



# Litle & Co. XML Reference Guide

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# **ABOUT THIS GUIDE**

This manual serves as a reference to the LitleXML transaction formats used for payment processing with Litle & Co. It also explains how to perform unattended transaction testing and attended certification testing with Litle & Co.

## **Intended Audience**

This document is intended for technical personnel who will be setting up and maintaining payment processing using the LitleXML format.

## **Revision History**

This document has been revised as follows:

**TABLE 1** Document Revision History

Doc. Version	Description	Location(s)
1.0	Initial release of combined (Batch + Online) and restructured XML Reference Guide.	N/A
1.1	Added information about the AMEX <advancedavsresults> element and AAVS response Codes. Also, updated all examples</advancedavsresults>	Chapters 3 and 4. Appendix A.
	to reflect change to LitleXML version 7.3.  Also, added info to Note for <paypal> element in chapter 4.</paypal>	
1.2	Added a note specifying that orphaned Credits are not supported for PayPal transactions. Also, removed <payeremail> from Chapter 4, since it is only used for PayPal orphaned Credits.</payeremail>	Chapters 3 and 4.
2.0	Added new information about echeck functionality.	All
2.1	Added new information about the echeck Void and eCheck redeposit transactions, including required test cases for certification testing.	All

**TABLE 1** Document Revision History

Doc. Version	Description	Location(s)
2.2	Corrected information concerning fields required when requesting an eCheck Verification.	Chapters 2, 3, 4 and Appendix A
2.3	Removed "Batch Only" note for various eCheck transactions.	Chapters 1, 3 and 4
	Clarified information in Online Dupe Checking section.	Chapter 1
	Fixed several errors in Test/Cert scenarios and added test cases for Enhanced Authorization features.	Chapter 2
2.4	Added information and tests for eCheck Tokenization.	All
2.5	Added information about new elements used for Healthcare Card processing.	All
	Added Register Token examples to Chapter 3.	Chapter 3
	Added 2 new AAVS Response Codes	Appendix A
2.6	Removed information about Amex Auth Reversals.	Chapter 1 and Appendix A
	Added "Certification Environment Usage Policy" section to Chapter 2.	Chapter 2
	Removed namespace (xmlns) attribute from all Response examples. This hasn't been used since schema version 7.0.	Chapters 3 and 4
2.7	Removed Response Code 803	Chapter 4 and Appendix A
	Clarified language about the operation of Online duplicate transaction checking for referenced transactions.	Chapter 1
2.8	Removed <orderid> element from Online Capture Response example. Added info to element definitions.</orderid>	Chapters 3 and 4
	Added information about new Insights elements.	All
	Added Information about Filtering Services.	Chapter 2
	Changed Account Number on eCheck test cases that should have returned a Return Reason Code of 301 - Invalid Account Number.	·
2.9	Add information for new <cardproducttype> element.</cardproducttype>	All
	Add information for new elements associated with Pay Page.	All
	Added descriptions to the Reason Response Codes table.	Appendix A
	Added info on using <pre><customeripaddress> element for AAVS.</customeripaddress></pre>	Chapter 4

**TABLE 1** Document Revision History

Doc. Version	Description	Location(s)
2.10	Misc. minor corrections and clarifications.	All
	Added information about Duplicate Transaction Detection.	Chapters 1 and 4
	Added Amex AuthReversal test case	Chapter 2
	Added paypageRegistrationId option to Register Token Transactions and new Response Code (879).	Chapter 3 and Appendix A
2.11	Added information about Automatic Account Updater service.	All
	Added information about new elements for recycling advice.	Chapters 1, 3, and 4
	Add new PayPal Response Codes (613 thru 628)	Appendix A
	Removed redepositCount element.	Chapters 3 and 4
2.12	Fixed typo in Testing chapter; ".acs" should have been ".asc"	Chapter 2
	Fixed error in Figure 1-4. With Full option, new card data is not returned to the merchant.	Chapter 1
2.13	Added Response Code 629; removed code 353	Appendix A
2.14	Restructured/rewrote Chapter 2.	Chapter 2
	Added new codes and info for AMEX Advanced AVS.	Appendix A
	Added the paypage element as an option to the Capture Given Auth, Credit, and Force Capture transactions.	Chapters 3 and 4
2.15	Added Prepaid Indicator (5) and AAVS Cert tests.	Chapter 2
	Added information about Recycling Engine.	All
	Added new schema elements for V8.8	Chapters 2, 3, & 4
	Added new Response Codes	Appendix A
2.16	Added Recycling Engine Cert tests	Chapter 2
	Added new schema element ( <actionreason>) for V8.9</actionreason>	Chapters 3 and 4
	maxDigits for <amount> element changed from 8 to 12</amount>	Chapter 4
2.17	Added new schema elements for Auth Recycling control	Chapters 3 and 4
	Added new response Reason Codes	Appendix A
2.18	Removed notes about <chargeback> element not being used.</chargeback>	Chapter 4
	Added section about Chargeback Filtering.	Chapter 1
	Added Appendix B providing info about account number formats.	Appendix B
2.19	Added information about new Recycling Engine elements.	Chapters 3 and 4
	Added information about alternate transaction tagging.	Chapter 1
2.20	Add information clarifying the operation of Online Dupe checking.	Chapter 1

**TABLE 1** Document Revision History

Doc. Version	Description	Location(s)
2.21	Add info about Security Code No-match Filter and new associated Response Code.	Chapter 1 and Appendix A
	Added new certification test cases for Recycling Engine. Also, added new tests for Online Dupe Checking.	Chapter 2
	Added new Response Code for Invalid Report Group.	Appendix A
2.22	Clarify info for several 3DS related elements.	Chapter 4
	Change info about Online Dupe checking when id="".	Chapters 1 and 4
	Fixed and error in the first cert test for Recycling Advice.	Chapter 2
2.23	Fix error in Recycling engine Cert tests.	Chapter 2
2.24	Adding info for fraudFilterOverride element	Chapter 4
	Changes in Fraud Filtering Services (formerly Transaction Filtering)	Chapter 1
2.25	Added AmEx test case for AVS	Chapter 2
	Added sections about Litle SDK and AVS Filter	Chapter 1
	Added Response reason Code 319	Appendix A
2.26	Added info about new transaction type to update CVV2/CVC2/CID information for tokenized merchants. Also schema change for registerTokenRequest transactions.	Chapters 3 and 4 Appendix A
	Added note stating that the chargeback filter override (chargeback element) is not supported. also, removed text about this element from the Prior Chargeback Filtering section.	Chapters 1 and 4
2.27	Added Response Reason Code 401	Appendix A
2.28	Added merchantData element to echeckRedeposit and echeckVerification transactions.	Chapters 3 and 4
	Added info about Additional Response Header Error Messages.	Chapter 4 and Appendix A
	Added Info about timeout behavior for persistent connections.	Chapter 2
2.29	Corrections and modifications to several Certification tests.	Chapter 2
2.30	Added information associated and new elements associated using a Void transaction to halt automatic transaction recycling.	Chapters 1, 3, and 4
2.31	Added test info for using Void transaction to halt Recycling.	Chapter 2
	Minor text corrections in Tokenization sections.	Chapters 1 and 2

**TABLE 1** Document Revision History

Doc. Version	Description	Location(s)
2.32	Changed amounts in some Cert tests.	Chapter 2
	Added info about new surchargeAmount and terminalId elements.	Chapters 3 and 4
2.33	Added new Response Reason Codes 375 through 378.	Appendix A
	Removed "blank" AVS response from several test cases.	Chapter 2
	Added Note that terminalId is required for MasterCard POS transactions.	Chapter 4
2.34	Updated for new Recurring elements included in schema V8.18.	Chapter 4
	Updated enhancedData tables providing info about Level 2/Level 3 data requirements.	Chapter 4
2.35	Added info about new debtRepayment element, including new Response Code - 852.	Chapters 3 & 4; Appendix A
	Also added more Recurring engine elements. ( <b>NOTE:</b> Recurring Engine is still in development and not yet intended for use.)	Chapter 4

### **Document Structure**

This manual contains the following sections:

#### Chapter 1, "Introduction"

This chapter provides an introduction to transaction processing using LitleXML.

#### Chapter 2, "Testing Your LitleXML Transactions"

This chapter provides information concerning the testing and certification process, which you must complete prior to submitting transactions to the Litle production environment.

#### Chapter 3, "LitleXML Transaction Examples"

This chapter provides information concerning the LitleXML structure for transaction submission, as well as examples.

#### Chapter 4, "LitleXML Elements"

This chapter provides definitions and other information concerning each LitleXML element.

#### Appendix A, "Payment Transaction Response Codes"

This appendix lists all of the possible response codes and messages.

#### **Appendix B, "Credit Card Number Formats"**

This appendix provides information about credit card number formats and Mod-10 validation.

## **Documentation Set**

For additional information concerning the Litle & Co. application, see any of the following guides in the documentation set:

- Litle & Co. User Interface Guide
- Litle & Co. Chargeback XML and Support Documentation API Reference Guide (Legacy)
- Litle & Co. Chargeback API Reference Guide
- Litle & Co. Chargeback Process Guide
- Litle & Co. PayPal Integration Guide
- Litle & Co. Bill Me Later Integration Guide
- Litle & Co. PayFac API Reference Guide
- Litle & Co. Virtual Terminal User Guide
- Litle & Co. Pay Page Integration Guide
- Litle & Co. XML Differences Guide

- Litle & Co. Merchant Provisioner API Reference Guide
- Litle & Co. Secure Scheduled Reports Reference Guide

# **Typographical Conventions**

Table 2 describes the conventions used in this guide.

**TABLE 2** Typographical Conventions

Convention	Meaning		
	Vertical ellipsis points in an example mean that information not directly related to the example has been omitted.		
	Horizontal ellipsis points in statements or commands mean that parts of the statement or command not directly related to the example have been omitted.		
<>	Angle brackets are used in the following situations:		
	user-supplied values (variables)		
	XML elements		
[]	Brackets enclose optional clauses from which you can choose one or more option.		
bold text	Bold text indicates emphasis.		
Italicized text	Italic type in text indicates the name of a referenced external document.		
blue text	Blue text indicates either a hypertext link or an element name (in xml examples).		
monospaced text	Used in code examples and elsewhere to designate field/element names.		

## **Contact Information**

This section provides contact information for organizations within Litle & Co.

**Implementation Support** - For technical assistance to resolve issues encountered during the onboarding process, including LitleXML certification testing.

Implementation Contact Information

E-mail implementation@litle.com	
Hours Available	Monday - Friday, 8:00 A.M 6:30 P.M. EST

**Chargebacks** - For business-related issues and questions regarding financial transactions and documentation associated with chargeback cases, contact the Chargebacks Department.

Chargebacks Department Contact Information

Telephone	978-275-6500 (option 4)
E-mail	chargebacks@litle.com
Hours Available	Monday - Friday, 8:00 A.M 6:30 P.M. EST

**Technical Publications** - For questions or comments about this document, please address your feedback to the Technical Publications Department. All comments are welcome.

**Technical Publications Contact Information** 

E-mail	TechPubs@litle.com
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**Customer Experience Management/Customer Service** - For non-technical issues, including questions concerning the user interface, help with passwords, modifying merchant details, and changes to user account permissions, contact the Customer Experience Management/Customer Service Department.

Relationship Management Contact Information

<b>Telephone</b> 1-800-548-5326	
E-mail	customerservice@litle.com
Hours Available	Monday - Friday, 8:00 A.M 6:30 P.M. EST



1

## INTRODUCTION

The LitleXML data format supports two types of transaction submission methods – Online and Batch. With the Online method, you submit each transaction independently and receive a response in real-time. The Online method is used most often for Authorization and Void transactions. The Batch method enables you to submit multiple transactions simultaneously. Litle recommends the Batch method for all transaction submissions except Authorizations and Voids.

This chapter provides an overview of the LitleXML data format, including some basic XML coding requirements. Also discussed are the advantages of using batch processing for most of your transactional processing, duplicate transaction detection, report groups, and the various supported transaction types.

The topics discussed in this chapter are:

- The LitleXML Data Format
- Batch Transaction Processing
- Payment Integration Platform (Litle SDKs)
- Duplicate Transaction Detection
- Coding for Report Groups
- Sales Recovery Services
- Customer Insight Features
- Fraud Filtering Services
- Tokenization Feature
- eCheck Processing
- Healthcare Card Feature
- Supported Transaction Types

#### 1.1 The LitleXML Data Format

Although Litle & Co. supports transaction processing via many data formats, there are several advantages to using the LitleXML format. Some of the advantages are as follows:

- Easier Implementation, Operations, and Debugging Compared to fixed length or binary formats, the XML format is considerably easier for operations staff to read and edit, using virtually any text editor. This allows Litle's Implementation, First Line Support, and Customer Experience Managers to quickly communicate any issues and work with your own operations staff to make necessary corrections without worrying about line lengths, padding or encoding.
- **Fewer Downgrades** Since the LitleXML format allows you to explicitly tie deposits to their associated authorizations via the litleTxnId> element, your transactions qualify for the best interchange rates at a higher frequency than with formats that do not support this transaction cross-referencing.
- Simpler Capture (Deposit) and Refund Transactions Because the LitleXML format associates related transactions using the litleTxnId> element, our format does not require you to resubmit all of the authorization information on a deposit nor all of the deposit information on a refund. When you submit the unique transaction id, Litle & Co. automatically pulls the information from the original transaction. Most other formats require you to resubmit the related data with each transaction.
- Superior Reporting The LitleXML format allows you to separate your transactions into different categories by specifying a Report Group on each transaction. When accessing your data on the Litle Merchant Accounting System, this feature allows you to filter your financial reports by Report Groups, providing more granular detail based on a reporting hierarchy the Report Groups create. Most other formats restrict reporting categories to a batch or specific merchant id.
- Improved Chargeback Management Unlike most other formats where transactional relationships can be a "best guess" proposition, the LitleXML format explicitly ties related transactions, allowing you and Litle to see authorization-to-deposit and deposit-to-refund relationships with precision. This knowledge is indispensable when fighting chargebacks.
- **New Features** All new features introduced are first supported in the LitleXML format. In fact, some features may never be supported in other formats, since development is dependent upon a third party. For example, some features currently supported only in LitleXML are:
  - Auth/Sales Recycling Engine
  - Fraud Filtering Services
  - Automatic Account Updater
  - Chargeback Management API
  - PayPal
  - Customer Insights Response Data
  - Bill Me Later

#### 1.1.1 Communications Protocols

There are four communication protocols supported for the submission of Batch transactions to Litle & Co. for processing and one for Online submissions as shown in Table 1-1. For Batch submissions Litle recommends that you use one of the two FTP methods. Use the HTTPS Post method for Online transactions.

TABLE 1-1	Communication	Protocol	Support	Matrix
-----------	---------------	----------	---------	--------

Protocol	Encryption	Batch	Online
HTTPS Post	SSL	Supported	Recommended
FTP	PGP or GPG (open source)	Recommended	N/A
sFTP	SSH Key	Recommended	N/A

If you use the standard FTP method, you must use either the Pretty Good Privacy (PGP) or the open source GNU Privacy Guard (GPG) encryption for your submissions. Both of these encryption methods use key cryptography and support message authentication and integrity checking. The alternate method, Secure FTP (sFTP), uses Secure Shell (SSH) to secure the transmission.

## 1.1.2 General XML Coding Requirements

As part of the on-boarding process, you receive XML schema files from your Litle Implementation Consultant. Using those files and this document as a guide, you create the required XML documents for submission of your transactions. You should validate all XML you create using the supplied schema. Also, working with your Litle Implementation Consultant, you are required to perform various tests of your XML (see Chapter 2, "Testing Your LitleXML Transactions") prior to submitting transactions to the production environment.

In addition to the process outlined above, there are a few XML basics of which you should be aware.

- Encode all data using the UTF-8 format.
- Although it is not required, Litle recommends that when formatting your XML, you keep each element on its own line. This will aid in debugging situations where an error message specifies an issue in a particular line of XML code (for example, line 20).
- Be aware of special characters that require specific handling (see Table 1-2). For example, the less than (<) and greater than (>) symbols define element tags in the XML code. Using the entity names &lt; and &gt; instead of < and > prevents a browser from interpreting these characters as element brackets.

**TABLE 1-2** Coding for Special Characters

Character	Description	Entity Reference (case sensitive)		
<	less than	<		
>	greater than	>		
"	quotation	"		
	apostrophe	'		
&	ampersand	&		

#### 1.1.3 Other XML Resources

There are several Internet sites that provide both reference and educational information that may help you when implementing your XML. A few of these sites are:

- http://www.w3schools.com/xml/xml\_syntax.asp
- http://www.w3.org/
- http://www.utf-8.com/

## 1.2 Batch Transaction Processing

Batch processing involves a group of transactions submitted in a single file. In the case of a LitleXML Batch the parent or root element is the litleRequest> element. A single litleRequest> can contain many batches and each batch can contain multiple transactions. Litle & Co. recommends that you use Batch processing for all transaction types except Authorizations and Voids (Online only).

Some of the advantages of using Batch processing are:

- **Better Performance** Litle & Co. optimizes batch processing by processing multiple transactions in the batch simultaneously. This allows you to process thousands of transactions quickly without writing complicated logic or managing complicated processes.
- Easier Reconciliation When processing a batch, all transactions within that batch post on the same day. In the case of Online transactions, you could submit two transactions at the same time and one could post today and the other tomorrow. This can cause confusion in your accounting process.
- Easier Error Recovery A batch processes as a single unit, thus if you experience any system or communication issue while processing a batch, you can easily determine if the file was processed. With Online transactions, determining which individual transactions were not processed can be more difficult.

## 1.3 Payment Integration Platform (Litle SDKs)

In order to facilitate integration to the Litle platform, Litle & Co. provides several language specific SDKs (Software Development Kits). The developers page on our website (http://www.litle.com/developers) provides links to SDK libraries for several popular languages, including:

- PHP
- Ruby
- Java
- .NET

In addition to the SDKs, Litle provides example of each supported transaction type, as well as demonstration applications. Once you install the library appropriate to your language, the Litle Sandbox, which functions as an emulator of our production environment, is available to validate your transaction format.

## 1.4 Duplicate Transaction Detection

Litle & Co. performs duplicate transaction checking for both Online and Batch transaction submissions. This section discusses the different checking methodologies used depending upon the type of submission.

#### NOTE:

For tokenized transactions, the token is used in place of the card numbers by the Duplicate Transaction Detection process.

For PayPal transactions a combination of the PayPal Id + the (consumer's) email is used by the Duplicate Transaction Detection process.

## 1.4.1 Batch Duplicate Checking

When processing a Batch file, the Litle system acts to detect duplicate transactions for the following transaction types: Authorization, Auth Reversal, Capture, Force Capture, Capture Given Auth, Credit, Sales, eCheck Credit, and eCheck Sales.

For each of these transaction types, the application compares the transaction type, transaction amount, the orderId element from the request, credit card number, and credit card expiration date against transactions in other batch files processed within the previous five days. If the characteristics of the new transaction match a previously processed transaction, the system marks it as a duplicate.

IMPORTANT: If you do not include a value for the id attribute in the request, Duplicate Checking is not performed.

The system only performs duplicate detection against valid transactions from the previous five days. For example, if an Authorization request matches a declined Authorization from the previous day, the system would not count it as a duplicate, because the declined Authorization was not a valid Authorization.

Also, a Batch file must be processed completely to be included in the previous five days of data. For example, if multiple Batch files you submit are processing simultaneously, the system will not compare the transactions in one batch with the transactions in the other, because neither has completed processing. For this same reason the system cannot detect duplicate transactions within the same Batch file.

If the system detects ten consecutive duplicate transactions or if the number of duplicate transactions is greater than or equal to 25% of the total transactions in the batch, the system flags the batch file as a duplicate. In this case, Litle will contact you so you can decide to discard the file as a duplicate or to continue processing the file.

#### 1.4.2 Online Duplicate Checking

When processing an Online transaction, the Litle system acts to detect duplicate transactions for the following transaction types: Capture, Force Capture, Capture Given Auth, Credit, Sales, eCheck Credit, eCheck Sales, eCheckVoid, and Void.

For most transactions the system compares the transaction type, the id attribute from the request, and the credit card number against other Online transactions processed within the previous two days. For transactions that reference other transactions (for example, a deposit referencing an authorization or a refund referencing a deposit), the system compares the transaction type, id attribute, and the card number from the referenced transaction (i.e. the transaction identified by the litleTxnId> element) against other Online transactions processed within the previous two days.

#### MPORTANT:

For Online transaction, if you do not include the id attribute in the request, or if you set the id attribute to null (id=""), duplicate Checking is not performed.

The system only performs duplicate detection against valid transactions. For example, if a Capture request matches a declined Capture from the previous day, the system would not count it as a duplicate, because the declined Capture was not a valid transaction.

#### Note:

While it is uncommon, under certain circumstances network latency may cause a duplicate Sale transaction to go undetected as a duplicate. This can occur if you submit a second, duplicate Sale transaction while the response from the network for the Authorization portion of the first transaction is sufficiently delayed such that the first Sale has not been recorded as a valid transaction in the Litle system.

If you elect to submit Online Sale transactions, Litle recommends a timeout setting of not less than 60 seconds to reduce the chances of undetected duplicate Sale transactions.

If the system determines a transaction to be a duplicate, it returns the original response message with the duplicate attribute set to **true** (see example below). This attribute indicates that the response was returned on a previous transaction.

#### Note:

If you do not receive a response for a submitted transaction, Litle recommends you re-send the transaction. If Litle received and processed the original transaction, you will receive a duplicate response. If Litle did not receive the original transaction, the new submission will be processed.

#### **Example:** captureResponse for a duplicate Capture

litleOnlineResponse version="8.19" xmlns="http://www.litle.com/schema"
response="0" message="Valid Format">

#### **Coding for Report Groups** 1.5

You use Report Groups (reportGroup attribute) to separate your transactions into different categories, so you can view the financial reports by your specific report group names. If you are unsure what groupings to use, your Customer Experience Manager can help you determine the best practice for your business.

CAUTION: Creation of an excessive number of Report Groups (in excess of 250) will impact the amount of time require to compile various reports in the Litle UI. Report Groups are intended to allow you to segregate transactions by logically grouping them into the different segments of your business.

> Report Groups are not intended to track sales or marketing programs that exist for limited times. For this type of tracking, Litle provides other transaction tagging methods detailed in Additional/Alternate Methods of **Tagging Transactions on page 11.**

#### **Example: Report Groups**

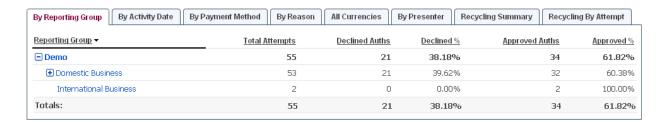
The merchant, Demo, wants to separate their domestic and international sales information. To do this the company submits all domestic transactions using reportGroup = "Domestic Business", and all international transactions using reportGroup = "International Business". When they access the Authorization Report in the Litle UI using the By Reporting Group tab, the transactions would be separated as shown in Figure 1-1.

#### NOTE:

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The reportGroup attribute is case and space sensitive. A reportGroup = "Picture Frame" is a different report group than a reportGroup = "pictureframe".

FIGURE 1-1 Report Group Example - 2 Groups



The plus sign next to the Domestic Business report group signifies that there are child groups present. When fully expanded (see Figure 1-2), the UI shows a report group hierarchy with information for the Domestic Business group further separated into Service A and Service B groups and Service A containing two additional child groups. If you find it necessary to establish this type of nested hierarchy, your Litle Implementation Consultant will assist you.

FIGURE 1-2 Report Group Example - Expanded to Show Child Groups

By Reporting Group By Activity Date	By Payment Method By Reason	All Currencies	By Presenter	Recycling Summary	Recyc	ling By Attempt
Reporting Group ▼	<u>Total Attempts</u>	<u>Declined Auths</u>	Declined %	Approved A	uths_	Approved %
<b>□</b> Demo	55	21	38.18%	5	34	61.82%
■ Domestic Business	53	21	39.62%	5	32	60.38%
☐ Service A	23	14	60.87%	5	9	39.13%
Product 1	19	14	73.68%	6	5	26.32%
Product 2	4	0	0.00%	6	4	100.00%
Service B	30	7	23.33%	6	23	76.67%
International Business	2	0	0.00%	6	2	100.00%
Totals:	55	21	38.18%	6	34	61.82%

## 1.5.1 Additional/Alternate Methods of Tagging Transactions

If you are using schema version 7.x or above you can use the merchantData element and its children to tag transactions (Authorization, Sale, Credit, Force Capture, Capture Given Auth, eCheck Sale, and eCheck Credit) with additional information. The three children of merchantData: campaign, affiliate, and merchantGroupingId, allow you to designate transactions as members of different groups enabling a deeper analysis of sales patterns.

#### NOTE:

The merchantData element and its children were add to the schema in V8.8 and backported to V7.3. If you are using a schema version between 7.0 and 8.7, you can code for the use of these elements and still pass the LitleXML validation.

For example, if the merchant from the previous example were trying a new sales initiative for Product 2 during the month of September. They plan to run ads in Boston and New York to test the new offering. To allow a deeper analysis of sales resulting from the new campaign, they can add the campaign element with a value of "September Ads" to the transactions originating in both test market. They can also include the merchantgroupingId with values that reflect the city where the order originates. By exporting either the Session report or the NSS by Transaction report from the Litle UI, the company can sort their sales data based upon these fields and gain a better understanding of the effectiveness of the sales campaign.

#### NOTE:

The transaction tagging elements described above appear in the exported Session and NSS by Transaction reports. They are also visible within the Litle UI in the new Transaction Detail reports.

## 1.6 Sales Recovery Services

The Litle Sales Recovery Services are a suite of products designed to increase customer lifetime value, while improving cash flow and reducing the risk of customer account cancellations. This set of services include: Recovery Engine, Recycling Engine, Recycling Advice, and Automatic Account Updater.

#### 1.6.1 Recovery Engine

The Litle Recovery Engine is a bundle of services that include both Automatic Account Updater (Full Service) and Recycling Engine. By combining these two managed services into a single bundle, Litle & Co. simultaneously increases your approval rates, optimizes customer lifetime value, and improves your cash flow, while reducing the cost of implementing the individual features separately in terms of IT resources. For additional information about the capabilities included in this bundle, please refer to Recycling Engine on page 13, and (AAU) Full Service Option on page 16.

## 1.6.2 Authorization/Sale Recycling

Authorization recycling is the process of retrying declined authorization attempts. Every merchant, especially those with a business model that uses recurring or installment payments, should devise a strategy for dealing with declined authorizations. As part of optimizing their operations, merchants must devise plans for both the timing and number of recycling attempts before contacting the cardholder or risking interruption of service. If a merchant does not recycle enough, they risk losing customers and revenue; whereas, if the merchant recycles too often, they risk increasing their total cost of payments. Implementing an optimal recycling strategy aids customer retention and therefore yields higher revenues, while lowering the costs of payment acceptance and improving cash flow.

Litle & Co. offers two options to help you with your recycling: Recycling Engine and Recycling Advice. Both offerings have the following benefits:

- Increases approval rates
- Shortens time to approval, improving cash flow
- Reduces the number of authorization retries
- Lowers the risk of account/service cancellation

### 1.6.2.1 Recycling Engine

The Litle Recycling Engine is a managed service that automatically retries declined authorization attempts on your behalf. It requires little or no IT investment on your part. Also, implementing the Litle service removes the need to plan your own recycling strategy.

In order to determine the most effective recycle timing, Litle performs statistical analysis of past recycling attempts across our entire merchant portfolio. This analysis examines many factors, including method of payment, response codes, and transaction amount among others, to determine the optimum intervals between attempts to obtain a successful authorization. When you receive a declined Authorization, the Litle system automatically queues the transaction for a retry at a designated time. Recycling of the Auth continues until it is either successful or the algorithm determines that it is no longer advantageous to retry.

#### NOTE:

For Visa transactions, the recycling Engine will retry declined Authorizations a maximum of 4 times within 16 days, as limited by Visa regulations.

Also, the Recycling Engine will not recycle transactions certain declined with (for example, response code 328 - Cardholder requested that recurring or installment payment be stopped). The recycleEngineActive> element in the response files indicate if the transaction is being handled by the Recycling Engine.

Litle provides the results of the recycling efforts to you in a batch file posted daily to an FTP site. This file contains transactions that either approved or exhausted the recycling pattern on the previous day. If you submit an Authorization for a transaction in the recycling queue, Litle returns the response from the last automatic recycling attempt. To halt recycling of a particular transaction, submit either an Authorization reversal transaction, if the original transaction was an Auth, or a Void transaction, if the original transaction was a Sale (conditional deposit).

#### **Transaction Signature**

The Litle Recycling Engine analyzes each Authorization or Sale request message to determine if it is a new request. The result of the analysis determines if the transaction should be added to the recycling pool upon decline or if the system should intercept the transaction to prevent a duplicate transaction entering the recycling pool. To perform the analysis, the Litle system checks the transaction signature. depending upon your configuration, the transaction signature can be:

- Value of the <recycleId> element
- Value of the <orderId> element
- Values of the <orderId>, <number>, and <amount> elements

#### **Additional Configuration Options**

The Litle Recycling Engine allows you the additional flexibility of excluding certain transactions from automatic recycling. You can exclude transactions manually by including the recycleBy>

element set to **None**. There are also global controls that allow you to exclude transactions based upon either submission by a particular presenter, or based upon the transaction type (authorization or sale). Please consult your Customer Experience Manager about the global options, since they must be configured in your Litle Merchant Profile.

## 1.6.3 Recycling Advice

If you choose to schedule and re-attempt failed authorizations on your system, Litle & Co. can provide recycling advice designed to optimize the number of attempts needed to receive an approved authorization. In this case, Litle performs the same data mining as with the Recycling Engine the difference being that merchants utilizing this feature receive the advice as part of the response message for declined Authorization or Sale requests. You must then schedule the next authorization attempt using the advice provided.

NOTE: You must upgrade to LitleXML schema V8.6 or above to receive Recycling Advice.

## 1.6.4 Authorization Recycling Best Practices

In order for Litle to provide optimum recycling advice, merchants using this feature should adhere the following best practices:

- The recycled transactions should maintain the identical information as the initial declined transaction for the following fields/elements and attributes:
  - Authentication information <user> and <password>
  - Report group attribute reportGroup = "UI Report Group"
  - Order Id <orderId> or Recycle Id <recycleId>
  - Amount <amount>
  - Card data (or token data) <type> and <number> (or <type> and tleToken>
- If you are a recurring merchants who charges the same card/same amount each billing cycle, use a new <orderId> or < recycleId> at the start of the billing cycle, but keep the same <orderId> or < recycleId> when recycling a charge.
- If different entities within your organization use different billing cycles, each should have its own merchant identifier (MID).
- Inform your Litle Customer Experience Manager of your billing cycle (in days) and any updates to it.

## 1.6.5 Automatic Account Updater Service

Credit and debit card numbers change for a variety of reasons including card expirations, card product type upgrades, portfolio conversions, and compromised account numbers among others. For merchants who offer services that are billed on a recurring or installment basis (for example, web hosting, gym memberships, specialized social networking, career services, monthly donation plans, etc.) out-of-date payment information can result in lost revenue, involuntary churn and decreased customer satisfaction.

Prior to the development of the Automatic Account Updater service, the standard method for merchants to obtain updated account information was to submit a batch file containing existing card information, requesting that Litle check for updates. Typically, merchants request updates for customer accounts scheduled to be billed in the next billing cycle. This legacy method is a relatively slow process, requiring several days for Litle to accumulate responses from the card networks/issuers and then to make the response file available to the merchant. Merchants must then update their billing systems with the new information, requiring IT processing cost. Failure to update their files can result in multiple requests (and charges) for the update information, as well as delays in or lost revenue, higher Authorization expenses, and possibly chargebacks when old account information is used.

With the new Litle & Co. Automatic Account Updater service you can shift the workload of obtaining and maintaining updated account information to Litle. Utilizing configurable scheduling algorithms, Litle initiates account update requests on your behalf and then stores the updated card information in its systems, effectively eliminating the standard file-based process completely. Once updated information is stored in our database, you submit billing transactions normally and Litle repairs the card information before submitting it to the networks for authorization.

This section discusses the following topics:

- Automatic Account Updater Service Options
- Merchant Requirements
- Automatic Account Updater Features

## 1.6.6 Automatic Account Updater Service Options

With a traditional account updater implementation, you submit update requests. These requests are then parsed into separate groups based upon the card type and forwarded to Visa, MasterCard, and Discover as required. When all responses have returned from the card networks, a response file is created and made available to you. The entire cycle from submission to availability of the response file may take up to five days. Once you have the update information, you can update your database and (re-)submit the transaction using the new account information. From creating queries that search your database for cards approaching their billing dates, to the coding required to parse the returned information correctly and update your databases, a significant investment of resources and time on your part is required.

The two Automatic Account Updater options are:

- Full Service Option
- Match and Repair Option

#### Note:

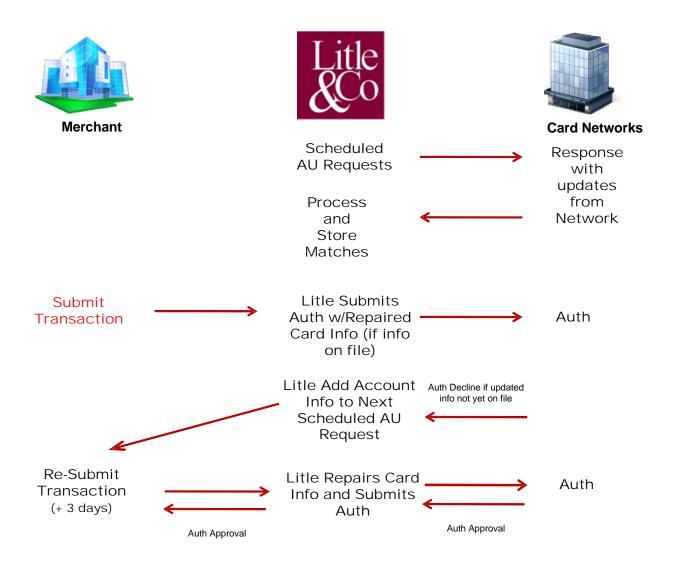
It is always a best practice to link transactions through the litleTxnId element whenever possible. This is especially important when using Automatic Account Updater and the account number has changed. For example, if you submit a Sale transaction using account number A and once AAU repairs it to use account number B, the transaction is accepted. A week later you submit an orphan refund (does not reference the litleTxnId) using account number A. The refund may not get applied to the correct account, because there was no repair, and a chargeback may ultimately occur.

### 1.6.6.1 Full Service Option

If you select the Full Service option (see Figure 1-3), Litle automatically initiates account update queries to the card networks on your behalf, utilizing configurable scheduling algorithms and rules, including the occurrence of declined Authorizations. Litle records and stores any matches returned by the networks in a merchant specific database.

When you submit a transaction, our system checks the submitted card data against our database of updated information and repairs the information if needed. Since with this option Litle does not transmit the update information to you, you can continue to submit transactions using the original card information and Litle take responsibility for maintaining the updates. There is no requirement for you to ever update the card information in your system.

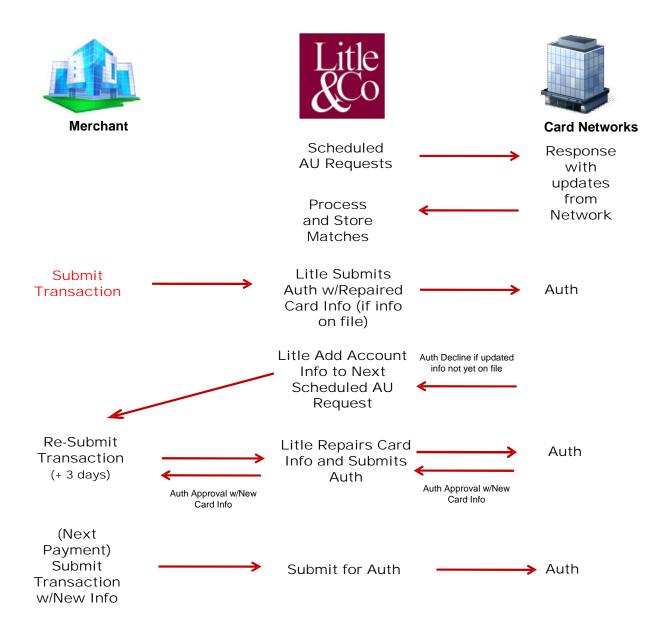
FIGURE 1-3 Full Service Option



### 1.6.6.2 Match and Repair Option

With the Match and Repair Automatic Account Updater option (see Figure 1-4), Litle performs all actions described in the Full Service option, but also returns the updated information to you in the LitleXML response messages. This allows you to update your database with the new information, using the repair service as a fallback, such as for cases where subsequent purchase by the same consumer occurs prior to you updating the account information in your database.

FIGURE 1-4 Match and Repair Option



### 1.6.6.3 Merchant Requirements

In order to use the Litle Automatic Account Updater service, you must first apply for membership to the following:

- MasterCard Automatic Billing Updater
- Visa Account Updater
- Discover Account Updater (not required by Discover for Litle acquired merchants)

Your Automatic Account Updater Welcome Kit includes the required application forms. If you have any questions about these forms, contact your Litle Customer Experience Manager, who can walk you through the application process. Approval from Visa and MasterCard typically takes between 10-15 business days. Normally, merchants are approved without issue; however, you can be declined for a variety of reasons. For example, merchants on a risk mitigation program typically are not accepted.

