber tag.	M	40	A
txRefIdx	E	void	**Gateway Transaction Index** ▪ 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	**Amount for Partial Voids if necessary** ▪ 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	**Transaction Routing Definition** Assigned by Chase Paymentech. 000001 Salem 000002 Tampa (PNS)	M	6	N

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: ▪ BIN 000001: 6-digit Salem 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 orderID 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: ▪ 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 orderID of the original transaction being marked for capture.	M	22	A
bin	E	markForCapture	**Transaction Routing Definition** Assigned by Chase Paymentech. 000001 Salem 000002 Tampa (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: ▪ 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	**Purchasing Card Level 2 Data - Tax type** Required for Purchasing Card Level 2 Data. 0 Not provided 1 Included 2 Non-Taxable—not valid for Visa Purchasing Card Level 2 qualification *See Purchasing Card 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	**Purchasing Card Level 2 Data - Tax Amount for the Purchase** ▪ Required for Purchasing Card Level 2 Data. ▪ Implied decimal, including those currencies that are a zero exponent. *See Purchasing Card Reference for further details*	O	12	N
pCardOrderID	E	markForCapture	**Purchasing Card Level 2 Data - PO Number from Customer** Required for Purchasing Card Level 2 Data. *See Purchasing Card Reference for further details*	O	17	A
pCardDestZip	E	markForCapture	**Purchasing Card Level 2 Data - Shipping Destination Zip Code for the Purchase** ▪ Required for Purchasing Card Level 2 Data. ▪ For Zip Code + 4, please separate with a hyphen (-). *See Purchasing Card Reference for further details*	O	10	A
pCardDestName	E	markForCapture	**Amex Purchasing Card Data - Cardholder Ship To: Name** Salem Only/Required for Amex Purchasing Card Data. *See Purchasing Card 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 Purchasing Card 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 Purchasing Card 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 Purchasing Card 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 Purchasing Card Reference for further details*	O	2	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3Core	E	markForCapture	**Purchasing Card Level 3 Data for Visa and MasterCard Transactions**	C	N/A	N/A
PC3FreightAmt	E	PC3Core	**Purchase Card Level 3 Freight Amount for Shipment** Total freight or shipping and handling charges. Implied decimal. *See Purchasing Card Reference for further details*	O	12	N
PC3DutyAmt	E	PC3Core	**Purchase Card Level 3 Duty Amount for Shipment** Total charges for any import and/or export duties included in this transaction. Implied decimal. *See Purchasing Card Reference for further details*	O	12	N
PC3DestCountryCd	E	PC3Core	**Purchase Card Level 3 Destination Country Code** ▪ The ISO-assigned code of the country to which the goods are shipped. ▪ Required for all Purchasing Card Level 3 transactions. ▪ If no value is submitted, defaults to the United States (USA). See *Table 13* in Appendix A for country codes. *See Purchasing Card Reference for further details*	C	3	A
PC3ShipFromZip	E	PC3Core	**Purchase Card Level 3 Ship from Zip** ▪ The zip/postal code of the location from which the goods are shipped. ▪ Required for best interchange rate. ▪ Cannot be all zeros or nines. *See Purchasing Card Reference for further details*	C	10	A
PC3DiscAmt	E	PC3Core	**Purchase Card Level 3 Discount Amount from Order** ▪ 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. *See Purchasing Card Reference for further details*	O	12	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3VATtaxAmt	E	PC3Core	**Purchase Card Level 3 Total Amount of VAT or Other Tax** ▪ The total amount of VAT or other tax included in this transaction. ▪ Implied decimal. ▪ Optional. For Visa only; should not be sent for MasterCard. *See Purchasing Card Reference for further details*	O	12	N
PC3VATtaxRate	E	PC3Core	**Purchase Card Level 3 Rate of VAT or Other Tax** ▪ The total amount of VAT or other tax included (expressed in percentage terms) for this line item. ▪ 2 decimal implied. For example, `0001 = 1%`. ▪ Optional. For Visa only; should not be sent for MasterCard. *See Purchasing Card Reference for further details*	O	4	N
PC3AltTaxInd	E	PC3Core	**Purchase Card Level 3 Alternate Tax ID** ▪ 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`. *See Purchasing Card Reference for further details*	O	15	N
PC3AltTaxAmt	E	PC3Core	**Purchase Card Level 3 Alternate Tax Amount** ▪ 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`. *See Purchasing Card Reference for further details*	O	9	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3LineItemCount	E	PC3Core	**Purchase Card Level 3 Number of Line Items** ▪ The number of Purchasing Card 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 Purchasing Card Level 3 Data. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	2	N
PC3LineItemArray	E	PC3Core	**Purchase Card Level 3 Detail Header** Required parent tag for Purchasing Card Level 3 Line Item Detail components.	C	N/A	N/A
PC3LineItem	E	PC3LineItemArray	**Parent XML Tag for Individual Purchase Card 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	**Purchase Card Level 3 Line Item Index** ▪ The sequential number (1–98) of this Line Item Detail within the PC3LineItemArray included with this transaction. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	2	N
PC3DtlDesc	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Description** ▪ Text description of the item purchased. ▪ Cannot be all zeros. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	35	A
PC3DtlProdCd	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Product Code** ▪ Product code of the item purchased. ▪ Cannot be all zeros. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	12	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3DtlQty	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Number of Units** ▪ Number of units of the item purchased. ▪ Cannot be all zeros. ▪ Implied decimal of 4. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details* 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.	C	13	N
PC3DtlUOM	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Unit of Measurement** ▪ The unit of measure or unit of measure code used for this line item. ▪ Required for Purchasing Card Level 3. See *Table 14 Unit of measure codes* in Appendix A. *See Purchasing Card Reference for further details*	C	3	A
PC3DtlTaxAmt	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Tax Amount** ▪ The tax amount for this item. ▪ Implied decimal. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	13	N
PC3DtlTaxRate	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Tax Rate** ▪ 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 Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	5	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3Dtllinetot	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Line Item Total** ▪ For PNS customers: - 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 Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	13	N
PC3DtlDisc	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Discount Amount for Line Item** ▪ Amount of the discount applied to the line item. ▪ Implied decimal. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	13	N
PC3DtlCommCd	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Commodity Code for Line Item** ▪ The commodity code used to classify the item purchased. ▪ Required for Visa; should not be sent for MasterCard. *See Purchasing Card Reference for further details*	C	12	N
PC3DtlUnitCost	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Unit Cost of Item Purchased** ▪ Unit Cost of the unit purchased. ▪ Implied decimal of 4. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	13	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3DtlGrossNet	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Gross/Net Indicator** ▪ Indicates whether tax amount is included in the item amount: Y Item amount includes tax amount N Item amount does not include tax amount ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	1	A
PC3DtlTaxType	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Type of Tax Being Applied** Type of tax being applied. *See Purchasing Card Reference for further details*	O	4	A
PC3DtlDiscInd	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Discount Indicator** ▪ Indicates whether the amount is discounted: 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. *See Purchasing Card Reference for further details*	O	1	A
PC3DtlDebitInd	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Item Debit/Credit Indicator** Valid values: D Item extended amount is a debit. C Item extended amount is a credit. Required for Purchasing Card Level 3 for PNS (BIN 00002) Merchants. *See Purchasing Card Reference for further details*	C	1	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
amexTranAdvAddn1	E	markForCapture	**Amex Purchasing Card Data - Transaction Advice Addendum #1** ▪ 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. ▪ TAAs 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. *See Purchasing Card Reference for further details*	C	40	A
amexTranAdvAddn2	E	markForCapture	**Amex Purchasing Card Data - Transaction Advice Addendum #2** Salem Only/Required for Amex Purchasing Card Data. *See Purchasing Card Reference for further details*	C	40	A
amexTranAdvAddn3	E	markForCapture	**Amex Purchasing Card Data - Transaction Advice Addendum #3** Salem Only/Required for Amex Purchasing Card Data. *See Purchasing Card Reference for further details*	C	40	A
amexTranAdvAddn4	E	markForCapture	**Amex Purchasing Card Data - Transaction Advice Addendum #4** ▪ The original transaction can be updated with purchasing card information during a Mark for Capture. ▪ Salem Only/Required for Amex Purchasing Card Data. *See Purchasing Card Reference for further details*	C	40	A
retryTrace	E	markForCapture	**Trace Number used for Retry Logic** SEE ALSO See *3.3.3 Retry Logic* for information on this field.	O	16	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	**Request Type Used to Generate a New Order** ▪ Auth ▪ Auth/Captures ▪ Force ▪ Force Captures ▪ Refunds The specific transaction type is defined by the value of the transType element.	M	N/A	N/A
BatchRequestNo	A	newOrder	**Sequential Presentation of the Request in the Batch File** The value for the first New Order request should be one higher than that of the last Mark for Capture 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
industryType	E	newOrder	**Industry Type of the Transaction** 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
transType	E	newOrder	**The transaction New Order Transaction Type** A Authorization request AC Authorization and Mark for Capture FC Force-Capture request R Refund request	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 Salem 000002 Tampa (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: ▪ 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** ▪ 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: SW Switch/Solo ED European Direct Debit EC Electronic Check BL Bill Me Later DP PINless Debit (Generic Value Used in Requests) IM International Maestro	C	2	A
ccAccountNum	E	newOrder	**Credit Card Number** ▪ Should be NULL for electronic check processing 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 The consumer's 16-byte Bill Me Later account number will be returned on all approved transactions.	C	19	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
ccExp	E	newOrder	**Card Expiration Date** ▪ Format: MMYY ▪ Mandatory for all card types, except ECP, European Direct Debit, and Bill Me Later. ▪ Salem (BIN 000001) allows a *blank* to be submitted when no known expiration date exists. There are three valid mechanisms for submitting a *Blank* expiration date to the Salem Host using Orbital: - null-fill this XML element: <Exp/> - Send four spaces: <Exp> </Exp> - Zero-fill this XML element: <Exp>0000</Exp> NOTE Please discuss this feature with your certification analyst before implementing.	C	4	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
switchSoloIssueNum	E	newOrder	**Switch/Solo Incremental Counter for Lost or Replacement Cards** ▪ Optional for Switch/Solo transactions. ▪ An incremental counter of either 1 or 2 characters defined by the issuing bank. If a card is lost, the bank issues a replacement card with the issue number being increased by one. ▪ Submit the value as displayed on the card—if the card displays 01, submit 01, NOT 1; if the card displays 1, submit 1. **NOTES:** ▪ The switchSoloCardStartDate field should be submitted only when the card does not have an Issue Number. ▪ If the card displays ONLY a Start Date and no Issue Number, the switchSoloCardStartDate field should contain a value and the switchSoloCardIssueNum field must be left blank (null-filled). ▪ If the card displays both a Start Date and an Issue Number, the switchSoloCardStartDate field should be left blank (null-filled) and the switchSoloCardIssueNum field must be populated.	O	2	N
switchSoloCardStartDate	E	newOrder	**Switch/Solo Card Activation Date** ▪ Optional for Switch/Solo transactions. ▪ Format: MMYY **NOTES:** ▪ The card start date should be submitted only when the card does not have an Issue Number. ▪ If the card displays both a Start Date and an Issue Number, this field should be left blank and the switchSoloCardIssueNum field must be populated.	O	4	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
ecpCheckRT	E	newOrder	**Bank Routing and Transit Number for the Customer** Conditionally required for Electronic Check processing. **NOTES:** ▪ 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	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** ▪ Code used to identify the method used by consumers to authorize debits to their accounts. ▪ Valid values: W Written I Internet (Web) – default T Telephone ▪ If no value submitted, we default this value to I.	O	1	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
ecpDelvMethod	E	newOrder	**ECP Payment Delivery Method** ▪ Conditionally required for Electronic Check processing. ▪ This field indicates the preferred manner to deposit the transaction: 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	**Cardholder Billing Address Zip Code** ▪ 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
avsAddress1	E	newOrder	**Cardholder Billing Address line 1** ▪ 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	newOrder	**Cardholder Billing Address line 2** Should not include any of the following characters: % | ^ \ /	O	30	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
avsCity	E	newOrder	**Cardholder Billing City** ▪ 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	newOrder	**Cardholder Billing State** ▪ 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 and all Electronic Check transactions.	C	30	A
avsCountryCode	E	newOrder	**Cardholder Billing Address Country Code** ▪ 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	newOrder	**Bill Me Later Cardholder Destination Billing Name** Required for Bill Me Later sale transactions.	C	30	A
avsDestAddress	E	newOrder	**Bill Me Later Cardholder Destination Address line 1** ▪ Should not include any of the following characters: % | ^ \ / ▪ Required for Bill Me Later sale transactions.	C	30	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
avsDestAddress2	E	newOrder	**Bill Me Later Cardholder Destination Address Line 2** ▪ Should not include any of the following characters: % | ^ \ / ▪ Optional for Bill Me Later Transactions.	O	30	A
avsDestCity	E	newOrder	**Bill Me Later Cardholder Destination Billing City** ▪ Should not include any of the following characters: % | ^ \ / ▪ Required for Bill Me Later sale transactions.	C	20	A
avsDestState	E	newOrder	**Bill Me Later Cardholder Destination Billing State** ▪ Should not include any of the following characters: % | ^ \ / ▪ Required for Bill Me Later sale transactions	C	2	A
avsDestZip	E	newOrder	**Bill Me Later Cardholder Destination Address Zip Code** ▪ 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
avsDestCountryCode	E	newOrder	**Bill Me Later Cardholder Destination Address Country Code** ▪ 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