Note:

Visa does not allow merchants with SIC numbers 5962, 5966, 5967, or 7995 to participate in their Account Updater service. MasterCard has no restrictions against any specific MCC numbers

### 1.6.6.4 Automatic Account Updater Features

The Litle Automatic Account Updater service can include the following features depending upon the implementation option you select:

- Litle initiates requests for updated account information to card networks based upon your billing cycle.
- Litle initiates requests for updated account information following certain failed Authorization attempts.
- All updated card information stored (per merchant) in our secure database.
- Automatic repair/replacement of outdated information with updated information in new Authorization/Sale transaction submissions.
- Return of the updated account information in the LitleXML response message when auto-repair occurs.
- Maintenance of card information history, so that the system can repair a card even if multiple updates have occurred during the card's billing lifecycle.
- All linked (to an Authorization) transactions will use the updated account information from
  the repaired parent transaction, including Captures, Refunds, and Reversals. If a re-Auth is
  needed on an attempted capture due to an expired authorization, the system uses the updated
  account information.
- Integration with Litle Vault for merchants utilizing Litle's tokenization solution.
- Return of Extended Response Codes in the LitleXML response messages.

## 1.7 Customer Insight Features

The Customer Insight set of features are designed provide additional information to merchants, allowing them to improve authorization approval rates and lower the total cost of payments. Currently, Litle & Co. offers four features in the Customer Insight family of features: Prepaid Indicator, Affluence Indicator, Issuer Country Indicator, Card Type Indicator.

## 1.7.1 Prepaid Indicator

Studies show that branded prepaid cards are growing in popularity with consumers. These cards are available in the form of non-reloadable Gift cards, Consumer Rebate/Incentive cards, and Teen cards among others. The Prepaid Indicator feature acts to determine if the submitted card is a prepaid card. If so, the system returns the type element with a value of Prepaid and the availableBalance element stating the outstanding balance remaining on the card (if available).

Knowing that the card is prepaid, as well as the available balance, at the time of sale is especially useful for merchants engaged in recurring payment, installment payment, or deferred billing scenarios. Merchants in these situations can use the information made available by this feature to make intelligent decisions concerning the profitable management of prepaid card usage by avoiding several factors that may contribute to lost revenue, while taking advantage of other opportunities that may add to revenue and enhance the customer experience.

For example, one possible situation merchant can avoid is fraudulent deferred/installment payment purchases made with a prepaid card that does not have enough available balance to cover the subsequent payments. With the available balance known, merchants can determine if the card can meet the required payment structure. If the card's balance does not meet the required threshold, the merchant can request another payment method, which may result in eliminating fraudsters, while retaining legitimate customers.

Another more common situation occurs when the consumer is unaware of the card balance. If the transaction is rejected due to inadequate balance, perhaps repeatedly, it could result in an unsatisfied customer and an abandoned purchase. Alternately, the card could have slightly more that the required balance, which the consumer would spend, if they had the knowledge. If the available balance is insufficient for the purchase, the merchant can obtain a second or alternate payment method. If the balance is higher than required for the purchase, the merchant may be able to encourage additional purchases.

In addition to indicating if the submitted card is a prepaid card and the available balance, this feature includes information about whether the card is reloadable and the specific type of prepaid card (i.e., TEEN, GIFT, PAYROLL, etc.). You can use this information to further refine your sales and marketing strategies.

### 1.7.2 Affluence Indicator

Visa, MasterCard, and Discover provide enhanced credit card products for consumers with high disposable incomes and high card spending. These cards encourage usage by offering the cardholders additional benefits usually including reward incentives, no pre-set spending limit, higher authorization approval rates, faster access to a customer service representatives, and dedicated chargeback resolution support.

Litle & Co. analysis of payments data indicates that consumers using these cards types typically spend more per order than consumers using traditional credit and debit cards. The Affluence Indicator feature provides the ability for merchants to segment their consumers based on the affluence level as determined by the issuer. Within the LitleXML Authorization response, consumers using these enhanced card products are classified either as Mass Affluent or Affluent. Based upon the specific card type, high income consumers are classified as Mass Affluent, while high income-high spending consumers are classified as Affluent.

Having this information at the time of authorization, allows merchants the opportunity to adjust their sales approach to the needs and spending patterns of the consumer, potentially generating additional sales. Having this information on file for later analysis also may provide the opportunity for targeted marketing campaigns and future sales.

## 1.7.3 Issuer Country Indicator

Knowing the country of the Issuing bank helps you in two respects. From a sales and marketing standpoint, this knowledge allows you to better analyze the purchasing patterns of your customers based upon their country of origin. You can then tailor marketing campaigns to take advantage of this geographic information. Likewise, you can use this information to analyze the successfulness of tailored campaigns.

The second advantage to having this information readily available is that you can use it to help determine possible patterns of fraud. With this knowledge in hand, you can use the Litle International Card Filtering feature to limit your exposure to international fraud originating in particular geographic locations.

## 1.7.4 Cardholder Type Indicator

The Card Holder Type indicator is an additional data point Litle & Co. can provide as part of the Customer Insight family of features. This indicator returns an element indicating whether the submitted card is a commercial or consumer card, providing you with additional data useful when analyzing sales patterns and/or planning marketing campaigns.

## 1.7.5 Flow Control for the Insights Feature

Litle & Co. provides flow control functionality that allows you to limit which transactions the system examines for which it returns indicators. Currently there are two flow control options: by Presenter and by Order Source. The by Presenter option allows you to limit the transactions considered for indicators to only those from one or more presenters. The by Order source option allows you to include or exclude transactions with a particular Order source tag (orderSource element in the XMl request). You can combine these Flow Controls. For example, you could establish a flow control such that the system would consider all transaction from Presenter A except those with an Order source of recurring.

## 1.8 Fraud Filtering Services

Litle & Co. offers a comprehensive suite of Fraud Filters for your use as part of an overall fraud prevention and mitigation strategy. You can apply each of the filters individually or in combinations by defining Filtering Rules (see Application of Filters - Filtering Rules on page 26). As part of the rule definition, you can define the application of the rules based upon MID, Report Group, Billing Descriptor, or order source. Litle & Co. currently offers six types of card filtering services that may aid you in reducing certain types of fraud: Prepaid Card Filtering, International Card Filtering, Prior Chargeback Filtering, Security Code No-match Filtering, Prior Fraud Advice Filtering, and Fraud Velocity Filtering.

You can disable all filtering for a specific transaction by setting the fraudFilterOverride element to **true**. This setting take precedence over all other filter override settings.

## 1.8.1 Prepaid Card Filtering

Just because a credit card network/company returns a valid authorization for a purchase does not always mean that completing the transaction is in your best interest. There are several reasons you may wish to decline a sale on a particular card at a particular time. Many merchants engaged in recurring payment, installment payment, or deferred billing experience some loss due to fraud schemes that make use of prepaid cards. Consider the case of a consumer using a prepaid card with a balance of \$100 to make a purchase that involves an initial charge of \$50 followed by three installments of \$50 each. The authorization would be approved for the initial transaction, and the card might have adequate balance for an additional charge, but if the consumer was attempting to defraud the merchant or simply used the card for other purchases, the card may not have sufficient balance for any additional payments. While the Prepaid Indicator feature provides you with the information necessary to make a decision at the time of the sale, and to request a secondary or different payment method, instead you may wish to have Litle filter these transactions automatically when you send the Authorization transaction.

If you elect to use the Litle & Co. Prepaid Card Filtering Service, you can select one of two methods of implementation. Using the first filtering method, our system declines all Authorization and Sale transactions when the consumer uses a prepaid card. In this case, if you are using LitleXML schema version 8.3 or above, the system returns a Response Reason Code of **309 - Restricted Card - Prepaid Card Filtering Service**. If you use LitleXML version 8.2 or below, the system returns a Response Reason Code of **322 - Invalid Transaction**. This method also allows you to disable the filtering logic on a transactional basis by including the cprepaid> element set to a value of **false**, thus allowing you to accept a prepaid card for these transactions.

The second method of implementing the Prepaid Card Filtering Service is to use it only on selected transactions. To enable the filter on a particular transaction, set the cprepaid element set to a value of **true**. This method would be useful to a merchant who offers products with both one-time payments and installment payments. For products involving a single payment, you may want to allow the use of prepaid cards, while for the product with multiple payments you may want to filter the use of prepaid cards.

#### NOTE:

Within either implementation method, you can elect to filter all prepaid cards, or only non-reloadable prepaid cards. Please consult your Litle Implementation Consultant for additional information about setting these global parameters.

## 1.8.2 International Card Filtering Service

An examination of your historical fraud data may show a high percentage of fraudulent transactions originating with certain international cards. You can limit your exposure to this type of fraud by taking advantage of the Litle & Co. International Card Filtering Service. This feature allows you to filter MasterCard and Visa cards originating in either all foreign countries or selected foreign countries based upon the country of the card issuer.

If you elect to use this feature, when you submit an Authorization/Sale transaction, the Litle system determines the country of origin of the card. If the card originates outside the United States and you have elected to filter all international cards, the system declines the transaction. Likewise, if you have elected to filter a specific country or countries and the card originates from a designated country, the system declines the transaction. If you are using LitleXML schema version 8.3 or above, the system returns a Response Reason Code of **312 - Restricted Card - International Card Filtering Service**. If you use LitleXML version 8.2 or below, the system returns a Response Reason Code of **322 - Invalid Transaction**.

You can override your settings on a transactional basis by including the <international> element set to **false** when you submit the Authorization/Sale transaction. In this case, the system ignores the filtering service and processes the transaction normally.

## 1.8.3 Prior Chargeback Filtering

If you elect to use the Chargeback Filter Service, there are two configuration options. You can elect to filter all transactions for which you received a chargeback, or you can elect to filter only the subset of transactions for which you received a fraud related chargeback (determine by the associated chargeback reason code). In both cases, the Litle system checks your historical data to see if you have received an applicable chargeback from the same account within the last 90 days (configurable). When a transaction is filtered, the system returns a Response Reason Code of **308** - **Restricted Card** - **Chargeback**.

## 1.8.4 Security Code No-Match Filter

The 3- or 4-digit security code was added by the card brands to act as a verification that the person ordering your product in a card-not-present environment has physical possession of the card. While this validation can be a useful anti-fraud tool, typically, the issuing banks do not decline the transaction based upon a failure to match the security code. Declining the transaction is left to the discretion of the merchant.

#### Note:

The Security Code No-Match filter does not apply to American Express transactions, since American Express declines the transaction when the code does not match. Transaction declined by American Express for a failure to match the security code use the Response Reason Code of 352 - Decline CVV2/CID Fail.

Similarly, if Visa, MasterCard, or Discover decline a transaction based upon the security code results, the filter is not applied and the transaction response contains the 352 reason Code.

If you elect to use the Security Code No-Match Filter Service, the Litle system takes action only if the submitted authorization/sale transaction is approved by the issuer, but includes a no-match code for the CVV2/CVC2/CID card validation check. In this case the transaction is declined with a Response Reason Code of **358** - **Restricted by Litle due to security code mismatch**. The Litle system also issues an Auth Reversal transaction on your behalf to remove the funds hold on the account.

## 1.8.5 Fraud Velocity Filtering

Often, when a person attempts to use a stolen credit card successfully, they will follow the initial purchase with a number of additional purchases within a short period of time. If you elect to use the Fraud Velocity Filter, the Litle system filters the transaction based upon the number of previously approved Auth/Sale transactions for the same account within an configurable time period. Both the number of approved Auths/Sales and the time period are configured in the Litle Merchant Profile. The default time period is 10 days (240 hours).

If you are using LitleXML V8.9 or above, the system returns a Response Reason Code of **315** - **Restricted Card** - **Auth Fraud Velocity Filtering Service**. If you use LitleXML version 8.8 or below, the system returns a Response Reason Code of **322** - **Invalid Transaction**.

## 1.8.6 Prior Fraud Advice Filtering

Litle & Co. maintains a database of Fraud Advice information received from the Visa and MasterCard networks for transactions you processed in the last 200 days. If you use the Prior Fraud Advice Filter, the Litle system compares the account information from the new transaction against the database of accounts with prior Fraud Advice and filters the transaction if there is a match.

If you are using LitleXML schema version 8.11 or above, the system returns a Response Reason Code of **318 - Restricted Card - Auth Fraud Advice Filtering Service**. If you use LitleXML version 8.10 or below, the system returns a Response Reason Code of **307 - Restricted Card**.

### 1.8.7 AVS Filter

One of the fraud prevention tools provided by the all card networks is an Address Verification System. By submitting the customer's address information in the billToAddress section of the LitleXML message, you can verify that the address/zip code supplied by the consumer matches the issuer's records. The card networks, however, do not decline transactions based upon the failure to match the address or zip code. Using the Litle AVS Filter, you can filter potentially fraudulent transactions based upon failure to match any of the following:

- the address
- the zip/postal code
- the address + zip/postal code (ANDed)
- the address or zip/postal code (ORed).

If you are using LitleXML schema version 8.13 or above, the system returns a Response Reason Code of **319 - Restricted Card - Fraud AVS Filtering Service**. If you use LitleXML version 8.12 or below, the system returns a Response Reason Code of **322 - Invalid Transaction**.

## 1.8.8 Application of Filters - Filtering Rules

NOTE:

Filter Rules are defined as part of your Merchant Profile. Please consult with your Customer Experience Manager and/or your Implementation Consultant concerning the provisioning of Filter Rules.

While you can have all submitted transactions flow through the Litle Fraud Filtering Service, you likely want to exercise a finer control over the application of the filters based upon a particular product, service or other criteria. The Litle system provides you the flexibility of restricting which transactions are submitted to the filtering service and which filters the system applies to which groups. This is accomplished by defining Filtering Rules.

For each Filtering Rule you first define a subgroup of transactions by selecting one of the following Flow Selectors: Report Group, Billing Descriptor, orderSource, or MID. Only one selector can be applied per rule. After selecting a particular Flow Selector, you then select which filters to have applied to that subset of transactions. You can define the Filter Rules so that filters are ORed (transaction filtered when any one of the filters conditions met), or ANDed (transaction filtered when multiple filter conditions met). Table 1-3 defines five rules that a merchant might define.

**TABLE 1-3** Example - Fraud Filtering Service Rules

Filter	Flow Selector	Filters
1	Report Group="XYZ"	Prepaid
2	Report Group="XYZ"	International
3	orderSource="recurring"	Prepaid + Prior Chargeback
4	orderSource="ecommerce"	Fraud Velocity + Security Code No-match
5	Billing Descriptor = "GoldMember"	Prepaid + International

Table 1-3 defines five Filter Rules that a merchant might use. These rules would be applied as follows:

- Filters 1 and 2 are applied to the subset of transactions that are members of Report Group XYZ and use the Prepaid and International Filters. Since the Filter Rules are defined separately, the rules are ORed. So, if a transaction uses either a Prepaid card or a card of International origin, the transaction is filtered.
- Filter 3 is applied to the subset of transactions that have an orderSource value set to recurring. These transactions are filtered only if both the criteria for the Prepaid Filter AND the Prior Chargeback Filter are met.
- Filter 4 is applied to the subset of transactions that have an orderSource value set to ecommerce. These transactions are filtered only if both the criteria for the Fraud Velocity Filter AND the Security Code No-Match Filter are met.
- Filter 5 is applied to the subset of transactions that have an Billing Descriptor value set to GoldMember. These transactions are filtered only if both the criteria for the Prepaid Filter AND the International Filter are met.

### 1.9 Tokenization Feature

Tokenization is the process by which a credit card number or eCheck account number is replaced by a reference number, referred to as a token. Unlike the card or account number, you can store the token on your system without concern of a security breach exposing critical customer information. Litle & Co. stores the information in a secure vault and accesses it only when you submit a transaction using the supplied token.

NOTE: You must be enabled for card tokenization in order to use the eCheck tokenization feature.

In the case of credit cards, since you do not store the customer's account information, the scope of PCI requirements to which you must comply may be minimized. This may greatly reduces the cost of compliance and may limit your liability if your systems are breached.

Note: Litle & Co. recommends you consult your own PCI Compliance and Legal departments to determine the specific advantages of tokenization for your company.

This section discusses the following topics:

- How Tokenization Works
- Litle Token Formats
- Obtaining Tokens
- Supported Token Transactions

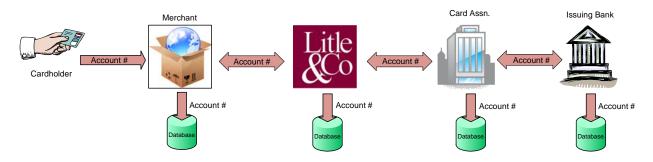
NOTE: Information about the use and integration of the Litle Pay Page is contained in the Litle & Co. Pay Page Integration Guide.

#### 1.9.1 How Tokenization Works

In a non-tokenized environment, customer data, including the card/eCheck account number, is handled and stored by multiple parties for each transaction. From a merchant standpoint, they receive the information, store it in their own database, and transmit it to their processor with the transaction request, as Figure 1-5 shows for card information. While the access and transmission of the data may occur a single time, as in the case of a Sale transaction, frequently the data is transmitted multiple times in order to complete a single sale, as in the case of an Auth followed by a Capture or several partial Captures. The local storage and repeated transmission of the information creates additional possible breach points, where the information might be compromised by a malicious third party.

**Tokenization Feature** 

FIGURE 1-5 Card Information Flow in Non-Token Environment



In a tokenized environment customer data is ideally transmitted a single time and is never stored locally by the merchant, as Figure 1-6 shows for card data. Once the account number is registered, using either a registerTokenRequest or by submitting it with any supported transaction, Litle returns a token. You store the token locally and use it for all future transactions concerning that account. Litle takes responsibility for storing and safeguarding the account information.

NOTE: The difference between card data flow and eCheck data flow is that the entities upstream of Litle & Co. are different. The principles remain the same from a merchant standpoint.

FIGURE 1-6 Card Information Flow in Tokenized Environment

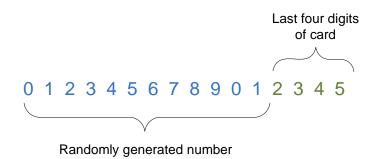
Note: Depending upon implementation, the use of a pay page can allow the account information to come directly to Litle, so the merchant handles the token only.

### 1.9.2 Litle Token Formats

For credit cards, in an effort to minimize development requirements on the merchant side, Litle & Co. elected to use a format-preserving tokenization scheme. In simple terms this means that the length of the original card number is reflected in the token, so a submitted 16-digit number results in a 16-digit token. Also, all tokens use only numeric characters, so you do not have to change your systems to accept alpha-numeric characters.

The credit card token numbers themselves have two parts. The last four digits match the last four digits of the card number. The remaining digits (length can vary based upon original card number length) are a randomly generated. Unlike credit card numbers, which are Mod 10 compliant, tokens are Mod 10 + 1 compliant.

FIGURE 1-7 Token Format - Card



For an eCheck token, since the account number length can vary widely, Litle & Co. elected to make the tokens a uniform length of 17 digits. Unlike card tokens, the entire eCheck token number is a randomly generated. The system supplies the last three characters of the account number in a separate element. As with credit card tokens, eCheck tokens are Mod 10 + 1 compliant.

## 1.9.3 Obtaining Tokens

NOTE:

#### •

You must be token enabled and certified prior to using the Vault feature. Please consult your Litle Customer Experience Manager concerning the requirements and details of this process.

There are three ways for you to obtain tokens for a account numbers. First, you can submit an existing card number/eCheck account information (account number and routing number) using a Register Token request. When Litle receives this transaction type, we generate a token and return it to you via a Register Token response (see Register Token Transactions on page 194.) Although you can use this method to tokenize an account number at any time, it is most useful when initially tokenizing your customer database. Litle & Co. recommends that you collect all distinct credit card numbers in your database and submit the information in one or more large batch files. When you receive the response file, parse the returned token information to your database, replacing the card numbers.

The second method you can use to obtain a token is to submit a supported transaction with the card information. If you are a tokenized merchant, Litle will automatically convert the submitted card number to a token and return it to you in the transaction response. Typically, you would use this method when taking and submitting a transaction during the normal course of business. When you receive the response, you store the token instead of the card information.

Note:

Once a card number has been converted to a token for a particular merchant, subsequent submissions of the same card number will return the same token.

The third method of obtaining a token applies only to merchants using the Litle Pay Page feature. In this case, upon submission of an account number via the Pay Page API, Litle issues a Registration Id. You then submit the Registration Id in an Authorization or Sale transaction and receive the token in the response message.

### 1.9.3.1 Bulk Token Registration

If you are new to Litle & Co., and have utilized tokens with a previous processor, Litle can perform a bulk token registration on all the card numbers that were vaulted with your previous processor. The following is an example of the process:

- 1. During your implementation with Litle & Co., you contact your previous processor and request an encrypted mapping file containing the card and token numbers for your customers. A Litle Implementation Consultant will work with you and your previous processor to facilitate the secure transfer of this file without impacting your PCI compliance. The file can be comma-delimited, tab-delimited, or any other common format.
- 2. Litle performs a bulk token registration of all of the card numbers contained in the file.
- 3. Litle returns a mapping file to your organization containing the old tokens and the new Litle-issued tokens, so that you can update your order processing system.

Note that Litle & Co. supports token-extractor formats of all major token service providers. Contact your Litle Implementation Consultant for more information or to initiate this process.

## 1.9.4 Supported Token Transactions

The following transactions support the generation and use of tokens:

- Authorization You can submit the transaction either with a token or card information. If
  you submit card information, Litle automatically generates the token and returns it in the
  response.
- Capture Given Auth You can submit the transaction either with a token or card information. If you submit card information, Litle automatically generates the token and returns it in the response.

- **Credit** You can submit the transaction either with a token or card information. If you submit card information, Litle automatically generates the token and returns it in the response.
- **Force Capture** You can submit the transaction either with a token or card information. If you submit card information, Litle automatically generates the token and returns it in the response.
- Register Token You use this transaction to convert a card number or eCheck account number to a Litle token without an associated authorization, verification or payment transaction.
- **Sale** You can submit the transaction either with a token or card information. If you submit card information, Litle automatically generates the token and returns it in the response.
- eCheck Credit You can submit the transaction either with a token or account information. If
  you submit account information, Litle automatically generates the token and returns it in the
  response.
- **eCheck Redeposit** You can submit the transaction either with a token or account information. If you submit account information, Litle automatically generates the token and returns it in the response.
- **eCheck Sale** You can submit the transaction either with a token or account information. If you submit account information, Litle automatically generates the token and returns it in the response.
- **eCheck Verification** You can submit the transaction either with a token or account information. If you submit account information, Litle automatically generates the token and returns it in the response.
- **Update Card Validation Number** This is a special transaction type provided to allow the update of a CVV2/CVC2/CID code supplied at the time of the token registration. You should only use this transaction type if you had previously submitted the account number and security code in a registerTokenRequest transaction and now need to change the CVV2/CVC2/CID value.

## 1.9.5 Compliance with Visa Best Practices for Tokenization

As shown below, the Litle Vault tokenization solution complies with 11 of the 12 items listed in the Visa Best Practices for Tokenization document. The twelfth item concerns the management of stored historical data (that may contain card information) within your systems. Tokenizing all historical card info when implementing the Litle solution would satisfy this item, as would protecting it per PCI DSS requirements.

**TABLE 1-4** Visa Best Practices for Tokenization Compliance

Item #	Who	Domain	Best Practice	Complies?
1	Litle	Tokenization System	Network Segmentation	Yes
2	Litle	Tokenization System	Authentication	Yes

 TABLE 1-4
 Visa Best Practices for Tokenization Compliance

Item #	Who	Domain	Best Practice	Complies?
3	Litle	Tokenization System	Monitoring	Yes
4	Litle	Tokenization System	Token Distinguishability	Yes
5	Litle	Token Generation	Token Generation	Yes
6	Litle	Token Generation	Single- vs. Multi- use Tokens	Yes
7	Litle	Token Mapping	PAN Processing	Yes
8	Litle	Card Data Vault	PAN Encrypted in Storage	Yes
9	Litle	Card Data Vault	Covered by PCI DSS	Yes
10	Litle	Cryptographic Keys	Key Strength	Yes
11	Litle	Cryptographic Keys	Covered by PCI DSS	Yes
12	Merchant	Historical Data Management	Non-tokenized data protected	Merchant Implementation Decision

# 1.10 eCheck Processing

An eCheck is an alternative payment method that directly debits a consumer's account via the Automatic Clearing House (ACH) network. From a merchant's standpoint offering eCheck as a payment method has several advantages, including a large consumer base in excess of 130 million accounts and no interchange fees.

This section provides information about several Litle & Co. eCheck processing features. Please consult with your Customer Experience Manager for additional information.

**NOTE:** eCheck Void transactions are supported only as Online transactions.

#### 1.10.1 Validation Feature

Litle & Co. performs a validation of the eCheck routing number. This is done both to verify that the routing number is correctly formatted and that it exist in the Fed database. If the routing number fails this validation, the transaction is rejected. Litle & Co. performs this validation on all eCheck transactions automatically.

### 1.10.2 Verification Feature

Since there is no authorization process associated with eChecks allowing you to confirm the availability of funds and hold the purchase amount, there is a higher risk of certain types of fraud. The optional eCheck Verification feature allows you to submit an eCheck account number for comparison to a database containing historical information about the account, as well as the account holder. When you submit an eCheck Verification transaction the information you provide is compared to a negative database to see if the account is associated with activities, such as fraud, over drafts, or other items determined to be risk factors.

NOTE: Litle & Co. makes use of a third party service, Certegy Check Services Inc., for all verification operations.

You can also initiate an account verification operation as part of an eCheck Sale transaction by setting the <verify> element to **true**. In this case, the eCheck Sale transaction is conditional upon the verification passing. If the verification fails, the sale is not processed.

### 1.10.2.1 Required Contents of Decline Notice

In the event you elect to perform verification on a transaction and also elect not to proceed with the transaction based upon a verification failure, you must provide your customer with the following Decline Notice. You can provide the notice orally, electronically, via e-mail, and/or via

U.S Mail, depending upon the type of transaction. The notice must be substantially as the notice set forth below that contains the disclosures required under the Fair Credit Reporting Act and instructs your customer how to contact Certegy directly.

Note:

If the required language of the Decline Notice changes, Litle & Co. will notify you of the change. You must enact the changes within 10 days.

#### **Example: Decline Notice**

We're sorry, but we are unable to proceed with your transaction. This determination was based on information provided by Certegy Check Services, Inc. ("Certegy"). To protect your privacy, Certegy did not provide any financial information to [Client's Name] during the authorization process.

The reason your transaction was not authorized was due to [mark one of the following based on applicable decline code transmitted by Certegy]:

- · account closed
- dishonored check or transfer information contained in Certegy's files
- Certegy had insufficient information available
- the identification information you entered did not conform to established guidelines

You have the right under the Fair Credit Reporting Act to know the information Certegy utilized to make a determination regarding your check. If you find that any information Certegy utilized in its decision is inaccurate or incomplete, you have a right to dispute it with Certegy.

You may call Certegy toll free at 800-695-1854, or write to Certegy Check Services, Inc., P.O. Box 30046, Tampa, FL 33680-3046.

If you contact Certegy, please provide the following information so they can respond promptly to your request:

- First Name
- Current Address
- Date Declined
- Dollar Amount
- Check/Draft/Transfer Number
- Checking Account Number

- Driver's License Number & State
- Home Telephone Number
- Date of Birth
- Social Security Number
- Merchant Name
- Name of Financial Institution

## 1.10.3 Automatic Notice of Change (NoC) Updates

Similar to an issuing bank providing credit card Account Updater information, RDFIs provide Notification of Change (NoC) files and deliver them through the ACH network. These NoCs include updated account information including bank routing numbers, account numbers, and account names.

Litle & Co. makes available the NoC information to you for your use in updating your customer files. Additionally, if you submit a transaction containing information that has changed, we automatically update the information and forward the corrected transaction to the ACH network. The LitleXML response message to you also contains the updated information for your use in correcting your database.

## 1.10.4 Auto Redeposit Feature

NACHA rules allow merchants to redeposit entries when the initial deposit was returned for either Insufficient Funds or Uncollected Funds. Two redeposit attempts are allowed within 180 days of the settlement date of the initial deposit. Litle & Co. offers an optional service that allows you to preconfigure automatic redeposits of transactions returned for the those reasons. You define the number of days from the initial return for Litle to resubmit the transaction. You also define the number of days from the return of the first resubmission for the attempt of a second resubmission.

#### Note:

You track the current state of your transactions, returns, and resubmissions via the Litle Merchant Accounting System User Interface. Please refer to the *Litle & Co. User Interface Guide* for additional information.

For example, you submitted an eCheck Sale transaction on 29 January that is returned for Return Reason Code R01 - Insufficient Funds. The return occurs on 1 February. With the Auto Redeposit feature enabled and a preset period of 5 days for the first redeposit, the Litle system would automatically generate a resubmission of the deposit on 6 February. If this transaction is also returned for the same reason code on 7 February and you have a preset time period for the second redeposit on 7 days, the Litle system generates the second redeposit on 14 February.

### 1.11 Healthcare Card Feature

Today, there are several types of Healthcare accounts that allow participants to use pre-tax money for the purchase of IRS approved healthcare products and services, such as prescription medications and office visit payments/co-pays. The most common of these accounts are Flexible Spending Accounts (FSAs), Health Reimbursement Arrangements (HRAs), and Health Savings Accounts (HSAs). In order to provide consumers with a more convenient method of making use of these accounts, certain issuers provide signature based, MasterCard or Visa branded, healthcare payment debit cards.

To facilitate the processing of transactions related to these cards, Litle & Co. has augmented the LitleXML format with elements specific to Healthcare card purchases. The healthcareIIAS element has been added to the Authorization and (Conditional) Sale transaction types. You use this element and its children to detail the costs associated with Healthcare related, IIAS approved items purchased by the consumer. The example below shows an Authorization transaction with IIAS items.

#### **Example:** Authorization with healthcare IIAS Element

#### NOTE:

The example below includes the visionAmount and dentalAmount elements to show all available amount classifications. Since these are optional elements and have values of 0 in the example, they can be omitted.

```
litleOnlineRequest version="8.2" xmlns="http://www.litle.com/schema"
 merchantId="100">
 <authentication>
   <user>Merchant1</user>
   <password>Password</password>
 </authentication>
 <authorization id="834262" reportGroup="ABC Division" customerId="038945">
   <orderId>123456789</orderId>
   <amount>5500</amount>
   <orderSource>ecommerce</orderSource>
   <br/>
<br/>billToAddress>
    <name>John Smith</name>
    <addressLine1>100 Main St</addressLine1>
    <city>Boston</city>
    <state>MA</state>
    <zip>12345</zip>
    <email>jsmith@someaddress.com
    <phone>555-123-4567</phone>
   </billToAddress>
   <card>
    <type>VI</type>
```

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```
<number>400000000000001
    <expDate>1211</expDate>
    <cardValidationNum>555/cardValidationNum>
   <cardholderAuthentication>
    <authenticationValue>BwABBJQ1qJDUCAAAAAA=</authenticationValue>
    <authenticationTransactionId>qMV75TmjAqk=</authenticationTransactionId>
   </cardholderAuthentication>
   <allowPartialAuth>true</allowPartialAuth>
   <healthcareIIAS>
    <healthcareAmounts>
      <totalHealthcareAmount>5500</totalHealthcareAmount>
      <RxAmount>4000</RxAmount>
      <visionAmount>0</visionAmount>
      <clinicOtherAmount>1500</clinicOtherAmount>
      <dentalAmount>0</dentalAmount>
    </healthcareAmounts>
    <IIASFlag>Y</IIASFlag>
   </healthcareIIAS>
 </authorization>
<le></litleOnlineRequest>
```

Please keep in mind the additional following requirements/recommendations:

IMPORTANT: The information below is not intended as an exhaustive list of the requirements for the acceptance of Healthcare cards by merchants. While Litle & Co. may be able to provide some information, merchants are responsible for the awareness of and adherence to all applicable regulatory requirements imposed by the Internal Revenue Service, other government agencies, and other interested parties (for example, Visa, MasterCard, SIGIS, etc.)

- Merchants must become a member of the Special Interest Group for IIAS Standards (SIGIS)
- Merchants must obtain and maintain SIGIS certification
- Merchants, except those with healthcare related MCCs, must have an Inventory Information Approval System (IIAS) used to identify eligible healthcare purchases as defined and required by the Internal Revenue Code.
- Merchants must obtain special account numbers from Visa and MasterCard to process these transactions
- Merchants must support data retention and retrieval of line item details for eligible healthcare products included in Healthcare Card transactions

- Merchants must complete Litle Certification Testing for the use of this feature, as well as the Partial Auth feature.
- ullet Transactions must include the IIASFlag element set to old Y.

# 1.12 Supported Transaction Types

Litle Batch processing supports all transaction types except Voids and eCheck Voids, which are handled as Online transactions only. Online processing handles all transaction types. This section provides a description of each transaction type, information concerning its use, and any special considerations.

### 1.12.1 Authorization Transaction

The Authorization transaction enables you to confirm that a customer has submitted a valid payment method with their order and has sufficient funds to purchase the goods or services they ordered. Setting the <allowPartialAuth> element to **true** in the Authorization request enables the system to return authorizations for a portion of the order amount for cases where the card does not have an adequate credit limit or balance available for the full amount.

An approved Authorization reduces the customer's credit limit (or bank balance, in the case of a debit card) by the amount of the approval by placing the amount on hold. If you have the Prepaid Indicator feature enabled, the Authorization response also includes an element that indicates if the card is Prepaid, as well as an element indicating the available balance on the card.

Note: While most merchants perform Authorizations as Online transactions, there is no requirement to do so.

The lifespan of an Authorization depends upon the payment method. Table 1-5 provides information concerning Authorization lifespans for various card types and alternate payment methods.

**TABLE 1-5** Lifespan of Payment Authorizations

Payment Type	Lifespan of Authorization
MasterCard	7 days
Visa	7 days
American Express	7 days
Discover	30 days
PayPal	29 days total by default; Litle & Co. recommends capture submission within three days. For more information, see the Litle & Co. PayPal Integration Guide.
Bill Me Later	30 days by default; for more information about Bill Me Later authorizations, see the <i>Litle &amp; Co. Bill Me Later Integration Guide</i> .

As long as the authorization has not expired, or the amount exhausted, you can use it repeatedly to fulfill an order. This would be the case if the Authorization covered multiple items with staggered deliveries. In this scenario, you would issue a Partial Capture transaction as each item shipped until the order was completely fulfilled.

NOTE:

If you obtain an Authorization through approved vendors for voice and terminal authorizations, you would use a Capture Given Auth transaction to deposit the funds (see Capture Given Auth Transaction on page 43).

### 1.12.1.1 AVS Only Transaction

An AVS Only transaction is a variation of an Authorization transaction that uses the Address Verification System to enable you to verify that a customer supplied address matches the billing address associated with the card. To submit an AVS Only transaction, submit an Authorization transaction with the <amount> element set to 000 and the optional billToAddress element with appropriate child values.

#### 1.12.2 Authorization Reversal Transactions

The primary use of Authorization Reversal transactions is to eliminate any unused amount on an unexpired Authorization. Issuing an Authorization Reversal has the benefit of freeing any remaining held amount that reduces the buying power of your customer. Potentially, this both increases customer satisfaction and can allow them to proceed with additional purchases that may otherwise be blocked by credit limits. It also helps you avoid any misuse of Auth fees imposed by the card associations.

#### Note:

For American Express transactions, the reversal amount must match the authorization amount. Partial reversals and reversals against remaining amount after a partial capture are not allowed. Attempts to perform these types of reversals result in a Response Code of 336 - Reversal amount does not match Authorization amount.

For example, consider the following scenario. A customer with a \$6,000 credit limit orders a \$3,000 stereo system, but the stereo is a discontinued item. The merchant notifies the customer, but does not perform and Authorization Reversal. The customer attempts to submit a new order for a \$3,001 stereo.

- If the customer uses the same credit card for both orders, the second order could be denied, since the account's remaining credit limit is only \$3,000.
- If the customer had used the same debit card for both orders, the second order places the customer's bank account in an overdraft situation (assuming a starting balance of \$6,000).

Either of these situations can result in the merchant losing a sale, as well as receiving a call from an angry customer.

Another advantage of Authorization Reversal transactions occurs on Visa transactions. In order for you to qualify for the best possible interchange rates from Visa, the amount of the Capture must match the amount of the associated Authorization. In order to take advantage of this situation for you, if the Capture amount is less than the associated Authorization amount, Litle automatically performs a partial Authorization Reversal for the unused amount (also see Capture Request on page 147).

### 1.12.2.1 Notes on the Use of Authorization Reversal Transactions

This section provides additional information concerning the requirements of and exceptions to the use of Authorization Reversal transactions.

- Authorization Reversal transactions are supported for the following methods of payment: PayPal, MasterCard, Visa, Discover, Diners Club, and JC and American Express, but American Express and PayPal only support reversals of the entire Authorized amount (no partial reversals).
- All transactional data, including associated Authorizations, Captures, and Refunds, must be LitleXML format.
- Litle & Co. recommends that you send the Authorization Reversal transaction using the same submission method (Batch or Online) as used for the Capture transaction. This is to eliminate a possible race condition that may occur if you submit an Online Authorization Reversal prior to the processing of a Batch containing the associate Capture transaction.
- For Batch transactions, send Authorization Reversal transactions in a session separate from the both the associated Authorization and the associated Capture transactions.
- For Online transactions, when following an Authorization with an Auth Reversal, allow a minimum of one minute between the transactions.
- For Visa transactions, Litle automatically performs a partial Authorization Reversal, if the Capture amount is less than the associated Authorization amount.
- If you do not specify an amount (<amount> element) in the Authorization Reversal, Little reverses the total amount of the associated Authorization.
- Do not send an Authorization Reversal against an expired Authorization. This results in a 306
   Auth expired, so amount does not need to be reversed error. When an Authorization expires, the hold amount is automatically reversed.
- Do not send an Authorization Reversal against an Authorization that does not exist in our system. For example, if you sends a reversal against an Authorization that failed or an Authorization that was declined, the Authorization Reversal returns a 360 No transaction found with specified litleTxnId error.
- Do not send an Authorization Reversal against a payment type that does not support Authorization Reversals. This results in a 335 This method of payment does not support reversals error.

• Do not send an Authorization Reversal for a fully depleted Authorization. This results in a 111 - Authorization amount has already been depleted error.

### 1.12.2.2 Using Authorization Reversal to Halt Recycling Engine

If you are using the Litle Recycling Engine to optimize your authorizations and need to discontinue the automatic recycling of the transaction, you use an Authorization Reversal transaction to halt the retries. For example, if a customer cancels an order and the authorization for the order is being retried by the Recycling Engine, you submit an Authorization Reversal transaction to halt the automatic recycling of the authorization.

NOTE:

If the initial transaction you submitted is a Sale (conditional deposit) rather than an Authorization, you use a Void transaction to halt the recycling.

## 1.12.3 Capture Transaction

You use a Capture transaction to transfer previously authorized funds from the customer to you after order fulfillment. You can submit a Capture transaction for the full amount of the Authorization, or for a lesser amount by setting the partial attribute to **true**.

NOTE:

For a Visa transaction, if you submit a Capture for an amount less than the Authorized amount, Litle automatically issues a partial Authorization Reversal for the balance of the Authorized amount.

# 1.12.4 Capture Given Auth Transaction

Similar to a Capture transaction, you use a Capture Given Auth transaction to transfer previously authorized funds from the customer to you after fulfillment. However, you typically use a Capture Given Auth transaction if the associated Authorization occurred outside of the Litle & Co. system (for example, if you received a telephone Authorization). Another possible use for a Capture Given Auth transaction is if the Authorization transaction occurred within the Litle system, but the litletxnId is unknown by the submitting party (for example, if the Auth was submitted by a merchant, but a fulfiller submits a Capture Given Auth).

Whenever you submit a Capture Given Auth transaction, Litle attempts to match it to an existing Authorization using COMAAR data (Card Number, Order Id, Merchant Id, Amount, Approval Code, and (Auth) Response Date) in order to obtain a better Interchange rate for the transaction. The application uses the following matching logic:

• If the Order Id was either not submitted (blank, spaces, or null) or does not match any Auth in the system, it is ignored and the matching attempt proceeds using the remaining COMAAR data.

• If the matching operation results in multiple possible matches, the application selects the Authorization with the lowest amount that is greater than or equal to the Capture Given Auth amount.

NOTE: In all cases, the Authorization amount must always be greater than or equal to the Capture Given Auth amount.

• If necessary, the application further narrows the match candidates to the one with the most recent response date.

NOTE:

If Litle is able to match the Capture Given Auth to an Authorization and the following conditions are met: the card type is Visa and the Capture Given Auth amount is less than the Authorization amount, then Litle will issue an Auth Reversal transaction for the balance of the Authorization.

This is done to obtain the best possible interchange rates from Visa.

### 1.12.5 Credit Transaction

You use a Credit transaction to refund money to a customer, even if the original transaction occurred outside of the Litle & Co. system. You can submit refunds against any of the following payment transactions:

- Capture Transaction
- Capture Given Auth Transaction
- Force Capture Transaction
- Sale Transaction
- External Sale or Capture

Note:

Litle recommends that all Credit transactions in a Batch be sent separate from the associated Capture or Sale transactions.

### 1.12.6 eCheck Credit Transaction

Similar to a Credit transaction, you use an eCheck Credit transaction to refund money to a customer, but only when the method of payment was an eCheck. You can submit an eCheck Credit transaction regardless of whether the original transaction occurred in or out of the Litle & Co. system.

#### 1.12.7 eCheck Redeposit Transaction

You use this transaction type to manually attempt redeposits of eChecks returned for either Insufficient Funds or Uncollected Funds. You can use this element in either Online or Batch transactions.

NOTE:

Do not use this transaction type if you are enabled for the Auto Redeposit feature. If you are enabled for the Auto Redeposit feature, the system will reject any echeckRedeposit transaction you submit.

#### 1.12.8 eCheck Sales Transaction

You use an eCheck Sales transaction to transfer funds from the customer to you after order fulfillment. It is the eCheck equivalent of a Capture transaction. Funding usually occurs within two days. You can also submit this transaction type as a conditional capture, which makes the processing of the deposit conditional upon a successful verification. If the verification fails, the deposit is not processed.

#### 1.12.9 eCheck Verification Transaction

You use an eCheck Verification transaction to initiate a comparison to a database containing information about checking accounts. The database may include information as to whether the account has been closed, as well as whether there is a history of undesirable behavior associated with the account/account holder.

# 1.12.10 eCheck Void Transaction (Online Only)

You use an eCheck Void transaction to either halt automatic redeposit attempts of eChecks returned for either Insufficient Funds or Uncollected Funds, or cancel an eCheck Sale transaction, as long as the transaction has not yet settled. This also applies to merchant initiated redeposits. You can use this element only in Online transactions.

## 1.12.11 Force Capture Transaction

A Force Capture transaction is a Capture transaction used when you do not have a valid Authorization for the order, but have fulfilled the order and wish to transfer funds.

CAUTION: Merchants must be authorized by Litle & Co. before processing this transaction. In some instances, using a Force Capture transaction can lead to chargebacks and fines.

### 1.12.12 Sale Transaction

The Sale transaction enables you to both authorize fund availability and deposit those funds by means of a single transaction. The Sale transaction is also known as a conditional deposit, because the deposit takes place only if the authorization succeeds. If the authorization is declined, the deposit will not be processed.

NOTE:

If the authorization succeeds, the deposit will be processed automatically, regardless of the AVS or CVV2 response.

## 1.12.13 Void Transaction (Online Only)

The Void transaction enables you to cancel any settlement transaction as long as the transaction has not yet settled and the original transaction occurred within the Litle system (Voids require a reference to a litleTxnId).

NOTE:

Do not use Void transactions to void an Authorization. To remove an Authorization use an Authorization reversal transaction (see Authorization Reversal Transactions on page 41.)

### 1.12.13.1 Using Void to Halt Recycling Engine

If you use the Litle Recovery or Recycling Engine service and use Sale transactions (conditional deposits) to authorize and capture the funds, you must use a Void transaction to discontinue the automatic recycling of the transaction should the need arise. For example, if a customer cancels an order and the Sale transaction is being retried by the Recycling Engine, you submit a Void transaction to halt the automatic recycling of the transaction.

NOTE:

If the initial transaction you submitted is an Authorization rather than an Sale, you use an Authorization Reversal transaction to halt the recycling.

When using a Void transaction to halt recycling, there is a possibility that the recycled transaction has already been approved and captured. If this condition occurs, depending upon your configuration, the Litle system takes one of two actions:

- If you are not configured for the Automatic Refund option (default = disabled), the system declines the Void transaction. You must issue the Credit transaction to refund the money to the consumer. The daily Recycling file will include the approved/captured transaction.
- If you are configured for the Automatic Refund option, the Litle system issues a Credit transaction on your behalf. The system returns the transaction Id for the Credit transaction in the Void response message (creditLitleTnxId element). The daily Recycling file will

include the approved/captured transaction only if the file was generated prior to the Litle system receiving the Void and issuing the automatic refund.



2

# TESTING YOUR LITLEXML TRANSACTIONS

The information provided in this chapter enables you to test and verify that your submitted transaction data conforms to the required LitleXML schema. This chapter contains the following topics:

- Certification Environment Usage Policy
- Overview of Testing
- Transferring Files
- Performing the Required Certification Tests
- Performing the Optional Tests

IMPORTANT: Per PCI DSS Requirements and Security Assessment Procedure, Section 6.4.3, "Production data (live PANs) are not used for testing or development."

#### **Certification Environment Usage Policy** 2.1

The Litle Certification environment is intended to provide merchants and partners with a means to test and certify initial integration code, as well as enhanced features and functionalities.

#### 2.1.1 Limitations

The Litle Certification environment is not designed or supported to be a high availability, production-level processing system, nor does it support true capacity or volume testing. While we currently allow merchants and partners the ability to maintain an open test account once they are live and processing with us, the intent of the system and the support provided is specific to a certification-level environment (i.e. the hardware and software are not production-level).

IMPORTANT: Litle reserves the right to terminate a user's access to the Certification environment if it is determined that usage falls outside of the realm of certification-level testing, and whose subsequent misuse may adversely affect the overall health of the system and the ability of other Litle merchants and/or partners to properly access and utilize the Certification environment.

#### **Transactional Limits**

In order to ensure that the Litle Certification environment is utilized as intended, the following processing transactions limits will be imposed:

- Daily maximum of 1000 Online transactions
- Daily maximum of 10000 Batch transactions

#### IP Address Limits

A maximum of five (5) IP addresses will be allocated per merchant or partner for access to the Litle Certification environment.

### **Concurrent Connection Limits (Online Processing)**

A maximum of three (3) concurrent connections will be granted per IP address for each Litle merchant or partner.

#### 2.1.2 **Regularly Scheduled Maintenance Window**

Litle & Co. will designate a recurring weekly maintenance window of Tuesdays from 8-10 AM ET for the Certification environment. The intent is that, to the best of Litle's ability, any systematic updates and/or maintenance to the Certification environment will be conducted during this maintenance window.

# 2.1.3 Data Retention Policy

Typically, the Litle & Co. Certification environment will be upgraded and re-started during the maintenance window on the third Tuesday of every month. All transactional data, including sessions, batches and payment transactions, will be purged. Merchants and partners can therefore expect from zero to thirty days of transactional data to be present in the Litle Certification database.

Litle & Co. reserves the right to modify the current Data Retention Policy at any time, if it is determined that the current amount of maintained historical data is negatively impacting the functionality of the Certification environment.

If you have any questions, please contact your Litle Implementation Consultant or Customer Experience Manager.

# 2.2 Overview of Testing

The purpose of the testing and certification process is to verify that your order entry and supporting systems construct and send xml messages that comply with the LitleXML requirements. The Litle & Co. testing process involves submitting Litle supplied data for specific fields in a request, and receiving specific data back in a response. The response returned by Litle allows you to verify that you parse the LitleXML Response file correctly.

Various tables in this chapter provide the data you use while testing, including card numbers, expiration dates, transaction amounts, and other values as required by the testing process. You use this data as input to your systems resulting in structured requests that conform to the required LitleXML schema.

IMPORTANT: The test data supplied does not necessarily account for all data fields/xml elements in a particular request. Where test data is not supplied, you should provide appropriate information. You should never override your own system to enter supplied data. If you are unable to enter the supplied data without overriding your system, please consult your Implementation Consultant concerning the test and how to proceed.

Typically, Litle assigns an Implementation Consultant to work with you after the completion of contract negotiations. Before you begin the testing phase, your assigned Implementation Consultant establishes a test account and supplies you with instruction for accessing the account along with the username and password. You must supply the IP address from which the data originates so we can grant access.

NOTE: Until you complete all required testing, you will only have access to the test and certification environment.

The testing process involves the following steps:

# 2.2.1 Planning for Certification Testing

Before you begin testing, determine which transaction types you will use according to your business needs. Virtually everyone will make use of the following basic transaction types: Authorization, Capture, Sale, Credit, and Void. There are several other transaction types and most transaction types offers many options/optional fields that you may wish to utilized and therefore test. For example, if you decide to offer eChecks as a alternate payment method, there are several associated certification tested required. Similarly, if you elect to make use of the Insights feature set, there are additional Authorization tests required for certification.

NOTE: For information about certification testing for PayPal, Bill Me Later, PayPage and Chargeback XML feed, please refer to the following documents:

- Litle & Co. PayPal Integration Guide
- Litle & Co. Bill Me Later Integration Guide
- Litle & Co. PayPage Integration Guide
- Litle & Co. Chargeback XML and Support Documentation API Reference Guide

### 2.2.2 Required Certification Testing

Certification testing is a required phase of implementing the LitleXML format. During the certification testing, a Litle & Co. Implementation Consultant works with you to verify that your transaction submissions meet the requirements of the LitleXML specifications. Each transaction type has specific test scenarios that use specific data sets simulating real transactions. The Litle Certification environment responds to each submission with an XML response message, allowing you to verify that you have coded correctly to parse and store the transaction data returned to you. For more detailed information, see Performing the Required Certification Tests on page 60.

# 2.2.3 Optional Testing

Litle & Co. provides you with test data, test scenarios, a test environment, and credentials for using that test environment so you can perform these tests on your own keeping in mind the limitations of the certification environment (see Certification Environment Usage Policy on page 50). During unattended testing, you use these resources to perform all of the tests that apply to your business needs.

NOTE:

If you have questions or need assistance while performing unattended testing, feel free to call your assigned Implementation Consultant or email implementation@litle.com.

#### 2.3 Transferring Files

As discussed in Communications Protocols on page 3, there are several protocols you can use to submit your transactions to Litle & Co. for processing. This section provides additional information concerning the recommended methods for transferring your LitleXML Batch and Online transaction files.

#### 2.3.1 Transferring Batch Files

While you can submit your Batch files via HTTPS POST, Litle recommends batch submission using either FTP or sFTP. This section describes how to FTP your files (not test system specific) and includes the following topics:

- Submitting a Batch File for Processing
- **Retrieving Processed Batch Files**

Before you begin transferring files via FTP, Litle & Co. provides the FTP Host and a username/password for the Litle & Co. test system.

#### 2.3.1.1 Submitting a Batch File for Processing

NOTE:

CAUTION: File naming conventions are crucial to the file submission process. Incorrect file names will prevent the file from being processed or may stop processing due to an incomplete file transfer.

> Do not append .asc to the end of the filename (Step 3). You must replace the .prg extension with .asc. If .prg appears in the filename, the system will not process the file

- 1. On your local system, add the extension .prg (lowercase) to the name of the file you want to submit. For example, you could name the file MerchantName YYMMDD.prg. Keep in mind the following rules:
  - Spaces are not allowed in the file name
  - The .prg extension must be lower case
- 2. Open your FTP connection to the Litle & Co. inbound directory and move your file to the Litle & Co. directory.
- 3. After the FTP process completes, change the extension of the transmitted file (in the Litle & Co. inbound directory) from .prg to .asc (lowercase). The system polls the directory for files with an .asc extension every thirty seconds. When the system encounters files with the proper extension, it retrieves them for processing.

### 2.3.1.2 Retrieving Processed Batch Files

Depending on the size of your file, your response should be ready within a few minutes. Batch files containing large number of transactions take longer. For example, a batch of 10,000 transactions may require as long as ten minutes to process.

The initial response represents an acknowledgement that we received the transactions and notification that we will deliver them upstream to Visa and/or MasterCard for review. Since we perform validation operations against the credit card number and the expiration date, you may also receive a decline responses containing the appropriate response code.

To retrieve response files from the outbound directory:

NOTE: Litle & Co. removes response files from the outbound directory after 24 hours. Plan to retrieve your files daily.

- 1. Open your FTP connection to the Litle & Co. outbound directory.
- 2. Locate the response file, which will have the same name as the file you submitted. If the response file has a .prg extension, it is still transferring. The extension changes to .asc when the transfer to the outbound directory completes.
- 3. Retrieve the response file.

## 2.3.2 Transferring Online Files

The recommended method for submitting Online transactions is via HTTPS POST. The sections that follow provide examples of ASP and Java programming methods for submitting your data using HTTPS POST.

- ASP Programming Example
- Java Programming Example
- Helpful Web Sites

NOTE: Before you begin testing, Litle & Co. provides the test system URL, a username/password, and any additional information required to test your XML transactions.

### 2.3.2.1 ASP Programming Example

The following code is an example of a LitleXML Authorization transaction submitted via HTTPS Post using ASP.

```
Dim xml
 Dim strXML
 strXML = strXML & "tleOnlineRequest version=""8.8""
xmlns=""http://www.litle.com/schema"" merchantId=""MERCHANTID"">"
   strXML = strXML & "<authentication>"
   strXML = strXML & "<user>USERNAME</user>"
   strXML = strXML & "<password>#######</password>"
   strXML = strXML & "</authentication>"
   strXML = strXML & "<authorization id=""834262""
reportGroup=""123"" customerId=""038945"">"
   strXML = strXML & "<orderId>3235059</orderId>"
   strXML = strXML & "<amount>54399</amount>"
   strXML = strXML & "<orderSource>ecommerce</orderSource>"
    strXML = strXML & "<billToAddress>"
      strXML = strXML & "<name>Todd Wilson</name>"
      strXML = strXML & "<addressLine1>123 Blue
Street</addressLine1>"
      strXML = strXML & "<addressLine2>Suite 108</addressLine2>"
      strXML = strXML & "<addressLine3>Address Line 3</addressLine3>"
      strXML = strXML & "<city>Lowell</city>"
      strXML = strXML & "<state>MA</state>"
      strXML = strXML & "<zip>01851</zip>"
      strXML = strXML & "<country>USA</country>"
      strXML = strXML & "<email>twilson@email.com</email>"
      strXML = strXML & "<phone>323-222-2222</phone>"
    strXML = strXML & "</billToAddress>"
    strXML = strXML & "<card>"
      strXML = strXML & "<type>VI</type>"
      strXML = strXML & "<number>###########</number>"
      strXML = strXML & "<expDate>0514</expDate>"
      strXML = strXML & "<cardValidationNum>###</cardValidationNum>"
    strXML = strXML & "</card>"
```

```
strXML = strXML & "</authorization>"
strXML = strXML & "</littleOnlineRequest>"
set xml = CreateObject("Microsoft.XMLHTTP")
xml.setRequestHeader "Content-type", "text/html; charset=UTF-8"
xml.Open "POST", "https://site.info.com/from_Little", False
xml.Send strXML
Response.write (xml.responseText)
set xml = Nothing
```

### 2.3.2.2 Java Programming Example

The following is an example of Java code used for HTTPS Post.

PostMethod and HttpClient are both part of the Apache HttpClient library located at http://jakarta.apache.org/commons/httpclient/.

```
PostMethod post = new PostMethod(url); // url = fully qualified url
of the server to which you are posting
post.setRequestHeader("Content-type", "text/html; charset=UTF-8");
post.setRequestBody(data); //data = request data in XML format

HttpClient client = new HttpClient();
client.setTimeout(10000); //10 second timeout (in milliseconds) is
suggested minimum, 30 second recommended for alternate payment
methods
client.executeMethod(post);

String response = post.getResponseBodyAsString();

//if the server throws an exception you get a null response
//to get around this set it to ""
if (response == null) {
    response = "";
}