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
avsDestPhone	E	newOrder	**Bill Me Later Cardholder Destination Phone Number** AAAEEENNNNXXXX, where AAA = Area Code EEE = Exchange NNNN = Number XXXX = Extension Optional for Bill Me Later sale transactions.	O	14	A
useCustomerRefNum	E	newOrder	**The Customer Reference Number that will be used to populate missing request fields** ▪ Required when Using a Profile during an authorization request. ▪ This field is NOT case-sensitive.	C	22	A
addProfileFromOrder	E	newOrder	**Requests that a Profile be added from the Order being submitted** Defines what the Customer Reference Number will be when creating a profile as part of an authorization: A Auto-Generate the customerRefNum S Use customerRefNum element O Use orderID as the customerRefNum D Use comments as the CustomerRefNum	C	1	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
customerRefNum	E	newOrder	**Sets the Customer Reference Number that will be used to utilize a Customer Profile on all future Orders** ▪ 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. The valid characters include: ▪ 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
customerProfileOrderOverideInd	E	newOrder	**Defines if any Order Data can be pre-populated from the Customer Reference Number (customerRefNum)** Required when adding a Profile Add request as part of an Authorization. NO No mapping to order data OI Use customerRefNum for orderID OD Use customerRefNum for comments OA Use customerRefNum for orderID and comments	C	2	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
priorAuthCd	E	newOrder	**Prior Authorization Code** ▪ 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
orderID	E	newOrder	**Merchant-Defined Order Number** ▪ Field defined and supplied by the auth originator and echoed back in response. ▪ The first 8 characters should be unique for each transaction. The valid characters include: ▪ 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. For BIN 000002 merchants: ▪ 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	**Transaction Amount** 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]
comments	E	newOrder	**Free-form comments** ▪ 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	**Shipping Tracking Reference Number** Merchant can fill in this field, and the information will be stored with the transaction details.	O	40	A
taxInd	E	newOrder	**Purchasing Card Level 2 Data - Tax Type** Conditionally required for Purchasing Card Level 2 Data. 0 Not provided 1 Included 2 Non-Taxable—Not valid for Visa Purchasing Card 2 qualification *See Purchasing Card Reference for further details*	C	1	N
taxAmount	E	newOrder	**Purchasing Card Level 2 Data - Tax Amount for the Purchase** ▪ Conditionally required for Purchasing Card Level 2 Data. ▪ Implied decimal, including those currencies that are a zero exponent. *See Purchasing Card Reference for further details*	C	12	N
pCardOrderID	E	newOrder	**PO Number or Order Number from Customer** Conditionally required for Purchasing Card Level 2 Data. *See Purchasing Card Reference for further details*	C	17	A
pCardDestZip	E	newOrder	**Shipping Destination Zip Code for the Purchase** ▪ Required for Purchasing Card Level 2 Data. ▪ For Zip Code + 4, separate with a hyphen (-). *See Purchasing Card Reference for further details*	C	10	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
pCardDestName	E	newOrder	**Amex Purchasing Card Data - Cardholder Ship To: Name** Salem Only/Required for Amex Purchasing Card Data. *See Purchasing Card Reference for further details*	C	30	A
pCardDestAddress	E	newOrder	**Amex Purchasing Card Data - Cardholder Ship To: Address line 1** Salem Only/Required for Amex Purchasing Card Data. *See Purchasing Card Reference for further details*	C	30	A
pCardDestAddress2	E	newOrder	**Amex Purchasing Card Data - Cardholder Ship To: Address line 2** Salem Only/Required for Amex Purchasing Card Data. *See Purchasing Card Reference for further details*	C	30	A
pCardDestCity	E	newOrder	**Amex Purchasing Card Data – Cardholder Ship To: City** Salem Only/Required for Amex Purchasing Card Data *See Purchasing Card Reference for further details*	C	20	A
pCardDestStateCd	E	newOrder	**Amex Purchasing Card Data – Cardholder Ship To: State** Salem Only/Required for Amex Purchasing Card Data. *See Purchasing Card Reference for further details*	C	2	A
PC3Core	E	newOrder	**Purchasing Card Level 3 Data for Visa and MasterCard Transactions**	C	N/A	N/A
PC3FreightAmt	E	PC3Core	**Purchase Card Level 3 Freight Amount for Shipment** Total freight or shipping and handling charges. Implied decimal. *See Purchasing Card Reference for further details*	O	12	N
PC3DutyAmt	E	PC3Core	**Purchase Card Level 3 Duty Amount for Shipment** Total charges for any import and/or export duties included in this transaction. Implied decimal. *See Purchasing Card Reference for further details*	O	12	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3DestCountryCd	E	PC3Core	**Purchase Card Level 3 Destination Country Code** ▪ The ISO-assigned code of the country to which the goods are shipped. ▪ Required for all Purchasing Card Level 3 transactions. ▪ If no value is submitted, defaults to the United States (USA). See *Table 13 ISO country codes* in Appendix A. *See Purchasing Card Reference for further details*	C	3	A
PC3ShipFromZip	E	PC3Core	**Purchase Card Level 3 Ship From Zip Code** ▪ 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. *See Purchasing Card Reference for further details*	C	10	A
PC3DiscAmt	E	PC3Core	**Purchase Card Level 3 Discount Amount from Order** ▪ 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. *See Purchasing Card Reference for further details*	O	12	N
PC3VATtaxAmt	E	PC3Core	**Purchase Card Level 3 Total Amount of VAT or Other Tax** ▪ The total amount of VAT or other tax included in this transaction. ▪ Implied decimal. ▪ Optional. For Visa only; should not be sent for MasterCard. *See Purchasing Card Reference for further details*	O	12	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3VATtaxRate	E	PC3Core	**Purchase Card Level 3 Rate of VAT or Other Tax** ▪ The total amount of VAT or other tax included (expressed in percentage terms) for this line item. ▪ 2 decimal implied. For example, 0001 = 1%. ▪ Optional. For Visa only; should not be sent for MasterCard. *See Purchasing Card Reference for further details*	O	4	N
PC3AltTaxInd	E	PC3Core	**Purchase Card Level 3 Alternate Tax ID** ▪ Tax ID number for the alternate tax associated with this transaction. ▪ Optional, but required if an amount is sent in PC3AltTaxAmt. ▪ For MasterCard only; should not be sent for Visa. *See Purchasing Card Reference for further details*	O	15	N
PC3AltTaxAmt	E	PC3Core	**Purchase Card Level 3 Alternate Tax Amount** ▪ 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. *See Purchasing Card Reference for further details*	O	9	N
PC3LineItemCount	E	PC3Core	**Purchase Card Level 3 Number of Line Items** ▪ The number of Purchasing Card 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 Purchasing Card Level 3 data. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	2	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3LineItemArray	E	PC3Core	**Purchase Card Level 3 Detail Header** Required parent tag for Purchasing Card Level 3 Line Item Detail components.	C	N/A	N/A
PC3LineItem	E	PC3LineItemArray	**Parent XML Tag for Individual Purchase Card 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	**Purchase Card Level 3 Line Item Index** ▪ The sequential number (1–98) of this Line Item Detail within the PC3LineItemArray included with this transaction. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	2	N
PC3DtlDesc	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Description** ▪ Text description of the item purchased. ▪ Cannot be all zeros. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	35	A
PC3DtlProdCd	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Product Code** ▪ Product code of the item purchased. ▪ Cannot be all zeros. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	12	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3DtlQty	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Number of Units** ▪ Number of units of the item purchased. ▪ Cannot be all zeros. ▪ Implied decimal of 4. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details* 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.	C	13	N
PC3DtlUOM	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Unit of Measurement** ▪ The unit of measure or unit of measure code used for this line item. ▪ Required for Purchasing Card Level 3. See *Table 14 Unit of measure codes* in Appendix A. *See Purchasing Card Reference for further details*	C	3	A
PC3DtlTaxAmt	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Tax Amount** ▪ The tax amount for this item. ▪ Implied decimal. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	13	N
PC3DtlTaxRate	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Tax Rate** ▪ 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 Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	4	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3Dtllinetot	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Line Item Total** ▪ For PNS customers: - 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 Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	13	N
PC3DtlDisc	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Discount Amount for Line Item** ▪ Amount of the discount applied to the line item. ▪ Implied decimal. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	13	N
PC3DtlCommCd	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Commodity Code for Line Item** ▪ The commodity code used to classify the item purchased. ▪ Required for Visa; should not be sent for MasterCard. *See Purchasing Card Reference for further details*	C	12	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3DtlUnitCost	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Unit Cost of Item Purchased** ▪ Unit Cost of the unit purchased. ▪ Implied decimal of 4. ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	13	N
PC3DtlGrossNet	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Gross/Net Indicator** ▪ Indicates whether tax amount is included in the item amount: Y Item amount includes tax amount N Item amount does not include tax amount ▪ Required for Purchasing Card Level 3. *See Purchasing Card Reference for further details*	C	1	A
PC3DtlTaxType	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Type of Tax Being Applied** Type of tax being applied. *See Purchasing Card Reference for further details*	O	4	A
PC3DtlDiscInd	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Discount Indicator** ▪ Indicates whether the amount is discounted: 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. *See Purchasing Card Reference for further details*	O	1	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
PC3DtlDebitInd	E	PC3LineItem	**Purchase Card Level 3 Line Item Detail Element – Item Debit/Credit Indicator** Valid values: D Item extended amount is a debit. C Item extended amount is a credit. Required for Purchasing Card Level 3 for PNS (BIN 00002) Merchants. *See Purchasing Card Reference for further details*	C	1	A
amexTranAdvAddn1	E	newOrder	**Amex Purchasing Card Data – Transaction Advice Addendum #1** ▪ 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. ▪ TAAs 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. *See Purchasing Card Reference for further details*	C	40	A
amexTranAdvAddn2	E	newOrder	**Amex Purchasing Card Data – Transaction Advice Addendum #2** Salem Only/Conditionally required for Amex Purchasing Card Data. *See Purchasing Card Reference for further details*	C	40	A
amexTranAdvAddn3	E	newOrder	**Amex Purchasing Card Data – Transaction Advice Addendum #3** Salem Only/Conditionally required for Amex Purchasing Card Data. *See Purchasing Card Reference for further details*	C	40	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
amexTranAdvAddn4	E	newOrder	**Amex Purchasing Card Data – Transaction Advice Addendum #4** Salem Only/Conditionally required for Amex Purchasing Card Data. *See Purchasing Card Reference for further details*	C	40	A
retryTrace	E	newOrder	**Trace Number used for Retry Logic** *SEE ALSO* See *3.3.3 Retry Logic* for information on this field.	O	16	N
sDMerchantName	E	newOrder	**Soft Descriptor Merchant Name** ▪ 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. Salem: ▪ CREDIT – Three options, which conditionally affect the sDProductDescription: - Max 3 bytes - Max 7 bytes - Max 12 bytes ▪ ECP: - Max 15 bytes Tampa (PNS): ▪ 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	**Soft Descriptor Product Description** ▪ Required for Soft Descriptors. ▪ Provides an accurate product description. Salem: ▪ CREDIT: - 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: - 10 bytes Max Tampa: ▪ This field will not show on Cardholder statements for Tampa Merchants.	C	18	A
sDMerchantCity	E	newOrder	**Soft Descriptor Merchant City** ▪ 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	**Soft Descriptor Merchant Phone** ▪ 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 Tampa Merchants. Valid Formats: ▪ NNN-NNN-NNNN ▪ NNN-AAAAAAA	C	12	A
sDMerchantEmail	E	newOrder	**Soft Descriptor Merchant E-mail** ▪ 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 Tampa Merchants.	C	13	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
sDMerchantURL	E	newOrder	**Soft Descriptor Merchant URL** ▪ 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 Tampa Merchants.	C	13	A
recurringInd	E	newOrder	**Recurring indicator** This tag is required for merchants that are: ▪ Located in Canada ▪ And processing on BIN 000002 ▪ And processing recurring transactions 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. Valid values: RF First Recurring Transaction RS Subsequent Recurring Transactions	C	2	A
euddCountryCode	E	newOrder	**European Direct Debit Country Code** ▪ Customer's Country Code. ▪ Valid country codes: AT Austria BE Belgium DE Germany FR France GB United Kingdom NL Netherlands	C	2	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
euddBankSortCode	E	newOrder	**European Direct Debit Bank Sort Code** ▪ Customer's Bank Sort code. ▪ Mandatory for the following Country Codes: AT Austria DE Germany FR France GB United Kingdom	C	10	A
euddRIBCode	E	newOrder	**European Direct Debit RIB** ▪ Bank Account checksum. ▪ Used in France only.	C	2	A
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** ▪ 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** ▪ The date a customer registered with the merchant. ▪ Mandatory for Bill Me Later sale transactions.	C	8	N
bmlCustomerTypeFlag	E	newOrder	**Customer Type Flag** ▪ New or Existing Customer to the Merchant (not Bill Me Later): N New E Existing ▪ Optional for Bill Me Later sale transactions.	O	2	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
bmlItemCategory	E	newOrder	**Item Category** ▪ Product Description Code assigned by Bill Me Later, Inc. ▪ Mandatory for Bill Me Later sale transactions.	C	4	N
bmlPreapprovalInvitationNum	E	newOrder	**Pre-Approval Invitation Number** ▪ 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	**Merchant Promotional Code** Optional for Bill Me Later sale transactions.	O	4	A
bmlCustomerBirthDate	E	newOrder	**Customer Date of Birth** ▪ Format: YYYYMMDD ▪ Mandatory for Bill Me Later sale transactions.	C	8	N
bmlCustomerSSN	E	newOrder	**Customer Social Security Number** ▪ 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	**Gross Household Annual Income** ▪ Implied decimal. For example, $100,000.00 should be sent as: <bmlCustomerAnnualIncome>10000000</bmlCustomerAnnualIncome> ▪ Optional for Bill Me Later sale transactions.	O	10	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
bmlCustomerResidenceStatus	E	newOrder	**Customer Residence Status** Valid values: O Own R Rent X Other Optional for Bill Me Later sale transactions.	O	1	A
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

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
mbType	E	newOrder	**Managed Billing Type** ▪ Indicates the type of Managed Billing the merchant is participating in: 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
mbOrderIDGenerationMethod	E	newOrder	**Managed Billing Order ID Generation Method** ▪ 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: 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	**Managed Billing Recurring Start Date** ▪ 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

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
mbRecurringEndDate	E	newOrder	**Managed Billing Recurring End Date** ▪ 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
mbRecurringNoEndDateFlag	E	newOrder	**Managed Billing 'No End Date' Indicator** ▪ Valid values: 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	**Managed Billing Max Number of Billings** ▪ 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

<table>
<tr><th>XML Name</th><th>XML Type[1]</th><th>XML Parent Element</th><th>Description</th><th>Req[2]</th><th>Max Char</th><th>Field Type[3]</th></tr>
<tr><td>mbRecurringFrequency</td><td>E</td><td>newOrder</td><td>Managed Billing Recurring Frequency Pattern
This pattern is a subset of a standard CRON expression, comprising 3 fields separated by white space:
<table><tr><th>Field</th><th>Allowed Values</th><th>Allowed Special Chars</th></tr><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></table>
SEE ALSO For a full discussion of these three fields, the usage of the special characters, and multiple example values, see 3.3.2 Profiles and Managed Billing.</td><td>C</td><td>Var</td><td>A</td></tr>
<tr><td>mbDeferredBillDate</td><td>E</td><td>newOrder</td><td>Managed Billing Deferred Billing Date
▪ 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</td><td>C</td><td>8</td><td>N</td></tr>
</table>

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
txRefNum	E	newOrder	**Gateway Transaction Reference Number** A unique value is assigned by the Gateway for each transaction. ▪ 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 Only)** ▪ Reference Number the Biller (merchant) uses on their system to identify this customer. ▪ Conditionally required for PINless Debit.	C	25	A
accountUpdaterEligibility	E	newOrder	**Account Updater Eligibility Flag** This field is used to designate if a customer profile created as part of a New Order should be eligible for Account Updater. • This field only applies to Salem (Bin 000001) merchants using the "Designated Profiles" Account Updater setup option. Valid values: Y Account Updater requests for this profile may be processed. N Account Updater requests for this profile will not be processed.	O	1	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
useStoredAAVInd	E	newOrder	**Use Stored AAV Indicator** This element is conditionally required on recurring payments for International Maestro. Valid values: Y Submit the Static AAV stored by Gateway with this transaction.	C	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	**Sequential Presentation of the Request in the Batch File** The value for the first Profile Add request should be one higher than that of the last New Order 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	customerProfileAdd	**Transaction Routing Definition** Assigned by Chase Paymentech. 000001 Salem 000002 Tampa (PNS)	M	6	N
merchantID	E	customerProfileAdd	**Gateway merchant account number assigned by Chase Paymentech** This account number will match that of your host platform: ▪ BIN 000001: 6-digit Salem 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	customerProfileAdd	**Customer Billing Name** This is the equivalent to the <avsName> element used on New Order requests.	O	30	A
customerRefNum	E	customerProfileAdd	**Sets the Customer Reference Number that will be used to utilize a Customer Profile on all future Orders** ▪ 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: - 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	**Cardholder Billing Address line 1** This is the equivalent to the <avsAddress1> element used on New Order requests.	O	30	A
customerAddress2	E	customerProfileAdd	**Cardholder Billing Address line 2** This is the equivalent to the <avsAddress2> element used on New Order requests.	O	30	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
customerCity	E	customerProfileAdd	**Cardholder Billing City** This is the equivalent to the <avsCity> element used on New Order requests.	O	20	A
customerState	E	customerProfileAdd	**Cardholder Billing State** This is the equivalent to the <avsstate> element used on transactional requests.	O	2	A
customerZIP	E	customerProfileAdd	**Cardholder Billing Address Zip Code** ▪ 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 <avsZip> element used on New Order requests.	C	10	A
customerEmail	E	customerProfileAdd	**Cardholder E-mail Address** ▪ Optional if Customer Profile Action Type = Create or Update. ▪ There is no equivalent to this field available on New Order requests.	O	50	A
customerPhone	E	customerProfileAdd	**Cardholder Telephone Number** AAAEEENNNNXXXX, where AAA = Area Code EEE = Exchange NNNN = Number XXXX = Extension ▪ 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	**Cardholder Billing Address Country Code** ▪ 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. ▪ This is the equivalent to the <avsCountryCode> element used on New Order requests.	O	2	A
customerProfileOrderOverideInd	E	customerProfileAdd	**Defines if any Order Data can be pre-populated from the Customer Reference Number (customerRefNum)** 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	**Customer Profile Number Generation Options** A Auto-Generate the customerRefNum S Use customerRefNum element	M	1	A
orderDefaultDescription	E	customerProfileAdd	**Order Description** The value submitted in this field will a set a default value for the <comments> element used on New Order requests that use this profile.	O	64	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
orderDefaultAmount	E	customerProfileAdd	**Transaction Amount** This is the equivalent to the <amount> element used on New Order requests. Keys: ▪ 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: <orderDefaultAmount>**10000** </orderDefaultAmount> *NOTE* Currency and currency code are not passed in the request. It is implied by the Currency setup for the Merchant ID.	O	12	N
customerAccountType	E	customerProfileAdd	**Customer's Payment Type to save in the Profile** CC Credit Card SW Switch/Solo DP PINless Debit EC Electronic Check	M	2	A
status	E	customerProfileAdd	**Profile Status Flag** This field is used to set the status of a Customer Profile. A Active I Inactive MS Manual Suspend	C	Var	A
ccAccountNum	E	customerProfileAdd	**Customer Credit Card Number** Required if Customer Account Type = Credit Card or Switch/Solo.	C	19	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
ccExp	E	customerProfileAdd	**Customer Credit Card Expiration Date** ▪ Format: MMYY ▪ Required if Customer Account Type = Credit Card or Switch/Solo. ▪ Salem (BIN 000001) allows a *blank* to be submitted when no known expiration date exists. There are three valid mechanisms for submitting a *Blank* expiration date to the Salem Host using Orbital: - null-fill this XML element: <Exp/> - Send four spaces: <Exp> </Exp> - Zero-fill this XML element: <Exp>0000</Exp> NOTE Please discuss this feature with your certification analyst before implementing.	C	4	N
ecpCheckDDA	E	customerProfileAdd	**ECP (DDA) Account Number** Required if the Customer Account Type = EC.	C	17	A
ecpBankAcctType	E	customerProfileAdd	**Deposit Account Type** Required if the Customer Account Type = EC. C Consumer Checking (US or Canadian) S Consumer Savings (US Only) X Commercial Checking (US Only)	C	1	A
ecpCheckRT	E	customerProfileAdd	**Bank Routing and Transit Number for the Customer** Required if the Customer Account Type = EC. **NOTES:** ▪ 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	**ECP Payment Delivery Method** ▪ Required if the Customer Account Type = EC. ▪ This field indicates the preferred manner to deposit the transaction: 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	**Switch/Solo Card Activation Date** ▪ Required if the Customer Account Type = SW. ▪ Format: MMYY	C	4	N
switchSoloIssueNum	E	customerProfileAdd	**Customer Switch/Solo Card Issue Number** ▪ Required if the Customer Account Type = SW. ▪ Switch/Solo incremental counter for lost or replacement cards.	C	2	N
mbType	E	customerProfileAdd	**Managed Billing Type** ▪ Indicates the type of Managed Billing the merchant is participating in: 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	**Managed Billing Order ID Generation Method** ▪ 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: 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	**Managed Billing Recurring Start Date** ▪ 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	**Managed Billing Recurring End Date** ▪ 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** ▪ Valid values: 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** ▪ 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

<table>
<tr><th>XML Name</th><th>XML Type[1]</th><th>XML Parent Element</th><th>Description</th><th>Req[2]</th><th>Max Char</th><th>Field Type[3]</th></tr>
<tr><td>mbRecurringFrequency</td><td>E</td><td>customerProfileAdd</td><td>Managed Billing Recurring Frequency Pattern
This pattern is a subset of a standard CRON expression, comprising 3 fields separated by white space:
<table><tr><th>Field</th><th>Allowed Values</th><th>Allowed Special Chars</th></tr><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></table>
SEE ALSO For a full discussion of these three fields, the usage of the special characters, and multiple example values, see 3.3.2 Profiles and Managed Billing.</td><td>C</td><td>Var</td><td>A</td></tr>
<tr><td>mbDeferredBillDate</td><td>E</td><td>customerProfileAdd</td><td>Managed Billing Deferred Billing Date
▪ 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</td><td>C</td><td>8</td><td>N</td></tr>
</table>