post.releaseConnection();
```

### 2.3.2.3 Notes on Timeout Settings

While Litle & Co. optimizes our systems to ensure the return of Authorization responses as quickly as possible, some portions of the process are beyond our control. The round-trip time of an Authorization can be broken down into three parts, as follows:

- 1. Transmission time (across the internet) to Litle & Co. and back to the merchant
- 2. Processing time by the card association or authorization provider
- 3. Processing time Litle

Under normal operating circumstances, the transmission time to and from Litle does not exceed 0.6 seconds and processing time by Litle occurs in 0.1 seconds. Typically, the processing time by the card association or authorization provider can take between 0.5 and 3 seconds, but some percentage of transactions may take significantly longer.

Because the total processing time can vary due to a number of factors, Litle & Co. recommends using a timeout setting of 10 seconds minimum for card transactions and 30 seconds minimum for alternate payment methods. These settings should ensure that you do not frequently disconnect prior to receiving a valid authorization causing dropped orders and/or re-auths and duplicate auths.

#### Note:

While it is uncommon, under certain circumstances network latency may cause a duplicate Online Sale transaction to go undetected as a duplicate. This can occur if you submit a second, duplicate Sale transaction while the response from the network for the Authorization portion of the first transaction is sufficiently delayed such that the first Sale has not been recorded as a valid transaction in the Litle system.

If you elect to submit Online Sale transactions, Litle recommends a timeout setting of not less than 60 seconds to reduce the chances of undetected duplicate Sale transactions.

### 2.3.2.4 Notes on Persistent Connections

In order to provide a highly scalable service that meets the needs of high-throughput merchants, while reducing the number of idle connections that could result in some merchants exceeding their connection limits, Litle systems allow for 10 seconds of idle time before closing a persistent connection. We selected this value because it is the midpoint between the Apache httpd 2.0 default value of 15 seconds and the Apache 2.2 default value of 5 seconds. If you plan to use persistent connection, please code keeping the 10 second idle time limit in mind.

### 2.3.2.5 Helpful Web Sites

The following web sites provide additional information, helpful hints, and examples of different programming methods used in combination with HTTPS POST.

- http://p2p.wrox.com/topic.asp?TOPIC\_ID=6193
- http://en.allexperts.com/q/Active-Server-Pages-1452/XML-ASP-Parser-2.htm
- http://www.java-samples.com/java/POST-toHTTPS-url-free-java-sample-program.htm

#### **Performing the Required Certification Tests** 2.4

You are required to complete a number of certification tests prior to submitting real transactions to the Litle & Co. production system. This testing process allows you to verify that your system not only submits correctly formatted transaction data, but also correctly parses the data returned to you in the response messages. To facilitate the certification process, Litle has established a certification environment that simulates the production environment.

During certification testing, a Litle & Co. Implementation Consultant will guide you through each required test scenario. For each transaction type specific data is supplied that you must use in your LitleXML transactions. Use of this data allows the validation of your transaction structure/syntax, as well as the return of a response file containing known data.

IMPORTANT: The test data supplied does not account for all data fields/xml elements in a particular request. Where data is not supplied, you should provide appropriate information. You should never override your own system to enter supplied data. If you are unable to enter the supplied data without overriding your system, please consult your Implementation Consultant concerning the test and how to proceed.

Never use the supplied test data in the production environment.

#### 2.4.1 Testing Authorization (including Indicators), AVS Only, Capture, Credit, Sale, and Void Transactions

Table 2-1 provides 26 data sets you use to test your construction of Authorization, AVS Only, Sale and Force Capture transactions, as well as your ability to parse the information contained in the XML response messages. You also use some of the approved authorizations as the basis for testing Capture and Credit transactions.

You do not necessarily have to perform all Authorization test. The tests you perform depend upon the Litle features you have elected to use. The tests are divided as follows:

- Order Ids 1 through 9 used to test standard Authorization requests and responses. Also used for AVS Only test and Sale test. (Capture test use the litleTxnId returned in the response messages.)
- Order Ids 10 through 13 include if you plan to use **Partial Authorization**
- Order Ids 14 and 20 include if you plan to use the **Prepaid Indicator** feature (see Prepaid Indicator on page 20)
- Order Ids 21 through 24 include if you plan to use the **Affluence Indicator** feature (see Affluence Indicator on page 21)
- Order Id 25 include if you plan to use the Issuer Country feature (see Issuer Country **Indicator** on page 21)

• Order Ids 26 through 31 - include if you plan to use the **Healthcare Card** feature (see Healthcare Card Feature on page 37)

#### To test **Authorization** transactions:

- 1. Verify that your Authorization XML template is coded correctly (refer to Authorization Transactions on page 134.)
- 2. Submit authorization transactions using the data shown in the Supplied Data Elements of Order Ids 1 through 9 of Table 2-1.
- 3. Verify that your response values match those shown in Key Response Elements for Order Ids 1 through 9 as shown in Table 2-1.
- 4. If you wish to test **AVS only** transactions, re-submit Order Ids 1 through 5, 7, 8, and 9 (skip order 6), but substitute 000 for the amount. The AVS result returned will be the value shown in the Key Response Elements section.
- 5. If you plan to use **Partial Authorizations**, submit authorization transactions using the data shown in the Supplied Data Elements of Order Ids 10 through 13 of Table 2-1.
- 6. Verify that your response values match those shown in Key Response Elements for Order Ids 10 through 13 as shown in Table 2-1.
- 7. If you elected to receive **Prepaid Indicators**, submit authorization transactions using the data shown in the Supplied Data Elements of Order Ids 14 through 20 of Table 2-1. Verify that your response values match those shown in Key Response Elements for Order Ids 14 and 15 as shown in Table 2-1.
- 8. If you elected to receive **Affluence Indicators**, submit authorization transactions using the data shown in the Supplied Data Elements of Order Ids 21through 24 of Table 2-1. Verify that your response values match those shown in Key Response Elements for Order Ids 16 through 19 as shown in Table 2-1.
- 9. If you elected to receive **Issuer Country** information, submit an authorization transaction using the data shown in the Supplied Data Elements of Order Id 25 of Table 2-1. Verify that your response values match those shown in Key Response Elements for Order Id 25 as shown in Table 2-1.
- 10. If you plan to handle transactions using **Healthcare (IIAS)** cards, submit authorization transactions using the data shown in the Supplied Data Elements of Order Ids 26 through 31 of Table 2-1. Verify that your response values match those shown in Key Response Elements for Order Ids 26 through 31 as shown in Table 2-1.

NOTE: Some Issuers do not return an Auth Code for \$0 Authorizations. You should code your systems to handle this possibility.

#### To Test **Sale** transactions:

- 1. Verify that your Sale XML template is coded correctly (refer to Sale Transactions on page 201.)
- 2. Submit sale transactions using the data shown in the Supplied Data Elements of Order Ids 1 through 9 of Table 2-1.
- 3. Verify that your response values match those shown in Key Response Elements for Order Ids 1 through 9 as shown in Table 2-1.

### To Test **Capture** transactions:

- 1. Verify that your Capture XML template is coded correctly (refer to Capture Transactions on page 147.).
- 2. Submit capture transactions for Order Ids 1A through 5A using the litleTnxId value returned in the response messages for Authorization Order Ids 1 through 5.
- 3. Verify that your response values match those shown in Key Response Elements for Order Ids 1A through 5A as shown in Table 2-1.

#### To test **Credit** transactions:

- 1. Verify that your Credit XML template is coded correctly (refer to Credit Transactions on page 162.)
- 2. Submit credit transactions for Order Ids 1B through 5B using the litleTnxId value returned in the response messages for Capture Order Ids 1A through 5A.
- 3. Verify that your response values match those shown in Key Response Elements for Order Ids 1B through 5B as shown in Table 2-1.

To test **Void** transactions (in this test you have the option of voiding either Credit or Sale transactions):

- 1. Verify that your Void XML template is coded correctly (refer to Void Transactions (Online Only) on page 210.)
- 2. Submit void transactions for Order Ids 1C through 5C (and 6Bif voiding Sale transactions) using the litleTnxId value returned in either the response messages for Credit Order Ids 1B through 5B, or the response messages for Sale (not Auth) Order Id 1 through 6.
- 3. Verify that your response values match those shown in Key Response Elements for Order Ids 1C through 5C (include 6B only if you elect to void the Sales transactions) as shown in Table 2-1.

**TABLE 2-1** Authorization Test Data

	Supplied Data	Elements	Key Response E	Elements
orderId	Element	Value	Element	Value
1	Authorization/Sale/AVS:		Authorization Response:	
	<amount></amount>	10100	<response></response>	000
	<name></name>	John Smith	<message></message>	Approved
	<addressline1></addressline1>	1 Main St.	<authcode></authcode>	11111
	<city></city>	Burlington	<avsresult></avsresult>	01
	<state></state>	MA	<cardvalidationresult></cardvalidationresult>	М
	<zip></zip>	01803-3747		
	<country></country>	US		
	<type></type>	VI		
	<number></number>	44570100000000009		
	<expdate></expdate>	0114		
	<cardvalidationnum></cardvalidationnum>	349		
1A	Capture:		Capture Response:	
	<li>ditleTxnld&gt;</li>	Value returned in	<response></response>	000
		Auth response for Order Id 1	<message></message>	Approved
1B	Credit:		Credit Response:	
	<li>litleTxnId&gt;</li>	Value returned in	<response></response>	000
		Capture response for Order Id 1A	<message></message>	Approved
1C	Void:		Void Response:	
	<li>litleTxnld&gt;</li>	Use either the value	<response></response>	000
		returned in the Credit response for	<message></message>	Approved
		Order Id 1B, or the		
		value returned in		
		the Sale response (not Auth) for Order		
		ld 1.		

**TABLE 2-1** Authorization Test Data (Continued)

	Supplied Data	Elements	Key Response Elements	
orderld	Element	Value	Element	Value
2	Authorization/Sale/AVS:		Authorization Response:	
	<amount></amount>	10100	<response></response>	000
	<name></name>	Mike J. Hammer	<message></message>	Approved
	<addressline1></addressline1>	2 Main St.	<authcode></authcode>	22222
	<addressline2></addressline2>	Apt. 222	<avsresult></avsresult>	10
	<city></city>	Riverside	<cardvalidationresult></cardvalidationresult>	М
	<state></state>	RI	<authenticationresult></authenticationresult>	Note: Not returned
	<zip></zip>	02915		for MasterCard
	<country></country>	US		
	<type></type>	MC		
	<number></number>	5112010000000003		
	<expdate></expdate>	0214		
	<cardvalidationnum></cardvalidationnum>	261		
	<authenticationvalue></authenticationvalue>	BwABBJQ1AgAAA AAgJDUCAAAAAA A=		
2A	Capture:		Capture Response:	
	<li>litleTxnId&gt;</li>	Value returned in	<response></response>	000
		Auth response for Order Id 2	<message></message>	Approved
2B	Credit:		Credit Response:	
	<li>ditleTxnld&gt;</li>	Value returned in	<response></response>	000
		Capture response for Order Id 2A	<message></message>	Approved
2C	Void:		Void Response:	
	<li>ditleTxnld&gt;</li>	Use either the value	<response></response>	000
		returned in the Credit response for	<message></message>	Approved
		Order Id 2B, or the value returned in the Sale response (not Auth) for Order Id 2.		

**TABLE 2-1** Authorization Test Data (Continued)

	Supplied Data Elements		Key Response E	Elements
orderld	Element	Value	Element	Value
3	Authorization/Sale/AVS:		Authorization Response:	
	<amount></amount>	10100	<response></response>	000
	<name></name>	Eileen Jones	<message></message>	Approved
	<addressline1></addressline1>	3 Main St.	<authcode></authcode>	33333
	<city></city>	Bloomfield	<avsresult></avsresult>	10
	<state></state>	СТ	<cardvalidationresult></cardvalidationresult>	М
	<zip></zip>	06002		
	<country></country>	US		
	<type></type>	DI		
	<number></number>	6011010000000003		
	<expdate></expdate>	0314		
	<cardvalidationnum></cardvalidationnum>	758		
ЗА	Capture:		Capture Response:	
	<li>ditleTxnld&gt;</li>	Value returned in	<response></response>	000
		Auth response for Order Id 3	<message></message>	Approved
3B	Credit:		Credit Response:	
	<li>ditleTxnld&gt;</li>	Value returned in	<response></response>	000
		Capture response for Order Id 3A	<message></message>	Approved
3C	Void:		Void Response:	
	<li>ditleTxnld&gt;</li>	Use either the value	<response></response>	000
		returned in the Credit response for	<message></message>	Approved
		Order Id 3B, or the		
		value returned in		
		the Sale response (not Auth) for Order		
		ld 3.		

**TABLE 2-1** Authorization Test Data (Continued)

	Supplied Data Elements		Key Response E	Elements
orderld	Element	Value	Element	Value
4	Authorization/Sale/AVS:		Authorization Response:	
	<amount></amount>	10100	<response></response>	000
	<name></name>	Bob Black	<message></message>	Approved
	<addressline1></addressline1>	4 Main St.	<authcode></authcode>	44444
	<city></city>	Laurel	<avsresult></avsresult>	13
	<state></state>	MD		
	<zip></zip>	20708		
	<country></country>	US		
	<type></type>	AX		
	<number></number>	375001000000005		
	<expdate></expdate>	0414		
4A	Capture:		Capture Response:	
	<li>litleTxnld&gt;</li>	Value returned in	<response></response>	000
		Auth response for Order Id 4	<message></message>	Approved
4B	Credit:		Credit Response:	
	<li>ditleTxnld&gt;</li>	Value returned in	<response></response>	000
		Capture response for Order Id 4A	<message></message>	Approved
4C	Void:		Void Response:	
	<li><li>litleTxnld&gt;</li></li>	Use either the value	<response></response>	000
		Credit response for Order Id 4B, or the value returned in the Sale response (not Auth) for Order	<message></message>	Approved
		returned in the Credit response for Order Id 4B, or the value returned in the Sale response	<response></response>	

**TABLE 2-1** Authorization Test Data (Continued)

	Supplied Data	Elements	Key Response Elements	
orderld	Element	Value	Element	Value
5	Authorization/Sale/AVS:		Authorization Response:	
	<amount></amount>	10100	<response></response>	000
	<type></type>	VI	<message></message>	Approved
	<number></number>	4457010200000007	<authcode></authcode>	55555
	<expdate></expdate>	0514	<avsresult></avsresult>	32
	<cardvalidationnum></cardvalidationnum>	463	<cardvalidationresult></cardvalidationresult>	М
	<authenticationvalue></authenticationvalue>	BwABBJQ1AgAAA AAgJDUCAAAAAA A=		
5A	Capture:		Capture Response:	
	<li>litleTxnld&gt;</li>	Value returned in	<response></response>	000
		Auth response for Order Id 5	<message></message>	Approved
5B	Credit:		Credit Response:	
	<li>litleTxnId&gt;</li>	Value returned in	<response></response>	000
		Capture response for Order Id 5A	<message></message>	Approved
5C	Void:		Void Response:	
	<li>litleTxnld&gt;</li>	Use either the value	<response></response>	000
		returned in the Credit response for Order Id 5B, or the value returned in the Sale response (not Auth) for Order Id 5.	<message></message>	Approved

 TABLE 2-1
 Authorization Test Data (Continued)

	Supplied Data	Elements	Key Response E	Elements
orderld	Element	Value	Element	Value
6	Authorization/Sale:		Authorization Response:	
	<amount></amount>	10100	<response></response>	110
	<name></name>	Joe Green	<message></message>	Insufficient Funds
	<addressline1></addressline1>	6 Main St.	<avsresult></avsresult>	34
	<city></city>	Derry	<cardvalidationresult></cardvalidationresult>	Р
	<state></state>	NH		
	<zip></zip>	03038		
	<country></country>	US		
	<type></type>	VI		
	<number></number>	4457010100000008		
	<expdate></expdate>	0614		
	<cardvalidationnum></cardvalidationnum>	992		
6A	Void:		Void Response:	
	<li>litleTxnld&gt;</li>		<response></response>	360
		returned in the Sale response (not Auth)	<message></message>	No transaction found with
		for Order Id 6.		specified litleTxnId
7	Authorization/Sale/AVS:		Authorization Response:	
	<amount></amount>	10100	<response></response>	301
	<name></name>	Jane Murray		Invalid Account
	<addressline1></addressline1>	7 Main St.	<message></message>	Number
	<city></city>	Amesbury	<avsresult></avsresult>	34
	<state></state>	MA	<cardvalidationresult></cardvalidationresult>	N
	<zip></zip>	01913		
	<country></country>	US		
	<type></type>	MC		
	<number></number>	5112010100000002		
	<expdate></expdate>	0714		
	<cardvalidationnum></cardvalidationnum>	251		

 TABLE 2-1
 Authorization Test Data (Continued)

	Supplied Data	Elements	Key Response E	Elements
orderld	Element	Value	Element	Value
8	Authorization/Sale/AVS:		Authorization Response:	
	<amount></amount>	10100	<response></response>	123
	<name></name>	Mark Johnson	<message></message>	Call Discover
	<addressline1></addressline1>	8 Main St.	<avsresult></avsresult>	34
	<city></city>	Manchester	<cardvalidationresult></cardvalidationresult>	Р
	<state></state>	NH		
	<zip></zip>	03101		
	<country></country>	US		
	<type></type>	DI		
	<number></number>	6011010100000002		
	<expdate></expdate>	0814		
	<cardvalidationnum></cardvalidationnum>	184		
9	Authorization/Sale/AVS:		Authorization Response:	
	<amount></amount>	10100	<response></response>	303
	<name></name>	James Miller	<message></message>	Pick Up Card
	<addressline1></addressline1>	9 Main St.	<avsresult></avsresult>	34
	<city></city>	Boston	<cardvalidationresult></cardvalidationresult>	Р
	<state></state>	MA		
	<zip></zip>	02134		
	<country></country>	US		
	<type></type>	AX		
	<number></number>	375001010000003		
	<expdate></expdate>	0914		
	<cardvalidationnum></cardvalidationnum>	0421		
NOTE:			designed to test Authorizati not coding to use partial au	
10	<amount></amount>	10100	<response></response>	010
	<type></type>	VI	<message></message>	Partially Approved
	<number></number>	4457010140000141	<approvedamount></approvedamount>	32000
	<expdate></expdate>	0914		
	<allowpartialauth></allowpartialauth>	true		
	l .			

 TABLE 2-1
 Authorization Test Data (Continued)

	Supplied Data	Elements	Key Response E	Elements
orderId	Element	Value	Element	Value
11	<amount></amount>	10100	<response></response>	010
	<type></type>	MC	<message></message>	Partially Approved
	<number></number>	5112010140000004	<approvedamount></approvedamount>	48000
	<expdate></expdate>	1114		
	<allowpartialauth></allowpartialauth>	true		
12	<amount></amount>	10100	<response></response>	010
	<type></type>	AX	<message></message>	Partially Approved
	<number></number>	375001014000009	<approvedamount></approvedamount>	40000
	<expdate></expdate>	0414		
	<allowpartialauth></allowpartialauth>	true		
13	<amount></amount>	10100	<response></response>	010
	<type></type>	DI	<message></message>	Partially Approved
	<number></number>	6011010140000004	<approvedamount></approvedamount>	12000
	<expdate></expdate>	0814		
	<allowpartialauth></allowpartialauth>	true		
NOTE:	that return Prepaid Ind	icator information in	designed to test Authorizati the response message. If yo e of the Insights feature set,	ou are not coding
14	<amount></amount>	10100	<response></response>	000
	<type></type>	VI	<message></message>	Approved
	<number></number>	4457010200000247	<type></type>	PREPAID
	<expdate></expdate>	0814	<availablebalance></availablebalance>	2000
			<reloadable></reloadable>	NO
			<pre><prepaidcardtype></prepaidcardtype></pre>	GIFT
15	<amount></amount>	10100	<response></response>	000
	<type></type>	МС	<message></message>	Approved
	<number></number>	5500000254444445	<type></type>	PREPAID
		I		
	<expdate></expdate>	0314	<availablebalance></availablebalance>	2000
	<expdate></expdate>	0314	<availablebalance> <reloadable></reloadable></availablebalance>	2000 YES

 TABLE 2-1
 Authorization Test Data (Continued)

	Supplied Data	Elements	Key Response E	Key Response Elements	
orderld	Element	Value	Element	Value	
16	<amount></amount>	10100	<response></response>	000	
	<type></type>	MC	<message></message>	Approved	
	<number></number>	5592106621450897	<type></type>	PREPAID	
	<expdate></expdate>	0314	<availablebalance></availablebalance>	0	
			<reloadable></reloadable>	YES	
			<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	PAYROLL	
17	<amount></amount>	10100	<response></response>	000	
	<type></type>	MC	<message></message>	Approved	
	<number></number>	5590409551104142	<type></type>	PREPAID	
	<expdate></expdate>	0314	<availablebalance></availablebalance>	6500	
			<reloadable></reloadable>	YES	
			<pre><prepaidcardtype></prepaidcardtype></pre>	PAYROLL	
18	<amount></amount>	10100	<response></response>	000	
	<type></type>	MC	<message></message>	Approved	
	<number></number>	5587755665222179	<type></type>	PREPAID	
	<expdate></expdate>	0314	<availablebalance></availablebalance>	12200	
			<reloadable></reloadable>	YES	
			<pre><prepaidcardtype></prepaidcardtype></pre>	PAYROLL	
19	<amount></amount>	10100	<response></response>	000	
	<type></type>	MC	<message></message>	Approved	
	<number></number>	5445840176552850	<type></type>	PREPAID	
	<expdate></expdate>	0314	<availablebalance></availablebalance>	20000	
			<reloadable></reloadable>	YES	
			<pre><prepaidcardtype></prepaidcardtype></pre>	PAYROLL	
20	<amount></amount>	10100	<response></response>	000	
	<type></type>	MC	<message></message>	Approved	
	<number></number>	5390016478904678	<type></type>	PREPAID	
	<expdate></expdate>	0314	<availablebalance></availablebalance>	10050	
			<reloadable></reloadable>	YES	
i			<pre><prepaidcardtype></prepaidcardtype></pre>	PAYROLL	

 TABLE 2-1
 Authorization Test Data (Continued)

	Supplied Data	Elements	Key Response E	lements
orderld	Element	Value	Element	Value
NOTE:	that return Affluence In	dicator information i	designed to test Authorizati n the response message. If ire of the Insights feature se	you are not coding
21	<amount></amount>	10100	<response></response>	000
	<type></type>	VI	<message></message>	Approved
	<number></number>	4457010201000246	<affluence></affluence>	AFFLUENT
	<expdate></expdate>	0914		
22	<amount></amount>	10100	<response></response>	000
	<type></type>	VI	<message></message>	Approved
	<number></number>	4457010202000245	<affluence></affluence>	MASS AFFLUENT
	<expdate></expdate>	1114		
23	<amount></amount>	10100	<response></response>	000
	<type></type>	MC	<message></message>	Approved
	<number></number>	5112010201000109	<affluence></affluence>	AFFLUENT
	<expdate></expdate>	0414		
24	<amount></amount>	10100	<response></response>	000
	<type></type>	MC	<message></message>	Approved
	<number></number>	5112010202000108	<affluence></affluence>	MASS AFFLUENT
	<expdate></expdate>	0814		
NOTE:	Issuer Country informa	ition in the response	est Authorization transaction message. If you are not cod nts feature set, you may skip	ing to use the
25	<amount></amount>	10100	<response></response>	000
	<type></type>	VI	<message></message>	Approved
	<number></number>	4100204446270000	<issuercountry></issuercountry>	BRA
	<expdate></expdate>	1114		

 TABLE 2-1
 Authorization Test Data (Continued)

	Supplied Data	Elements	Key Response Elements	
orderId	Element	Value	Element	Value
Note:	involving Healthcare C	are (IIAS) transaction	designed to test Authorizati . If you are not coding to us it, you may skip these tests.	e the optional
26	<amount></amount>	18698	<response></response>	341
	<type></type>	MC	<message></message>	Invalid healthcare
	<number></number>	5194560012341234		amounts
	<expdate></expdate>	1214		
	<allowpartialauth></allowpartialauth>	true		
	<totalhealthcareamount></totalhealthcareamount>	20000		
27	<amount></amount>	18698	<response></response>	341
	<type></type>	MC	<message></message>	Invalid healthcare
	<number></number>	5194560012341234		amounts
	<expdate></expdate>	1214		
	<allowpartialauth></allowpartialauth>	true		
	<totalhealthcareamount></totalhealthcareamount>	15000		
	<rxamount></rxamount>	16000		
28	<amount></amount>	15000	<response></response>	000
	<type></type>	MC	<message></message>	Approved
	<number></number>	5194560012341234		
	<expdate></expdate>	1214		
	<allowpartialauth></allowpartialauth>	true		
	<totalhealthcareamount></totalhealthcareamount>	15000		
	<rxamount></rxamount>	3698		
29	<amount></amount>	18699	<response></response>	314
	<type></type>	VI	<message></message>	Invalid healthcare
	<number></number>	4024720001231239		amounts
	<expdate></expdate>	1214		
	<allowpartialauth></allowpartialauth>	true		
	<totalhealthcareamount></totalhealthcareamount>	31000		
	<rxamount></rxamount>	1000		
	<visionamount></visionamount>	19901		
	<clinicotheramount></clinicotheramount>	9050		
	<dentalamount></dentalamount>	1049		

 TABLE 2-1
 Authorization Test Data (Continued)

	Supplied Data Elements		Key Response E	lements
orderld	Element	Value	Element	Value
30	<amount></amount>	20000	<response></response>	341
	<type></type>	VI	<message></message>	Invalid healthcare
	<number></number>	4024720001231239		amounts
	<expdate></expdate>	1214		
	<allowpartialauth></allowpartialauth>	true		
	<totalhealthcareamount></totalhealthcareamount>	20000		
	<rxamount></rxamount>	1000		
	<visionamount></visionamount>	19901		
	<clinicotheramount></clinicotheramount>	9050		
	<dentalamount></dentalamount>	1049		
31	<amount></amount>	25000	<response></response>	010
	<type></type>	VI	<message></message>	Partially Approved
	<number></number>	4024720001231239	<approvedamount></approvedamount>	18699
	<expdate></expdate>	1214		
	<allowpartialauth></allowpartialauth>	true		
	<totalhealthcareamount></totalhealthcareamount>	18699		
	<rxamount></rxamount>	1000		
	<visionamount></visionamount>	15099		

### 2.4.1.1 Testing Recycling Advice

If you have elected to receive Authorization Recycling Advice, you must complete the certification tests in this section. The primary purpose of these tests are for you to verify that your systems correctly parse the recycle advice returned in the response message and that your systems can act on the recommendations.

If you are not coding to receive Recycling Advice, skip this test and go to Testing Authorization Reversal Transactions on page 76.

To test the Recycling Advice feature:

- 1. Submit authorization transactions using the orders shown in Table 2-2.
- 2. The response messages for each transaction will contain a recycling element (see recycling on page 421). Verify that your system parses the advice correctly and sets-up to recycle the Auth according to the advice provided in the Key Response Elements for the given orderId.
- 3. Recycle the Auth according to the advice provided.
  - For Order Id **VIcredit12401** the response message for the second recycle attempt (third Auth transaction) will contain the recycleAdviceEnd element.
  - For Order Id **VIcredit13201** the response message for the second recycle attempt (third Auth transaction) will contain additional recycling advice, but you can discontinue the testing at this point.

**TABLE 2-2** Authorization Recycling Advice Test Data

	Supplied Data Elements		Key Response Elements	
orderld	Element	Value	Element	Value
VIcredit12401	<amount></amount>	12401	Initial Auth Response:	
	<type></type>	VI	<response></response>	322
	<number></number>	4457012400000001	<message></message>	Invalid Transaction
	<expdate></expdate>	1220	<nextrecycletime></nextrecycletime>	Auth Date + 1 Day
			First Recycle Attempt:	
			<response></response>	322
			<message></message>	Invalid Transaction
			<nextrecycletime></nextrecycletime>	(Original) Auth Date + 2 Days
			Second Recycle Attempt:	
			<response></response>	322
			<message></message>	Invalid Transaction
			<recycleadviceend></recycleadviceend>	End of Advice

**Supplied Data Elements Key Response Elements** orderld **Element** Value **Element** Value VIprepaid13201 13201 **Initial Auth Response:** <amount> <type> V١ 349 <response> <number> 4457013200000001 <message> Do Not Honor <expDate> 1220 <nextRecycleTime> Auth Date + 1 Day First Recycle Attempt: 349 <response> <message> Do Not Honor <nextRecycleTime> (Original) Auth Date + 3 Days Second Recycle Attempt: 349 <response> <message> Do Not Honor <recycleAdviceEnd> (Original) Auth Date + 5 Days

**TABLE 2-2** Authorization Recycling Advice Test Data

# 2.4.2 Testing Authorization Reversal Transactions

If you plan to use Authorization Reversal Transactions, you must perform this test. If you do not plan to use Authorization Reversal transactions, skip this test and go to Testing eCheck Transactions on page 80.

To test Authorization Reversal Transactions:

- 1. Verify that your Authorization Reversal XML templates are coded correctly (refer to Authorization Reversal Transactions on page 144).
- 2. Submit the Authorizations, Captures (if applicable), and Authorization Reversal Transactions using the orders shown in Table 2-3.
- 3. Verify that your response values match those shown in Key Response Elements as shown in Table 2-3.

**TABLE 2-3** Authorization Reversal Test Data

	Supplied Data Elements		Key Response E	Elements
orderld	Element	Value	Element	Value
32	Authorization:		Authorization Response:	
	<amount></amount>	10010	<response></response>	000
	<name></name>	John Smith	<message></message>	Approved
	<addressline1></addressline1>	1 Main St.	<authcode></authcode>	11111
	<city></city>	Burlington	<avsresult></avsresult>	01
	<state></state>	MA	<cardvalidationresult></cardvalidationresult>	М
	<zip></zip>	01803-3747		
	<country></country>	US		
	<type></type>	VI		
	<number></number>	44570100000000009		
	<expdate></expdate>	0114		
	<cardvalidationnum></cardvalidationnum>	349		
32A	Capture:		Capture Response:	
	<amount></amount>	5050	<response></response>	000
	<li>litleTxnId&gt;</li>	Value returned in Auth response for Order Id 32	<message></message>	Approved
32B	Authorization Reversal:		Auth Reversal Response:	
	<li>ditleTxnld&gt;</li>	Value returned in	<response></response>	111
		Auth response for Order Id 32	<message></message>	Authorization
	<amount></amount>	Do Not Submit an Amount	Note: This transaction returns 111 instead of 000, because it is unnecessary to submit an Authorization Reversal for the Visa payment card.	amount has already been depleted

**TABLE 2-3** Authorization Reversal Test Data

	Supplied Data Elements		Key Response E	Elements
orderld	Element	Value	Element	Value
33	Authorization:		Authorization Response:	
	<amount></amount>	20020	<response></response>	000
	<name></name>	Mike J. Hammer	<message></message>	Approved
	<addressline1></addressline1>	2 Main St.	<authcode></authcode>	22222
	<addressline2></addressline2>	Apt. 222	<avsresult></avsresult>	10
	<city></city>	Riverside	<cardvalidationresult></cardvalidationresult>	М
	<state></state>	RI	<authenticationresult></authenticationresult>	Note: Not returned
	<zip></zip>	02915		for MasterCard
	<country></country>	US		
	<type></type>	MC		
	<number></number>	51120100000000003		
	<expdate></expdate>	0214		
	<cardvalidationnum></cardvalidationnum>	261		
	<authenticationvalue></authenticationvalue>	BwABBJQ1AgAAA AAgJDUCAAAAAA A=		
33A	Authorization Reversal:		Auth Reversal Response:	
	<li>litleTxnld&gt;</li>	Value returned in	<response></response>	000
		Auth response for Order Id 33	<message></message>	Approved
	<amount></amount>	Do Not Submit an amount		
34	Authorization:		Authorization Response:	
	<amount></amount>	30030	<response></response>	000
	<name></name>	Eileen Jones	<message></message>	Approved
	<addressline1></addressline1>	3 Main St.	<authcode></authcode>	33333
	<city></city>	Bloomfield	<avsresult></avsresult>	10
	<state></state>	СТ	<cardvalidationresult></cardvalidationresult>	М
	<zip></zip>	06002		
	<country></country>	US		
	<type></type>	DI		
	<number></number>	60110100000000003		
	<expdate></expdate>	0314		
	<cardvalidationnum></cardvalidationnum>	758		

**TABLE 2-3** Authorization Reversal Test Data

	Supplied Data	Elements	Key Response E	Elements
orderld	Element	Value	Element	Value
34A	Authorization Reversal:		Auth Reversal Response:	
	<li>litleTxnId&gt;</li>	Value returned in Auth response for Order Id 34	<response></response>	000 Approved
	<amount></amount>	Do Not Submit an Amount		
35	Authorization:		Authorization Response:	
	<amount></amount>	10100	<response></response>	000
	<name></name>	Bob Black	<message></message>	Approved
	<addressline1></addressline1>	4 Main St.	<authcode></authcode>	44444
	<city></city>	Laurel	<avsresult></avsresult>	13
	<state></state>	MD		
	<zip></zip>	20708		
	<country></country>	US		
	<type></type>	AX		
	<number></number>	375001000000005		
	<expdate></expdate>	0414		
35A	Capture:		Capture Response:	
	<amount></amount>	5050	<response></response>	000
	<li>ditleTxnId&gt;</li>	Value returned in Auth response for Order Id 35	<message></message>	Approved
35B	Authorization Reversal:		Auth Reversal Response:	
	<li>litleTxnld&gt;</li>	Value returned in	<response></response>	336
		Auth response for Order Id 35	<message></message>	Reversal amount does not match
	<amount></amount>	5050		Authorization amount
36	Authorization:		Authorization Response:	
	<amount></amount>	20500	<response></response>	000
	<type></type>	AX	<message></message>	Approved
	<number></number>	375000026600004		
	<expdate></expdate>	0514		

Supplied Data Elements **Key Response Elements** orderld **Element** Value **Element** Value **Authorization Reversal:** 36A **Auth Reversal Response:** litleTxnId> Value returned in 336 <response> Auth response for <message> Reversal Amount Order Id 36 does not match 10000 Authorization <amount> amount

**TABLE 2-3** Authorization Reversal Test Data

# 2.4.3 Testing eCheck Transactions

If you have elected to offer eChecks as an alternate payment method, you are required to complete the tests in this section. Data sets are provided for you to use to test your construction of XML request messages, as well as the parsing of the response messages for eCheck transactions.

Note: The eCheck Verification test is required only if you plan to perform eCheck Verifications.

#### To test **eCheck Verification** transactions:

- 1. Verify that your eCheck XML template is coded correctly (refer to eCheck Verification Transactions on page 182.)
- 2. Submit the eCheck Verification transactions using the data sets supplied in Table 2-4.

#### NOTE:

In addition to the test data provided in the table, you must also provide appropriate data for other child elements of the billToAddress element, such as Address1 (2, 3), city, state, phone, etc.

For Corporate accounts (Order ID 39 and 40) you must include the firstName, lastName, and companyName in the echeckVerification request.

- 3. Verify that your response values match those shown in the Key Response Elements section of Table 2-4.
- 4. After you complete this test, go to the next eCheck test.

**TABLE 2-4** eCheck Verification Test Data

	Supplied Data Elements		Key Response Elements	
orderId	Element	Value	Element	Value
37	<amount></amount>	3001	<response></response>	301
	<ordersource></ordersource>	telephone	<message></message>	Invalid Account
	<firstname></firstname>	Tom		Number
	<lastname></lastname>	Black		
	<acctype></acctype>	Checking		
	<accnum></accnum>	10@BC99999		
	<routingnum></routingnum>	053100300		
38	<amount></amount>	3002	<response></response>	000
	<ordersource></ordersource>	telephone	<message></message>	Approved
	<firstname></firstname>	John		
	<lastname></lastname>	Smith		
	<acctype></acctype>	Checking		
	<accnum></accnum>	1099999999		
	<routingnum></routingnum>	011075150		
39	<amount></amount>	3003	<response></response>	950
	<ordersource></ordersource>	telephone	<message></message>	Declined -
	<firstname></firstname>	Robert		Negative Information on File
	<lastname></lastname>	Jones		inioniation on the
	<companyname></companyname>	Good Goods Inc		
	<acctype></acctype>	Corporate		
	<accnum></accnum>	309999999		
	<routingnum></routingnum>	053100300		
40	<amount></amount>	3004	<response></response>	951
	<ordersource></ordersource>	telephone	<message></message>	Absolute Decline
	<firstname></firstname>	Peter		
	<lastname></lastname>	Green		
	<companyname></companyname>	Green Co		
	<acctype></acctype>	Corporate		
	<accnum></accnum>	809999999		
	<routingnum></routingnum>	011075150		

#### To test eCheck Sale transactions:

- 1. Verify that your eCheck XML template is coded correctly (refer to eCheck Sale Transactions on page 179).
- 2. Submit the echeckSale transactions using the Supplied Data elements shown in Table 2-5.

NOTE: In addition to the test data provided in the table, you must also provide appropriate data for other child elements of the billToAddress element, such as Address1 (2, 3), city, state, phone, etc.

- 3. Verify that your response values match those shown in Table 2-5.
- 4. After you complete this test, go to the next test.

TABLE 2-5 eCheck Sale Test Data

	Supplied Data Elements		Key Response Elements	
orderld	Element	Value	Element	Value
41	<amount></amount>	2008	<response></response>	301
	<ordersource></ordersource>	telephone	<message></message>	Invalid Account
	<firstname></firstname>	Mike		Number
	<middleinitial></middleinitial>	J		
	<lastname></lastname>	Hammer		
	<acctype></acctype>	Checking		
	<accnum></accnum>	10@BC99999		
	<routingnum></routingnum>	053100300		
42	<amount></amount>	2004	<response></response>	000
	<ordersource></ordersource>	telephone	<message></message>	Approved
	<firstname></firstname>	Tom		
	<lastname></lastname>	Black		
	<acctype></acctype>	Checking		
	<accnum></accnum>	4099999992		
	<routingnum></routingnum>	011075150		

**TABLE 2-5** eCheck Sale Test Data (Continued)

	Supplied Data Elements		Key Response E	Elements
orderld	Element	Value	Element	Value
43	<amount></amount>	2007	<response></response>	000
	<ordersource></ordersource>	telephone	<message></message>	Approved
	<firstname></firstname>	Peter		Note: This
	<lastname></lastname>	Green		response will include the
	<companyname></companyname>	Green Co		accountUpdater
	<acctype></acctype>	Corporate		element (see
	<accnum></accnum>	6099999992		accountUpdater on page 219).
	<routingnum></routingnum>	011075150		,
44	<amount></amount>	2009	<response></response>	900
	<ordersource></ordersource>	telephone	<message></message>	Invalid Bank
	<firstname></firstname>	Peter		Routing Number
	<lastname></lastname>	Green		
	<companyname></companyname>	Green Co		
	<acctype></acctype>	Corporate		
	<accnum></accnum>	9099999992		
	<routingnum></routingnum>	053133052		

#### To test **eCheck Credit** transactions:

1. Verify that your eCheck XML template is coded correctly (refer to eCheck Credit Transactions on page 172.)

NOTE: In addition to the test data provided in the table, you must also provide appropriate data for other child elements of the billToAddress element, such as Address1 (2, 3), city, state, phone, etc.

- 2. Submit the echeckCredit transactions using the data in the Supplied Data Elements section of Table 2-6.
- 3. Verify that your response values match those shown in the Key Response Elements section of Table 2-6.
- 4. After you complete this test, go to the next test.

TABLE 2-6 eCheck Credit Test Data

	Supplied Data Elements		Key Response Elements	
orderld	Element	Value	Element	Value
45	<amount></amount>	1001	<response></response>	301
	<ordersource></ordersource>	telephone	<message></message>	Invalid Account
	<firstname></firstname>	John		Number
	<lastname></lastname>	Smith		
	<acctype></acctype>	Checking		
	<accnum></accnum>	10@BC99999		
	<routingnum></routingnum>	053100300		
46	<amount></amount>	1003	<response></response>	000
	<ordersource></ordersource>	telephone	<message></message>	Approved
	<firstname></firstname>	Robert		
	<lastname></lastname>	Jones		
	<companyname></companyname>	Widget Inc		
	<acctype></acctype>	Corporate		
	<accnum></accnum>	3099999999		
	<routingnum></routingnum>	011075150		
47	<amount></amount>	1007	<response></response>	000
	<ordersource></ordersource>	telephone	<message></message>	Approved
	<firstname></firstname>	Peter		Note: This
	<lastname></lastname>	Green		response will include the
	<companyname></companyname>	Green Co		accountUpdater
	<acctype></acctype>	Corporate		element (see accountUpdater on
	<accnum></accnum>	6099999993		page 219.)
	<routingnum></routingnum>	211370545		,
48	<li>litleTxnld&gt;</li>	Value returned in	<response></response>	000
		eCheck Sale response for Order Id 43	<message></message>	Approved
49	<li><li>litleTxnId&gt;</li></li>	2	<response></response>	360
-			<message></message>	No transaction found with specified litleTxnld

### To test **eCheck Void** transactions:

- 1. Verify that your eCheck XML template is coded correctly (refer to eCheck Void Transactions (Online Only) on page 186.)
- 2. (Re)Submit the echeckSale transaction for Order ID #42 as shown in Table 2-5 with a different value for the id attribute.
  - a. Using the litleTxnId returned in the echeckSaleResponse message, submit an echeckVoid transaction.
  - b. The system returns an echeckVoidResponse Response Code of "000" and a message of "Approved".
- 3. Using the litleTxnId returned in the echeckCreditResponse message for Order ID #41, submit an echeckVoid transaction.
  - a. The system returns an echeckVoidResponse Response Code of "000" and a message of "Approved".
- 4. Submit an echeckVoid request using a value of "2" for the litleTxnId.
  - a. The system returns an echeckVoidResponse Response Code of "360" and a message of "No transaction found with specified litleTxnId".
- 5. After you complete this test, go to the next test.

## 2.4.4 Testing Token Transactions

You can obtain tokens in two ways. The first method is explicit registration using the registerTokenRequest transaction. The second method is implicit registration, which is achieved by submitting the card or account information (for eChecks) in a normal payment transaction. This section provides test data sets using both methods for both credit card and eCheck tokenization.

Perform this test only if you plan to use the Litle & Co. Vault feature.

#### Note:

Because the Certification environment is a test environment, Litle & Co. periodically purges the systems of old data. As a result of the purge operation, tokens you create in the Certification environment may no longer exist at a future time. For additional information see Data Retention Policy on page 51.

Also, the test data does not include values for all elements. You should use appropriate values for all elements as required to create a properly structured LitleXML request.

To test explicit Token Registration transactions:

- 1. Verify that your LitleXML template is coded correctly for this transaction type (refer to registerTokenRequest on page 424.)
- 2. To test credit card tokenization, submit registerTokenRequest transactions using the data for Order Ids 50 through 52 from Table 2-7.
- 3. If you also use eCheck transactions and have elected to tokenize eCheck account numbers, submit registerTokenRequest transactions using the data for Order Ids 53 and 54 from Table 2-7; otherwise, skip those two tests.
- 4. Verify that your registerTokenResponse values match those shown in the Key Response Elements section of Table 2-7. The complete token values are not defined in the table, because the system generates the tokens dynamically.
- 5. After completing this test, proceed to the next set of tests for implicit tokenization.

**TABLE 2-7** Register Token Test Data

	Supplied Data	Elements	Key Response Elements	
orderld	Element	Value	Element	Value
50	<accountnumber></accountnumber>	4457119922390123	<li>litleToken&gt;</li>	xxxxxxxxxxxx0123
			<bi><bi>&gt;</bi></bi>	445711
			<type></type>	VI
			<response></response>	801
			<message></message>	Account number was successfully registered
				Note:
51	<accountnumber></accountnumber>	4457119999999999	<li>litleToken&gt;</li>	none returned
			<response></response>	820
			<message></message>	Credit card number was invalid
52	<accountnumber></accountnumber>	4457119922390123	<li>litleToken&gt;</li>	xxxxxxxxxxxx0123
			   	445711
			<type></type>	VI
			<response></response>	802
			<message></message>	Account number was previously registered
53	<accnum></accnum>	109999998	<li>litleToken&gt;</li>	xxxxxxxxx
	<routingnum></routingnum>	114567895	<type></type>	EC
			<echeckaccountsuffix></echeckaccountsuffix>	998
			<response></response>	801
			<message></message>	Account number was successfully registered
54	<accnum></accnum>	1022222102	<response></response>	900
	<routingnum></routingnum>	1145_7895	<message></message>	Invalid bank routing number

To test the submission of card data in an tokenized environment using Authorization transactions, as well as the submission of tokens in transactions, do the following:

- 1. Verify that your LitleXML template is coded correctly for this transaction type (refer to Authorization Transactions on page 134.)
- 2. Submit three authorization transactions using the Supplied Data Elements from Order Ids 55 through 57 from Table 2-8.
- 3. Verify that your authorizationResponse values match those shown in the Key Response Elements section of Table 2-8 for Order Ids 55 through 57.
- 4. To verify that your LitleXML template is coded correctly for the submission of tokens in authorization transactions, submit authorization transactions using the Supplied Data Elements from Order Ids 58 through 60 from Table 2-8.

To test the submission of eCheck data in an tokenized environment using Authorization transactions, as well as the submission of tokens in eCheck transactions, do the following:

- 1. Verify that your LitleXML template is coded correctly for these transaction types as applicable (refer to eCheck Sale Transactions on page 179 and eCheck Credit Transactions on page 172).
- 2. Submit the four transactions, Order Ids 61 through 64, using the Supplied Data Elements from Table 2-8.
- 3. Verify that your response values match those shown in the Key Response Elements section of Table 2-8 for Order Ids 61 through 64.

**TABLE 2-8** Implicit Registration Test Data

	Supplied Data Elements		Key Response	Elements
orderId	Element	Value	Element	Value
55	<amount></amount>	15000	<response></response>	000
	<type></type>	MC	<message></message>	Approved
	<number></number>	5435101234510196	<li>ditleToken&gt;</li>	xxxxxxxxxxxx0196
	<expdate></expdate>	1114	<tokenresponsecode></tokenresponsecode>	801
	<cardvalidationnum></cardvalidationnum>	987	<tokenmessage></tokenmessage>	Account number was successfully registered
			<type></type>	MC
			<bin></bin>	543510

**TABLE 2-8** Implicit Registration Test Data (Continued)

	Supplied Date	a Elements	Key Response	Elements
orderld	Element	Value	Element	Value
56	<amount></amount>	15000	< <response></response>	301
	<type></type>	MC	<message></message>	Invalid account
	<number></number>	5435109999999999		number
	<expdate></expdate>	1114		
	<cardvalidationnum></cardvalidationnum>	987		
57	<amount></amount>	15000	<response></response>	000
	<type></type>	MC	<message></message>	Approved
	<number></number>	5435101234510196	<li>litleToken&gt;</li>	xxxxxxxxxxxx0196
	<expdate></expdate>	1114	<tokenresponsecode></tokenresponsecode>	802
	<cardvalidationnum></cardvalidationnum>	987	<tokenmessage></tokenmessage>	Account number was previously registered
			<type></type>	MC
			   	543510
58	<amount></amount>	15000	<response></response>	000
	<li>litleToken&gt;</li>	xxxxxxxxxxxx0196	<message></message>	Approved
	<expdate></expdate>	1114		
	<pre><cardvalidationnum></cardvalidationnum></pre>	987		
		<b>Note:</b> Use the token returned in Order Id 57.		
59	<amount></amount>	15000	<response></response>	822
	<li>litleToken&gt;</li>	1111000100092332	<message></message>	Token was not found
	<expdate></expdate>	1114		
60	<amount></amount>	15000	<response></response>	823
	<li>litleToken&gt;</li>	1112000100000085	<message></message>	Token was invalid
	<expdate></expdate>	1114		
L		i		i

**TABLE 2-8** Implicit Registration Test Data (Continued)

	Supplied Dat	a Elements	Key Response Elements	
orderId	Element	Value	Element	Value
61	eCheck Sale:		<li><li>litleToken&gt;</li></li>	xxxxxxxxxxxxx
	<acctype></acctype>	Checking	<tokenresponsecode></tokenresponsecode>	801
	<accnum></accnum>	1099999003	<tokenmessage></tokenmessage>	Account number was
	<routingnum></routingnum>	114567895		successfully registered
			<type></type>	EC
			<echeckaccountsuffix></echeckaccountsuffix>	003
62	eCheck Sale:		<li><li>litleToken&gt;</li></li>	xxxxxxxxxxxxx
	<acctype></acctype>	Checking	<tokenresponsecode></tokenresponsecode>	801
	<accnum></accnum>	1099999999	<tokenmessage></tokenmessage>	Account number was
	<routingnum></routingnum>	114567895		successfully registered
			<type></type>	EC
			<echeckaccountsuffix></echeckaccountsuffix>	999
63	eCheck Credit:		<li><li>litleToken&gt;</li></li>	xxxxxxxxxxxxx
	<acctype></acctype>	Checking	<tokenresponsecode></tokenresponsecode>	801
	<accnum></accnum>	1099999999	<tokenmessage></tokenmessage>	Account number was
	<routingnum></routingnum>	214567892		successfully registered
			<type></type>	EC
			<echeckaccountsuffix></echeckaccountsuffix>	999

**TABLE 2-8** Implicit Registration Test Data (Continued)

	Supplied Data Elements		Key Response	Elements
orderId	Element	Value	Element	Value
64	eCheck Sale:		<originaltokeninfo></originaltokeninfo>	(parent element)
	<acctype></acctype>	Corporate	<acctype></acctype>	Checking
	<accnum></accnum>	6099999993	<li><li>litleToken&gt;</li></li>	11190000001003001
	<routingnum></routingnum>	211370545	<routingnum></routingnum>	211370545
			<newtokeninfo></newtokeninfo>	(parent element)
			<acctype></acctype>	Checking
			<li><li>litleToken&gt;</li></li>	11190000001154101
			<routingnum></routingnum>	211370545
			<li><li>litleToken&gt;</li></li>	xxxxxxxxxxxxx
			<tokenresponsecode></tokenresponsecode>	801
			<tokenmessage></tokenmessage>	Account number was successfully registered
			<type></type>	EC
			<echeckaccountsuffix></echeckaccountsuffix>	993

### Note:

Order ID 64 returns accountUpdater information. This test allows you to test responses you might receive when a NOC exists against the eCheck account, but you submit the old account information. In this case, the system provides the old token information, but issues a new token based upon the new account information and provides it as well.

# 2.5 Performing the Optional Tests

This section describes data that you can use to test different response codes, messages, and AVS response codes from the Litle & Co. system for American Express, Visa, MasterCard, Discover, and Diner's Club cards. You can perform these tests after completing the certification testing.

This section contains the following topics:

- Testing AVS and Card Validation
- Testing Address Responses
- Testing Advanced AVS Response Codes
- Testing Response Reason Codes and Messages
- Testing 3DS Responses
- Testing the Prepaid Filtering Feature
- Testing the International Card Filter Feature
- Testing Security Code No-Match Filtering
- Testing Automatic Account Updater
- Testing Tax Billing and Convenience Fee
- Testing the Recycling Engine
- Testing Online Duplicate Transaction Processing
- Testing Transaction Volume Capacity

# 2.5.1 Testing AVS and Card Validation

Use the AVS tests to test all of the possible AVS response codes that the system can produce, including those response codes that cannot be produced by varying the address and ZIP code data. For these tests the AVS response codes are independent of any address or ZIP code data that you submit.

To test AVS response codes:

- 1. Submit transactions using the card data in Table 2-9. If you are using Card Validation, include the cardValidationNum element. The Card Validation test will return all possible Card Validation response codes. The response codes that are returned are independent of the card validation value that you submit.
- 2. Verify that the AVS tests return the following response:

```
<response>000</response>
<message>Approved</message>
<authCode>654321</authCode>
```

<avsresult>See Table 2-9</avsresult>
<cardValidationResult>See Table 2-9</cardValidationResult>

NOTE: For a list of all possible AVS response codes, see AVS Response Codes on page 509.

For a list of all possible card validation response codes, see Card Validation Response Codes on page 513.

TABLE 2-9 AVS and Card Validation Test Data

	Supplied Data Elements		Key Response E	Elements
orderId	Element	Value	Element	Value
65	<type></type>	VI	<avsresult></avsresult>	00
	<number></number>	4457000300000007	<cardvalidationresult></cardvalidationresult>	U
66	<type></type>	VI	<avsresult></avsresult>	01
	<number></number>	4457000100000009	<cardvalidationresult></cardvalidationresult>	М
67	<type></type>	VI	<avsresult></avsresult>	02
	<number></number>	4457003100000003	<cardvalidationresult></cardvalidationresult>	М
68	<type></type>	VI	<avsresult></avsresult>	10
	<number></number>	4457000400000006	<cardvalidationresult></cardvalidationresult>	S
69	<type></type>	VI	<avsresult></avsresult>	11
	<number></number>	4457000200000008	<cardvalidationresult></cardvalidationresult>	М
70	<type></type>	MC	<avsresult></avsresult>	12
	<number></number>	5112000100000003	<cardvalidationresult></cardvalidationresult>	М
71	<type></type>	MC	<avsresult></avsresult>	13
	<number></number>	5112002100000009	<cardvalidationresult></cardvalidationresult>	М
72	<type></type>	MC	<avsresult></avsresult>	14
	<number></number>	5112002200000008	<cardvalidationresult></cardvalidationresult>	N
73	<type></type>	MC	<avsresult></avsresult>	20
	<number></number>	5112000200000002	<cardvalidationresult></cardvalidationresult>	N
74	<type></type>	MC	<avsresult></avsresult>	30
	<number></number>	5112000300000001	<cardvalidationresult></cardvalidationresult>	Р

**Supplied Data Elements Key Response Elements** orderld **Element** Value Element Value 75 MC 31 <type> <avsResult> <number> 5112000400000000 <cardValidationResult> U 32 76 <type> DI <avsResult> <number> 6011000100000003 <cardValidationResult> S 77 MC <avsResult> 33 <type> <number> 5112000500000009 <cardValidationResult> No Returned 78 <type> <avsResult> <cardValidationResult> <number> 5112000600000008 80 <type> AX <cardValidationResult> Not Returned <number> 374313304211118 352 <response> Note: American <message> Decline CVV2/CID Express CID Fail failures are declined by American Express.

**TABLE 2-9** AVS and Card Validation Test Data

# 2.5.2 Testing Address Responses

Use the address tests to test different AVS responses by varying the address and ZIP code data. The address tests are intended to return a realistic AVS response code.

To test address responses:

- 1. Submit Authorization or Sale transactions using the card numbers in Table 2-10. For each of these numbers, submitting 95 Main St. and 95022 returns an avsResult of 00. If you extend the Zip Code to 9 digits, by appending 1111, the system returns an avsResult of 01, as shown in the first example.
- 2. The AVS response code depends on the Address Line 1 and ZIP Code that are passed in with the transaction. Submit additional transactions using the card data from the table, but varying the address/zip information to receive other avsResult codes in the response messages (see Examples below).

For a detailed list of all possible AVS response codes, see AVS Response Codes on page 509.

**Example: Correct Address and Nine-Digit ZIP Code** 

AVS Request: 4457000600000004 95 Main St. 950221111

**AVS Response:** 01

**Example:** Incorrect Address, but Correct Five-Digit ZIP Code

**AVS Request:** 4457000600000004 100 Maple St 95022

**AVS Response:** 10

**Example: Incorrect Address and ZIP Code** 

**AVS Request:** 4457000600000004 100 Maple St 02134

**AVS Response: 20** 

TABLE 2-10 Address Test Data

Supplied Data Elements				
Element	Value			
<type></type>	VI			
<number></number>	4457000600000004			
<type></type>	MC			
<number></number>	5112000700000007			
<type></type>	AX			
<number></number>	375000010000005			
<type></type>	DI			
<number></number>	6011000200000002			
<type></type>	VI			
<number></number>	4457000700000003			
<type></type>	MC			
<number></number>	5112000800000006			
<type></type>	AX			
<number></number>	375000020000003			
<type></type>	DI			
<number></number>	6011000300000001			

## 2.5.3 Testing Advanced AVS Response Codes

The Advanced AVS (AAVS) feature is an offering from American Express that allows you to check several parameters not normally covered by a standard AVS check, including name, phone, and email.

To test AAVS Response Codes:

- 1. Submit an Authorization transaction using the data supplied in Table 2-12.
- 2. Verify that you handle the response correctly.
- 3. Enter additional transaction varying the values for name, phone, and/or email to trigger other AAVS results (see AAVS Response Codes on page 510 for other result codes). For example, if you submit a second transaction using the name Jane Doe Instead of John Doe, the AAVS result would be 011 indicating No Match for name, but Match for phone and email.

TABLE 2-11 Advanced AVS Test Data

	Supplied Data Elements		Key Response Elements	
orderId	Element	Value	Element	Value
81	<amount></amount>	12523	<advancedavsresults></advancedavsresults>	111
	<name></name>	John Doe		
	<addressline1></addressline1>	95 Main St.		
	<city></city>	Palo Alto		
	<state></state>	CA		
	<zip></zip>	950221111		
	<country></country>	US		
	<email></email>	test@test.com		
	<phone></phone>	6178675309		
	<type></type>	AX		
	<number></number>	341234567890127		
	<expdate></expdate>	1114		

## 2.5.4 Testing Response Reason Codes and Messages

Use the data as shown in this section to test Response Reason Codes and Messages.

NOTE: If you submit account numbers not specified in the tables, you will receive the following response:

<response>000</response>

<message>Approved</message>

<authCode>123457</authCode>

<avsResult>00</avsResult>

To test Response Codes and Messages:

- 1. Submit transactions using the data in Table 2-12.
- 2. Verify that you handle the response correctly. The responses are as indicated in Table 2-12 regardless of the address sent in with the transaction.

NOTE:

The messages listed are samples of messages that the system can return. Since the messages are subject to change at any time, you should use them only for human readability purposes and not for coding purposes. Always code to the response codes, since these do not change.

- For a list of all possible response reason codes, see Payment Transaction Response Codes on page 492.
- For a list of all possible AVS response codes, see AVS Response Codes on page 509.

TABLE 2-12 Response Code Test Data

Supplied Data Elements		Key Response Elements	
Element	Value	Element	Value
<type></type>	VI	<response></response>	000
<number></number>	4457000800000002	<message></message>	Approved
<type></type>	VI	<response></response>	000
<number></number>	4457000900000001	<message></message>	Approved
<type></type>	VI	<response></response>	000
<number></number>	4457001000000008	<message></message>	Approved
<type></type>	MC	<response></response>	000
<number></number>	5112000900000005	<message></message>	Approved

**TABLE 2-12** Response Code Test Data

Supplied Da	ta Elements	Key Response Elements	
Element	Value	Element	Value
<type></type>	AX	<response></response>	121
<number></number>	375000030000001	<message></message>	Call AMEX
<type></type>	DI	<response></response>	123
<number></number>	6011000400000000	<message></message>	Cal Discover
<type></type>	VI	<response></response>	120
<number></number>	4457001200000006	<message></message>	Call Issuer
<type></type>	VI	<response></response>	120
<number></number>	4457001300000005	<message></message>	Call Issuer
<type></type>	VI	<response></response>	120
<number></number>	4457001400000004	<message></message>	Call Issuer
<type></type>	MC	<response></response>	101
<number></number>	51120010000000002	<message></message>	Issuer Unavailable
<type></type>	VI	<response></response>	321
<number></number>	4457001900000009	<message></message>	Invalid Merchant
<type></type>	VI	<response></response>	303
<number></number>	4457002000000006	<message></message>	Pick Up Card
<type></type>	VI	<response></response>	110
<number></number>	4457002100000005	<message></message>	Insufficient Funds
<type></type>	VI	<response></response>	120
<number></number>	4457002200000004	<message></message>	Call Issuer
<type></type>	AX	<response></response>	110
<number></number>	375000050000006	<message></message>	Insufficient Funds
<type></type>	VI	<response></response>	349
<number></number>	4457002300000003	<message></message>	Do Not Honor
<type></type>	VI	<response></response>	340
<number></number>	4457002500000001	<message></message>	Invalid Amount
<type></type>	MC	<response></response>	301
<number></number>	5112001600000006	<message></message>	Invalid Account Number

**TABLE 2-12** Response Code Test Data

Supplied Da	Supplied Data Elements		Key Response Elements	
Element	Value	Element	Value	
<type></type>	MC	<response></response>	301	
<number></number>	5112001700000005	<message></message>	Invalid Account Number	
<type></type>	MC	<response></response>	321	
<number></number>	5112001800000004	<message></message>	Invalid Merchant	
<type></type>	VI	<response></response>	101	
<number></number>	4457002700000009	<message></message>	Issuer Unavailable	
<type></type>	MC	<response></response>	305	
<number></number>	5112001900000003	<message></message>	Expired Card	
<type></type>	VI	<response></response>	322	
<number></number>	4457002800000008	<message></message>	Invalid Transaction	
<type></type>	VI	<response></response>	350	
<number></number>	4457002900000007	<message></message>	Generic Decline	
<type></type>	VI	<response></response>	101	
<number></number>	4457003000000004	<message></message>	Issuer Unavailable	
<type></type>	MC	<response></response>	101	
<number></number>	51120020000000000	<message></message>	Issuer Unavailable	
<type></type>	VI	<response></response>	301	
<number></number>	4457000100000000	<message></message>	Invalid Account Number	
<type></type>	VI	<response></response>	320	
<number></number>	4457000200000008	<message></message>	Invalid Expiration Date	

## 2.5.5 Testing 3DS Responses

The cardholder authentication value should only be included by merchants who support 3DS (3 Domain Secure) electronic commerce transactions. Your systems must be in compliance with the Verified by Visa or MasterCard Secure Code implementations of 3DS.

To test 3DS responses:

1. Submit Authorization transactions or Sale transactions using the data in Table 2-13. For all cards, set the cardholder authentication value within <cardholderAuthentication> section to the following base64 encoded string:

BwABBJQ1AgAAAAAgJDUCAAAAAA=

The response from a 3DS test will be the same as an Authorization or Sale response, except the <authenticationResult> tag will be included in the response within the <fraudResult> section.

TABLE 2-13 3DS Test Data

Supplied Data Elements		Key Response E	lements
Element	Value	Element	Value
<type></type>	VI	<authenticationresult></authenticationresult>	0
<number></number>	4457010200000015		
<type></type>	VI	<authenticationresult></authenticationresult>	1
<number></number>	4457010200000023		
<type></type>	VI	<authenticationresult></authenticationresult>	2
<number></number>	4457010200000031		
<type></type>	VI	<authenticationresult></authenticationresult>	3
<number></number>	4457010200000049		
<type></type>	VI	<authenticationresult></authenticationresult>	4
<number></number>	4457010200000056		
<type></type>	VI	<authenticationresult></authenticationresult>	5
<number></number>	4457010200000064		
<type></type>	VI	<authenticationresult></authenticationresult>	6
<number></number>	4457010200000072		
<type></type>	VI	<authenticationresult></authenticationresult>	7
<number></number>	4457010200000080		
<type></type>	VI	<authenticationresult></authenticationresult>	8
<number></number>	4457010200000098		

TABLE 2-13 3DS Test Data

Supplied Da	ta Elements	Key Response E	Elements
Element	Value	Element	Value
<type></type>	VI	<authenticationresult></authenticationresult>	9
<number></number>	4457010200000106		
<type></type>	VI	<authenticationresult></authenticationresult>	Α
<number></number>	4457010200000114		
<type></type>	VI	<authenticationresult></authenticationresult>	В
<number></number>	4457010200000122		
<type></type>	VI	<authenticationresult></authenticationresult>	С
<number></number>	4457010200000130		
<type></type>	VI	<authenticationresult></authenticationresult>	D
<number></number>	4457010200000148		
<type></type>	MC	<authenticationresult></authenticationresult>	N/A
<number></number>	5112010200000001		

## 2.5.6 Testing the Prepaid Filtering Feature

Complete this test only if you are planning on using the Litle & Co. Prepaid Filtering Feature and are using schema version 8.3 or above.

To test the Prepaid Filtering feature:

- 1. Submit authorization transactions using the values provided in Supplied Data Elements of Table 2-14.
- 2. Verify that your response values match those shown in the Key Response Elements section of Table 2-14.
- 3. After you complete this test, go to the next test.

**TABLE 2-14** Prepaid Filtering Test Data

	Supplied Dat	a Elements	Key Respons	e Elements
orderld	Element	Value	Element	Value
filterPrepaidMC	<amount></amount>	9100	<response></response>	309
	<ordersource></ordersource>	recurring	<message></message>	Restricted Card -
	<name></name>	John Doe		Prepaid Card Filtering Service
	<addressline1></addressline1>	10 Main St.	<authcode></authcode>	
	<city></city>	San Jose	<avsresult></avsresult>	02
	<state></state>	CA	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0_
	<zip></zip>	95032		
	<country></country>	US		
	<email></email>	jdoe@phoenixProce ssing.com		
	<phone></phone>	7812701111		
	<type></type>	MC		
	<number></number>	5500000958501839		
	<expdate></expdate>	1114		
	<prepaid></prepaid>	true		
filterPrepaidVI	<amount></amount>	9100	<response></response>	309
	<ordersource></ordersource>	recurring	<message></message>	Restricted Card -
	<name></name>	John Doe		Prepaid Card Filtering Service
	<addressline1></addressline1>	10 Main St.	<authcode></authcode>	none
	<city></city>	San Jose	<avsresult></avsresult>	34
	<state></state>	CA	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	<zip></zip>	95032		
	<country></country>	US		
	<email></email>	jdoe@phoenixProce ssing.com		
	<phone></phone>	7812701111		
	<type></type>	VI		
	<number></number>	4100200010001474		
	<expdate></expdate>	1114		
	<pre><prepaid></prepaid></pre>	true		

## 2.5.7 Testing the International Card Filter Feature

Complete this test only if you are planning on using the Litle & Co. International Card Filtering Feature and are using schema version 8.3 or above.

To test the International Card Filtering feature:

- 1. Submit authorization transactions using the values provided in Supplied Data Elements of Table 2-15.
- 2. Verify that your response values match those shown in Key Response Elements section of Table 2-15.
- 3. After you complete this test, go to the next test.

**TABLE 2-15** International Filtering Test Data

	Supplied Data Elements		Key Respon	se Elements
orderld	Element	Value	Element	Value
filterInternational1	<amount></amount>	9100	<response></response>	312
	<ordersource></ordersource>	recurring	<message></message>	Restricted Card -
	<name></name>	John Doe		International Card Filtering Service
	<addressline1></addressline1>	10 Main St.	<avsresult></avsresult>	
	<city></city>	San Jose	\av3\c3\tc3\til\	04
	<state></state>	CA		
	<zip></zip>	95032		
	<country></country>	US		
	<email></email>	jdoe@phoenixProce ssing.com		
	<phone></phone>	7812701111		
	<type></type>	VI		
	<number></number>	4100200309950001		
	<expdate></expdate>	1114		

**TABLE 2-15** International Filtering Test Data

	Supplied Data Elements		Key Respon	se Elements
orderld	Element	Value	Element	Value
filterInternational2	<amount></amount>	9100	<response></response>	000
	<ordersource></ordersource>	recurring	<message></message>	Approved
	<name></name>	John Doe	<authcode></authcode>	123457
	<addressline1></addressline1>	10 Main St.	<avsresult></avsresult>	00
	<city></city>	San Jose		
	<state></state>	CA		
	<zip></zip>	95032		
	<country></country>	US		
	<email></email>	jdoe@phoenixProce ssing.com		
	<phone></phone>	7812701111		
	<type></type>	VI		
	<number></number>	4100200309950001		
	<expdate></expdate>	1114		
	<international></international>	false		

# 2.5.8 Testing Security Code No-Match Filtering

Complete this test only if you are planning on using the Litle & Co. Security Code No-Match Filtering Feature.

To test the Security Code No-Match feature:

- 1. Submit authorization transactions using the values provided in Supplied Data Elements of Table 2-16.
- 2. Verify that your response values match those shown in Key Response Elements section of Table 2-16.

After you complete this test, go to the next test.

TABLE 2-16 Security Code No-Match Filtering Test Data

	Supplied Dat	a Elements	Key Respon	se Elements
orderld	Element	Value	Element	Value
securityCodeFilte	<amount></amount>	9100	<response></response>	358
r1	<ordersource></ordersource>	ecommerce	<message></message>	Restricted by Litle
	<name></name>	John Doe		due to security code mismatch.
	<addressline1></addressline1>	10 Main St.	<avsresult></avsresult>	14
	<city></city>	San Jose	<pre><cardvalidationres< pre=""></cardvalidationres<></pre>	
	<state></state>	CA	ult>	
	<zip></zip>	95032		
	<country></country>	US		
	<type></type>	MC		
	<number></number>	5112002200000008		
	<expdate></expdate>	1114		
securityCodeFilte	<amount></amount>	9100	<response></response>	358
r1	<ordersource></ordersource>	ecommerce	<message></message>	Restricted by Litle
	<name></name>	Jane Doe		due to security code mismatch.
	<addressline1></addressline1>	10 Main St.	<avsresult></avsresult>	20
	<city></city>	San Jose	<pre><cardvalidationres< pre=""></cardvalidationres<></pre>	
	<state></state>	CA	ult>	.,
	<zip></zip>	95032		
	<country></country>	US		
	<type></type>	MC		
	<number></number>	5112000200000002		
	<expdate></expdate>	1114		
	<international></international>	false		

## 2.5.9 Testing Automatic Account Updater

To test Automatic Account Updater, you submit a normal Authorization transaction. The certification system returns an Authorization response that includes Account Update information. You should verify that you correctly parse the update information.

NOTE: You can also perform the tests in this section using Sale transactions instead of Authorization transactions.

To test the Automatic Account Updater service:

- 1. Submit authorization transactions using the values provided in Supplied Data Elements of Table 2-17.
- 2. Verify that your response values match those shown in Key Response Elements section of Table 2-17.
- 3. If you have coded to receive Extended Response Codes, proceed to the next test.

**TABLE 2-17** Automatic Account Updater Test Data

	Supplied Dat	a Elements	Key Respons	se Elements
orderId	Element	Value	Element	Value
100	<amount></amount>	10000	<originalcardinfo></originalcardinfo>	(parent element)
	<type></type>	VI	<type></type>	VI
	<number></number>	4457000300000007	<number></number>	4457000300000007
	<expdate></expdate>	0115	<expdate></expdate>	0115
			<newcardinfo></newcardinfo>	(parent element)
			<type></type>	MC
			<number></number>	5112000100000003
			<expdate></expdate>	0115
101	<amount></amount>	10000	<originalcardinfo></originalcardinfo>	(parent element)
	<type></type>	DI	<type></type>	DI
	<number></number>	6500102087026221	<number></number>	6500102087026221
	<expdate></expdate>	0115	<expdate></expdate>	0115
			<newcardinfo></newcardinfo>	(parent element)
			<type></type>	DI
			<number></number>	6011102077026225
			<expdate></expdate>	0115

## 2.5.9.1 Testing Automatic Account Updater Extended Response Codes

To test the Automatic Account Updater Extended Response Codes feature:

NOTE: You are required to code to LitleXML schema version 8.5 or above to receive the <extendedCardResponse> child of <accountUpdater>.

- 1. Submit authorization transactions using the values provided in Supplied Data Elements of Table 2-18.
- 2. Verify that the response values match those shown in Key Response Elements section of Table 2-18 and that your systems parse the data correctly. The second test case does not include account repair information only the Extended Response Code.

TABLE 2-18 Automatic Account Updater Extended Response Test Data

	Supplied D	oata Elements	Key Response	Elements
orderId	Element	Value	Element	Value
102	<amount></amount>	10000	<originalcardinfo></originalcardinfo>	(parent element)
	<type></type>	MC	<type></type>	MC
	<number></number>	5112000101110009	<number></number>	5112000101110009
	<expdate></expdate>	1199	<expdate></expdate>	1199
			<newcardinfo></newcardinfo>	(parent element)
			<type></type>	VI
			<number></number>	4457000302200001
			<expdate></expdate>	1199
			<extendedcardresponse></extendedcardresponse>	(parent element)
			<code></code>	501
			<message></message>	The account was closed.
103	<amount></amount>	10000	<extendedcardresponse></extendedcardresponse>	(parent element)
	<type></type>	VI	<code></code>	501
	<number> <expdate></expdate></number>	4457000301100004 1199	<message></message>	Contact the cardholder for updated information.

### 2.5.9.2 Testing Automatic Account Updater for Tokenized Merchants

If you are a tokenized merchant using the Automatic Account Updater service, you can test this service using the card information provided in Table 2-17. In this case you will receive an original and new token in the <accountUpdater> section of the Authorization response message (see accountUpdater Structure - Credit Cards (tokenized Merchant) on page 221).

## 2.5.10 Testing Tax Billing and Convenience Fee

This test applies only to merchants with MCC 9311.

To test Tax Billing and Convenience Fee transactions:

- 1. Submit authorization transactions using the values provided in Supplied Data Elements of Table 2-19. Note: The second transactions omits the <taxType> element.
- 2. Verify that the system returns a response code of 000 Approved for the first transaction and response code of 852 Invalid Tax Billing for the second.

	Supplied Data Elements		Key Response Elements	
orderId	Element	Value	Element	Value
MCC9311Test	<amount></amount>	3000	<response></response>	000
	<type></type>	VI	<message></message>	Approved
	<number></number>	4457010200000247		
	<expdate></expdate>	1114		
	<taxtype></taxtype>	fee		
MCC9311Test2	<amount></amount>	3000	<response></response>	851
	<type></type>	VI	<message></message>	Invalid Tax Billing
	<number></number>	4457010200000247		
	<expdate></expdate>	1114		

**TABLE 2-19** Tax Billing and Convenience Fee Test Data

# 2.5.11 Testing the Recycling Engine

The Certification test cases for the Litle Recycling Engine serve two purposes. First, you use the test transactions to verify your handling of the responses you receive if you submit additional Authorization transactions for a declined auth being handled by the engine. Second, you can verify your process for retrieving and processing recycling completion files via sFTP.

There are three test scenarios you can use to test the Recycling Engine and your ability to parse the response messages and/or result batch files. The particular data sets and scenarios you use

depends upon the version of LitleXML you use, as well as your plans for retrieving the response messages. Use the following to determine which tests you should run:

- If you plan to retrieve recycling results via the results batch file posted daily to the FTP site, perform the tests in Scenario 1.
- If you are using LitleXML schema version V8.5 or below, perform the tests in Scenario 2.
- If you are using LitleXML schema version V8.6 or above, perform the tests in Scenario 3.

### Scenario 1

To test your handling of the Recycling Results Batch file:

1. Submit authorization (or sale) transactions using the values provided in the Supplied Data Elements column of Table 2-20. Please use the same value for the orderId and if applicable, the recycleId elements.

**NOTE:** If your configuration is set for Litle to recycle by default, you can omit the <recycleBy> element.

2. Wait a minimum of 2 hours after submitting the last transaction. After 2 hours, retrieve the Results Batch file from the FTP site.

TABLE 2-20 Recycling Engine Test Data - Results Batch File Pick-up

orderld or recycleld	Supplied Da	ita Elements	Key Respon	se Elements
(replace XXX with your merchantld)	Element	Value	Element	Value
XXXCase1Orde	<amount></amount>	10000	Initial Response:	
r1	<type></type>	VI	<response></response>	110
	<number></number>	4457012400000027	<message></message>	Insufficient Funds
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true
	<recycleby></recycleby>	Litle	ctive>	
			Final Response (in FTP Batch File):	
			<response></response>	000
			<message></message>	Approved

TABLE 2-20 Recycling Engine Test Data - Results Batch File Pick-up

orderld or recycleid	Supplied Da	ta Elements	Key Respon	se Elements
(replace XXX with your merchantld)	Element	Value	Element	Value
XXXCase1Orde	<amount></amount>	10000	Initial Response:	
r2	<type></type>	MC	<response></response>	110
	<number></number>	5160124000000029	<message></message>	Insufficient Funds
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true
	<recycleby></recycleby>	Litle	ctive>	
			Final Response (in FTP Batch File):	
			<response></response>	000
			<message></message>	Approved
XXXCase1Orde	<amount></amount>	10000	Initial Response:	
r3	<type></type>	VI	<response></response>	110
	<number></number>	4100200700000059	<message></message>	Insufficient Funds
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true
	<recycleby></recycleby>	Litle	ctive>	
			Final Response (in FTP Batch File):	
			<response></response>	110
			<message></message>	Insufficient Funds
XXXCase1Orde	<amount></amount>	10000	Initial Response:	
r4	<type></type>	MC	<response></response>	110
	<number></number>	5500010000000052	<message></message>	Insufficient Funds
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true
	<recycleby></recycleby>	Litle	ctive>	
			Final Response (in FTP Batch File):	
			<response></response>	110
			<message></message>	Insufficient Funds

TABLE 2-20 Recycling Engine Test Data - Results Batch File Pick-up

orderld or recycleid	Supplied Da	ta Elements	Key Response Elements		
(replace XXX with your merchantld)	Element	Value	Element	Value	
XXXCase1Orde	<amount></amount>	10000	Initial Response:		
r5	<type></type>	VI	<response></response>	110	
	<number></number>	4457032800000047	<message></message>	Insufficient Funds	
	<expdate></expdate>	1220	<pre><recyclingenginea ctive=""></recyclingenginea></pre>	true	
	<recycleby></recycleby>	Litle	Final Response (in FTP Batch File):		
			<response></response>	328	
			<message></message>	Cardholder requests that recurring or installment payment be stopped	
XXXCase1Orde	<amount></amount>	10000	Initial Response:		
r6	<type></type>	MC	<response></response>	110	
	<number></number>	5160328000000042	<message></message>	Insufficient Funds	
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true	
	<recycleby></recycleby>	Litle	ctive> Final Response (in FTP Batch File):		
			<response></response>	120	
			<message></message>	Call Issuer	

orderld or recycleld	Supplied Data Elements		Key Respon	se Elements
(replace XXX with your merchantld)	Element	Value	Element	Value
XXXCase1Orde r7	<amount> <type> <number> <expdate> <recycleby></recycleby></expdate></number></type></amount>	10000 VI 5160328000000042 1220 Litle	Initial Response:	302 Account Number Does Not Match Payment Type false

**TABLE 2-20** Recycling Engine Test Data - Results Batch File Pick-up

### Scenario 2

To test your handling of the Recycling Results Batch file and Normal Batch/Online response for schema version V8.5 or below:

1. Submit authorization (or sale) transactions using the values provided in the Supplied Data Elements column of Table 2-21. Please use the same value for the orderId and if applicable, the recycleId elements.

NOTE: If your configuration is set for Litle to recycle by default, you can omit the <recycleBy> element.

2. Wait a minimum of 2 hours after submitting the last of the initial transactions. After 2 hours, you can retrieve the Results Batch file from the FTP site and/or resubmit the transaction. The responses will contain the data shown for the Final Response.

TABLE 2-21 Recycling Engine Test Data - Online or Results Batch File Pick-up V8.5 and below

orderld or recycleld	Supplied Data Elements		Key Response Elements	
(replace XXX with your merchantld)	Element	Value	Element	Value
XXXCase2Orde	<amount></amount>	20000	Initial Response:	
r1	<type></type>	VI	<response></response>	110
	<number></number>	4457012400000027	<message></message>	Insufficient Funds
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true
	<recycleby></recycleby>	Litle	ctive>	
			Final Response (Online/Normal Batch, or in FTP Batch File):	
			<response></response>	000
			<message></message>	Approved
XXXCase2Orde	<amount></amount>	20000	Initial Response:	
r2	<type></type>	MC	<response></response>	110
	<number></number>	5160124000000029	<message></message>	Insufficient Funds
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true
	<recycleby></recycleby>	Litle	ctive>	
			Final Response (Online/Normal Batch, or in FTP Batch File):	
			<response></response>	000
			<message></message>	Approved

TABLE 2-21 Recycling Engine Test Data - Online or Results Batch File Pick-up V8.5 and below

orderld or recycleld	Supplied Data Elements		Key Response Elements	
(replace XXX with your merchantld)	Element	Value	Element	Value
XXXCase2Orde	<amount></amount>	20000	Initial Response:	
r3	<type></type>	VI	<response></response>	110
	<number></number>	4100200700000059	<message></message>	Insufficient Funds
	<expdate></expdate>	1220 Litle	<recyclingenginea ctive=""></recyclingenginea>	true
	(looydidby)	Lide	Final Response in Online or Normal Batch File):	
			<response></response>	110
			<message></message>	Insufficient Funds
			<recyclingenginea ctive=""></recyclingenginea>	false
			Final Response in FTP Batch File):	
			<response></response>	110
			<message></message>	Insufficient Funds
XXXCase2Orde	<amount></amount>	20000	Initial Response:	
r4	<type></type>	MC	<response></response>	110
	<number></number>	5500010000000052	<message></message>	Insufficient Funds
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true
	<recycleby></recycleby>	Litle	ctive>	
			Final Response in Online or Normal Batch File):	
			<response></response>	110
			<message></message>	Insufficient Funds
			<recyclingenginea ctive=""></recyclingenginea>	false
			Final Response in FTP Batch File):	
			<response></response>	110
			<message></message>	Insufficient Funds

orderld or **Supplied Data Elements Key Response Elements** recycleId (replace XXX with your merchantld) **Element** Value **Element** Value 20000 XXXCase2Orde **Initial Response:** <amount> r5 VI 302 <response> <type> 5160328000000042 Account Number <number> <message> Does Not Match 1220 <expDate> Payment Type <recycleBy> Litle <recyclingEngineA</pre> false ctive> Final Response (in Batch File): None - This type of decline is not recycled.

TABLE 2-21 Recycling Engine Test Data - Online or Results Batch File Pick-up V8.5 and below

### Scenario 3

To test your handling of the Intercept Response Codes/Messages, as well as the Recycling Results Batch file and Normal Batch/Online responses:

1. Submit authorization (or sale) transactions using the values provided in the Supplied Data Elements column of Table 2-22. Please use the same value for the orderId and if applicable, the recycleId elements.

NOTE: If your configuration is set for Litle to recycle by default, you can omit the <recycleBy> element.

- 2. If you are using schema version V8.6 or above, resubmit any of the first four transactions within 36 hours to receive a response message containing the intercept Response Reason Code 372 Soft Decline Auto Recycling In Progress. If you are using schema version 8.5 or below, you will receive a response message with the same Response Reason Code as in the initial response message.
- 3. Wait a minimum of 36 hours after submitting the last of the initial transactions. After 36 hours, you can retrieve the Results Batch file from the FTP site and/or resubmit the transaction. The responses will contain the data shown for the Final Response.

TABLE 2-22 Recycling Engine Test Data - Intercept and Online or Results Batch File Pick-up

orderld or recycleld	Supplied Data Elements		Key Response Elements	
(replace XXX with your merchantId)	Element	Value	Element	Value
XXXCase3Orde	<amount></amount>	20000	Initial Response:	
r1	<type></type>	DI	<response></response>	350
	<number></number>	6223012400000025	<message></message>	Generic Decline
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true
	<recycleby></recycleby>	Litle	ctive>	
			Intermediate Attempts (V8.6):	
			<response></response>	372
			<message></message>	Soft decline - Recycling In Progress
			<recyclingenginea ctive=""></recyclingenginea>	true
			Final Response (Online/Normal Batch, or in FTP Batch File):	
			<response></response>	000
			<message></message>	Approved

TABLE 2-22 Recycling Engine Test Data - Intercept and Online or Results Batch File Pick-up

orderld or	Supplied Data Elements		Key Response Elements	
recycleld (replace XXX with your merchantId)	Element	Value	Element	Value
XXXCase3Orde	<amount></amount>	20000	Initial Response:	
r2	<type></type>	AX	<response></response>	350
	<number></number>	377201240000025	<message></message>	Generic Decline
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true
	<recycleby></recycleby>	Litle	ctive>	
			Intermediate Attempts (V8.6):	
			<response></response>	372
			<message></message>	Soft decline - Recycling In Progress
			<recyclingenginea ctive=""></recyclingenginea>	true
			Final Response (Online/Normal Batch, or in FTP Batch File):	
			<response></response>	000
			<message></message>	Approved

TABLE 2-22 Recycling Engine Test Data - Intercept and Online or Results Batch File Pick-up

orderld or recycleld	Supplied Data Elements		Key Response Elements	
(replace XXX with your merchantId)	Element	Value	Element	Value
XXXCase3Orde	<amount></amount>	20000	Initial Response:	
r3	<type></type>	DI	<response></response>	350
	<number></number>	6223012400000033	<message></message>	Generic Decline
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true
	<recycleby></recycleby>	Litle	ctive>	
			Intermediate Attempts (V8.6):	
			<response></response>	372
			<message></message>	Soft decline - Recycling In Progress
			<recyclingenginea ctive=""></recyclingenginea>	true
			Final Response (Online/Normal Batch, or in FTP Batch File):	
			<response></response>	373
			<message></message>	Hard Decline - Auto Recycling Complete

TABLE 2-22 Recycling Engine Test Data - Intercept and Online or Results Batch File Pick-up

orderld or recycleld	Supplied Data Elements				se Elements
(replace XXX with your merchantld)	Element	Value	Element	Value	
XXXCase3Orde	<amount></amount>	20000	Initial Response:		
r4	<type></type>	DI	<response></response>	101	
	<number></number>	6011002078551608	<message></message>	Issuer Unavailable	
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true	
	<recycleby></recycleby>	Litle	ctive>	truc	
	(100y0loby)	Litto	Intermediate Attempts (V8.6):		
			<response></response>	372	
			<message></message>	Soft decline - Recycling In Progress	
			<recyclingenginea ctive=""></recyclingenginea>	true	
			Final Response (Online/Normal Batch, or in FTP Batch File):		
			<response></response>	373	
			<message></message>	Hard Decline - Auto Recycling Complete	
XXXCase3Orde	<amount></amount>	20000	Initial Response:		
r5	<type></type>	VI	<response></response>	302	
	<number></number>	377203280000048	<message></message>	Account Number	
	<expdate></expdate>	1220		Does Not Match Payment Type	
	<recycleby></recycleby>	Litle	<recyclingenginea ctive=""></recyclingenginea>	false	
			All Responses:		
			None - This type of decline is not recycled.		

### 2.5.11.1 Testing Recycling Engine Cancellation

You use an authReversal transaction to halt the automatic recycling of an authorization. For a sale transaction, use a void transaction to halt recycling.

NOTE: You can perform this test either after completing the Recycling Engine test or prior to starting that test.

### To test recycling cancellation:

- 1. Submit a sale transaction using the values provided for Case1Order1a and an authorization transaction using the values provided for Case1Order2a in the Supplied Data Elements of Table 2-23.
- 2. Two (2) hours after receiving the decline message, submit a void transaction using the litleTxnId returned in the response message for Case1Order1a. The response message you receive depends upon whether you are enabled for Auto-refunding approved sales on Void.

Note: If you submit the Void transaction (Step 2) within 2 hours of the initial transaction submission, you will receive a voidResponse with a response code of 000 - Approved.

3. After receiving the decline messages, submit an authReversal transaction using the litleTxnId returned in the response message for Case1Order2a. You should receive an authReversalResponse with a response code of 000 - Approved.

**TABLE 2-23** Recycling Engine Cancellation Test Data

orderld or recycleld	Supplied Data Elements		Key Response Elements	
(replace XXX				
with your merchantId)	Element	Value	Element	Value
XXXCase1Orde	<amount></amount>	11000	Initial Response:	
r1a	<type></type>	VI	<response></response>	110
	<number></number>	4457012400000027	<message></message>	Insufficient Funds
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true
	<recycleby></recycleby>	Litle	ctive>	
	Submit Void using litleTxnld from Initial Response		Void Response (if enabled for Auto-Refund):	
			<response></response>	000
			<message></message>	Approved
			<pre><creditlitletxnid></creditlitletxnid></pre>	(Random Value)
			Void Response (if not enabled for Auto-Refund:	
			<response></response>	362
			<message></message>	Transaction Not Voided - Already Settled
XXXCase1Orde	<amount></amount>	11000	Initial Response:	
r2a	<type></type>	MC	<response></response>	110
	<number></number>	5160124000000029	<message></message>	Insufficient Funds
	<expdate></expdate>	1220	<recyclingenginea< td=""><td>true</td></recyclingenginea<>	true
	<recycleby></recycleby>	Litle	ctive>	
	Submit AuthReversal		authReversalResp onse:	000
	using litleTxnld from Initial		<response></response>	000
	Response		<message></message>	Approved

# 2.5.12 Testing Online Duplicate Transaction Processing

When you submit certain Online transactions, the Litle system acts to detect if it is a duplicate by comparing the id attribute and the credit card number against other successful Online transactions of the same type processed within the previous two days. The system performs this checking routine for the following transaction types: Capture, Force Capture, Capture Given Auth, Credit, Sales, eCheck Credit, eCheck Sales, eCheckVoid, and Void.

If the system determines a transaction to be a duplicate, it returns the original response message with the duplicate attribute set to **true** (see example below). This attribute indicates that the response was returned on a previous transaction. Please refer to Online Duplicate Checking on page 8 for additional information.

To test your handling of response messages that include the duplicate attribute:

#### Note:

When you submit the duplicate transaction, make sure that all information, including the id attribute, is identical.

Online Duplicate Transaction checking is disabled if you submit a null value (id="").

- 1. Send any of the following Sale transactions more than once within a two day period: Order numbers 1, 2, 3, 4, or 5. The response for the second submission will contain the duplicate attribute.
- 2. Send any of the following Capture transactions more than once within a two day period: Order numbers 1A, 2A, 3A, 4A, or 5A. The response for the second submission will contain the duplicate attribute. You may have to submit the corresponding Authorization transaction prior to submitting the Capture transaction.
- 3. Send any of the following Credit transactions more than once within a two day period: Order numbers 1B, 2B, 3B, 4B, or 5B. The response for the second submission will contain the duplicate attribute. You may have to submit the corresponding Capture transaction prior to submitting the Credit transaction.
- 4. Send any of the following Void transactions more than once within a two day period: Order numbers 1C, 2C, 3C, 4C, or 5C. The response for the second submission will contain the duplicate attribute. You may have to submit the corresponding Sale transaction prior to submitting the Void transaction.
- 5. Send either of the following eCheck Sale transactions more than once within a two day period: Order numbers 42 or 43. The response for the second submission will contain the duplicate attribute.
- 6. Send any of the following eCheck Credit transactions more than once within a two day period: Order numbers 46, 47, or 48. The response for the second submission will contain the duplicate attribute.

# 2.5.13 Testing Transaction Volume Capacity

Volume testing is useful if you plan to send large files. This is an optional test you can perform during certification testing. Volume testing enables you to verify how many transactions (the number of requests and responses) you can process within a specific time frame.

Litle & Co. recommends you submit transactions for a 15-minute time interval. Submit the approximate number of transactions that you anticipate to be normal volume for any 15-minute period. You can send in any valid transaction data; the actual data you send will not be verified.



3

# LITLEXML TRANSACTION EXAMPLES

This chapter contains information and examples concerning the structure of LitleXML transaction messages. Where differences exist between the structure of Batch and Online transactions, the sections present examples of both structures.

This chapter discusses the following topics:

- Overview of Online and Batch Processing Formats
- Transaction Types and Examples

# 3.1 Overview of Online and Batch Processing Formats

There are two methods of submitting payment transactions using the LitleXML format: Online (one transaction at a time), or Batch. This section provides a high level overview of the request and response structures used for each submission type.

#### 3.1.1 Batch Process Format

Each Batch transmission you send to Litle & Co. is considered to be a single request. You can think of the entire Batch request as a session composed of one or more individual batches, each containing one or more transactions. You can also use a Batch as a request for retrieval of the response for a previously processed session. Each request results in a response transmission sent from Litle & Co. to you.

Batch processing supports the following transaction types;

- Authorizations
- Authorization Reversal
- Captures
- Capture Given Auth
- Force Capture
- Sale Transactions
- Credit Transactions
- eCheck Sale Transactions
- eCheck Credit Transactions
- eCheck Redeposit Transactions
- eCheck Verification Transactions
- RFR Batch Transactions (Batch Only)
- Update Card Validation Number Transactions

For more information about Batch processing, see Batch Transaction Processing on page 5.

# 3.1.1.1 Supported Communication Protocols

Litle & Co. supports the following communication protocols for Batch processing. Litle & Co. recommends using either Encrypted FTP or sFTP for the transmission of Batch files.

- HTTPS POST
- Encrypted FTP (PGP or GPG key encryption)
- sFTP

For additional information concerning the recommended transmission methods, see Transferring Batch Files on page 54.

# 3.1.1.2 Batch Processing Request Format

The Batch processing request is made up of the following elements:

- Header information one litleRequest element
- Merchant authentication information one <authentication> element
- Batch information one or more <batchRequest> elements
- Payment transactions (for example, an Authorization, Capture, Credit, etc.) at least one per
   batchRequest> element

Figure 3-1 illustrates the required structure of a Batch Request.

example 500=5.00).

NOTE: Each of the num and amount attributes used in a batchRequest defaults to 0 (zero) if not specified in the request. In any of the amount fields (authAmount, captureAmount, etc.), the value is an implied decimal (for

FIGURE 3-1 Batch Request XML Format



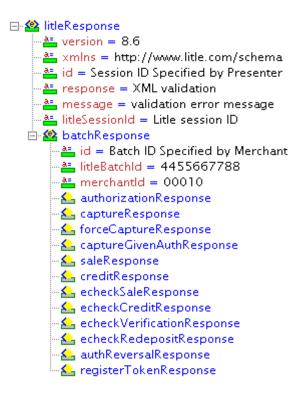
### 3.1.1.3 Batch Processing Response Format

The Batch processing response is composed of the following elements:

- Header information one litleResponse> element
- One or more <batchResponse> elements contains payment transactions response.
- At least one payment transaction response (for example, an Authorization response, Capture response, Credit response, etc.).

Figure 3-2 illustrates the structure of a Batch Response

FIGURE 3-2 Batch Response XML Format



NOTE: For information on the XML Validation response and message attributes, please refer to XML Validation Error Messages on page 514.

# 3.2 Online Processing Format

Each Online request you send to Litle & Co. is a single transaction. Litle processes Online transactions upon receipt and returns a response file.

Online processing supports the following transaction types:

- Authorizations
- Authorization Reversal
- Capture
- Capture Given Auth
- Force Capture
- Sale Transactions
- Credit Transactions
- eCheck Sale Transactions
- eCheck Credit Transactions
- eCheck Redeposit Transactions
- eCheck Verification Transactions
- eCheck Void Transactions (Online Only)
- Update Card Validation Number Transactions
- Void Transactions (Online Only)

# **3.2.1** Supported Communication Protocols

Litle & Co. supports the following communication protocol for Online processing is HTTPS POST.

For additional information concerning the recommended transmissions methods, see Transferring Online Files on page 55.

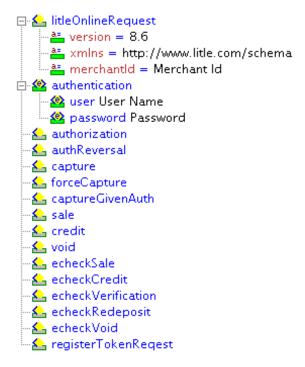
# 3.2.2 Online Processing Request Format

The Online processing request is made up of the following elements:

- Header information one tleOnlineRequest > element
- Merchant authentication information one <authentication> element
- Payment transaction one payment transaction

Figure 3-3 illustrates the structure of an Online Request.

FIGURE 3-3 Online Request XML Format



# 3.2.3 Online Processing Response Format

An Online processing response is composed of the following elements:

- Header information one tleOnlineResponse>
- Payment transaction one payment transaction

Figure 3-4 illustrates the structure of an Online Response.

FIGURE 3-4 Online Response XML Format



NOTE: For information on the XML Validation response and message attributes, please refer to XML Validation Error Messages on page 514.

# 3.3 Transaction Types and Examples

This section presents structural information of each transaction type for both Online and Batch submission methods. The structural information is followed by one or more examples of the LitleXML transaction. Each structural example shows the parent and all child elements, but does not show grandchildren. The LitleXML examples do show child elements to multiple levels.

The element names in the structural examples provide links to the element definitions in Chapter 4.

Note:

The XML examples in this section are intended to present typical LitleXML transactions. The examples may not include every possible element for a particular transaction type. When coding your XML, always consult the LitleXML schema files for information concerning all available elements.

This section contains examples of the following transaction types:

- Authorization Transactions
- Authorization Reversal Transactions
- Capture Transactions
- Capture Given Auth Transactions
- Credit Transactions
- eCheck Credit Transactions
- eCheck Redeposit Transactions
- eCheck Sale Transactions
- eCheck Verification Transactions
- eCheck Void Transactions (Online Only)
- Force Capture Transactions
- Register Token Transactions
- RFR Transactions (Batch Only)
- Sale Transactions
- Update Card Validation Number Transactions
- Void Transactions (Online Only)

### 3.3.1 Authorization Transactions

The Authorization transaction enables you to confirm that a customer has submitted a valid payment method with their order and has sufficient funds to purchase the goods or services they ordered.

The lifespan of an authorization varies according to the payment type being used, as shown in Table 3-1. During the lifespan, you can use a valid authorization multiple times as needed.

NOTE:

To submit an AVS Only request, submit an Authorization request with the <amount> element set to 000. The response is identical to an Authorization response message.

**TABLE 3-1** Lifespan of a Payment Authorization

Payment Type	Lifespan of Authorization	
American Express	7 days	
Bill Me Later	30 days by default; for more information about Bill Me Later authorizations, see the Litle & Co. Bill Me Later Integration Guide.	
Discover	10 days	
MasterCard	7 days	
PayPal	29 days total; Litle & Co. recommends three days. For more information about PayPal authorizations, see the <i>Litle &amp; Co. PayPal Integration Guide</i> .	
Visa	7 days	

This section describes the format you must use for an Authorization request, as well as the format of the Authorization Response you receive from Litle & Co.

# 3.3.1.1 Authorization Request Structure

You must structure an Authorization request as shown in the following examples. The structure of an Authorization request is identical for either an Online or a Batch submission.