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
sDMerchantName	E	customerProfileAdd	**Soft Descriptor Merchant Name** ▪ 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. Salem: ▪ CREDIT – Three options, which conditionally affect the sDProductDescription: - Max 3 bytes - Max 7 bytes - Max 12 bytes ▪ ECP: - Max 15 bytes Tampa: ▪ 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	**Soft Descriptor Product Description** ▪ Required for Soft Descriptors. ▪ Provides an accurate description. Salem: ▪ CREDIT: - 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: - 10 bytes Max Tampa: ▪ This field will not show on Cardholder statements for Tampa Merchants.	C	18	A
sDMerchantCity	E	customerProfileAdd	**Soft Descriptor Merchant City** ▪ 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	**Soft Descriptor Merchant Phone** ▪ 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 Tampa Merchants. Valid Formats: ▪ 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** ▪ 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 Tampa Merchants.	C	13	A
sDMerchantURL	E	customerProfileAdd	**Soft Descriptor Merchant URL** ▪ 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 Tampa Merchants.	C	13	A
euddCountryCode	E	customerProfileAdd	**European Direct Debit Country Code** ▪ Customer's Country Code. ▪ Valid country codes: AT Austria BE Belgium DE Germany FR France GB United Kingdom NL Netherlands	C	2	A
euddBankSortCode	E	customerProfileAdd	**European Direct Debit Bank Sort Code** ▪ Customer's Bank Sort code. ▪ Mandatory for the following Country Codes: AT Austria DE Germany FR France GB United Kingdom	C	10	A
euddRIBCode	E	customerProfileAdd	**European Direct Debit RIB** ▪ Bank Account checksum. ▪ Used in France only.	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 Only)** ▪ Reference Number the Biller (merchant) uses on their system to identify this customer. ▪ Conditionally required for PINless Debit.	C	25	A
accountUpdaterEligibility	E	customerProfileAdd	**Account Updater Eligibility Flag** This field is used to designate if the customer profile should be eligible for Account Updater. • This field only applies to Salem (Bin 000001) merchants using the "Designated Profiles" Account Updater setup option. Valid values: Y Account Updater requests for this profile may be processed. N Account Updater requests for this profile will not be processed.	O	1	A

4.1.6 Profile Update Request Elements

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
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 Salem 000002 Tampa (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: ▪ BIN 000001: 6-digit Salem Division Number ▪ BIN 000002: 12-digit PNS Merchant ID	M	15	N
customerName	E	customerProfileChange	**Customer Billing Name** This is the equivalent to the <avsName> 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 <avsAddress1> element used on New Order requests.	O	30	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
customerAddress2	E	customerProfileChange	**Cardholder Billing Address line 2** This is the equivalent to the <avsAddress2> element used on New Order requests.	O	30	A
customerCity	E	customerProfileChange	**Cardholder Billing City** This is the equivalent to the <avsCity> element used on New Order requests.	O	20	A
customerState	E	customerProfileChange	**Cardholder Billing State** This is the equivalent to the <avsstate> element used on transactional requests.	O	2	A
customerZip	E	customerProfileChange	**Cardholder Billing Address Zip Code** ▪ 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 <avsZip> element used on New Order requests.	O	10	A
customerEmail	E	customerProfileChange	**Cardholder E-mail Address** ▪ Optional if Customer Profile Action Type = Create or Update. ▪ There is no equivalent to this field available on New Order requests.	O	50	A
customerPhone	E	customerProfileChange	**Cardholder Telephone Number** AAAEEENNNNXXXX, where AAA = Area Code EEE = Exchange NNNN = Number XXXX = Extension ▪ 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	customerProfileChange	**Cardholder Billing Address Country Code** ▪ 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. ▪ This is the equivalent to the <avsCountryCode> element used on New Order requests.	O	2	A
customerProfileOrderOverideInd	E	customerProfileChange	**Defines if any Order Data can be pre-populated from the Customer Reference Number (customerRefNum)** 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	**Order Description** The value submitted in this field will a set a default value for the <comments> element used on New Order requests that use this profile.	O	64	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
orderDefaultAmount	E	customerProfileChange	**Transaction Amount** This is the equivalent to the <amount> element used on New Order requests. Keys: ▪ 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: <orderDefaultAmount>**10000** </orderDefaultAmount> *NOTE* Currency and currency code are not passed in the request. It is implied by the Currency setup for the Merchant ID.	O	12	N
customerAccountType	E	customerProfileChange	**Customer's Payment Type to save in the Profile** Required if the Account Type is being changed. CC Credit Card SW Switch/Solo DP PINless Debit EC Electronic Check	C	2	A
ccAccountNum	E	customerProfileChange	**Customer Credit Card Number**	O	19	N
status	E	customerProfileChange	**Profile Status Flag** This field is used to set the status of a Customer Profile. A Active I Inactive MS Manual Suspend	C	Var	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
ccExp	E	customerProfileChange	**Customer Credit Card Expiration Date** ▪ Format: MMYY ▪ Salem (BIN 000001) allows a *blank* to be submitted when no known expiration date exists. There are three valid mechanisms for submitting a *Blank* expiration date to the Salem Host using Orbital: - null-fill this XML element: <Exp/> - Send four spaces: <Exp> </Exp> - Zero-fill this XML element: <Exp>0000</Exp> NOTE Please discuss this feature with your certification analyst before implementing.	O	4	N
ecpCheckDDA	E	customerProfileChange	**ECP (DDA) Account Number**	O	17	A
ecpBankAcctType	E	customerProfileChange	**Deposit Account Type** Required if the Customer Account Type = EC. C Consumer Checking (US or Canadian) S Consumer Savings (US Only) X Commercial Checking (US Only)	O	1	A
ecpCheckRT	E	customerProfileChange	**Bank Routing and Transit Number for the Customer** ▪ 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	**ECP Payment Delivery Method** This field indicates the preferred manner to deposit the transaction: 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	**Switch/Solo Card Activation Date** Format: MMYY	O	4	N
switchSoloIssueNum	E	customerProfileChange	**Customer Switch/Solo Card Issue Number** Switch/Solo incremental counter for lost or replacement cards.	O	2	N
mbType	E	customerProfileChange	**Managed Billing Type** ▪ Indicates the type of Managed Billing the merchant is participating in: 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** ▪ 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: 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** ▪ 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** ▪ 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	**Managed Billing 'No End Date' Indicator** ▪ Valid values: 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	**Managed Billing Max Number of Billings** ▪ 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

<table>
<tr><th>XML Name</th><th>XML Type[1]</th><th>XML Parent Element</th><th>Description</th><th>Req[2]</th><th>Max Char</th><th>Field Type[3]</th></tr>
<tr><td>mbRecurringFrequency</td><td>E</td><td>customerProfileChange</td><td>Managed Billing Recurring Frequency Pattern
This pattern is a subset of a standard CRON expression, comprising 3 fields separated by white space:
<table><tr><th>Field</th><th>Allowed Values</th><th>Allowed Special Chars</th></tr><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></table>
SEE ALSO For a full discussion of these three fields, the usage of the special characters, and multiple example values, see 3.3.2 Profiles and Managed Billing.</td><td>C</td><td>Var</td><td>A</td></tr>
<tr><td>mbDeferredBillDate</td><td>E</td><td>customerProfileChange</td><td>Managed Billing Deferred Billing Date
▪ 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</td><td>C</td><td>8</td><td>N</td></tr>
<tr><td>mbCancelDate</td><td>E</td><td>customerProfileChange</td><td>Managed Billing Cancel Date
▪ 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</td><td>C</td><td>8</td><td>N</td></tr>
</table>

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
mbRestoreDate	E	customerProfileChange	**Managed Billing Restore Billing Date** ▪ 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 *Standard* 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** ▪ 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. Salem: ▪ CREDIT – Three options, which conditionally affect the sDProductDescription: - Max 3 bytes - Max 7 bytes - Max 12 bytes ▪ ECP: - Max 15 bytes Tampa: ▪ 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	**Soft Descriptor Product Description** ▪ Required for Soft Descriptors. ▪ Provides an accurate description. Salem: ▪ CREDIT: - 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: - 10 bytes Max Tampa: ▪ This field will not show on Cardholder statements for Tampa Merchants.	C	18	A
sDMerchantCity	E	customerProfileChange	**Soft Descriptor Merchant City** ▪ 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	**Soft Descriptor Merchant Phone** ▪ 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 Tampa Merchants. Valid Formats: ▪ 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** ▪ 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 Tampa Merchants.	C	13	A
sDMerchantURL	E	customerProfileChange	**Soft Descriptor Merchant URL** ▪ 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 Tampa Merchants.	C	13	A
euddCountryCode	E	customerProfileChange	**European Direct Debit Country Code** ▪ Customer's Country Code. ▪ Valid country codes: AT Austria BE Belgium DE Germany FR France GB United Kingdom NL Netherlands	C	2	A
euddBankSortCode	E	customerProfileChange	**European Direct Debit Bank Sort Code** ▪ Customer's Bank Sort code. ▪ Mandatory for the following Country Codes: AT Austria DE Germany FR France GB United Kingdom	C	10	A
euddRIBCode	E	customerProfileChange	**European Direct Debit RIB** ▪ Bank Account checksum. ▪ Used in France only.	C	2	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
billerReferenceNumber	E	customerProfileChange	**Biller Reference Number (PINless Debit Only)** ▪ Reference Number the Biller (merchant) uses on their system to identify this customer. ▪ Conditionally required for PINless Debit.	C	25	A
accountUpdaterEligibility	E	customerProfileChange	**Account Updater Eligibility Flag** This field is used to designate if the customer profile should be eligible for Account Updater. • This field only applies to Salem (Bin 000001) merchants using the "Designated Profiles" Account Updater setup option. Valid values: Y Account Updater requests for this profile may be processed. N Account Updater requests for this profile will not be processed.	O	1	A

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 Salem 000002 Tampa (PNS)	M	6	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
merchantID	E	customerProfileDelete	**Gateway merchant account number assigned by Chase Paymentech** This account number will match that of your host platform: ▪ BIN 000001: 6-digit Salem 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 Salem 000002 Tampa (PNS)	M	6	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
merchantID	E	customerProfileFetch	**Gateway merchant account number assigned by Chase Paymentech** This account number will match that of your host platform: ▪ 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 Update action.	M	22	A
accountUpdaterEligibility	E	customerProfileFetch	**Account Updater Eligibility Flag** This field is used to designate if the customer profile should be eligible for Account Updater. • This field only applies to Salem (Bin 000001) merchants using the "Designated Profiles" Account Updater setup option. Valid values: Y Account Updater requests for this profile may be processed. N Account Updater requests for this profile will not be processed.	O	1	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 Salem 000002 Tampa (PNS) *Bin 000002 is not supported for Account Updater.*	M	6	N
merchantID	E	accountUpdater	**Gateway merchant account number assigned by Chase Paymentech** This account number will match that of your host platform: ▪ BIN 000001: 6-digit Salem Division Number ▪ BIN 000002: 12-digit PNS Merchant ID *Bin 000002 is not supported for Account Updater.*	M	15	N
terminalID	E	accountUpdater	**Merchant Terminal ID assigned by Chase Paymentech** ▪ Salem 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	**Scheduled Date** Defines the future date that Orbital will add this profile to the set of Account Updater submissions Format: MMDDYYYY When this value is not set, the profile will automatically go into the next AU submission.	O	8	N