```
<br/>
<billToAddress>
 <shipToAddress>
 [ <card> | <paypal> | <paypage> | <token>]
 <billMeLaterRequest>
 <cardholderAuthentication>
 cprocessingInstructions>
 <pos>
 <customBilling>
 <taxType>payment or fee</taxType>
 <enhancedData>
 <amexAggregatorData>
 <allowPartialAuth>
 <healthcareIIAS>
 <filtering>
 <merchantData>
 <recyclingRequest> (for Recycling Engine merchants)
 <fraudFilterOverride>
 <debtRepayment>true or false</debtRepayment>
</authorization>
```

#### **Example: Batch Authorization Request - Card Not Present**

The example below shows a batch request with a single card-not-present Authorization request. If the batch included additional Authorization requests, each would have it's own <authorization> element with all applicable attributes and child elements. Also, the numAuths attribute of the <batchRequest> element would increment for each additional <authorization> element and the authAmount attribute would increase by the new amounts from each authorization.

```
<br/>
<br/>billToAddress>
      <name>John Doe</name>
      <addressLine1>15 Main Street</addressLine1>
      <city>San Jose</city>
      <state>CA</state>
      <zip>95032-1234</zip>
      <country>USA</country>
      <phone>9782750000</phone>
      <email>jdoe@litle.com
    </billToAddress>
    <shipToAddress>
      <name>Jane Doe</name>
      <addressLine1>15 Main Street</addressLine1>
      <city>San Jose</city>
      <state>CA</state>
      <zip>95032-1234</zip>
      <country>USA</country>
      <phone>9782750000</phone>
      <email>jdoe@litle.com
    </shipToAddress>
    <card>
      <type>VI</type>
      <number>4005550000081019
      <expDate>1110</expDate>
    </card>
    <customBilling>
      <phone>8009990001</phone>
      <descriptor>bdi*001</descriptor>
    </customBilling>
    <allowPartialAuth>true</allowPartialAuth>
   </authorization>
 </batchRequest>
</litleRequest>
```

#### **Example: Batch Authorization Request - Card Present**

The following example contains two Authorization requests, each defined in its own <authorization> element. The first is a card present transaction, which uses the <track> child of the <card> element.

```
litleRequest version="8.19" xmlns="http://www.litle.com/schema" id="123"
numBatchRequests="1">
  <authentication></a>
```

```
<user>userName
   <password>password</password>
 </authentication>
 <batchRequest id="01234567" numAuths="2" authAmount="68336"</pre>
 merchantId="100">
   <authorization id="AX54321678" reportGroup="RG27">
    <orderId>12z58743y1</orderId>
    <amount>12522</amount>
    <orderSource>retail</orderSource>
    <br/>
<br/>billToAddress>
      <zip>95032</zip>
    </billToAddress>
    <card>
    <track>%B40000001^Doe/JohnP^06041...?;40001=0604101064200?</track>
    </card>
    <pos>
      <capability>magstripe</capability>
      <entryMode>completeread
      <cardholderId>signature/cardholderId>
    </pos>
   </authorization>
   <authorization id="AX54325432" reportGroup="RG12">
    <orderId>12z58743y7</orderId>
    <amount>55814</amount>
    <orderSource>retail</orderSource>
    <br/>
<br/>billToAddress>
      <zip>01854</zip>
    </billToAddress>
    <card>
      <type>VI</type>
      <number>4005550000081019
      <expDate>0911</expDate>
    </card>
    <pos>
      <capability>keyedonly</capability>
      <entryMode>keyed</entryMode>
      <cardholderId>directmarket</cardholderId>
    <allowPartialAuth>true</allowPartialAuth>
   </authorization>
 </batchRequest>
</litleRequest>
```

#### **Example: Online Authorization Request**

#### Note:

The example below uses 3dsAuthenticated as the <orderSource> value. If you submit the wrong <orderSource> value, Litle returns the response code 370 - Internal System Error - Contact Litle.

Also, the values for the <authenticationValue> and <authenticationTransactionId> elements in the example below have been truncated.

```
litleOnlineRequest version="8.19" xmlns="http://www.litle.com/schema"
 merchantId="100">
 <authentication>
   <user>User Name</user>
   <password>Password</password>
 </authentication>
 <authorization id="834262" reportGroup="ABC Division" customerId="038945">
   <orderId>65347567</orderId>
   <amount>40000</amount>
   <orderSource>3dsAuthenticated</orderSource>
   <br/>
<billToAddress>
    <name>John Smith</name>
    <addressLine1>100 Main St</addressLine1>
    <city>Boston</city>
    <state>MA</state>
    <zip>12345</zip>
    <email>jsmith@someaddress.com
    <phone>555-123-4567</phone>
   </billToAddress>
   <card>
    <type>VI</type>
    <number>400000000000001
    <expDate>1209</expDate>
    <cardValidationNum>555/cardValidationNum>
   </card>
   <cardholderAuthentication>
    <authenticationValue>BwABBJQ1gJDUCAAAAAAA=</authenticationValue>
    <authenticationTransactionId>gMV75TmjAgk=</authenticationTransactionId>
   </cardholderAuthentication>
 </authorization>
<le></litleOnlineRequest>
```

#### **Example: Authorization Request using token Element**

The example below uses the following token related elements (click name to jump to element definition): token and litleToken.

#### NOTE:

When you submit the CVV2/CVC2/CID in a registerTokenRequest, the Litle platform encrypts and stores the value on a temporary basis for later use in a tokenized Auth/Sale transaction submitted without the value. To use the store value when submitting an Auth/Sale transaction, set the cardValidationNum value to 000.

```
<authorization id="99999" customerId="444" reportGroup="RG1">
 <orderId>F12345</orderId>
 <amount>15000</amount>
 <orderSource>telephone</orderSource>
 <br/>
<billToAddress>
   <name>John Doe</name>
   <addressLine1>15 Main Street</addressLine1>
   <city>San Jose</city>
   <state>CA</state>
   <zip>95032-1234</zip>
   <country>USA</country>
   <phone>9782750000</phone>
   <email>jdoe@litle.com
 </billToAddress>
 <shipToAddress>
   <name>Jane Doe</name>
   <addressLine1>15 Main Street</addressLine1>
   <city>San Jose</city>
   <state>CA</state>
   <zip>95032-1234</zip>
   <country>USA</country>
   <phone>9782750000</phone>
   <email>jdoe@litle.com</email>
 </shipToAddress>
 <token>
   <litleToken>1111000101039449</litleToken>
   <expDate>1112</expDate>
   <cardValidationNum>987</cardValidationNum>
 </token>
</authorization>
```

### 3.3.1.2 Authorization Response Structure

An Authorization response has the following structure. The response message is identical for Online and Batch transactions except Online includes the <postDate> element.

```
<authorizationResponse id="Authorization Id" reportGroup="UI Report</pre>
Group" customerId="Customer Id">
 <litleTxnId>Litle & Co. Transaction Id</litleTxnId>
 <orderId>Order Id</orderId>
 <response>Response Code</response>
 <responseTime>Date and Time in GMT</responseTime>
 <postDate>Date transaction posted</postDate> (Online Only)
 <message>Response Message</message>
 <authCode>Approval Code</authCode>
 <approvedAmount>Approved amount for partial Auth<approvedAmount>
 <accountInformation>
 <accountUpdater>
 <fraudResult>
 <billMeLaterResponseData>
 <tokenResponse> (for Tokenized merchants submitting card data)
 <enhancedAuthResponse>
 <recycling> (included for declined Auths if feature is enabled)
</authorizationResponse>
```

#### **Example: Batch Authorization Response**

The example below shows a batch Authorization response that contains two transactions.

```
</authorizationResponse>
   <authorizationResponse id="AX54325432" reportGroup="RG12">
    <litleTxnId>84568457</litleTxnId>
    <orderId>12z58743y7</orderId>
    <response>000</response>
    <responseTime>2011-03-01T10:24:31</responseTime>
    <message>Approved</message>
    <authCode>123456</authCode>
    <fraudResult>
      <avsResult>00</avsResult>
      <authenticationResult>2</authenticationResult>
    </fraudResult>
    <enhancedAuthResponse>
      <fundingSource>
        <type>PREPAID</type>
        <availableBalance>5000</availableBalance>
        <reloadable>NO</reloadable>
        cprepaidCardType>GIFT</prepaidCardType>
      </fundingSource>
    </enhancedAuthResponse>
   </authorizationResponse>
 </batchResponse>
<le></litleResponse>
```

#### **Example: Online Authorization Response**

Note:

The online response format contains a <postDate> element, which indicates the date the financial transaction will post (specified in YYYY-MM-DD format).

```
<litleOnlineResponse version="8.19" xmlns="http://www.litle.com/schema"</pre>
 response="0" message="Valid Format">
 <authorizationResponse id="834262" reportGroup="ABC Division">
   <litleTxnId>969506</litleTxnId>
   <orderId>65347567</orderId>
   <response>000</response>
   <responseTime>2011-07-25T15:13:43</responseTime>
   <postDate>2011-07-25</postDate>
   <message>Approved</message>
   <authCode>123457</authCode>
   <fraudResult>
    <avsResult>00</avsResult>
```

#### **Example: Authorization Response for Tokenized Merchant Sending Card Data**

If a tokenized merchant submits card data in the Authorization request, the response includes the tokenResponse element. The example below is a response for an Online request (litleOnlineresponse element not shown); therefore, it includes the postDate element.

```
<authorizationResponse id="99999" reportGroup="RG1" customerId="444">
 <litleTxnId>2120000001108</litleTxnId>
 <orderId>F12345</orderId>
 <response>000</response>
 <responseTime>2011-10-08T21:38:32</responseTime>
 <postDate>2011-10-08</postDate>
 <message>Approved</message>
 <authCode>270005</authCode>
 <fraudResult>
   <avsResult>11</avsResult>
   <cardValidationResult>P</cardValidationResult>
 </fraudResult>
 <tokenResponse>
   <litleToken>11111100100240005</litleToken>
   <tokenResponseCode>801</tokenResponseCode>
   <tokenMessage>Account number was successfully registered</tokenMessage>
   <type>VI</type>
   <br/>
<bin>402410</bin>
 </tokenResponse>
</authorizationResponse>
```

### **Example: Online Authorization Response with Account Updater Token Info**

In this example. the <accountUpdater> contains both original and new card information as well as the <extendedCardResponse> element. This signifies that the card number changed from the original to the new and (from the extended response code) that the issuer is reporting that the new account is closed. Although the Authorization was approved, this information allows you to make an informed decision about how to proceed with the sale.

```
<litleOnlineResponse version="8.19" xmlns="http://www.litle.com/schema"</pre>
 response="0" message="Valid Format">
 <authorizationResponse id="834262" reportGroup="ABC Division">
   <litleTxnId>969506</litleTxnId>
   <orderId>65347567</orderId>
   <response>000</response>
   <responseTime>2011-07-25T15:13:43</responseTime>
   <postDate>2011-07-25</postDate>
   <message>Approved</message>
   <authCode>123457</authCode>
   <accountUpdater>
    <originalCardTokenInfo>
      <litleToken>11111100100240005</litleToken>
      <type>VI</type>
      <expDate>1112</expDate>
      <br/>bin>400555</bin>
    </originalCardTokenInfo>
    <newCardTokenInfo>
      <litleToken>11111100100250017</litleToken>
      <type>VI</type>
      <expDate>1114</expDate>
      <br/>bin>400555</bin>
    </newCardTokenInfo>
    <extendedCardResponse>
      <code>501</code>
      <message>The account was closed</message>
    </extendedCardResponse>
   </accountUpdater>
   <fraudResult>
    <avsResult>00</avsResult>
    <cardValidationResult>N</cardValidationResult>
    <authenticationResult>2</authenticationResult>
   </fraudResult>
 </authorizationResponse>
<le></litleOnlineResponse>
```

# 3.3.2 Authorization Reversal Transactions

The Authorization Reversal transaction enables you to remove the hold on any funds being held by an Authorization. The original Authorization transaction must have been processed within the Litle system. For information on how to use the Authorization Reversal transaction, see Notes on the Use of Authorization Reversal Transactions on page 42. Also, if you use Litle's Recycling Engine, you can use the authReversal transaction to halt the recycling of an authorization transaction.

### 3.3.2.1 Authorization Reversal Requests

You must structure an Authorization Reversal request as shown in the following examples. The structure of the request is identical for either an Online or a Batch submission.

```
<authReversal id="Authorization Id" reportGroup="UI Report Group"
customerId="Customer Id">
   litleTxnId>Litle & Co. Transaction Id</litleTxnId>
   <amount>Authorization Amount to Reverse</amount>
   <actionReason>SUSPECT_FRAUD</actionReason>
   </authReversal>
```

### **Example: Batch Authorization Reversal Request**

The following example contains three Authorization Reversal Requests.

```
litleRequest version="8.19" xmlns="http://www.litle.com/schema"
 numBatchRequests="1">
  <authentication>
    <user>PHXMLTEST</user>
    <password>password</password>
  </authentication>
  <batchRequest numAuthReversals="3" authReversalAmount="3005"</pre>
 merchantId="000057">
    <authReversal id="ID" customerId="customerId" reportGroup="000057">
      <litleTxnId>12345678</litleTxnId>
      <amount>1002</amount>
    </authReversal>
    <authReversal id="ID" customerId="customerId" reportGroup="000057">
      <litleTxnId>81234567</litleTxnId>
      <amount>1003</amount>
    </authReversal>
    <authReversal id="ID" customerId="customerId" reportGroup="000057">
      <litleTxnId>78123456</litleTxnId>
      <amount>1000</amount>
    </authReversal>
```

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```
</batchRequest>
</litleRequest>
```

#### **Example: Online Authorization Reversal Request**

### 3.3.2.2 Authorization Reversal Responses

The basic structure of an Authorization Reversal response is identical for Batch and Online responses.

#### **Example: Batch Authorization Reversal Response**

The following example shows a Batch Response containing three Authorization Reversal responses.

```
<response>000</response>
      <responseTime>2011-10-14T13:15:43/responseTime>
      <message>Approved</message>
    </authReversalResponse>
    <authReversalResponse id="ID" reportGroup="core" customerId="viRev2">
      <litleTxnId>21200000002809</litleTxnId>
      <orderId>visaAuth2</orderId>
      <response>000</response>
      <responseTime>2011-10-14T13:15:43</responseTime>
      <message>Approved</message>
    </authReversalResponse>
    <authReversalResponse id="ID" reportGroup="core" customerId="mcRev3">
      <litleTxnId>21200000002908</litleTxnId>
      <orderId>mcAuth2</orderId>
      <response>000</response>
      <responseTime>2011-10-14T13:15:43</responseTime>
      <message>Approved</message>
    </authReversalResponse>
  </batchResponse>
<le></litleResponse>
```

#### **Example: Online Authorization Reversal Response**

```
litleOnlineResponse version="8.19" xmlns="http://www.litle.com/schema"
    response="0" message="Valid Format">
        <authReversalResponse id="12345" customerId="Customer Id"
    reportGroup="Auth Reversals">
        litleTxnId>12345678</litleTxnId>
        <orderId>abc123</orderId>
        <response>000</response>
        <responseTime>2011-08-30T13:15:43</responseTime>
        <message>Approved</message>
        </authReversalResponse>
</litleOnlineResponse>
```

# 3.3.3 Capture Transactions

The Capture transaction transfers funds from the customer to the merchant. The Capture references the associated Authorization by means of the litleTxnId element returned in the Authorization response.

You send a Capture after the order has been fulfilled. In some cases, it is not possible to fulfill a customer's entire order in one shipment (for example, if some items are backordered, or some shipped from an off-site DCS). In this situation, you can send a Partial Capture transaction by setting the partial attribute to **true**. A Partial Capture contains only the data relevant to the items that were actually shipped, enabling you to settle the funds related to those items.

# 3.3.3.1 Capture Request

You must structure a Capture request as shown in the following examples. The structure of the request is identical for either an Online or a Batch submission.

#### **Example: Batch Capture Request - Full Capture**

The following Capture example is for a full capture. Although the <capture> element includes an <amount> child, it is not required for a full Capture. If you omit the <amount> child element, the capture amount defaults to the full amount from the associated Authorization.

```
<customerReference>PO12346/customerReference>
<salesTax>1500</salesTax>
<taxExempt>false</taxExempt>
<discountAmount>0</discountAmount>
<shippingAmount>3714</shippingAmount>
<dutyAmount>0</dutyAmount>
<shipFromPostalCode>01851</shipFromPostalCode>
<destinationPostalCode>01851</destinationPostalCode>
<destinationCountryCode>USA</destinationCountryCode>
<invoiceReferenceNumber>123456</invoiceReferenceNumber>
<orderDate>2011-09-14
<detailTax>
  <taxIncludedInTotal>true</taxIncludedInTotal>
  <taxAmount>500</taxAmount>
 <taxRate>0.01667</taxRate>
 <taxTypeIdentifier>00</taxTypeIdentifier>
 <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
</detailTax>
<lineItemData>
  <itemSequenceNumber>1</itemSequenceNumber>
  <itemDescription>table</itemDescription>
  cproductCode>TB123
  <quantity>1</quantity>
  <unitOfMeasure>EACH</unitOfMeasure>
  <taxAmount>1500</taxAmount>
  <lineItemTotal>30000</lineItemTotal>
  <lineItemTotalWithTax>31500</lineItemTotalWithTax>
  <itemDiscountAmount>0</itemDiscountAmount>
  <commodityCode>301</commodityCode>
  <unitCost>300.00</unitCost>
  <detailTax>
   <taxIncludedInTotal>true</taxIncludedInTotal>
   <taxAmount>500</taxAmount>
   <taxRate>0.01667</taxRate>
   <taxTypeIdentifier>03</taxTypeIdentifier>
   <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
  </detailTax>
</lineItemData>
lineItemData>
  <itemSequenceNumber>2</itemSequenceNumber>
  <itemDescription>chair</itemDescription>
  cproductCode>CH123
  <quantity>1</quantity>
```

#### **Example: Batch Capture Request - Partial Capture**

A partial Capture has the partial attribute set to **true** and must include an amount child element.

```
com/schema id="123"
 numBatchRequests="1">
 <authentication>
   <user>userName</user>
   <password>password</password>
 </authentication>
 <batchRequest id="01234567" numAuths="0" authAmount="0" numCaptures="1"</pre>
 captureAmount="45814" numCredits="0" creditAmount="0" numSales="0"
 saleAmount="0" merchantId="100">
   <capture id="AX54325432" reportGroup="RG12" partial="true">
     <litleTxnId>84568457</litleTxnId>
     <amount>45814</amount>
     <enhancedData>
       <customerReference>PO12346</customerReference>
       <salesTax>2100</salesTax>
       <taxExempt>false</taxExempt>
       <discountAmount>0</discountAmount>
       <shippingAmount>3714</shippingAmount>
       <dutyAmount>0</dutyAmount>
       <shipFromPostalCode>01851</shipFromPostalCode>
       <destinationPostalCode>01851</destinationPostalCode>
       <destinationCountryCode>USA</destinationCountryCode>
       <invoiceReferenceNumber>123456</invoiceReferenceNumber>
       <orderDate>2011-09-14
       <detailTax>
         <taxIncludedInTotal>true</taxIncludedInTotal>
         <taxAmount>500</taxAmount>
         <taxRate>0.01667</taxRate>
```

```
<taxTypeIdentifier>00</taxTypeIdentifier>
         <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
       </detailTax>
       <lineItemData>
         <itemSequenceNumber>1</itemSequenceNumber>
         <itemDescription>table</itemDescription>
         cproductCode>TB123
         <quantity>1</quantity>
         <unitOfMeasure>EACH</unitOfMeasure>
         <taxAmount>1500</taxAmount>
         <lineItemTotal>30000</lineItemTotal>
         <lineItemTotalWithTax>31500</lineItemTotalWithTax>
         <itemDiscountAmount>0</itemDiscountAmount>
         <commodityCode>301</commodityCode>
         <unitCost>300.00</unitCost>
         <detailTax>
           <taxIncludedInTotal>true</taxIncludedInTotal>
           <taxAmount>500</taxAmount>
           <taxRate>0.01667</taxRate>
           <taxTypeIdentifier>03</taxTypeIdentifier>
           <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
         </detailTax>
       lineItemData>
         <itemSequenceNumber>2</itemSequenceNumber>
         <itemDescription>chair</itemDescription>
         cproductCode>CH123
         <quantity>1</quantity>
         <unitOfMeasure>EACH</unitOfMeasure>
         <lineItemTotal>20000</lineItemTotal>
         <itemDiscountAmount>0</itemDiscountAmount>
         <commodityCode>301</commodityCode>
         <unitCost>200.00</unitCost>
       </lineItemData>
     </enhancedData>
   </capture>
 </batchRequest>
```

#### **Example: Online Capture Request - Full Capture**

The following Capture example is for a full capture. Although the <capture> element includes an <amount> child, it is not required for a full Capture. If you omit the <amount> child element, the capture amount defaults to the full amount from the associated Authorization.

```
litleOnlineRequest version="8.19" xmlns="http://www.litle.com/schema"
 merchantId="100">
 <authentication>
   <user>User Name
   <password>password</password>
 </authentication>
 <capture id="2" reportGroup="ABC Division" customerId="038945"</pre>
 partial="false">
   <litleTxnId>13254123434</litleTxnId>
   <enhancedData>
    <customerReference>P012345</customerReference>
    <salesTax>125</salesTax>
    <taxExempt>false</taxExempt>
    <discountAmount>0</discountAmount>
    <shippingAmount>495</shippingAmount>
    <dutyAmount>0</dutyAmount>
    <shipFromPostalCode>01851</shipFromPostalCode>
    <destinationPostalCode>01851</destinationPostalCode>
    <destinationCountryCode>USA</destinationCountryCode>
    <invoiceReferenceNumber>123456</invoiceReferenceNumber>
    <orderDate>2011-08-14
    <detailTax>
      <taxIncludedInTotal>true</taxIncludedInTotal>
      <taxAmount>55</taxAmount>
      <taxRate>0.0059</taxRate>
      <taxTypeIdentifier>00</taxTypeIdentifier>
      <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
    </detailTax>
    <lineItemData>
      <itemSequenceNumber>1</itemSequenceNumber>
      <itemDescription>chair</itemDescription>
      cproductCode>CH123
      <quantity>1</quantity>
      <unitOfMeasure>EACH</unitOfMeasure>
      <taxAmount>125</taxAmount>
      <lineItemTotal>9380</lineItemTotal>
      <lineItemTotalWithTax>9505</lineItemTotalWithTax>
      <itemDiscountAmount>0</itemDiscountAmount>
```

```
<commodityCode>300</commodityCode>
      <unitCost>93.80</unitCost>
      <detailTax>
       <taxIncludedInTotal>true</taxIncludedInTotal>
       <taxAmount>55</taxAmount>
       <taxRate>0.0059</taxRate>
       <taxTypeIdentifier>03</taxTypeIdentifier>
       <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
      </detailTax>
    <lineItemData>
      <itemSequenceNumber>2</itemSequenceNumber>
     <itemDescription>table</itemDescription>
      cproductCode>TB123
      <quantity>1</quantity>
      <unitOfMeasure>EACH</unitOfMeasure>
      <lineItemTotal>30000</lineItemTotal>
      <itemDiscountAmount>0</itemDiscountAmount>
      <commodityCode>300</commodityCode>
      <unitCost>300.00</unitCost>
    </enhancedData>
 </capture>
<le></litleOnlineRequest>
```

#### **Example: Online Capture Request - Partial Capture**

A partial Capture has the partial attribute set to **true** and must include an <amount> child element.

```
<taxExempt>false</taxExempt>
<discountAmount>0</discountAmount>
<shippingAmount>495</shippingAmount>
<dutyAmount>0</dutyAmount>
<shipFromPostalCode>01851</shipFromPostalCode>
<destinationPostalCode>01851</destinationPostalCode>
<destinationCountryCode>USA</destinationCountryCode>
<invoiceReferenceNumber>123456</invoiceReferenceNumber>
<orderDate>2011-08-14
<detailTax>
 <taxIncludedInTotal>true</taxIncludedInTotal>
 <taxAmount>55</taxAmount>
 <taxRate>0.0059</taxRate>
 <taxTypeIdentifier>00</taxTypeIdentifier>
 <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
</detailTax>
lineItemData>
 <itemSequenceNumber>1</itemSequenceNumber>
 <itemDescription>chair</itemDescription>
 cproductCode>CH123
 <quantity>1</quantity>
 <unitOfMeasure>EACH</unitOfMeasure>
 <taxAmount>125</taxAmount>
 <lineItemTotal>9380</lineItemTotal>
 <lineItemTotalWithTax>9505</lineItemTotalWithTax>
 <itemDiscountAmount>0</itemDiscountAmount>
 <commodityCode>300</commodityCode>
 <unitCost>93.80</unitCost>
 <detailTax>
   <taxIncludedInTotal>true</taxIncludedInTotal>
   <taxAmount>55</taxAmount>
   <taxRate>0.0059</taxRate>
   <taxTypeIdentifier>03</taxTypeIdentifier>
   <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
 </detailTax>
</lineItemData>
<lineItemData>
 <itemSequenceNumber>2</itemSequenceNumber>
 <itemDescription>table</itemDescription>
 cproductCode>TB123
 <quantity>1</quantity>
 <unitOfMeasure>EACH</unitOfMeasure>
 <lineItemTotal>30000</lineItemTotal>
```

# 3.3.3.2 Capture Response

A Capture response has the following structure. The response message is identical for Online and Batch transactions except Batch always includes the corderId> element, while Online includes the cpostDate> element and may include a duplicate attribute.

#### **Example: Batch Capture Response**

```
litleResponse version="8.19" xmlns="http://www.litle.com/schema"
                                                                   id="123"
 litleSessionId="987654321" response="0" message="Valid Format">
 <batchResponse id="01234567" litleBatchId="4455667788" merchantId="100">
    <captureResponse id="AX54321678" reportGroup="RG27">
      <litleTxnId>84568456</litleTxnId>
      <orderId>12z58743y1</orderId>
      <response>000</response>
      <responseTime>2011-09-01T10:24:31</responseTime>
      <message>message</message>
    </captureResponse>
    <captureResponse id="AX54325432" reportGroup="RG12">
      <litleTxnId>84568457</litleTxnId>
      <orderId>12z58743y7</orderId>
      <response>000</response>
      <responseTime>2011-09-01T10:24:31</responseTime>
```

#### **Example: Online Capture Response**

#### NOTE:

If the request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate attribute set to true and the entire original response.

# 3.3.4 Capture Given Auth Transactions

You typically use a Capture Given Auth transaction when the associated Authorization occurred outside of the Litle & Co. system (for example, if you received a telephone Authorization). Another possible use for a Capture Given Auth transaction is if the Authorization transaction occurred within the Litle system, but the litleTxnId> is unknown by the submitting party (for example, if the Auth was submitted by a merchant, but a fulfiller submits a Capture Given Auth).

# 3.3.4.1 Capture Given Auth Request

You must specify the Capture Given Auth request as follows. The structure of the request is identical for either an Online or a Batch submission.

#### **Example: Batch Capture Given Auth Request**

The following example shows a single Capture Given Auth request. The example uses the <card> child element, but a tokenized merchant could use the <token> child element in its place.

```
<litleRequest version="8.19" xmlns="http://www.litle.com/schema"</pre>
 numBatchRequests="1">
 <authentication>
   <user>XMLTEST</user>
   <password>password</password>
 </authentication>
 <batchRequest id="batchId" numCaptureGivenAuths="1"</pre>
 captureGivenAuthAmount="10000" merchantId="100">
   <captureGivenAuth id="AX54321678" reportGroup="RG27">
    <orderId>orderId
    <authInformation>
      <authDate>2011-09-21</authDate>
      <authCode>123456</authCode>
    </authInformation>
    <amount>10000</amount>
    <orderSource>ecommerce</orderSource>
    <card>
      <type>VI</type>
      <number>4005550000081019</number>
      <expDate>0910</expDate>
```

```
</card>
    <enhancedData>
      <customerReference>PO12345</customerReference>
      <salesTax>125</salesTax>
      <taxExempt>false</taxExempt>
      <discountAmount>0</discountAmount>
      <shippingAmount>495</shippingAmount>
      <dutyAmount>0</dutyAmount>
      <shipFromPostalCode>01851</shipFromPostalCode>
      <destinationPostalCode>01851</destinationPostalCode>
      <destinationCountryCode>USA</destinationCountryCode>
      <invoiceReferenceNumber>123456</invoiceReferenceNumber>
      <orderDate>2011-09-21
      <detailTax>
       <taxIncludedInTotal>true</taxIncludedInTotal>
       <taxAmount>55</taxAmount>
       <taxRate>0.0055</taxRate>
       <taxTypeIdentifier>00</taxTypeIdentifier>
       <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
      </detailTax>
      <lineItemData>
       <itemSequenceNumber>1</itemSequenceNumber>
       <itemDescription>chair</itemDescription>
       cproductCode>CH123
       <quantity>1</quantity>
       <unitOfMeasure>EACH</unitOfMeasure>
       <taxAmount>125</taxAmount>
       <lineItemTotal>9380</lineItemTotal>
       <lineItemTotalWithTax>9505</lineItemTotalWithTax>
       <itemDiscountAmount>0</itemDiscountAmount>
       <commodityCode>300</commodityCode>
       <unitCost>93.80</unitCost>
      </lineItemData>
    </enhancedData>
   </captureGivenAuth>
 </batchRequest>
```

### **Example: Online Capture Given Auth Request**

```
litleOnlineRequest version="8.19" xmlns="http://www.litle.com/schema"
merchantId="100">
    <authentication></a>
```

```
<user>XMLTESTV3</user>
 <password>password</password>
</authentication>
<captureGivenAuth id="AX54321678" reportGroup="RG27">
 <orderId>orderId
 <authInformation>
  <authDate>2011-08-24</authDate>
  <authCode>123456</authCode>
 </authInformation>
 <amount>10000</amount>
 <orderSource>ecommerce</orderSource>
 <card>
  <type>VI</type>
  <number>4005550000081019
  <expDate>0910</expDate>
 </card>
 <enhancedData>
   <customerReference>P012345</customerReference>
  <salesTax>125</salesTax>
  <deliveryType>TBD</deliveryType>
  <taxExempt>false</taxExempt>
   <discountAmount>0</discountAmount>
  <shippingAmount>495</shippingAmount>
  <dutyAmount>0</dutyAmount>
  <shipFromPostalCode>01851</shipFromPostalCode>
  <destinationPostalCode>01851</destinationPostalCode>
  <destinationCountryCode>USA</destinationCountryCode>
  <invoiceReferenceNumber>123456</invoiceReferenceNumber>
  <orderDate>2011-08-14
  <detailTax>
    <taxIncludedInTotal>true</taxIncludedInTotal>
    <taxAmount>55</taxAmount>
    <taxRate>0.0059</taxRate>
    <taxTypeIdentifier>00</taxTypeIdentifier>
    <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
  </detailTax>
   <lineItemData>
    <itemSequenceNumber>1</itemSequenceNumber>
    <itemDescription>chair</itemDescription>
    cproductCode>CH123
    <quantity>1</quantity>
    <unitOfMeasure>EACH</unitOfMeasure>
    <taxAmount>125</taxAmount>
```

### **Example: Capture Given Auth Request using token Element**

The example below uses the following token related elements (click name to jump to element definition): token and litleToken.

```
<captureGivenAuth id="99999" customerId="444" reportGroup="RG1">
 <orderId>F12345</orderId>
 <authInformation>
   <authDate>2011-10-25</authDate>
   <authCode>500005</authCode>
 </authInformation>
 <amount>15000</amount>
 <orderSource>ecommerce</orderSource>
 <br/>
<billToAddress>
   <name>John Doe</name>
   <addressLine1>10 Main Street</addressLine1>
   <city>San Jose</city>
   <state>CA</state>
   <zip>95032-1234</zip>
   <country>USA</country>
 </billToAddress>
 <token>
   <litleToken>1112000100010085</litleToken>
   <expDate>1112</expDate>
   <cardValidationNum>987</cardValidationNum>
 </token>
</captureGivenAuth>
```

# 3.3.4.2 Capture Given Auth Response

A Capture Given Auth response has the following structure. The response message is identical for Online and Batch transactions except Online includes the <postDate> element and may include a duplicate attribute.