4.1.10 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 Salem 000002 Tampa (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: ▪ BIN 000001: 6-digit Salem Division Number ▪ BIN 000002: 12-digit PNS Merchant ID	M	15	N
terminalID	E	flexCache	**Merchant Terminal ID assigned by Chase Paymentech** ▪ Salem Terminal IDs: presently set to 001. ▪ PNS Terminal IDs: between 001 and 999; typically 001.	M	3	N
ccAccountNum	E	flexCache	**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]
orderID	E	flexCache	**Merchant-Defined Order Number** ▪ Field defined and supplied by the auth originator and echoed back in response. ▪ The first 8 characters should be unique for each transaction. The valid characters include: ▪ abcdefghijklmnopqrstuvwxyz ▪ ABCDEFGHIJKLMNOPQRSTUVWXYZ ▪ 0123456789 ▪ - , $ @ & and a space character, though the space character **cannot** be the leading character For BIN 000002 merchants: ▪ 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	**Transaction Amount** ▪ 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
ccPinNum	E	flexCache	**Card Verification Data (CVD) / PIN** 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: ▪ Authorize ▪ Redemption ▪ Balance Inquiry NOTE Most gift card programs require the presence of this value in the above transaction types.	O	4	N
comments	E	flexCache	**Free-form comments** ▪ 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

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
shippingRef	E	flexCache	**Shipping Tracking Reference Number** Merchant can fill in this field, and the information will be stored with the transaction details.	O	40	A
txRefNum	E	flexCache	**Gateway Transaction Reference Number** A unique value for each transaction, which is required to adjust any transaction in the Gateway, such as a Mark for Capture or Reversal.	M	40	A
industryType	E	flexCache	**Industry Type of the Transaction** MO Mail Order transaction RC Recurring Payment (not a valid choice for Canadian merchants) EC eCommerce transaction	M	2	A
flexAction	E	flexCache	**Transaction (or Action) Type** Valid values: ACTIVATE, BLOCKACTIVATE, DEACTIVATE, REACTIVATE, ADDVALUE, AUTH, REDEMPTION, REFUND, BALANCEINQUIRY	M	30	A
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** *SEE ALSO* See *3.3.3 Retry Logic* for information on this field.	O	16	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
priorAuthCd	E	flexCache	**Prior Authorization Code – Indicates the Transaction is a Prior Activation, Add Value, or Redemption** ▪ 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: - Activation, Add Value, and Redemption transactions (as indicated by the value in the flexAction 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

4.1.11 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 Salem 000002 Tampa (PNS)	M	6	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
merchantID	E	endOfDay	**Gateway Merchant Account Number assigned by Chase Paymentech** This account number will match that of your host platform: ▪ BIN 000001: 6-digit Salem Division Number ▪ BIN 000002: 12-digit PNS Merchant ID	M	15	N
terminalID	E	endOfDay	**Merchant Terminal ID assigned by Chase Paymentech** ▪ Salem 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** ▪ 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	**Process Status** ▪ 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: 0 Success All other values constitute an error condition. See *Table 10* in Appendix A for definition of these error values.	M	6	A
respDateTime	E	voidResp	**Date/Time the Transaction was Processed by Gateway** Format: MMDDYYYYhhmmss	M	14	N
procStatusMessage	E	voidResp	**Text Message Associated with procStatus Value**	C	Var	A
retryTrace	E	voidResp	**Trace Number used for Retry Logic** Echoes the value, if any, passed in the request.	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	**Sequential Presentation of the Response in the Batch File** Echoes the Batch Request Number passed in the request.	M	6	N
txRefNum	E	markForCaptureResp	**Gateway Transaction Reference Number** Echoes the Transaction Reference Number passed in request.	M	40	A
amount	E	markForCaptureResp	**Amount Captured** Echoes the Amount passed in request.	C	12	N
orderID	E	markForCaptureResp	**Merchant-Defined Order Number** Field defined and supplied by the auth originator and echoed back in response.	C	22	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
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** ▪ 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: `0` Success All other values constitute an error condition. See *Table 10* 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** ▪ 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 Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
approvalStatus	E	markForCaptureResp	**Approval Status** 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: 0 Declined 1 Approved 2 Message/System Error	C	1	N
respCode	E	markForCaptureResp	**Response Code** Normalized authorization response code issued by the host system (Salem/PNS), which identifies an approval (00) or the reason for a decline or error. See *Table 8* in Appendix A for values.	M	2	A
avsRespCode	E	markForCaptureResp	**Address Verification Request Response** Conditional on AVS request being sent. See *Table 9* in Appendix A for values.	M	2	A
authorizationCode	E	markForCaptureResp	**Issuer Approval Code** Unique transactional-level code issued by the bank or service establishment for approvals. PINless Debit transactions could return blanks or N/A.	M	6	A
respCodeMessage	E	markForCaptureResp	**Text Message Associated with hostRespCode**	C	80	A
hostRespCode	E	markForCaptureResp	**Actual Host Response Code** ▪ 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	**Actual Host Address Verification Response Code** ▪ 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

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** ▪ Value is conditionally returned for approved Bill Me Later transactions. ▪ Other methods of payment never return the card number.	C	19	N
cardBrand	E	newOrderResp	**Card Type/Brand for the Transaction** Echoes the Card Type/Brand passed in the request, except: ▪ 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 *request* Card Brand is DP (which is a generic PINless mnemonic). However, the *response* Card Brand will be one of the three supported PINless Debit Card Brands: NP NYCE PINless Debit PP Pulse PINless Debit SP Star PINless Debit	C	2	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
orderID	E	newOrderResp	**Merchant-Defined Order Number** Echoes the Order Number passed in the request.	M	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** ▪ 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: MMDDYYYYhhmmss	M	14	N
procStatus	E	newOrderResp	**Process Status** ▪ 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: 0 Success All other values constitute an error condition. See *Table 10* in Appendix A for definition of these error values.	M	6	A
approvalStatus	E	newOrderResp	**Approval Status** 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: 0 Declined 1 Approved 2 Message/System Error	C	1	N
respCode	E	newOrderResp	**Response Code** Normalized authorization response code issued by the host system (Salem/PNS), which identifies an approval (00) or the reason for a decline or error. See *Table 8* in Appendix A for values.	C	2	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
avsRespCode	E	newOrderResp	**Address Verification Request Response** Conditional on AVS request being sent. See *Table 9* in Appendix A for values.	C	2	A
cavvRespCode	E	newOrderResp	**Response Code to Verified by Visa Requests** See Appendix A for values.	C	1	A
authorizationCode	E	newOrderResp	**Issuer Approval Code** Unique transactional-level code issued by the bank or service establishment for approvals. PINless Debit transactions could return blanks or N/A.	C	6	A
mbRecurringAdvCode	E	newOrderResp	**Recurring Payment Advice Code** Valid values: 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. **NOTES:** ▪ MasterCard recurring transactions only.	C	2	N
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** ▪ 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** ▪ 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

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
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: ▪ 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** Echoes value from a Profile Add request.	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 11* 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
retryAttempCount	E	newOrderResp	**Number of Times a Transaction Result has been Returned** 0 First Response (unique retryTrace) ≥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.	C	2	N
lastRetryDate	E	newOrderResp	**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 yyyymmddhh24mmss.	C	14	N

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	**Sequential Presentation of the Response in the Batch File** Echoes the Batch Request Number passed in the request.	M	6	N
bin	E	customerProfileResp	**Transaction Routing Definition** Echoes the BIN passed in the request.	M	6	N
merchantID	E	customerProfileResp	**Gateway Merchant Account Number assigned by Chase Paymentech** Echoes the Merchant ID passed in the request.	M	15	N
customerName	E	customerProfileResp	**Customer Billing Name** Echoes the Customer Name passed in the request.	M	30	A
customerRefNum	E	customerProfileResp	**Customer Reference Number** ▪ 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** C customerProfileAdd response U customerProfileChange response R customerProfileFetch response D customerProfileDelete response	M	1	A
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 11* in Appendix A for values.	C	6	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
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
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

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
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
profileOrderOverideInd	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
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 if the request = customerProfileFetch and the data exists for customer profile being retrieved.	C	19	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
ccExp	E	customerProfileResp	**Customer Credit Card Expiration Date** Data conditionally returned if the request = customerProfileFetch and the data exists for customer profile being retrieved.	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
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

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
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** ▪ 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** ▪ 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
mbRecurringMaxBillings	E	customerProfileResp	**Managed Billing Max Number of Billings** ▪ 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 *3.3.2 Profiles and Managed Billing*.	C	Var	A
mbDeferredBillDate	E	customerProfileResp	**Managed Billing Deferred Billing Date** Format: MMDDYYYY	C	8	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
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** AT Austria BE Belgium DE Germany FR France GB United Kingdom NL Netherlands	C	2	A
euddBankSortCode	E	customerProfileResp	**European Direct Debit Bank Sort Code** ▪ Mandatory for the following Country Codes: AT Austria DE Germany FR France GB United Kingdom	C	10	A
euddRIBCode	E	customerProfileResp	**European Direct Debit RIB** ▪ Bank Account checksum. ▪ Used in France only.	C	2	A
billerReferenceNumber	E	customerProfileResp	**Biller Reference Number (PINless Debit Only)** Echoed from Request.	C	25	A
accountUpdaterEligibility	E	customerProfileResp	**Account Updater Eligibility Flag** Echoed from Request	C	1	A

4.2.6 Account Updater Response Elements

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
accountUpdaterResp	E	transResponse	**XML Tag that Defines the Transaction as an Account Updater Response**	M	N/A	N/A
batchRequestNo	A	accountUpdaterResp	**Sequential Presentation of the Response in the Batch File** Echoes the Batch Request Number passed in the request.	M	6	N
bin	E	accountUpdaterResp	**Transaction Routing Definition** Echoes the BIN passed in the request.	M	6	N
merchantID	E	accountUpdaterResp	**Gateway Merchant Account Number assigned by Chase Paymentech** Echoes the Merchant ID passed in the request.	M	15	N
terminalID	E	accountUpdaterResp	**Gateway Terminal ID Number assigned by Chase Paymentech** Echoes the Terminal ID passed in the request.	M	3	N
customerRefNum	E	accountUpdaterResp	**Customer Reference Number** Echoes the Profile ID (customerRefNum) passed in the request.	C	22	N
scheduledDate	E	accountUpdaterResp	**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	accountUpdaterResp	**Result Status of Profile Management** Communicates the success or failure of a Profile Management request: 0 Success >0 An error condition, see *Table 11* in Appendix A for values.	M	6	A
procStatusMessage	E	accountUpdaterResp	**Text Message Associated with ProfileProcStatus Value**	C	Var	A
respDateTime	E	accountUpdaterResp	**Time the Transaction was Processed by Gateway** Format: MMDDYYYYHH24MISS	C	15	A

4.2.7 Gift Card (FlexCache) Response Elements

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
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
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** ▪ The Expiration Date of the Gift Card, if any, is returned in all response messages. ▪ Format: MMYY	M	6	N

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
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** ▪ 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** ▪ 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: 0 Success All other values constitute an error condition. See *Table 10* in Appendix A for definition of these error values.	M	6	A
procstatusMessage	E	flexCacheResp	**Text Message Associated with respCode Value**	C	Var	A
approvalStatus	E	flexCacheResp	**Approval Status** Conditional on: ▪ Process Status returning a 0 or successful response. ▪ Only returned if performing a MFC on a Gift Card Type. If present, the approval status identifies the result of the authorization request to the host system: 0 Decline 1 Approved 2 Message/System Error	C	1	N
authorizationCode	E	flexCacheResp	**Issuer Approval Code** Unique transactional-level code issued by the bank or service establishment for approvals.	C	6	A

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
respCode	E	flexCacheResp	**Response Code** ▪ 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. See *Table 8* in Appendix A for values.	C	2	A
hostRespCode	E	flexCacheResp	**Actual Host Response Code** ▪ 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	**Card Verification Value Request Response** Conditional on card verification request being sent.	M	1	A
batchFailedAcctnum	E	flexCacheResp	**Card Number in a Block Activation Sequence that caused a Block Activation Failure** Conditionally returned on a Block Activation failure.	C	19	N
flexRequestedAmount	E	flexCacheResp	**Transaction Amount Submitted in the Request** ▪ Implied decimal.	C	12	N
flexRedeemedAmt	E	flexCacheResp	**Actual Amount Redeemed on a Redemption Completion** ▪ 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

XML Name	XML Type[1]	XML Parent Element	Description	Req[2]	Max Char	Field Type[3]
respDateTime	E	flexCacheResp	**Date/Time the Transaction was Processed by Gateway** Format: MMDDYYYYhhmmss	M	14	N

4.2.8 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
procStatus	E	endofDayResp	**Process Status** ▪ 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: 0 Success All other values constitute an error condition. See *Table 10* in Appendix A for definition of these error values.	M	6	A
batchSeqNum	E	endofDayResp	**Batch Sequence Number** An internal Batch Number Identifier that can be tied back to any Final Batch Settlement event.	M	16	N
procStatusMessage	E	endofDayResp	**Text Message Associated with ProcStatus Value**	M	Var	A

4.2.9 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	**XML Tag that Defines the File as a File Processing Error Response** If this result is returned as a response: ▪ 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`	**Process Status** Reason code for the File Processing error. See *Table 12* in Appendix A for definition of these error values.	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 Purchasing card 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 Purchasing Card 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
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)

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>2.2</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>1000000000000001</retryTrace>
   </void>
   <!-- Void: Partial Amount -->
   <void BatchRequestNo="2">
      <txRefNum>3EFB415D74CE06681E5C11D79002FA8C144C8ABA</txRefNum>
      <txRefIdx/>
      <adjustedAmount>000000000010</adjustedAmount>
      <bin>000001</bin>
      <merchantID>123456</merchantID>
      <terminalID>001</terminalID>
      <orderID>test12345def</orderID>
      <retryTrace>1000000000000002</retryTrace>
   </void>
   <!-- Mark for Capture -->
   <markForCapture BatchRequestNo="3">
      <txRefNum>3EFB416556A20CDC5AF5DF698BF651FD44769765</txRefNum>
      <amount>000000000600</amount>
      <orderID>12345678901234567890123456789012</orderID>
      <bin>000001</bin>
      <merchantID>123456</merchantID>
      <terminalID>001</terminalID>
      <retryTrace>1000000000000003</retryTrace>
   </markForCapture>
   <!-- Mark for Capture: adding Visa Purchasing card data to the original Auth -->
   <markForCapture BatchRequestNo="4">
      <txRefNum>AB12CD6556A20CDC5AF5DF698BF651FD44769765</txRefNum>
      <amount>000000000600</amount>
      <orderID>12345678901234567890123456789012</orderID>
      <bin>000001</bin>
      <merchantID>123456</merchantID>
      <terminalID>001</terminalID>
      <taxInd>2</taxInd>
      <taxAmount>000000000000</taxAmount>
      <pCardOrderID>12345678901234567</pCardOrderID>
```

```
      <pCardDestZip>54321-0123</pCardDestZip>
      <retryTrace>1000000000000004</retryTrace>
   </markForCapture>
```

```
<!-- Mark for Capture: adding American Express Purchasing card data to original Auth -->
    <markForCapture BatchRequestNo="5">
        <txRefNum>12QS41C556A20CDC5AF5DF698BF651FD44769765</txRefNum>
        <amount>000000000600</amount>
        <orderID>12345678901234567890</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 11111111111111111111</amexTranAdvAddn1>
        <amexTranAdvAddn2>Order Information 22222222222222222222</amexTranAdvAddn2>
        <amexTranAdvAddn3>Order Information 33333333333333333333</amexTranAdvAddn3>
        <amexTranAdvAddn4>Order Information 44444444444444444444</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>10000000000000000000006</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 Purchasing Card Data -->
    <newOrder BatchRequestNo="7">
        <industryType>MO</industryType>
        <transType>AC</transType>
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <terminalID>001</terminalID>
```

```
        <ccAccountNum>4012888888881</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>10000000000000000000007</orderID>
        <amount>000000001000</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>1000000000000007</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>10000000000000000000008</orderID>
        <amount>000000001000</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>10000000000000000000009</orderID>
        <amount>000000001000</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>10000000000000000000010</orderID>
        <amount>000000001000</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>10000000000000000000011</orderID>
        <amount>000000001000</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>10000000000000000000012</orderID>
        <amount>000000001000</amount>
        <comments>Test #1</comments>
        <shippingRef>FED EX WB 1234567</shippingRef>
        <retryTrace>1000000000000012</retryTrace>
    </newOrder>
    <!-- New Order: Auth/Capture, PINless Debit -->
    <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>10000000000000000000013</orderID>
        <amount>000000001000</amount>
        <comments>Test #2</comments>
        <retryTrace>1000000000000013</retryTrace>
        <billerReferenceNumber>DebitRef123456</billerReferenceNumber>
    </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>
        <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>10000000000000000000014</orderID>
        <amount>000000001000</amount>
```

```
        <comments>Test #2</comments>
        <shippingRef>FED EX WB 1234567</shippingRef>
        <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 11111111111111111111</amexTranAdvAddn1>
        <amexTranAdvAddn2>Order Information 22222222222222222222</amexTranAdvAddn2>
        <amexTranAdvAddn3>Order Information 33333333333333333333</amexTranAdvAddn3>
        <amexTranAdvAddn4>Order Information 44444444444444444444</amexTranAdvAddn4>
        <retryTrace>1000000000000014</retryTrace>
    </newOrder>
    <!-- New Order: Auth/Capture, Recurring, Credit Card, adding a Profile (Merchant Sets
         Profile ID) -->
    <newOrder BatchRequestNo="15">
        <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>S</addProfileFromOrder>
        <customerRefNum>ABCDEFGHIJKLMNOPQRSTUV</customerRefNum>
        <customerProfileOrderOverideInd>OI</customerProfileOrderOverideInd>
        <orderID>10000000000000000000015</orderID>
        <amount>000000001000</amount>
        <comments>Test 1</comments>
        <shippingRef>FED EX WB 1234567</shippingRef>
        <retryTrace>1000000000000015</retryTrace>
    </newOrder>
    <!-- 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>
        <customerProfileOrderOverideInd>OI</customerProfileOrderOverideInd>
        <orderID>10000000000000000000016</orderID>
        <amount>000000001000</amount>
        <comments>Test #1</comments>
        <shippingRef>FED EX WB 1234567</shippingRef>
        <retryTrace>1000000000000016</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>10000000000000000000017</orderID>      ← use for customerRefNum of new Profile
        <profileOrderOverideInd>NO</profileOrderOverideInd>
        <amount>000000001000</amount>
        <comments>Test #1</comments>
        <shippingRef>FED EX WB 1234567</shippingRef>
        <retryTrace>1000000000000017</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>ABCDEFGHIJKLMNOPQRSTUV</useCustomerRefNum>
        <orderID/>
        <amount/>
        <retryTrace>1000000000000018</retryTrace>
    </newOrder>
```

```
<!-- New Order: Auth/Capture, Recurring, Credit Card, will generate an error response -->
<newOrder BatchRequestNo="19">
    <industryType>RC</industryType>
    <transType>AC</transType>
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <terminalID>001</terminalID>
    <ccAccountNum>5000000000000000</ccAccountNum>                ← Invalid account number
    <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>10000000000000000000019</orderID>
    <amount>000000001000</amount>
    <comments>Test #1</comments>
    <shippingRef>FED EX WB 1234567</shippingRef>
    <retryTrace>1000000000000019</retryTrace>
</newOrder>
<!-- New Order: Auth/Capture, Recurring, Credit Card, will generate a decline response -->
<newOrder BatchRequestNo="20">
    <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>
    <orderID>10000000000000000000020</orderID>
    <amount>000000053000</amount>
    <comments>Test #1</comments>
    <shippingRef>FED EX WB 1234567</shippingRef>
    <retryTrace>1000000000000020</retryTrace>
</newOrder>
<!-- Profile Add: Credit Card -->
<customerProfileAdd BatchRequestNo="21">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>10000000000000000000020</customerRefNum>
    <customerAddress1>101 Nowhere Street</customerAddress1>
    <customerAddress2>Apt 0</customerAddress2>
    <customerCity>Tampa</customerCity>
```

```
        <customerState>FL</customerState>
        <customerZip>33556-1234</customerZip>
        <customerProfileOrderOverideInd>OA</customerProfileOrderOverideInd>
        <customerProfileFromOrderInd>S</customerProfileFromOrderInd>
        <orderDefaultAmount>000000001000</orderDefaultAmount>
        <customerAccountType>CC</customerAccountType>
        <ccAccountNum>5454545454545454</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>
        <customerProfileOrderOverideInd>NO</customerProfileOrderOverideInd>
        <customerProfileFromOrderInd>A</customerProfileFromOrderInd>
        <orderDefaultDescription>123456789012345678900ABCDEFGHIJ</orderDefaultDescription>
        <orderDefaultAmount>000000001000</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>10000000000000000000022</customerRefNum>
        <customerAddress1>101 Nowhere Street</customerAddress1>
        <customerAddress2>Apt 0</customerAddress2>
        <customerCity>Tampa</customerCity>
        <customerState>FL</customerState>
        <customerZip>33556-1234</customerZip>
        <customerProfileOrderOverideInd>OI</customerProfileOrderOverideInd>
        <customerProfileFromOrderInd>S</customerProfileFromOrderInd>
        <orderDefaultDescription>123456789012345678900ABCDEFGHIJ</orderDefaultDescription>
        <orderDefaultAmount>000000001000</orderDefaultAmount>
        <customerAccountType>EC</customerAccountType>
        <ecpCheckDDA>12345678901234567</ecpCheckDDA>
        <ecpBankAcctType>C</ecpBankAcctType>
        <ecpCheckRT>123456789</ecpCheckRT>
        <ecpDelvMethod>B</ecpDelvMethod>
    </customerProfileAdd>
    <!-- Profile Add: PINless Debit -->
```