#### **Example:** Batch Capture Given Auth Response

### **Example: Online Capture Given Auth Response**

#### Note:

If the request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate attribute set to true and the entire original response.

# **Example:** Capture Given Auth Response for Tokenized Merchant Sending Card Data

### 3.3.5 Credit Transactions

The Credit transaction enables you to refund money to a customer, even if the original transaction occurred outside of the Litle & Co. system. You can submit refunds against any of the following payment transactions:

- Capture Transactions
- Capture Given Auth Transactions
- Force Capture Transactions
- Sale Transactions
- External Sale or Capture Transactions

**NOTE:** Although there are two different scenarios for Credit requests, there is only one scenario for the Credit response.

# 3.3.5.1 Credit Request for a Litle & Co. Processed Transaction

You must specify the Credit request for a Litle & Co. processed transaction as follows. The structure of the request is identical for either an Online or a Batch submission.

```
<credit id="Credit Id" reportGroup="UI Report Group" customerId="Customer Id">
    litleTxnId>Litle & Co. Transaction Id</litleTxnId>
    <amount>Authorization Amount</amount>
        <customBilling>
        <enhancedData>
        cprocessingInstructions>
        <actionReason>SUSPECT_FRAUD</actionReason>
        </credit>
```

#### **Example:** Batch Credit Request for a Litle & Co. Processed Transaction

To request a Credit against a sale settled by Litle & Co., you only need to specify the litleTxnId> element. The application uses the litleTxnId> to look-up the Capture referenced and obtain all the necessary information including the amount.

Note:

Although it is not required, if you choose to include <amount> elements in your Credit transaction, you must include the total amount in the creditAmount attribute of the <batchrequest>. If you do not specify amounts, set the creditAmount attribute to 0.

```
litleRequest version="8.19" xmlns="http://www.litle.com/schema" id="123"
```

```
numBatchRequests="1">
<authentication>
 <user>userName
 <password>password</password>
</authentication>
<batchRequest id="01234567" numAuths="0" authAmount="0" numCaptures="0"</pre>
captureAmount="0" numCredits="1" creditAmount="10000" numSales="0"
saleAmount="0" merchantId="100">
 <credit id="AX54321678" reportGroup="RG27">
   <litleTxnId>84568456</litleTxnId>
   <amount>10000</amount>
   <enhancedData>
    <customerReference>PO12345</customerReference>
    <salesTax>125</salesTax>
    <taxExempt>false</taxExempt>
    <discountAmount>0</discountAmount>
    <shippingAmount>3017</shippingAmount>
    <dutyAmount>0</dutyAmount>
    <shipFromPostalCode>01851</shipFromPostalCode>
    <destinationPostalCode>01851</destinationPostalCode>
    <destinationCountryCode>USA</destinationCountryCode>
    <invoiceReferenceNumber>123456</invoiceReferenceNumber>
    <orderDate>2011-09-14
    <detailTax>
      <taxIncludedInTotal>true</taxIncludedInTotal>
      <taxAmount>55</taxAmount>
      <taxRate>0.0059</taxRate>
      <taxTypeIdentifier>00</taxTypeIdentifier>
      <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
    </detailTax>
    <lineItemData>
      <itemSequenceNumber>1</itemSequenceNumber>
      <itemDescription>chair</itemDescription>
      cproductCode>CH123
      <quantity>1</quantity>
      <unitOfMeasure>EACH</unitOfMeasure>
      <taxAmount>125</taxAmount>
      <lineItemTotal>9380</lineItemTotal>
      <lineItemTotalWithTax>9505</lineItemTotalWithTax>
      <itemDiscountAmount>0</itemDiscountAmount>
      <commodityCode>300</commodityCode>
      <unitCost>93.80</unitCost>
      <detailTax>
```

#### Example: Online Credit Request for a Litle & Co. Processed Transaction

To request a Credit against a sale settled by Litle & Co., you need only specify the tleTxnId> element. The application uses the tleTxnId> to look up the Capture referenced and obtain all the necessary information including the amount. The example below includes the optional <customBilling> and <enhancedData> elements.

```
litleOnlineRequest version="8.19" xmlns="http://www.litle.com/schema"
 merchantId="100">
 <authentication>
   <user>User Name
   <password>password</password>
 </authentication>
 <credit id="2" reportGroup="ABC Division" customerId="038945">
   <litleTxnId>13254123434</litleTxnId>
   <customBilling>
    <phone>888888888</phone>
    <descriptor>descriptor</descriptor>
   </customBilling>
   <enhancedData>
    <customerReference>PO12345</customerReference>
    <salesTax>125</salesTax>
    <taxExempt>false</taxExempt>
    <discountAmount>0</discountAmount>
    <shippingAmount>495</shippingAmount>
    <dutyAmount>0</dutyAmount>
    <shipFromPostalCode>01851</shipFromPostalCode>
    <destinationPostalCode>01851</destinationPostalCode>
    <destinationCountryCode>USA</destinationCountryCode>
    <invoiceReferenceNumber>123456</invoiceReferenceNumber>
    <orderDate>2011-07-14
```

```
<detailTax>
      <taxIncludedInTotal>true</taxIncludedInTotal>
      <taxAmount>55</taxAmount>
      <taxRate>0.0059</taxRate>
      <taxTypeIdentifier>00</taxTypeIdentifier>
      <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
    </detailTax>
    lineItemData>
      <itemSequenceNumber>1</itemSequenceNumber>
      <itemDescription>chair</itemDescription>
      cproductCode>CH123
      <quantity>1</quantity>
      <unitOfMeasure>EACH</unitOfMeasure>
      <taxAmount>125</taxAmount>
      <lineItemTotal>9380</lineItemTotal>
      <lineItemTotalWithTax>9505</lineItemTotalWithTax>
      <itemDiscountAmount>0</itemDiscountAmount>
      <commodityCode>300</commodityCode>
      <unitCost>93.80</unitCost>
      <detailTax>
       <taxIncludedInTotal>true</taxIncludedInTotal>
       <taxAmount>55</taxAmount>
       <taxRate>0.0059</taxRate>
       <taxTypeIdentifier>03</taxTypeIdentifier>
       <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
      </detailTax>
    </lineItemData>
    <lineItemData>
      <itemSequenceNumber>2</itemSequenceNumber>
      <itemDescription>table</itemDescription>
      cproductCode>TB123
      <quantity>1</quantity>
      <unitOfMeasure>EACH</unitOfMeasure>
      <lineItemTotal>30000</lineItemTotal>
      <itemDiscountAmount>0</itemDiscountAmount>
      <commodityCode>300</commodityCode>
      <unitCost>300.00</unitCost>
    </lineItemData>
   </enhancedData>
 </credit>
<le></litleOnlineRequest>
```

# 3.3.5.2 Credit Request for a Non-Litle & Co. Processed Transaction

You must specify the Credit request for a Non-Litle & Co. processed transaction as follows. The structure of the request is identical for either an Online or a Batch submission.

#### NOTE:

Although the schema shows <paypal> as an optional element for a Credit against a non-Litle & Co. processed transaction, refunds of this type are not supported for PayPal. If you need to refund non-Litle & Co. processed transactions and have not maintained a temporary relationship with your former processor for this purpose, please ask your Litle Customer Experience Manager for alternative options.

```
<credit id="Credit Id" reportGroup="UI Report Group" customerId="Customer Id">
 <orderId>Order Id</orderId>
 <amount>Authorization Amount/amount>
 <orderSource>Order Entry Source
 <br/>
<br/>billToAddress>
 [ <card> | <token> | <paypage> ]
 <customBilling>
 <taxType>payment or fee</taxType>
 <br/><billMeLaterRequest>
 <enhancedData>
 cprocessingInstructions>
 <pos>
 <amexAggregatorData>
 <merchantData>
   <actionReason>SUSPECT FRAUD</actionReason>
</credit>
```

#### Example: Batch Credit Request for a Non-Litle & Co. Processed Transaction

If the sale occurred outside of the Litle & Co. system, you must specify the following elements in your Credit request: <orderId>, <amount>, and <card>, or <token> (<paypal> not supported for this transaction type).

```
<batchRequest id="01234567" numCredits="1" creditAmount="10000"</pre>
merchantId="100">
 <credit id="AX54321678" reportGroup="RG27">
   <orderId>12z58743y1</orderId>
   <amount>10000</amount>
   <orderSource>ecommerce</orderSource>
   <br/>
<br/>billToAddress>
    <name>John Doe</name>
    <addressLine1>123 4th street</addressLine1>
    <addressLine2>Apt. 20</addressLine2>
    <addressLine3>second floor</addressLine3>
    <city>San Jose</city>
    <state>CA</state>
    <zip>95032</zip>
    <country>USA</country>
    <email>jdoe@isp.com</email>
    <phone>408-555-1212</phone>
   </billToAddress>
   <card>
    <type>MC</type>
    <number>5186005800001012
    <expDate>1110</expDate>
   </card>
   <enhancedData>
    <customerReference>P012345</customerReference>
    <salesTax>125</salesTax>
    <taxExempt>false</taxExempt>
    <discountAmount>0</discountAmount>
    <shippingAmount>495</shippingAmount>
    <dutyAmount>0</dutyAmount>
    <shipFromPostalCode>01851</shipFromPostalCode>
    <destinationPostalCode>01851</destinationPostalCode>
    <destinationCountryCode>USA</destinationCountryCode>
    <invoiceReferenceNumber>123456</invoiceReferenceNumber>
    <orderDate>2011-09-14
    <detailTax>
      <taxIncludedInTotal>true</taxIncludedInTotal>
      <taxAmount>55</taxAmount>
      <taxRate>0.0059</taxRate>
      <taxTypeIdentifier>00</taxTypeIdentifier>
      <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
    </detailTax>
    <lineItemData>
```

```
<itemSequenceNumber>1</itemSequenceNumber>
       <itemDescription>chair</itemDescription>
       cproductCode>CH123
       <quantity>1</quantity>
       <unitOfMeasure>EACH</unitOfMeasure>
       <taxAmount>125</taxAmount>
       <lineItemTotal>9380</lineItemTotal>
       <lineItemTotalWithTax>9505</lineItemTotalWithTax>
       <itemDiscountAmount>0</itemDiscountAmount>
       <commodityCode>300</commodityCode>
       <unitCost>93.80</unitCost>
      </lineItemData>
    </enhancedData>
   </credit>
 </batchRequest>
```

### **Example: Online Credit Request for a Non-Litle & Co. Processed Transaction**

If the sale occurred outside of the Litle & Co. system, you must specify the following elements in your Credit request: <orderId>, <amount>, and <card>, or <token> (<paypal> not supported for this transaction type).

```
litleOnlineRequest version="8.19" xmlns="http://www.litle.com/schema"
 merchantId="100">
 <authentication>
   <user>User Name
   <password>password</password>
 </authentication>
 <credit id="2" reportGroup="ABC Division" customerId="038945">
   <orderId>56789</orderId>
   <amount>10000</amount>
   <orderSource>ecommerce</orderSource>
   <br/>
<br/>billToAddress>
    <name>Mike J. Hammer
    <addressLine1>Two Main Street</addressLine1>
    <addressLine2>Apartment 222</addressLine2>
    <addressLine3></addressLine3>
    <city>Riverside</city>
    <state>RI</state>
    <zip>02915</zip>
    <country>US</country>
    <email>mike@sample.com
```

```
<phone>555555555</phone>
</billToAddress>
<card>
 <type>VI<type>
 <number>4005550000081019
 <expDate>0907</expDate>
</card>
<customBilling>
 <phone>555555555</phone>
 <descriptor>descriptor</descriptor>
</customBilling>
<enhancedData>
 <customerReference>P012345</customerReference>
 <salesTax>125</salesTax>
 <taxExempt>false</taxExempt>
 <discountAmount>0</discountAmount>
 <shippingAmount>495</shippingAmount>
 <dutyAmount>0</dutyAmount>
 <shipFromPostalCode>01851</shipFromPostalCode>
 <destinationPostalCode>01851</destinationPostalCode>
 <destinationCountryCode>USA</destinationCountryCode>
 <invoiceReferenceNumber>123456</invoiceReferenceNumber>
 <orderDate>2011-08-14
 <detailTax>
   <taxIncludedInTotal>true</taxIncludedInTotal>
  <taxAmount>55</taxAmount>
  <taxRate>0.0059</taxRate>
  <taxTypeIdentifier>00</taxTypeIdentifier>
   <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
 </detailTax>
 <lineItemData>
   <itemSequenceNumber>1</itemSequenceNumber>
   <itemDescription>chair</itemDescription>
   cproductCode>CH123
   <quantity>1</quantity>
   <unitOfMeasure>EACH</unitOfMeasure>
   <taxAmount>125</taxAmount>
   <lineItemTotal>9380</lineItemTotal>
   <lineItemTotalWithTax>9505</lineItemTotalWithTax>
   <itemDiscountAmount>0</itemDiscountAmount>
   <commodityCode>300</commodityCode>
   <unitCost>93.80</unitCost>
```

# 3.3.5.3 Credit Response

The Credit response message is identical for Online and Batch transactions except Online includes the postDate element and may include a duplicate attribute.

#### **Example: Credit Response**

The example below illustrates a Batch Credit response. A response for an Online transaction uses a litleOnlineResponse element as the parent.

```
<response>000</response>
    <responseTime>2011-09-01T10:24:31</responseTime>
    <message>Approved</message>
    </creditResponse>
    </batchResponse>
</litleResponse></litleResponse></litre>
```

### **Example: Credit Response for a Tokenized Merchant Sending Card Data**

When a tokenized merchant submits card data in the Credit request, the response includes the tokenResponse element. The example below is a response for an Online request (litleOnlineResponse> element not shown), so it includes the <postDate> element.

# 3.3.6 eCheck Credit Transactions

The eCheck Credit transaction enables you to refund a previous eCheck Sale. Merchants can submit an eCheck Credit transaction for a sale regardless or whether the original transaction was settled by the Litle & Co. system, although the requests are structured differently. This section contains the following:

- eCheck Credit Request Against a Litle & Co. Transaction
- eCheck Credit Request for a Non-Litle & Co. Processed Sale
- eCheck Credit Response

NOTE: Although there are two different scenarios for eCheck Credit requests, the response message uses the same structure.

# 3.3.6.1 eCheck Credit Request Against a Litle & Co. Transaction

To request an eCheck Credit against an eCheck Sale that had been settled by Litle & Co. you only need to specify the litleTxnId> element. When you specify this element, the application uses the litleTxnId> to look up the referenced echeckSale transaction and obtain the necessary information. In this case, the <amount> element is optional, but should be included if the credit

amount is less than the captured amount. If you do not include the <amount> element, the system assumes the credit to be for the total amount of the referenced transaction.

When requesting a echeckCredit against an echeckSale that occurred within Litle & Co., specify the Credit request as follows:

```
<echeckCredit id="Credit Id" reportGroup="UI Report Group" customerId="Customer
Id">
    litleTxnId>Litle & Co. Transaction Id</litleTxnId>
    <amount>Credit Amount</amount>
    <customBilling>
</echeckCredit>
```

#### **Example: eCheck Credit Request**

The eCheck Credit batch request shown below contains three <echeckCredit> elements. The first two use a Litle Transaction ID as a reference. The third, which you would use for a sale occurring outside of the Litle & Co. system, uses the <orderId>, <amount>, <billToAddress>, and <echeck> elements to provide the required information.

```
<litleRequest version="8.19" xmlns="http://www.litle.com/schema"</pre>
 numBatchRequests="1">
 <authentication>
   <user>userName
   <password>password</password>
 </authentication>
 <batchRequest id="xmlbat01" numEcheckCredit="3" echeckCreditAmount="12100"</pre>
 merchantId="000053">
   <echeckCredit id="credit1" reportGroup="new53" customerId="53">
    <litleTxnId>4455667788</litleTxnId>
    <amount>1000</amount>
   </echeckCredit>
   <echeckCredit reportGroup="new53">
    <litleTxnId>4455667789</litleTxnId>
    <amount>1100</amount>
   </echeckCredit>
   <echeckCredit reportGroup="new53">
    <orderId>12z58743y1</orderId>
    <amount>10000</amount>
    <orderSource>ecommerce</orderSource>
    <br/>
<br/>billToAddress>
      <name>John Doe</name>
      <addressLine1>123 4th street</addressLine1>
      <addressLine2>Apt. 20</addressLine2>
      <addressLine3>second floor</addressLine3>
```

```
<city>San Jose</city>
      <state>CA</state>
      <zip>95032</zip>
      <country>USA</country>
      <email>jdoe@isp.com</email>
      <phone>408-555-1212</phone>
    </billToAddress>
    <echeck>
      <accType>Checking</accType>
      <accNum>5186005800001012</accNum>
      <routingNum>000010101/routingNum>
      <checkNum>1104</checkNum>
    </echeck>
   </echeckCredit>
 </batchRequest>
```

# 3.3.6.2 eCheck Credit Request for a Non-Litle & Co. Processed Sale

If the original eCheck Sale transaction was not processed via Litle & Co. or the if the tleTxnId> for the original eCheck Sale transaction is not available, specify eCheck Credit request as follows:

The third transaction shown in the eCheck Credit Request example on page 173 shows an example of a Credit request against a non-Litle & Co. processed transaction.

# 3.3.6.3 eCheck Credit Response

The eCheck Credit message is identical for either type of eCheck Credit request. The <accountUpdater> element is included only if you submit account information in the request transaction for which a NOC exists. In this case the system automatically updates the information sent to the ACH network and includes the change information in the response.

The eCheck Credit response has the following structure:

```
<echeckCreditResponse id="eCheck Credit Id" reportGroup="UI Report Group"
customerId="Customer Id">
    litleTxnId>Litle & Co. Transaction Id</litleTxnId>
    <orderId>Order Id</orderId>
    <response>Response Code</response>
    <responseTime>Date and Time in GMT</responseTime>
    <message>Response Message</message>
    <postDate>Date of Posting</postDate> (Online Only)
    <accountUpdater>Account Change Info</accountUpdater>
    <tokenResponse> (for Tokenized merchants submitting account data)
</echeckCreditResponse>
```

#### **Example:** eCheck Credit Response

# 3.3.7 eCheck Redeposit Transactions

You use this transaction type to manually attempt redeposits of eChecks returned for either Insufficient Funds or Uncollected Funds. You can use this element in either Batch or Online transactions.

NOTE:

Do not use this transaction type if you are enabled for the Auto Redeposit feature. If you are enabled for the Auto Redeposit feature, the system will reject any echeckRedeposit transaction you submit.

# 3.3.7.1 eCheck Redeposit Request

You must specify the eCheck Redeposit request using the following format:

```
<echeckRedeposit id="eCheck Redeposit Id" reportGroup="UI Report Group"
customerId="Customer Id">
    litleTxnId>Litle Transaction Id</litleTxnId>
    <echeck> or <echeckToken>
    <merchantData>
</echeckredeposit>
```

#### NOTE:

If you include the echeck element, the values submitted for accType, accNum, and routingNum children must match those submitted in the original echeckSale transaction.

#### **Example: Online eCheck Redeposit Request**

```
litleOnlineRequest version="8.19" xmlns="http://www.litle.com/schema"
 merchantId="81603">
 <authentication>
   <user>User Name
   <password>password</password>
 </authentication>
 <echeckRedeposit reportGroup="001603">
   <litleTxnId>345454444</litleTxnId>
   <echeck>
    <accType>Checking</accType>
    <accNum>1099999903</accNum>
    <routingNum>114567895/routingNum>
   </echeck>
   <merchantData>
    <campaign>New Marketing Campaign/campaign>
   </merchantData>
```

```
</echeckRedeposit>
</litleOnlineRequest>
```

### **Example:** Batch eCheck Redeposit Request

```
<litleRequest version="8.19" xmlns="http://www.litle.com/schema"</pre>
 numBatchRequests="1">
 <authentication>
   <user>User Name
   <password>Password</password>
 </authentication>
 <batchRequest id="uniqueId" numEcheckRedeposit="4" merchantId="1603">
   <echeckRedeposit reportGroup="001603">
    <litleTxnId>3456456444</litleTxnId>
    <merchantdata>
      <affiliate>ABC Marketing</affiliate>
    </merchantdata>
   </echeckRedeposit>
   <echeckRedeposit reportGroup="001603">
    <litleTxnId>3456456449</litleTxnId>
    <echeck>
      <accType>Checking</accType>
      <accNum>1099999903</accNum>
      <routingNum>114567895/routingNum>
    </echeck>
    <merchantdata>
      <affiliate>ABC Marketing</affiliate>
    </merchantdata>
   </echeckRedeposit>
   <echeckRedeposit reportGroup="001603">
    <litleTxnId>3456557123</litleTxnId>
    <echeck>
      <accType>Savings</accType>
      <accNum>10999999444</accNum>
      <routingNum>114567895/routingNum>
    </echeck>
    <merchantdata>
      <affiliate>ABC Marketing</affiliate>
    </merchantdata>
   </echeckRedeposit>
   <echeckRedeposit reportGroup="001603">
    <litleTxnId>123456789</litleTxnId>
   </echeckRedeposit>
```

```
</batchRequest>
</litleRequest>
```

# 3.3.7.2 eCheck Redeposit Response

The eCheck Redeposit response indicates that Litle & Co. has received your eCheck Redeposit request. This does not indicate when funds will be transferred. The <accountUpdater> element is included only if the account information submitted in the request transaction has changed (NOC exists). In this case the system automatically updates the information sent to the ACH network and includes the change information in the response.

The eCheck Sale response has the following structure:

# **Example: Batch eCheck Redeposit Response**

```
litleResponse version="8.19" xmlns="http://www.litle.com/schema" id="123"
 response="0" message="Valid Format" litleSessionId="987654321">
 <batchResponse id="01234567" litleBatchId="4455667788" merchantId="100">
   <echeckRedepositResponse id="AX54321678" reportGroup="RG27"</pre>
 customerId="53">
    <litleTxnId>84568456</litleTxnId>
    <response>000</response>
    <responseTime>2010-06-01T10:24:31</responseTime>
    <message>Approved</message>
   </echeckRedepositResponse>
   <echeckRedepositResponse id="AX54325432" reportGroup="RG12">
    <litleTxnId>84568457</litleTxnId>
    <response>000</response>
    <responseTime>2010-06-01T10:24:31</responseTime>
    <message>Approved</message>
    <accountUpdater>
      <originalAccountInfo>
        <accType>Checking</accType>
```

# 3.3.8 eCheck Sale Transactions

You use the eCheck Sale transaction to capture funds from a customer paying via electronic checks. It is the eCheck equivalent of a Capture transaction. Setting the <verify> element to **true** triggers an eCheck Verification operation prior to the capture. If the verification fails, the system does not process the capture operation.

NOTE:

To perform a verification you must include the following optional children of the billToAddress element in your request: firstName, lastName, companyName (if accType = Corporate or Corp Savings), address1 (address 2 and 3 if needed), city, state, phone.

# 3.3.8.1 eCheck Sale Request

You must specify the eCheck Sale request using the following format:

```
<merchantData>
</echeckSale>
```

### **Example: eCheck Sale Request**

```
litleRequest version="8.19" xmlns="http://www.litle.com/schema" id="123"
 numBatchRequests="1">
 <authentication>
   <user>userName
   <password>password</password>
 </authentication>
 <batchRequest id="654321" numEcheckSales="1" echeckSalesAmount="10000"</pre>
 merchantId="100">
   <echeckSale id="AX54321678" reportGroup="RG27" customerId="53">
    <orderId>12z58743y1</orderId>
    <verify>true</verify>
    <amount>10000</amount>
    <orderSource>telephone
    <br/>
<br/>billToAddress>
      <firstName>John</firstName>
      <lastName>Doe</lastName>
      <addressLine1>123 4th street</addressLine1>
      <addressLine2>Apt. 20</addressLine2>
      <addressLine3>second floor</addressLine3>
      <city>San Jose</city>
      <state>CA</state>
      <zip>95032</zip>
      <country>USA</country>
      <email>jdoe@isp.com</email>
      <phone>408-555-1212</phone>
    </billToAddress>
    <echeck>
      <accType>Checking</accType>
      <accNum>5186005800001012</accNum>
      <routingNum>000010101/routingNum>
      <checkNum>1104</checkNum>
    </echeck>
   </echeckSale>
 </batchRequest>
</litleRequest>
```

# 3.3.8.2 eCheck Sale Response

The eCheck Sale response indicates that Litle & Co. has received your eCheck Sale request. This does not indicate when funds will be transferred. The <accountUpdater> element is included only if the account information submitted in the request transaction has changed (NOC exists). In this case the system automatically updates the information sent to the ACH network and includes the change information in the response.

NOTE: The schema for echeckSalesResponse includes a verificationCode child element. This element is not used at this time.

The eCheck Sale response has the following structure:

### Example: eCheck Sale Response

The response example below includes the accountUpdater element, which indicates that there is a NOC against the account and provides the new account information. If the request used a token, the accountUpdater element would have children providing the original and new token information.

```
<litleTxnId>84568457</litleTxnId>
    <orderId>12z58743y7</orderId>
    <response>000</response>
    <responseTime>2011-09-01T10:24:31</responseTime>
    <message>Approved</message>
    <accountUpdater>
      <originalAccountInfo>
        <accType>Checking</accType>
        <accNum>5186005800001012</accNum>
        <routingNum>000010101</routingNum>
      </originalAccountInfo>
      <newAccountInfo>
        <accType>Checking</accType>
        <accNum>5499576040500006</accNum>
        <routingNum>000010102/routingNum>
      </newAccountInfo>
    </accountUpdater>
   </echeckSalesResponse>
 </batchResponse>
<le></litleResponse>
```

# 3.3.9 eCheck Verification Transactions

You use an eCheck Verification transaction to initiate a comparison to a database containing information about checking accounts. The database may include information as to whether the account has been closed, as well as whether there is a history of undesirable behavior associated with the account/account holder.

Note:

While eCheck Verification is a valuable tool that you can use to reduce possible fraud and loss, unlike a credit card authorization, it does not check for the availability of funds, nor does it place a hold on any funds.

# 3.3.9.1 eCheck Verification Request

You must specify the eCheck Verification request using the following format:

IMPORTANT: For an eCheckVerification transaction, you must submit the firstName and lastName elements instead of the name element (middleInitial is optional). For a corporate account you must include the companyName element in addition to the firstName and lastName elements. In both cases, you also must include the address, city, state, zip and phone information.

For a corporate account, if you do not have the name of the check issuer, you can use a value of "unavailable" for the firstName and lastName elements.

#### Example: eCheck Verification Request - Personal Checking

```
litleRequest version="8.19" xmlns="http://www.litle.com/schema" id="123"
 numBatchRequests="1">
 <authentication>
   <user>userName
   <password>password</password>
 </authentication>
 <batchRequest id="654321" numEcheckVerification="1"</pre>
 echeckVerificationAmount="10000" merchantId="100">
   <echeckVerification id="AX54321678" reportGroup="RG27" customerId="53">
    <orderId>12z58743y1</orderId>
    <amount>10000</amount>
    <orderSource>telephone</orderSource>
    <br/>
<br/>billToAddress>
      <firstName>John</firstName>
      <lastName>Doe</lastName>
      <addressLine1>123 4th street</addressLine1>
```

```
<addressLine2>Apt. 20</addressLine2>
      <addressLine3>second floor</addressLine3>
      <city>San Jose</city>
      <state>CA</state>
      <zip>95032</zip>
      <country>USA</country>
      <email>jdoe@isp.com</email>
      <phone>408-555-1212</phone>
    </billToAddress>
    <echeck>
      <accType>Checking</accType>
      <accNum>5186005800001012</accNum>
      <routingNum>000010101/routingNum>
      <checkNum>1104</checkNum>
    </echeck>
    <merchantData>
      <campaign>New Campaign
    </merchantData>
   </echeckVerification>
 </batchRequest>
</litleRequest>
```

### **Example:** eCheck Verification Request - Corporate Account

NOTE: If you do not have the name of the check issuer, you can use a value of "unavailable" for the firstName and lastName elements.

```
<companyName>Widget Company
      <addressLine1>123 4th street</addressLine1>
      <addressLine2>Apt. 20</addressLine2>
      <addressLine3>second floor</addressLine3>
      <city>San Jose</city>
      <state>CA</state>
      <zip>95032</zip>
      <country>USA</country>
      <email>pjones@isp.com
      <phone>408-555-1212</phone>
    </billToAddress>
    <echeck>
      <accType>Corporate</accType>
      <accNum>5186005800001012</accNum>
      <routingNum>000010101/routingNum>
      <checkNum>1104</checkNum>
    </echeck>
   </echeckVerification>
 </batchRequest>
<le></litleRequest>8.6
```

# 3.3.9.2 eCheck Verification Response

The <accountUpdater> element is included only if the account information submitted in the request transaction has changed (NOC exists). In this case the system automatically updates the information sent to the ACH network and includes the change information in the response.

The eCheck Verification response has the following structure:

### **Example:** eCheck Verification Response

```
litleResponse version="8.19" xmlns="http://www.litle.com/schema" id="123"
 response="0" message="Valid Format" litleSessionId="987654321">
 <batchResponse id="01234567" litleBatchId="4455667788" merchantId="100">
   <echeckVerificationResponse id="AX54321678" reportGroup="RG27"</pre>
 customerId="53">
    <litleTxnId>84568456</litleTxnId>
    <orderId>12z58743y1</orderId>
    <response>000</response>
    <responseTime>2011-09-01T10:24:31</responseTime>
    <message>Approved</message>
   </echeckVerificationResponse>
   <echeckVerificationResponse id="AX54325432" reportGroup="RG12">
    <litleTxnId>84568457</litleTxnId>
    <orderId>12z58743y7</orderId>
    <response>000</response>
    <responseTime>2011-09-01T10:24:31</responseTime>
    <message>Approved</message>
    <accountUpdater>
      <originalAccountInfo>
        <accType>Checking</accType>
        <accNum>5186005800001012</accNum>
        <routingNum>000010101</routingNum>
      </originalAccountInfo>
      <newAccountInfo>
        <accType>Checking</accType>
        <accNum>5499576040500006</accNum>
        <routingNum>000010102</routingNum>
      </newAccountInfo>
    </accountUpdater>
   </echeckVerificationResponse>
 </batchResponse>
<le></litleResponse>
```

#### eCheck Void Transactions (Online Only) 3.3.10

You use an eCheck Void transaction to either halt automatic redeposit attempts of eChecks returned for either Insufficient Funds or Uncollected Funds, or cancel an eCheck Sale transaction, as long as the transaction has not yet settled. This also applies to merchant initiated redeposits. You can use this element only in Online transactions.

# 3.3.10.1 eCheck Void Request

The eCheck Void request references the litleTxnId> of the previously approved transaction. You must structure an eCheck Void request as follows.

```
<echeckVoid id = "echeckVoid Id" reportGroup="UI Report Group">
    litleTxnId>Litle & Co. Transaction Id</litleTxnId>
</echeckVoid>
```

### **Example: eCheck Void Request**

# 3.3.10.2 eCheck Void Response

The eCheck Void response message may also include a duplicate attribute. The eCheck Void response has the following structure.

### **Example: Online eCheck Void Response**

# 3.3.11 Force Capture Transactions

A Force Capture transaction is a Capture transaction used when you do not have a valid Authorization for the order, but have fulfilled the order and wish to transfer funds.

CAUTION: Merchants must be authorized by Litle & Co. before submitting transactions of this type. In some instances, using a Force Capture transaction can lead to chargebacks and fines.

# 3.3.11.1 Force Capture Request

You must specify the Force Capture request as follows. The structure of the request is identical for either an Online or a Batch submission.

### **Example: Batch Force Capture Request**

```
litleRequest version="8.19" xmlns="http://www.litle.com/schema" id="123"
 numBatchRequests="1">
 <authentication>
   <user>userName
   <password>password</password>
 </authentication>
 <batchRequest id="01234567" numForceCaptures="1"</pre>
 forceCaptureAmount="10000" merchantId="100">
   <forceCapture id="AX54321678" reportGroup="RG27" customerId="038945">
    <orderId>orderId
    <amount>10000</amount>
    <orderSource>ecommerce</orderSource>
    <card>
      <type>VI</type>
      <number>4005550000081019
      <expDate>0910</expDate>
    </card>
    <enhancedData>
      <customerReference>PO12345</customerReference>
      <salesTax>125</salesTax>
      <taxExempt>false</taxExempt>
      <discountAmount>0</discountAmount>
      <shippingAmount>495</shippingAmount>
      <dutyAmount>0</dutyAmount>
      <shipFromPostalCode>01851</shipFromPostalCode>
      <destinationPostalCode>01851</destinationPostalCode>
      <destinationCountryCode>USA</destinationCountryCode>
      <invoiceReferenceNumber>123456</invoiceReferenceNumber>
      <orderDate>2011-09-14
      <detailTax>
       <taxIncludedInTotal>true</taxIncludedInTotal>
       <taxAmount>55</taxAmount>
       <taxRate>0.0059</taxRate>
       <taxTypeIdentifier>00</taxTypeIdentifier>
       <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
      </detailTax>
      lineItemData>
       <itemSequenceNumber>1</itemSequenceNumber>
       <itemDescription>chair</itemDescription>
       cproductCode>CH123
       <quantity>1</quantity>
       <unitOfMeasure>EACH</unitOfMeasure>
```

```
<taxAmount>125</taxAmount>
        <lineItemTotal>9380</lineItemTotal>
        <lineItemTotalWithTax>9505</lineItemTotalWithTax>
        <itemDiscountAmount>0</itemDiscountAmount>
        <commodityCode>300</commodityCode>
        <unitCost>93.80</unitCost>
        <detailTax>
         <taxIncludedInTotal>true</taxIncludedInTotal>
         <taxAmount>55</taxAmount>
         <taxRate>0.0059</taxRate>
         <taxTypeIdentifier>03</taxTypeIdentifier>
         <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
        </detailTax>
      </lineItemData>
    </enhancedData>
   </forceCapture>
 </batchRequest>
</litleRequest>
```

### **Example: Online Force Capture Request**

```
litleOnlineRequest version="8.19" xmlns="http://www.litle.com/schema"
 merchantId="123">
 <authentication>
   <user>userName
   <password>password</password>
 </authentication>
 <forceCapture id="AX54321678" reportGroup="RG27" customerId="038945">
   <orderId>orderId
  <amount>10000</amount>
  <orderSource>ecommerce</orderSource>
   <card>
    <type>VI</type>
    <number>4005550000081019
    <expDate>0907</expDate>
   </card>
   <enhancedData>
    <customerReference>PO12345</customerReference>
    <salesTax>125</salesTax>
    <taxExempt>false</taxExempt>
    <discountAmount>0</discountAmount>
    <shippingAmount>495</shippingAmount>
    <dutyAmount>0</dutyAmount>
```

```
<shipFromPostalCode>01851</shipFromPostalCode>
    <destinationPostalCode>01851</destinationPostalCode>
    <destinationCountryCode>USA</destinationCountryCode>
    <invoiceReferenceNumber>123456</invoiceReferenceNumber>
    <orderDate>2011-08-14
    <detailTax>
      <taxIncludedInTotal>true</taxIncludedInTotal>
      <taxAmount>55</taxAmount>
      <taxRate>0.0059</taxRate>
      <taxTypeIdentifier>00</taxTypeIdentifier>
      <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
    </detailTax>
    <lineItemData>
      <itemSequenceNumber>1</itemSequenceNumber>
      <itemDescription>chair</itemDescription>
      cproductCode>CH123
      <quantity>1</quantity>
      <unitOfMeasure>EACH</unitOfMeasure>
      <taxAmount>125</taxAmount>
      <lineItemTotal>9380</lineItemTotal>
      <lineItemTotalWithTax>9505</lineItemTotalWithTax>
      <itemDiscountAmount>0</itemDiscountAmount>
      <commodityCode>300</commodityCode>
      <unitCost>93.80</unitCost>
    </lineItemData>
   </enhancedData>
 </forceCapture>
<le></litleOnlineRequest>
```

# 3.3.11.2 Force Capture Response

The Force Capture response message is identical for Online and Batch transactions, except Online includes the <postDate> element and may include a duplicate attribute. The Force Capture response has the following structure:

```
<forceCaptureResponse id="Capture Id" reportGroup="UI Report Group"
customerId="Customer Id">
    litleTxnId>Litle & Co. Transaction Id</litleTxnId>
    <orderId>Order Id</orderId>
    <response>Response Code</response>
    <responseTime>Date and Time in GMT</responseTime>
```

```
<postDate>Date of Posting</postDate> (Online Only)

<message>Response Message</message>

<tokenResponse> (for Tokenized merchants submitting card data)

<accountUpdater>
</forceCaptureResponse>
```

### **Example: Batch Force Capture Response**

#### **Example: Online Force Capture Response**

If the Online request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate attribute set to true (not shown) and the entire original response.

### Example: Force Capture Response for Tokenized Merchant Sending Card Data

A tokenized merchant that includes card information in the request receives a response message that includes the token element. The example below is an Online response.

# 3.3.12 Register Token Transactions

The Register Token transaction enables you to submit a credit card number, eCheck account number, or Pay Page Registration Id to Litle & Co. and receive a token in return. While you can submit Register Token transactions at any time, typically, you would make use of this transactions when initially converting to the use of tokens. In this case you would submit large quantities of credit cards/eCheck account numbers in batch files and replace them in your database with the tokens returned.