```
<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>
    <customerProfileOrderOverideInd>OI</customerProfileOrderOverideInd>
    <customerProfileFromOrderInd>S</customerProfileFromOrderInd>
    <orderDefaultDescription>12345678901234567890ABCDEFGHIJ</orderDefaultDescription>
    <orderDefaultAmount>000000001000</orderDefaultAmount>
    <customerAccountType>DP</customerAccountType>
    <ccAccountNum>5999012345678905</ccAccountNum>
    <ccExp>0112</ccExp>
    <billerReferenceNumber>Biller Ref 123456</billerReferenceNumber>
</customerProfileAdd>
<!-- Profile Add: Will generate an error response -->
<customerProfileAdd BatchRequestNo="25">
    <bin>000001</bin>
    <merchantID>123456</merchantID>
    <customerName>Billy Smith</customerName>
    <customerRefNum>10000000000000000000023</customerRefNum>
    <customerAddress1>101 Nowhere Street</customerAddress1>
    <customerAddress2>Apt 0</customerAddress2>
    <customerCity>Tampa</customerCity>
    <customerState>FL</customerState>
    <customerZip>33556-1234</customerZip>
    <customerProfileOrderOverideInd>OI</customerProfileOrderOverideInd>
    <customerProfileFromOrderInd>S</customerProfileFromOrderInd>
    <orderDefaultDescription>12345678901234567890ABCDEFGHIJ</orderDefaultDescription>
    <orderDefaultAmount>000000001000</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>10000000000000000000020</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>10000000000000000000020</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>10000000000000000020</customerRefNum>
    </customerProfileDelete>
    <!-- Profile Retrieve -->
    <customerProfileFetch BatchRequestNo="29">
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <customerRefNum>10000000000000000021</customerRefNum>
    </customerProfileFetch>
    <!-- Batch Close (End of Day) -->
    <endOfDay BatchRequestNo="30">                    ← = RequestCount from header
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <terminalID>001</terminalID>
    </endOfDay>
</transRequest>
```

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>                                    ← Success!
      <respDateTime>04222004130500</respDateTime>
      <retryTrace>1000000000000001</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>1000000000000002</retryTrace>
   </voidResp>
   <!-- Response to Mark for Capture -->
   <markForCaptureResp batchRequestNo="3">
      <txRefNum>3EFB416556A20CDC5AF5DF698BF651FD44769765</txRefNum>
      <amount>000000000600</amount>
      <orderID>123456789012345678901 2</orderID>
      <bin>000001</bin>
      <merchantID>123456</merchantID>
      <terminalID>001</terminalID>
      <procStatus>0</procStatus>
      <respDateTime>04222004130502</respDateTime>
      <txRefIdx>2</txRefIdx>
      <retryTrace>1000000000000003</retryTrace>
   </markForCaptureResp>
   <!-- Response to Mark for Capture: adding Visa Purchasing card data to original Auth -->
   <markForCaptureResp batchRequestNo="4">
      <txRefNum>AB12CD6556A20CDC5AF5DF698BF651FD44769765</txRefNum>
      <amount>000000000600</amount>
      <orderID>123456789012345678901 2</orderID>
      <bin>000001</bin>
      <merchantID>123456</merchantID>
      <terminalID>001</terminalID>
      <procStatus>0</procStatus>
      <respDateTime>04222004130503</respDateTime>
```

```
      <txRefIdx>2</txRefIdx>
      <retryTrace>1000000000000004</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>1000000000000005</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>10000000000000000000006</orderID>
      <txRefNum>W1D4FY41C556A20CDC5AF5DF698BF651FD447697</txRefNum>
      <txRefIdx>0</txRefIdx>
      <respDateTime>04222004130505</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>1000000000000006</retryTrace>
      <retryAttempCount>0</retryAttempCount>
   </newOrderResp>
   <!-- Response to New Order: Auth/Capture, Mail Order, Credit Card, Visa Purchasing Card
        Data -->
   <newOrderResp batchRequestNo="7">
      <industryType>MO</industryType>
      <transType>AC</transType>
      <bin>000001</bin>
      <merchantID>123456</merchantID>
      <terminalID>001</terminalID>
      <cardBrand>VI</cardBrand>
      <orderID>10000000000000000000007</orderID>
      <txRefNum>E5R3R141C556A20CDC5AF5DEFGDF698BF651FD44</txRefNum>
```

```
        <txRefIdx>0</txRefIdx>
        <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>1000000000000007</retryTrace>
        <retryAttempCount>0</retryAttempCount>
    </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>10000000000000000000008</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>
        <retryAttempCount>0</retryAttempCount>
    </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>10000000000000000000008</orderID>
        <txRefNum>VBG97HJ9K456A20CDC5AF5DF698BF651FD447697</txRefNum>
        <txRefIdx>0</txRefIdx>
        <respDateTime>04222004130508</respDateTime>
        <procStatus>0</procStatus>
        <approvalStatus>1</approvalStatus>
```

```
        <procStatusMessage>APPROVED</procStatusMessage>
        <retryTrace>1000000000000010</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>10000000000000000000010</orderID>
        <txRefNum>87HGTF23EV56A20CDC5AF5DF698BF651FD447697</txRefNum>
        <txRefIdx>0</txRefIdx>
        <respDateTime>04222004130509</respDateTime>
        <procStatus>0</procStatus>
        <approvalStatus>1</approvalStatus>
        <procStatusMessage>APPROVED</procStatusMessage>
        <retryTrace>1000000000000010</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>10000000000000000000011</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>1000000000000011</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>10000000000000000012</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>
        <retryAttempCount>0</retryAttempCount>
    </newOrderResp>
    <!-- Response to New Order: Auth/Capture, PINless Debit -->
    <newOrderResp batchRequestNo="13">
        <industryType>RC</industryType>
        <transType>AC</transType>
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <terminalID>001</terminalID>
        <cardBrand>SP</cardBrand>
        <orderID>10000000000000000013</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>
        <retryAttempCount>0</retryAttempCount>
    </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>10000000000000000014</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>1000000000000014</retryTrace>
        <retryAttempCount>0</retryAttempCount>
    </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>10000000000000000000015</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>ABCDEFGHIJKLMNOPQRSTUV</customerRefNum>          ← echoed from request
        <customerName>Billy Smith</customerName>                         ← echoed from request
        <profileProcStatus>0</profileProcStatus>
        <profileProcStatusMsg>GOOD</profileProcStatusMsg>
        <retryTrace>1000000000000015</retryTrace>
        <retryAttempCount>0</retryAttempCount>
    </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>10000000000000000000016</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>                    ← generated by Chase Paymentech
      <customerName>Billy Smith</customerName>                    ← echoed from request
      <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>10000000000000000017</orderID>                    ← echoed from request
      <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>10000000000000000017</customerRefNum>          ← set to Order ID
      <customerName>Billy Smith</customerName>
      <profileProcStatus>0</profileProcStatus>
      <profileProcStatusMsg>GOOD</profileProcStatusMsg>
      <retryTrace>1000000000000017</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>10000000000000000016</orderID>
```

```
    <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>1000000000000018</retryTrace>
    <retryAttempCount>0</retryAttempCount>
</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>10000000000000000000008</orderID>
    <respDateTime>04222004130517</respDateTime>
    <procStatus>839</procStatus>          ← Error validating card/account number checksum
    <procStatusMessage>PWS_ERR_VALIDATION_PAN_LUHN</procStatusMessage>
    <retryTrace>1000000000000019</retryTrace>
    <retryAttempCount>0</retryAttempCount>
</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>10000000000000000000020</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>
    <retryAttempCount>0</retryAttempCount>
```

```
    </newOrderResp>
    <!-- Response to Profile Add: Credit Card -->
    <customerProfileResp batchRequestNo="21">
        <bin>000001</bin>
        <merchantID>123456</merchantID>
        <customerName>Billy Smith</customerName>
        <customerRefNum>10000000000000000021</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>10000000000000000022</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>10000000000000000123</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>10000000000000000023</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>10000000000000000000020</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>10000000000000000000020</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>10000000000000000000020</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>10000000000000000000021</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>
      <profileOrderOverideInd>OI</profileOrderOverideInd>
      <orderDefaultDescription>12345678901234567890ABCDEFGHIJ</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>
```

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>
```

5.3 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>10000000000000000008</orderID>
      <respDateTime>04222004130517</respDateTime>
      <procStatus>841</procStatus>          ← Error validating card/account number range
      <procStatusMessage>PWS_ERR_VALIDATION_PAN_RANGE</procStatusMessage>
      <retryTrace>1000000000000019</retryTrace>
      <retryAttempCount>0</retryAttempCount>
</newOrderResp>
```

Proc Status Example 2:

```
<markForCaptureResp batchRequestNo="31">
      <txRefNum></txRefNum>
      <amount>000000000600</amount>
      <orderID>12345678901234567890 12</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>10000000000000000020</customerRefNum>
    <profileAction>C</profileAction>                                    ← Create
    <profileProcStatus>9579</profileProcStatus>                         ← Error: This merchant is not
                                                                        set up for Profile Management
    <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>10000000000000000017</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>10000000000000000017</customerRefNum>
    <customerName>Billy Smith</customerName>
    <profileProcStatus>0</profileProcStatus>                            ← The profile also succeeded
    <profileProcStatusMsg>GOOD</profileProcStatusMsg>
    <retryTrace>1000000000000017</retryTrace>
    <retryAttempCount>0</retryAttempCount>
</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>10000000000000000020</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>
   <retryAttempCount>0</retryAttempCount>
</newOrderResp>
```

Issuer Approval Example:

```
<markForCaptureResp BatchRequestNo="3">
   <txRefNum>3EFB416556A20CDC5AF5DF698BF651FD44769765</txRefNum>
   <amount>000000000600</amount>
   <orderID>12345678901234567890 12</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>1000000000000004</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>
```

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 7 describes what action the values displayed in the Action column indicate that you should take.

Table 7 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 8 describes the different values for the <respCode> element in a response message.

Table 8 Response code values

Code	Definition	Status	Action*	Host Code Salem	Host Code Tampa
00	Approved	Approved	None	100, 102	00
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 8 Response code values

Code	Definition	Status	Action*	Host Code Salem	Host Code Tampa
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	N/A
26	Pre-noted	Approved	None	103	N/A
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 8 Response code values

Code	Definition	Status	Action*	Host Code Salem	Host Code Tampa
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	N/A
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 8 Response code values

Code	Definition	Status	Action*	Host Code Salem	Host Code Tampa
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 8 Response code values

Code	Definition	Status	Action*	Host Code Salem	Host Code Tampa
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	N/A
D6	Changed Field	Decline	Fix	520	N/A

Table 8 Response code values

Code	Definition	Status	Action*	Host Code Salem	Host Code Tampa
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	N/A
E9	Unknown Transit Routing Number	Error	Fix	751	N/A
F1	Missing Name	Error	Fix	752	N/A
F2	Invalid Account Type	Error	Fix	753	N/A
F3	Account Closed	Error	Cust.	754	N/A
F4	No Account/Unable To Locate	Error	Fix	755	N/A
F5	Account Holder Deceased	Error	Cust.	756	N/A
F6	Beneficiary Deceased	Error	Cust.	757	N/A
F7	Account Frozen	Error	Cust.	758	N/A
F8	Customer Opt Out	Error	Cust.	759	N/A
F9	ACH Non-Participant	Error	Cust.	760	N/A
G1	No Pre-note	Error	Fix	761	N/A
G2	No Address	Error	Fix	762	N/A
G3	Invalid Account Number	Error	Fix	763	N/A
G4	Authorization Revoked by Consumer	Error	Cust.	764	N/A
G5	Customer Advises Not Authorized	Error	Cust.	765	N/A
G6	Invalid CECP Action Code	Error	Fix	766	N/A
G7	Invalid Account Format	Error	Fix	767	N/A
G8	Bad Account Number Data	Error	Fix	768	N/A
G9	No Capture	Decline	N/A	801	N/A
H1	No Credit Function	Decline	N/A	803	N/A
H2	No Debit Function	Decline	N/A	804	N/A
H3	Rev Exceed Withdrawal	Decline	Cust.	805	N/A

Table 8 Response code values

Code	Definition	Status	Action*	Host Code Salem	Host Code Tampa
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
K4	Reserved Closing	Decline	N/A	827	N/A

Table 8 Response code values

Code	Definition	Status	Action*	Host Code Salem	Host Code Tampa
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
PA	Partial Approval	Approved	N/A	N/A	10
PB	Revocation of all Authorization	Decline	Cust.	572	17
PP	No Match for Debit Authorization based on Trace, Account, and Division Number	Error	Fix	N/A	N/A
PQ	Unable to Validate Debit Auth Record Based on Amount, Action Code, and MOP	Error	Fix	N/A	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

A.3 AVS Response Codes

Table 9 describes the different values for the <avsRespCode> field in a response message.

Table 9 AVS response code values

Code	AVS Message
1	No address supplied
2	Bill-to address did not pass Auth Host edit checks
3	AVS not performed
4 or **R**	Issuer does not participate in AVS
5	Edit-error - AVS data is invalid
6	System unavailable or time-out
7	Address information unavailable
8	Transaction Ineligible for AVS
9	Zip Match/Zip4 Match/Locale match
A	Zip Match/Zip 4 Match/Locale no match
	No address supplied
2	Bill-to address did not pass Auth Host edit checks
3	AVS not performed
4 or **R**	Issuer does not participate in AVS
5	Edit-error - AVS data is invalid
6	System unavailable or time-out
7	Address information unavailable
8	Transaction Ineligible for AVS
9	Zip Match/Zip4 Match/Locale match
A	Zip Match/Zip 4 Match/Locale no match
B	Zip Match/Zip 4 no Match/Locale match
C	Zip Match/Zip 4 no Match/Locale no match
D	Zip No Match/Zip 4 Match/Locale match
E	Zip No Match/Zip 4 Match/Locale no match
F	Zip No Match/Zip 4 No Match/Locale match
G	No match at all
H	Zip Match/Locale match
J	Issuer does not participate in Global AVS
JA	International street address and postal match

Table 9 AVS response code values

Code	AVS Message
JB	International street address match. Postal code not verified.
JC	International street address and postal code not verified.
JD	International postal code match. Street address not verified.
M1	Cardholder name matches
M2	Cardholder name, billing address, and postal code matches
M3	Cardholder name and billing code matches
M4	Cardholder name and billing address match
M5	Cardholder name incorrect, billing address and postal code match
M6	Cardholder name incorrect, billing address matches
M7	Cardholder name incorrect, billing address matches
M8	Cardholder name, billing address and postal code are all incorrect
N3	Address matches, ZIP not verified.
N4	Address and ZIP code not verified due to incompatible formats
N5	Address and ZIP code match (International only)
N6	Address not verified (International only)
N7	ZIP matches, address not verified
N8	Address and ZIP code match (International only)
N9	Address and ZIP code match (UK only)
R	Issuer does not participate in AVS
UK	Unknown
X	Zip Match/Zip 4 Match/Address Match
Z	Zip Match/Locale no match
blank	Not applicable (non-Visa)

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 10 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 10 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

Code	Message / Description	Action*
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

Code	Message / Description	Action*
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
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
9737	Gateway is Down	Resend
9738	Database Connection Problem: Cannot acquire Database Connection	Resend
9743	Pcard 3 data was sent in parent split, but is missing in current request	Fix

Code	Message / Description	Action*
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
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	Unknown SOAP version	Fix
9793	PINless Debit: Invalid. The field is missing, invalid, or has exceeded the max length.	Fix
9794	PINless Debit: The PINless Debit Card Type [DP] is Not Allowed with [%s] Transactions.	Fix
9795	PINless Debit: The PINless Debit Card Type [DP] is Only Allowed with [%s] Transactions	Fix
9796	PINless Debit: 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
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

Code	Message / Description	Action*
10005	Error communicating with the host	Fix
10011	Response timed out waiting for Authorization Host	Resend
10096	Invalid Card Number	Fix
10204	Invalid AVS ZIP Code	Fix
10332	Invalid Message Format. Transaction was flagged as an eCommerce Industry Type but No ECOrderNum was sent	Fix
10333	The ECOrderNum or MailOrderNum was all Zero's or All Spaces. These are not valid	Fix
10334	Invalid Card Number	Fix
10336	Transaction Amount to Large	Fix
10337	Transaction Amount to Small	Fix
10349	Host eFalcon check requested from PNS [BIN 000002] – This functionality is not supported on this platform	Fix
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
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

Code	Message / Description	Action*
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
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

Code	Message / Description	Action*
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 transaction types	Fix
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

Code	Message / Description	Action*
9884	Error occurred while searching for transaction related to retry trace ID	Call
9885	Failed to find transaction associated with retry trace ID	Fix

A.4.2 Process Status in Profile Management Responses

Table 11 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 11 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
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

Code	Message / Description	Action*
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

A.4.3 Process Status in Error Response Files

Table 12 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 12 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 then 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

Code	Message / Description	Action*
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
6902	Zip Exception	Fix
6903	SAX Exception – This will be sent back to the sender with exact schema violation	Fix

A.5 Purchasing Card Level 3 Codes

This section contains tables describing the *ISO country codes* and *unit of measure codes* that can be used in Purchasing Card Level 3 data elements.

Table 13 ISO country codes

ISO Code	Country
AFG	AFGANISTAN
ALB	ALBANIA
DZA	ALGERIA
ASM	AMERICAN SAMOA
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

ISO Code	Country
LBY	LIBYAN ARAM JAMAHIRAYA
LIE	LIECHTENSTEIN
LTU	LITHUANIA
LUX	LUXEMBOURG
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

Table 13 ISO country codes

ISO Code	Country
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
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'IVORE
HRV	CROATIA (local name: Hrvatska)
CYP	CYPRUS
CZE	CZECH REPUBLIC
DNK	DENMARK

ISO Code	Country
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
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

Table 13 ISO country codes

ISO Code	Country
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
GUF	FRENCH GUIANA
PYF	FRENCH POLYNESIA
ATF	FRENCH SOUTHERN TERRIRORIES
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

ISO Code	Country
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
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

Table 13 ISO country codes

ISO Code	Country
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
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
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
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 14 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 m2)
BAR	Bar
BLL	Barrel (petroleum) (158,987 dm3)
BQL	Becquerel
BIL	Billion EUR
MLD	Billion US
BFT	Board foot
BHP	Brake horse power (245,7 watts)
BTU	British thermal unit (1,055 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

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 dm3)
PTL	Liquid pint (0,473176 dm3)
QTL	Liquid quart (0,946353 dm3)
LTR	Litre (1dm3)
LPA	Litre of pure alcohol
CWI	(Long) hundredweight GB (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

Table 14 Unit of measure codes

UoM Code	Unit Name
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 *Kelvin*
DPT	Displacement tonnage
DZN	Dozen
DZP	Dozen packs
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)

UoM Code	Unit Name
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
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)

Table 14 Unit of measure codes

UoM Code	Unit Name
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
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

UoM Code	Unit Name
RPM	Revolution per minute
RPS	Revolution per second
SCO	Score
SCR	Scruple GB, US (1,295982 g)
SEC	Second
SET	Set
SHT	Shipping ton
SST	Short standard
STN	Short ton GB, US (0,90718474 t)
SIE	Siemans
CMK	Square centimeter
DMK	Square decimeter
FTK	Square foot
INK	Square inch
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)

Table 14 Unit of measure codes

UoM Code	Unit Name
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
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

Appendix B General Card Validation

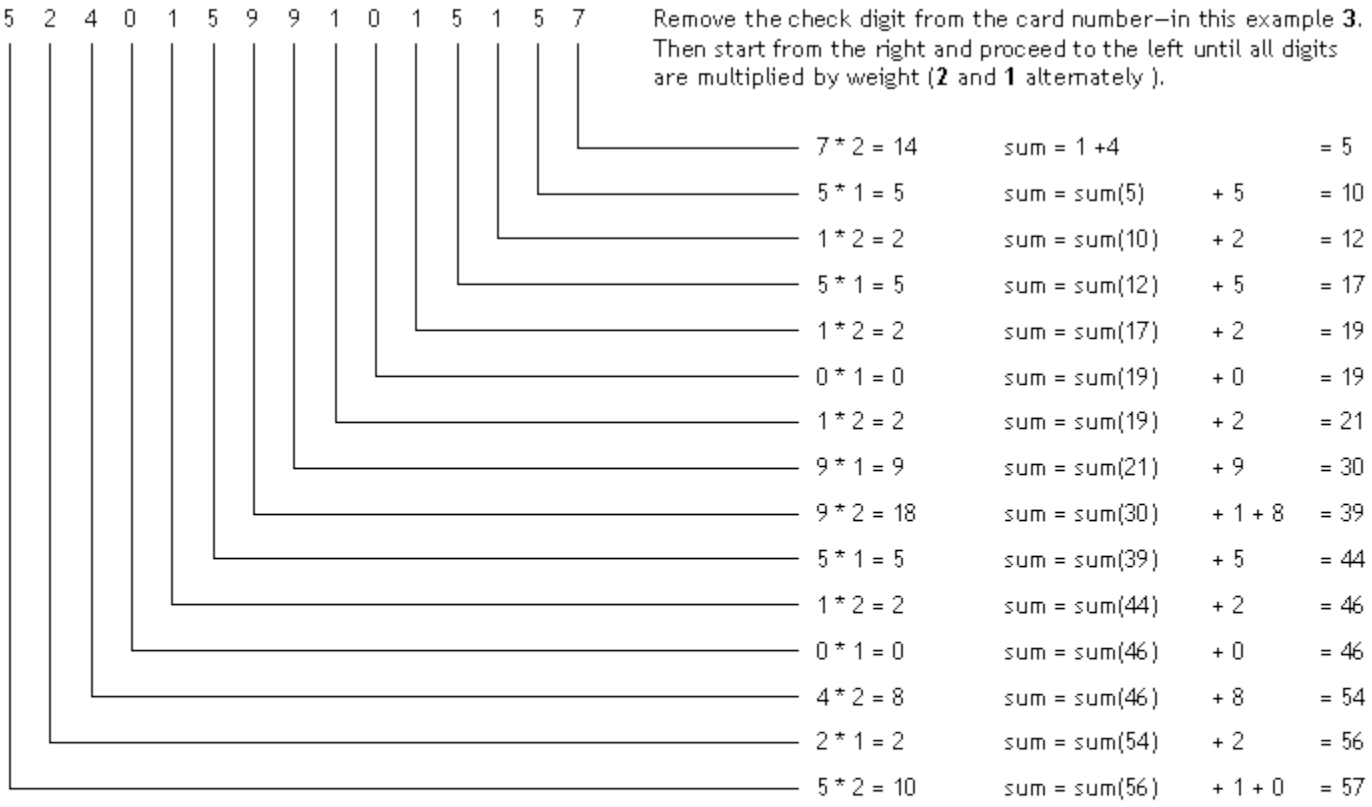
There are three common edits that catch the greatest majority of bad card numbers:

- 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



sum = 57

sum MOD 10 ➔ 57 MOD 10 = 7

10 - 7 = 3

check digit of 524015991015157***3*** 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 15 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*
Switch/Solo (BIN 000001 ONLY)	49, 56, 6*, where * is any single digit
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 16 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
MasterCard	16
PINless Debit	12–19
Switch/Solo (BIN 000001 ONLY)	16, 18, or 19
Visa/Delta	13 or 16

Appendix C Purchasing Card Reference

This appendix contains tables highlighting the requirements for processing Purchase Cards. Please see section *3.2.1.2 Purchasing Card* for more information.

C.1 Purchasing Card Level 2 Summary

Each card type that supports Level 2 processing on purchase cards 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 17 Salem (Bin 000001) Level 2 information

Data Type	Visa	MasterCard	Amex	Notes
Purchase Order #	M	M	O	17 characters, Alphanumeric only
Destination Zip	M	M	M	Allows for 5 digit, 9 digit, or Canadian zip
Tax Indicator	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	O	• This may not be zero to qualify for Level 2. • Acceptable thresholds vary by card type.
Requestor Name	N/A	N/A	M	30 alphanumeric characters
Destination Address (1 & 2)	N/A	N/A	M	30 alphanumeric characters per line
Destination City	N/A	N/A	M	20 alphanumeric characters
Destination State	N/A	N/A	C	• 2 alphabetic characters • Optional for Canada, Mandatory for U.S.
TAA Records	N/A	N/A	M	• 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 18 PNS (Tampa - 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
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 Purchasing Card Level 3 Summary

Purchasing Card 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 19 Salem (Bin 000001) Level 3 information

Data Type	Visa	MasterCard	Notes
Purchasing Card Level 2 Data	C	M	• 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 13 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. • 26 characters for Visa, 35 for MasterCard
Detail Product Code	M	M	These values are defined by the Card Issuer.

Data Type	Visa	MasterCard	Notes
Detail Quantity	M	M	The quantity of said items submitted • 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 recieves 124
Detail Unit of Measure	M	M	See *Purchasing Card Level 3 Codes* for accepted values.
Detail Tax Amount	O	O	Lists the amount of the line item which is Tax
Detail Tax Rate	O	O	Lists the tax rate applied to this transaction. • 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	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	C	• 4 implied decimals • Mastercard: Required for the UK if transaction exceeds a minimum threshold
Detail Gross Net	N/A	M	Indicates if Tax is included in this line item. Must be Y or N.
Detail Tax Type	N/A	O	Four alphabetic characters.
Detail Discount Indicator	N/A	M	Indicates if a discount was applied.
Detail Debit Indicator	O	O	This field is only used by PNS.

Table 20 PNS (Tampa - Bin 000002) Level 3 information

Data Type	Visa	MasterCard	Notes
Purchasing Card Level 2 Data	C	M	• 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

Data Type	Visa	MasterCard	Notes
Destination Country Code	C	C	This defaults to USA if not submitted. See *Table 13 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. • 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 • 13 digits, with 4 implied decimals
Detail Unit of Measure	M	M	See *A.5 Purchasing Card Level 3 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
Detail Gross Net	N/A	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. • Must be a D or a C.