#### NOTE:

When initially tokenizing your customer database, Litle recommends that you collect all distinct credit card numbers and submit the information in one or more large batch files. When you receive the response file, parse the returned token information to your database, replacing the card numbers.

# 3.3.12.1 Register Token Request

You must specify the Register Token request as follows. The structure of the request is identical for either an Online or a Batch submission. The child elements used differ depending upon whether you are registering a credit card account, an eCheck account, or submitting a Pay Page Registration Id.

When you submit the CVV2/CVC2/CID in a registerTokenRequest, the Litle platform encrypts and stores the value on a temporary basis for later use in a tokenized Auth/Sale transaction submitted without the value. This is done to accommodate merchant systems/workflows where the security code is available at the time of token registration, but not at the time of the Auth/Sale. If for some reason you need to change the value of the security code supplied at the time of the token registration, use an updateCardValidationNumOnToken transaction. To use the store value when submitting an Auth/Sale transaction, set the cardValidationNum value to 000.

#### Note:

The use of the cardValidationNum element in the registertokenRequest only applies when you submit an accountNumber element.

#### For credit cards:

```
<registerTokenRequest id="Id" reportGroup="UI Report Group">
  <orderId>Order Id</orderId>
  <accountNumber>Card Account Number</accountNumber>
  <cardValidationNum>CVV2/CVC2/CID</cardValidationNum>
</registerTokenRequest>
```

For eCheck accounts:

```
<registerTokenRequest id="Id" reportGroup="UI Report Group">
    <orderId>Order Id</orderId>
    <echeckForToken>
      <accNum>Account Number</accNum>
      <routingNum>Routing Number</routingNum>
    </echeckForToken>
   </registerTokenRequest>
For Pay Page Registration Ids:
   <registerTokenRequest id="Id" reportGroup="UI Report Group">
    <orderId>Order Id</orderId>
    <paypageRegistrationId>
   </registerTokenRequest>
Example: Batch Register Token Request - Credit Card
com/schema id="123"
 numBatchRequests="1">
 <authentication>
   <user>userName
   <password>password</password>
 </authentication>
 <batchRequest id="01234567" numTokenRegistrations="1">
   <registerTokenRequest id="99999" reportGroup="RG1">
    <orderId>F12345
    <accountNumber>4005101001000002</accountNumber>
    <cardValidationNum>999</cardValidationNum>
   </registerTokenRequest>
 </batchRequest>
</litleRequest>
Example: Batch Register Token Request - eCheck
litleRequest version="8.19" xmlns="http://www.litle.com/schema" id="123"
 numBatchRequests="1">
 <authentication>
   <user>userName
   <password>password</password>
 </authentication>
 <batchRequest id="01234567" numTokenRegistrations="1">
   <registerTokenRequest id="99999" reportGroup="RG1">
    <orderId>F12345</orderId>
```

#### Example: Batch Register Token Request - paypageRegistationId

# 3.3.12.2 Register Token Response

There is no structural difference an Online and Batch response; however, some child elements change depending upon whether the token is for a credit card account or an eCheck account. The response will have one of the following structures.

Register Token response for Credit Cards

```
<registerTokenResponse id="99999" reportGroup="RG1">
  litleTxnId>Litle Transaction Number</litleTxnId>
  <orderId>Order Id</orderId>
  litleToken>Litle Token</litleToken>
  <bin>BIN</bin>
  <type>Method of Payment</type>
  <response>Response Code</response>
  <responseTime>Response Time</responseTime>
```

```
<message>Response Message</message>
</registerTokenResponse>
```

# Register Token response for eChecks

### **Example: Batch Register Token Response - Credit Card**

# **Example:** Batch Register Token Request - eCheck

# 3.3.13 RFR Transactions (Batch Only)

An RFR (Request For Response) transaction enables you to request a response file for a previously submitted Batch file. You make the request by submitting either the litleSessionId of the Batch, or in the case of a request for an Account Updater file, the accountUpdateFileRequestData element.

NOTE:

The use of RFR transactions for Account Updater files apply only to the legacy Account Updater solution.

# **3.3.13.1** RFR Request

You must specify the RFR request as follows.

```
<RFRRequest>
  litleSessionId | accNum>
</RFRRequest>
```

## **Example: RFR Request for Payment Transaction Batch**

The following example shows an RFR request for the response, with 7766554321 as the value of the tleSessionId> element.

```
litleRequest version="8.19" xmlns="http://www.litle.com/schema" id="123"
    numBatchRequests="0">
    <a href="mailto:authentication">
        <user>userName</user>
        <password>password</password>
        </authentication>
        <RFRRequest>
        litleSessionId>7766554321</litleSessionId>
        </RFRRequest>
        </litleRequest></litleRequest>
```

## **Example: RFR Request for an Account Updater File**

```
 <postDate>2010-01-15</postDate>
  </RFRRequest>
</litleRequest>
```

# 3.3.13.2 RFR Response

When using an RFR request to obtain the response file for a payment transaction Batch file, the RFR response is exactly the same as the original session response associated with the litleSessionId> you submitted in the RFR request. The session ID returned in the response will be the session ID of the original session.

When using an RFR request in an Account Updater scenario, you will receive either an Account Updater Completion response, if the file is ready, or an Account Updater RFR "not ready" response, as shown in the example below.

## Example: Account Updater RFR "not ready" Response

# 3.3.14 Sale Transactions

The Sale transaction enables you to both authorize fund availability and deposit those funds by means of a single transaction. The Sale transaction is also known as a conditional deposit, because the deposit takes place only if the authorization succeeds. If the authorization is declined, the deposit will not be processed.

#### NOTE:

If the authorization succeeds, the deposit is processed automatically, regardless of the AVS, CVV2, CVC2, or CID response, except for American Express transactions. For American Express, a failure to match the security code (CID) results in a declined transaction with the Response Reason Code of 352 - Decline CVV2/CID Fail.

# **3.3.14.1** Sale Request

You must specify the Sale request as follows. The structure of the request is identical for either an Online or a Batch submission.

#### NOTE:

When you submit the CVV2/CVC2/CID in a registerTokenRequest, the Litle platform encrypts and stores the value on a temporary basis for later use in a tokenized Auth/Sale transaction submitted without the value. To use the store value when submitting an Auth/Sale transaction, set the cardValidationNum value to 000.

#### **Example: Batch Sale Request**

```
litleRequest version="8.19" xmlns="http://www.litle.com/schema" id="123"
 numBatchRequests="1">
 <authentication>
   <user>userName
   <password>password</password>
 </authentication>
 <batchRequest id="01234567" numSales="1" saleAmount="12522"</pre>
 merchantId="100">
   <sale id="AX54321678" reportGroup="RG27">
    <orderId>12z58743y1</orderId>
    <amount>12522</amount>
    <orderSource>ecommerce</orderSource>
    <br/>
<br/>billToAddress>
      <name>John Doe</name>
      <addressLine1>123 4th street</addressLine1>
      <addressLine2>Apt. 20</addressLine2>
      <addressLine3>second floor</addressLine3>
      <city>San Jose</city>
      <state>CA</state>
      <zip>95032</zip>
      <country>USA</country>
      <email>jdoe@isp.com</email>
      <phone>408-555-1212</phone>
    </billToAddress>
    <card>
      <type>MC</type>
      <number>5186005800001012
      <expDate>1110</expDate>
    </card>
```

```
</sale>
</batchRequest>
</litleRequest>
```

### **Example: Online Sale Request**

#### Note:

The example below includes an <orderSource> value of 3dsAuthenticated and includes the <cardholderAuthentication> information. Use this <orderSource> value only if you are a 3DS merchant and authenticated the cardholder.

Also, the values for the <authenticationValue> and <authenticationTransactionId> elements in the example below have been truncated.

```
litleOnlineRequest version="8.19" xmlns="http://www.litle.com/schema"
 merchantId="100">
  <authentication>
    <user>User Name
    <password>password</password>
  </authentication>
 <sale id="1" reportGroup="ABC Division" customerId="038945">
    <orderId>5234234</orderId>
    <amount>40000</amount>
    <orderSource>3dsAuthenticated</orderSource>
    <br/>
<br/>billToAddress>
      <name>John Smith</name>
      <addressLine1>100 Main St</addressLine1>
      <addressLine2>100 Main St</addressLine2>
      <addressLine3>100 Main St</addressLine3>
      <city>Boston</city>
      <state>MA</state>
      <zip>12345</zip>
      <country>US</country>
      <email>jsmith@someaddress.com</email>
      <phone>555-123-4567</phone>
    </billToAddress>
    <card>
      <type>VI</type>
      <number>4005550000081019
      <expDate>1210</expDate>
      <cardValidationNum>555/cardValidationNum>
    </card>
```

```
<cardholderAuthentication>
  <authenticationValue>BwABBJQ1AqJDUCAAAAAAA=</authenticationValue>
  <authenticationTransactionId>gMV75TAgk=</authenticationTransactionId>
</cardholderAuthentication>
<customBilling>
  <phone>888888888</phone>
  <descriptor>bdi*Litle&amp;Co Test</descriptor>
</customBilling>
<enhancedData>
  <customerReference>PO12345</customerReference>
  <salesTax>125</salesTax>
 <taxExempt>false</taxExempt>
  <discountAmount>0</discountAmount>
  <shippingAmount>495</shippingAmount>
  <dutyAmount>0</dutyAmount>
  <shipFromPostalCode>01851</shipFromPostalCode>
  <destinationPostalCode>01851</destinationPostalCode>
  <destinationCountryCode>USA</destinationCountryCode>
  <invoiceReferenceNumber>123456</invoiceReferenceNumber>
  <orderDate>2011-08-14
  <detailTax>
   <taxIncludedInTotal>true</taxIncludedInTotal>
   <taxAmount>55</taxAmount>
   <taxRate>0.0059</taxRate>
   <taxTypeIdentifier>00</taxTypeIdentifier>
    <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
  </detailTax>
  lineItemData>
    <itemSequenceNumber>1</itemSequenceNumber>
    <itemDescription>chair</itemDescription>
    cproductCode>CH123
   <quantity>1</quantity>
    <unitOfMeasure>EACH</unitOfMeasure>
    <taxAmount>125</taxAmount>
   <lineItemTotal>9380</lineItemTotal>
   <lineItemTotalWithTax>9505</lineItemTotalWithTax>
    <itemDiscountAmount>0</itemDiscountAmount>
    <commodityCode>300</commodityCode>
   <unitCost>93.80</unitCost>
    <detailTax>
      <taxIncludedInTotal>true</taxIncludedInTotal>
     <taxAmount>55</taxAmount>
      <taxRate>0.0059</taxRate>
```

```
<taxTypeIdentifier>03</taxTypeIdentifier>
          <cardAcceptorTaxId>011234567</cardAcceptorTaxId>
        </detailTax>
      </lineItemData>
      lineItemData>
        <itemSequenceNumber>2</itemSequenceNumber>
       <itemDescription>table</itemDescription>
       cproductCode>TB123
       <quantity>1</quantity>
        <unitOfMeasure>EACH</unitOfMeasure>
       <lineItemTotal>30000</lineItemTotal>
       <itemDiscountAmount>0</itemDiscountAmount>
       <commodityCode>300</commodityCode>
        <unitCost>300.00</unitCost>
      </lineItemData>
   </enhancedData>
 </sale>
<le></litleOnlineRequest>
```

# 3.3.14.2 Sale Response

The Sale response message is identical for Online and Batch transactions except Online includes the postDate element and may include a duplicate attribute. The Sale response has the following structure:

```
<enhancedAuthResponse>
  <accountUpdater>
  <recycling> (included for declined Auths if featrure is enabled)
</saleResponse>
```

#### **Example: Batch Sale Response**

```
litleResponse version="8.19" xmlns="http://www.litle.com/schema" id="123"
 response="0" message="Valid Format" litleSessionId="987654321">
 <batchResponse id="01234567" litleBatchId="4455667788" merchantId="100">
   <saleResponse id="AX54321678" reportGroup="RG27">
    <litleTxnId>84568456</litleTxnId>
    <orderId>12z58743y1
    <response>000</response>
    <responseTime>2011-09-01T10:24:31</responseTime>
    <message>Approved</message>
    <authCode>123456</authCode>
    <fraudResult>
      <avsResult>00</avsResult>
    </fraudResult>
   </saleResponse>
   <saleResponse id="AX54325432" reportGroup="RG12">
    <litleTxnId>84568457</litleTxnId>
    <orderId>12z58743y7</orderId>
    <response>000</response>
    <responseTime>2011-09-01T10:24:31</responseTime>
    <message>Approved</message>
    <authCode>123456</authCode>
    <fraudResult>
      <avsResult>00</avsResult>
      <authenticationResult>2</authenticationResult>
    </fraudResult>
   </saleResponse>
 </batchResponse>
<le></litleResponse>
```

## **Example: Online Sale Response**

```
<response>000</response>
  <responseTime>2011-07-11T14:48:46</responseTime>
  <postDate>2011-07-11</postDate>
  <message>Approved</message>
  <authCode>123457</authCode>
  <fraudResult>
        <avsResult>01</avsResult>
        <cardValidationResult>U</cardValidationResult>
        <authenticationResult>2</authenticationResult>
        </fraudResult>
        </fraudResult>
        </fraudResult>
        </fraudResult>
        </fraudResult>
        </fraudResult>
    </fraudResult>
    </fraudResult>
</fraudResult>
</fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fraudResult></fra>
```

### **Example: Online Sale Response for Tokenized Merchant Sending Card Data**

A tokenized merchant that includes card information in the request receives a response message that includes the token element. The example below is an Online response.

```
<saleResponse id="99999" reportGroup="RG1" customerId="444">
 <litleTxnId>21200000028606</litleTxnId>
 <orderId>F12345
 <response>000</response>
 <responseTime>2011-10-26T17:30:00</responseTime>
 <postDate>2011-10-26</postDate>
 <message>Approved</message>
 <authCode>089510</authCode>
 <fraudResult>
   <avsResult>11</avsResult>
   <cardValidationResult>P</cardValidationResult>
 </fraudResult>
 <tokenResponse>
   <litleToken>1111000100329510</litleToken>
   <tokenResponseCode>801</tokenResponseCode>
   <tokenMessage>Account number was successfully registered</tokenMessage>
   <type>VI</type>
   <bin>432610</bin>
 </tokenResponse>
</saleResponse>
```

#### **Example: Online Sale Response with Account Updater Info**

```
litleOnlineResponse version="8.19" xmlns="http://www.litle.com/schema"
response="0" message="Valid Format">
```

```
<saleResponse id="1" reportGroup="ABC Division" customerId="038945">
   <litleTxnId>1100030055</litleTxnId>
   <orderId>23423434</orderId>
   <response>000</response>
   <responseTime>2011-07-11T14:48:46</responseTime>
   <postDate>2011-07-11</postDate>
   <message>Approved</message>
   <authCode>123457</authCode>
   <accountUpdater>
    <originalCardInfo>
      <type>VI</type>
      <number>4234823492346234
      <expDate>1112</expDate>
    </originalCardInfo>
    <newCardInfo>
      <type>VI</type>
      <number>4234823490005777
      <expDate>1114</expDate>
    </newCardInfo>
   </accountUpdater>
   <fraudResult>
    <avsResult>01</avsResult>
    <cardValidationResult>U</cardValidationResult>
    <authenticationResult>2</authenticationResult>
   </fraudResult>
 </saleResponse>
<le></litleOnlineResponse>
```

# 3.3.15 Update Card Validation Number Transactions

When you submit the CVV2/CVC2/CID in a registerTokenRequest, the Litle platform encrypts and stores the value on a temporary basis for later use in a tokenized Auth/Sale transaction submitted without the value. This is done to accommodate merchant systems/workflows where the security code is available at the time of token registration, but not at the time of the Auth/Sale. If for some reason you need to change the value of the security code supplied at the time of the token registration, use an updateCardValidationNumOntoken transaction.

NOTE:

You should only use this transaction type if you had previously submitted the account number and security code in a registerTokenRequest transaction and now need to change the CVV2/CVC2/CID value.

# 3.3.15.1 Update Card Validation Number Request

The updateCardValidationNumOnToken transaction has the following structure:

# **Example: Online Update Card Validation Number Request**

```
tleOnlineRequest version="8.19" xmlns="http://www.litle.com/schema"
    merchantId="100">
    <updateCardValidationNumOnToken id="99999" customerId="444"
    reportGroup="RG1">
        <orderId>F12345</orderId>
        <ardValidationNum>987</cardValidationNum>

<<ul></updateCardValidationNumOnToken>

<p
```

# 3.3.15.2 Update Card Validation Number Response

The updateCardValidationNumOnTokenResponse transaction has the following structure:

### **Example: Online Update Card Validation Number Response**

```
<orderId>F12345</orderId>
  <response>803</response>
  <message>Card Validation Number Updated</message>
  <responseTime>2012-08-09T17:21:51</responseTime>
  </updateCardValidationNumOnTokenResponse>
</litleOnlineResponse>
```

# 3.3.16 Void Transactions (Online Only)

You use a Void transaction to cancel a transaction that occurred during the same business day. You can void Capture, Credit, and Sale transactions. Also, if you use Litle's Recycling Engine, you can use the void transaction to halt the recycling of a sale transaction. In this case the response may include the recycling element. (see Using Void to Halt Recycling Engine on page 46).

Note: Do not use Void transactions to void an Authorization. To remove an Authorization use an Authorization Reversal transaction (see Authorization Reversal Transactions on page 144.)

If you attempt to void a transaction after the cutoff time, the system returns a response code of **362** and the message, **Transaction Not Voided - Already Settled**. In this situation, you can cancel the original transaction by using its reverse transaction, as shown in Table 3-2.

TABLE 3-2 Cancelling a Transaction That Cannot Be Voided

If you had originally sent this transaction	Cancel it by using this transaction
Capture Transactions	Credit Transactions
Sale Transactions	Credit Transactions
Credit Transactions	Sale Transactions
Force Capture Transactions	Credit Transactions

## **3.3.16.1** Void Request

The Void request references the litleTxnId> of the previously approved transaction. You must structure a Void request as follows.

```
<void id = "Void Id" reportGroup="UI Report Group">
   litleTxnId>Litle & Co. Transaction Id
```

```
/
```

#### **Example: Online Void Request**

```
litleOnlineRequest version="8.19" xmlns="http://www.litle.com/schema"
    merchantId="100">
    <authentication>
        <user>User Name</user>
        <password>Password</password>
        </authentication>
        <void id="1" reportGroup="Void Division">
              litleTxnId>345454444</litleTxnId>
        </void>
        </litleOnlineRequest>
```

# 3.3.16.2 Void Response

The Void response message may also include a duplicate attribute. The Void response has the following structure.

```
<voidResponse id="Void Id" reportGroup="UI Report Group">
  litleTxnId>Litle & Co. Transaction Id</litleTxnId>
  <orderId>Order Id</orderId>
  <response>Response Code</response>
  <responseTime>Date and Time in GMT</responseTime>
  <postDate>Date of Posting</postDate>
  <message>Response Message</message>
  <recycling> (May be included if halting recycling.)
</voidResponse>
```

### **Example: Online Void Response**

If the request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate attribute set to true and the entire original response.

```
litleOnlineResponse version="8.19" xmlns="http://www.litle.com/schema"
    response="0" message="Valid Format">
    <voidResponse id="1" reportGroup="Void Division">
        litleTxnId>1100026202</litleTxnId>
        <response>000</response>
        <responseTime>2011-07-16T19:43:38</responseTime>
```

## **Example: Online Void Response with Recycling Element**

When you use a Void transaction to halt recycling, the response may include the recycling element. (see Using Void to Halt Recycling Engine on page 46).



4

# LITLEXML ELEMENTS

This chapter provides definitions for the elements and attributes used in LitleXML. This information is intended to be used in combination with the various LitleXML schema files to assist you as you build the code necessary to submit transactions to Litle & Co. transaction processing systems. Each section defines a particular element, its relationship to other elements (parents and children), as well as any attributes associated with the element.

For additional information on the structure of Litle XML requests and responses using these elements, as well as XML examples, please refer to Chapter 3, "LitleXML Transaction Examples".

The XML elements defined in this chapter are listed alphabetically.

# 4.1 accNum

The accNum element is a required child of the echeck, originalAccountInfo, and newAccountInfo elements defining the account number of the eCheck account.

**Type** = String; **minLength** = 4; **maxLength** = 17

NOTE:

Although the schema does not specify a minimum length for the accNum element, the number must be greater than or equal to 4 characters for the transaction to succeed.

### **Parent Elements:**

echeck, newAccountInfo, originalAccountInfo

Attributes:

None

**Child Elements:** 

# 4.2 accountInformation

The accountInformation element is an optional child of the authorizationResponse and saleResponse elements. It contains two children that define the card type and account number.

## **Parent Elements:**

authorizationResponse, saleResponse

# Attributes:

None

### **Child Elements:**

Required: type

Optional: number

# 4.3 accountNumber

The accountNumber element is a required child of the registerTokenRequest element defining the account number for which you are requesting a token.

**Type** = String; **minLength** = 13; **maxLength** = 25

## **Parent Elements:**

register Token Request

Attributes:

None

**Child Elements:** 

# 4.4 accountUpdate

The accountUpdate element is the parent element for all Account Updater request transactions. You can use this only with Batch transactions.

## **Parent Elements:**

batchRequest

## **Attributes:**

Attribute Name	Туре	Required?	Description
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response.
			minLength = N/A maxLength = 25
customerId	String	No	A value assigned by the merchant to identify the consumer.  minLength = N/A maxLength = 50
reportGroup	String Yes	Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.
			minLength = 1 maxLength = 25

**Child Elements: (all Required)** 

orderId, cardOrToken (allows the substitution of either the card or token elements)

# 4.5 accountUpdateFileRequestData

The accountUpdateFileRequestData element is a child of the RFRRequest element, required when requesting the response file for an (legacy) Account Updater submission.

### **Parent Elements:**

**RFRRequest** 

#### Attributes:

None

#### **Child Elements:**

Required: merchantId

Optional: postDay

# **Example: accountUpdateFileRequestData Structure**

# 4.6 accountUpdater

The accountUpdater element is an optional child of the authorizationResponse, captureResponse, echeckSalesResponse, echeckCreditResponse, echeckVerificationResponse, forceCaptureResponse, and saleResponse elements. This element is included in the response messages when the submitted account information has changed.

In the case of eCheck accounts, the system automatically updates the information sent to the ACH network and includes the original and updated information in the response. Similarly, if you use the Automatic Account Updater service (for credit cards), the system automatically repairs the card information sent to the card networks and depending upon the option you select, can return the info to you.

#### Parent Elements:

authorizationResponse, captureResponse, forceCaptureResponse, echeckCreditResponse, echeckRedepositResponse, echeckSalesResponse, saleResponse

#### Attributes:

None

#### **Child Elements:**

Required:extendedCardResponse, newAccountInfo, newCardInfo, newCardTokenInfo, newTokenInfo, originalAccountInfo, originalCardInfo, originalCardTokenInfo

#### IMPORTANT:

When using Automatic Account Updater (any variation), you must always code to receive the extendedCardResponse element and its children. Litle always returns this information whenever applicable regardless of whether you receive other account updater information in the transaction response message.

# **Example:** accountUpdater Structure - Credit Cards without extendedCardResponse

```
<accountUpdater>
  <originalCardInfo>
    <type>Card Type</type>
    <number>Old Account Number</number>
    <expDate>Old Expiration Date</expDate>
  </originalCardInfo>
  <newCardInfo>
```

```
<type>Card Type</type>
<number>New Account Number</number>
<expDate>New Expiration Date</expDate>
</newCardInfo>
</accountUpdater>
```

# **Example:** accountUpdater Structure - Credit Cards with extendedCardResponse

```
<accountUpdater>
 <originalCardInfo>
   <type>Card Type</type>
   <number>Old Account Number
   <expDate>Old Expiration Date</expDate>
 </originalCardInfo>
 <newCardInfo>
   <type>Card Type</type>
   <number>New Account Number</number>
   <expDate>New Expiration Date</expDate>
 </newCardInfo>
 <extendedCardResponse>
   <message>Code Description</message>
   <code>Either 501 or 504</code>
 </extendedCardResponse>
</accountUpdater>
```

# **Example:** accountUpdater Structure - Credit Cards only extendedCardResponse

```
<accountUpdater>
  <extendedCardResponse>
    <message>Code Description</message>
    <code>Either 501 or 504</code>
    </extendedCardResponse>
</accountUpdater>
```

## **Example:** accountUpdater Structure - Credit Cards (tokenized Merchant)

### NOTE: This structure can also include the <extendedCardResponse> element.

# **Example:** accountUpdater Structure - eCheck (for non-Tokenized Merchant)

# **Example:** accountUpdater Structure - eCheck (for Tokenized Merchant)

```
<accountUpdater>
```

# 4.7 accountUpdateResponse

The accountUpdaterResponse element is the parent element for all Account Update responses transactions. You can use this only with Batch transactions.

### **Parent Elements:**

batchResponse

### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	The response returns the same value submitted in the accountUpdate transaction.  minLength = N/A maxLength = 25
			minicengui = N/A maxcengui = 25
customerId	String	No	The response returns the same value submitted in the accountUpdate transaction.
			minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the accountUpdate transaction.
			minLength = 1 maxLength = 25

**Child Elements: (Required)** 

litleTxnId, orderId, response, responseTime, message

**Child Elements: (Optional)** 

updatedCard, originalCard, originalToken, updatedToken

# 4.8 accType

The accType element is a required child of the echeck, originalAccountInfo, and newAccountInfo elements defining the type of eCheck account used in the transaction.

Type = Choice (Enum); Enumerations = Checking, Savings, Corporate, or Corp Savings

Note: Use Corporate for Corporate Checking accounts.

#### **Parent Elements:**

echeck, newAccountInfo, originalAccountInfo, originalTokenInfo, newTokenInfo

**Attributes:** 

None

**Child Elements:** 

# 4.9 actionReason

The actionReason element is an optional child of the authReversal element defining if the reversal is due to suspected fraud.

**Type** = String (Enum); **Enumerations** = SUSPECT\_FRAUD

#### Note:

When you include this optional element in an authReversal transaction, the information will be forwarded to MasterCard as part of the MasterCard eCommerce Fraud Alert program.

When you include this optional element in an credit transaction, the Litle system uses the information to track potentially fraudulent transactions for future analysis.

### **Parent Elements:**

authReversal, credit

Attributes:

None

**Child Elements:** 

# 4.10 addressIndicator

The addressIndicator element is an optional child of the billMeLaterResponseData element and indicates whether the shipping address is a commercial (c) or residential (r) shipping address.

Type = String; minLength = N/A; maxLength = 1

### **Parent Elements:**

bill MeLater Response Data

**Attributes:** 

None

**Child Elements:** 

# 4.11 addressLine1, addressLine2, addressLine3

The elements addressLine1, addressLine2, and addressLine3 define the address information in both the billToAddress and shipToAddress elements.

**Type** = String; **minLength** = N/A; **maxLength** = 35

## **Parent Elements:**

billToAddress, shipToAddress

Attributes:

None

**Child Elements:** 

# 4.12 advancedAVSResult

The advancedAVSResult element is an optional child element of the fraudResult element. It defines the American Express Advanced AVS response codes that can be returned as verification of information supplied in the <phone> and/or <email> child elements of the <billToAddress> element. For a list of possible values, please refer to AAVS Response Codes on page 510.

NOTE: You must be certified to use LitleXML version 7.3 or above and specifically enabled to use the Advanced AVS feature. Please consult your Litle

**Customer Experience Manager for additional information.** 

**Type** = String; minLength = N/A; maxLength = 3

**Parent Elements:** 

fraudResult

Attributes:

None

**Child Elements:** 

# 4.13 affiliate

The affiliate element is an optional child element of the merchantData element. You can use it to track transactions associated with various affiliate organizations.

Type = String; minLength = N/A; maxLength = 25

## **Parent Elements:**

merchantData

## **Attributes:**

None

## **Child Elements:**

# 4.14 affluence

The affluence element is an optional child of the enhancedAuthResponse element and defines whether the card used falls into one of the two defined affluent categories. If the card does not meet the definition of either category, the system does not return the affluence element.

**NOTE:** Please consult your Customer Experience Manager for additional information concerning this feature.

**Type** = String (enum); minLength = N/A; maxLength = N/A

## **Parent Elements:**

enhancedAuthResponse

Attributes:

None

**Child Elements:** 

None

## **Enumerations:**

Enumeration	Description
MASS AFFLUENT	Returned for certain Visa and MasterCard cards indicating high income customers (>100K annual income).
AFFLUENT	Returned for certain Visa and MasterCard cards indicating high income customers with high spending patterns (>100K annual income and >40K in card usage).

NOTE: The Affluence indicator applies only to certain Visa and MasterCard cards. This indicator does not apply to American Express or Discover cards.

# 4.15 allowPartialAuth

The allowPartialAuth element is an optional child of both Authorization and Sale transactions, which allows you to specify whether to authorize a partial amount if the entire requested authorization amount exceeds available credit/balance.

requested authorization amount exceeds available credit/balance.

Type = Boolean; Valid Values = true or false

Parent Elements:
authorization, sale

Attributes:
None

Child Elements:
None

Note: For a Sale transaction, the deposit will be for the partial amount.

# 4.16 amexAggregatorData

The amexAggregatorData element defines Amex Aggregator specific information in the Litle XML. The system does not use the information unless you are designated as an Aggregator by American Express.

## **Parent Elements:**

authorization, captureGivenAuth, credit, forceCapture, sale

### Attributes:

None

**Child Elements: (Required)** 

sellerId, sellerMerchantCategoryCode

# Example: amexAggregatorData Structure

```
<amexAggregatorData>
  <sellerId>Seller Id</sellerId>
    <sellerMerchantCategoryCode>MerchantCategoryCode</sellerMerchantCategoryCode>
</amexAggregatorData>
```

# 4.17 amount

The amount element defines the amount of the transaction, except when it is a child of the subscription element. When amount is a child of the subscription element, it defines the amount of the recurring payment. Supply the value in cents without a decimal point. For example, a value of 1995 signifies \$19.95.

**Type** = Integer; totalDigits = 12

#### Parent Elements:

The amount element is a required child of each of the following Parent Elements: authorization, credit (required if original transaction was not processed by Litle & Co.), captureGivenAuth, echeckCredit (required if original transaction was not processed by Litle & Co.), echeckSale, echeckVerification, forceCapture, sale

The amount element is an optional child of each of the following Parent Elements: authReversal, capture, credit, echeckCredit, subscription

NOTE:

For all cases where the amount element is optional, if you do not specify a value, the system uses the entire amount from the referenced (by litleTxnId) transaction.

### Attributes:

None

#### **Child Elements:**

### approvedAmount 4.18

authorizationResponse, saleResponse

The approvedAmount element defines the dollar amount of the approval. It appears in an

authorization or sale response only if the allowPartialAuth element is set to true in the request transaction.	e
Type = Integer; totalDigits = 8	
Parent Elements:	

**Attributes:** 

None

**Child Elements:** 

# 4.19 authAmount

The authAmount element is an optional child of the authInformation element and is used to define the dollar amount of the authorization for Capture Given Auth transactions.

Type = Integer; totalDigits = 8

Parent Elements:

authInformation

**Attributes:** 

None

**Child Elements:** 

# 4.20 authCode

The authCode element is an optional child of both the authOrizationResponse and saleResponse elements. It is also a required child of the authInformation element (used in captureGivenAuth transactions), where it specifies the authorization code from the associated Authorization or Sale transaction.

**Type** = String; minLength = N/A; maxLength = 6

## **Parent Elements:**

authInformation, authorizationResponse, saleResponse

Attributes:

None

**Child Elements:** 

# 4.21 authDate

The authDate element is a required child of the authInformation element and defines the date of the associated Authorization transaction.

Type = Date; Format = YYYY-MM-DD

## **Parent Elements:**

authInformation

## **Attributes:**

None

## **Child Elements:**

# 4.22 authenticatedByMerchant

The authenticatedByMerchant element is an optional child element of the cardholderAuthentication element. This element indicates whether or not the customer has logged in to a secure web site or has been authenticated by the call center ANI.

For Bill Me Later transactions, set this element to **true** if this is an ecommerce transaction and you store and verify the customers BML account number. Set this element to **false** for call center BML transaction or ecommerce transactions if you do not store and verify the customers BML account number.

account number.
<b>Type</b> = Boolean; <b>Valid Values</b> = true or false
Parent Elements:
cardholderAuthentication
Attributes:
None
Child Elements:
None

# 4.23 authentication

The authentication element is a required element of both the litleOnlineRequest and the batchRequest elements. It contains child elements used to authenticate that the XML message is from a valid user.

## **Parent Elements:**

litleOnlineRequest, batchRequest

## Attributes:

None

## **Child Elements:**

Required: user, password

## **Example: authentication Structure**

```
<authentication>
  <user>User Name</user>
  <password>Password</password>
</authentication>
```

None

# 4.24 authenticationResult

The authenticationResult element is an optional child element of the fraudResult element. It defines the Visa CAVV Result code (from Verified by Visa). For a list of possible values, please refer to 3DS Authentication Result Codes on page 507.

<b>Type</b> = String; $minLength = N/A$ ; $maxLength = N/A$	<b>gth</b> = 1
Parent Elements:	
fraudResult	
Attributes:	
None	
Child Elements:	

# 4.25 authenticationTransactionId

The authenticationTransactionId element is an optional child of the cardholderAuthentication element. This element defines the Verified by Visa Transaction Id.

You must include this element for Visa transactions, when the orderSource element is set to **3dsAuthenticated.** 

**Type** = Base 64 Encoded String; **minLength** = N/A; **maxLength** = 28

## **Parent Elements:**

cardholderAuthentication

Attributes:

None

**Child Elements:** 

# 4.26 authentication Value

The authenticationValue element is an optional child of the cardholderAuthentication element. This element defines either the Visa CAVV value (fixed length 28 characters) or the MasterCard UCAF value (variable length up to 32 characters).

You must include this element for Visa and MasterCard transactions, when the orderSource element is set to **3dsAuthenticated**.

Type = Base 64 Encoded String; minLength = N/A; maxLength = 32

	O.	O	-	O
Parent Elements:				
cardholderAuthentication				

**Attributes:** 

None

**Child Elements:** 

# 4.27 authInformation

The authInformation element is a required child of the captureGivenAuth element. It contains child elements used to provide details concerning the external (to the Litle systems) Authorization.

## **Parent Elements:**

captureGivenAuth

### Attributes:

None

### **Child Elements:**

Required: authDate, authCode

Optional: fraudResult, authAmount

## **Example:** authInformation Structure

# 4.28 authorization

The authorization element is the parent element for all Authorization transactions. You can use this element in either Online or Batch transactions.

### **Parent Elements:**

litleOnlineRequest, batchRequest

#### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response.  minLength = N/A maxLength = 25
customerId	String	No	A value assigned by the merchant to identify the consumer.  minLength = N/A maxLength = 50
reportGroup	String	Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.  minLength = 1 maxLength = 25

### **Child Elements:**

Required: orderId, amount, orderSource, (choice of) card, paypal, paypage, or token, cardholderAuthentication

**NOTE:** The cardholderAuthentication child element is required only for 3-D Secure transactions.

Optional: customerInfo, billToAddress, shipFromPostalCode, billMeLaterRequest, processingInstructions, pos, customBilling, taxType, enhancedData, amexAggregatorData, allowPartialAuth, healthcareIIAS, merchantData, recyclingRequest, fraudFilterOverride, surchargeAmount, debtRepayment

NOTE: The enhancedData element and two of its child elements, deliveryType and shippingAmount, are required for Bill Me Later Authorizations.

# 4.29 authorizationResponse

The authorizationResponse element is the parent element for information returned to you in response to an Authorization transaction. It can be a child of either a litleOnlineResponse element or a batchResponse element.

### **Parent Elements:**

litleOnlineResponse, batchResponse

### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	The response returns the same value submitted in the Authorization transaction.
			minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the Authorization transaction.
			minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the Authorization transaction.
			minLength = 1 maxLength = 25

### **Child Elements:**

Required: litleTxnId, orderId, response, responseTime, message

Optional: postDate, cardProductId (see Note below), authCode, authorizationResponseSubCode (see Note below), approvedAmount, accountInformation, fraudResult, billMeLaterResponseData, tokenResponse, enhancedAuthResponse, accountUpdater, recycling, recurringResponse

#### NOTE:

The postDate child element is returned only in responses to Online transactions.

The cardProductId element returns a raw code referencing the card type. Please consult your Litle Customer Experience Manager for additional information.

The authorizationResponseSubCode element is not used at this time.

# 4.30 authorizationSourcePlatform

The authorizationSourcePlatform element is an optional child element of the billMeLaterRequest element. This element defines the physical platform that was used for submitting the authorization request (not the order). Specify as needed for auditing and re-authorization management purposes.

**Type** = String; **minLength** = N/A; **maxLength** = 1 (valid values below)

Value	Description
Α	application processing
В	batch capture, recurring or mail order
С	call center
F	fulfillment/order management
K	kiosk
М	mobile device gateway
Р	processor or gateway reauthorization
R	retail POS

## **Parent Elements:**

billMeLaterRequest

**Attributes:** 

None

**Child Elements:** 

# 4.31 authReversal

The authReversal element is the parent element for all Authorization Reversal transactions. You can use this element in either Online or Batch transactions. Also see Notes on the Use of Authorization Reversal Transactions on page 42. Also, if you use the Litle Recycling Engine, you can use the authReversal transaction to halt the recycling of an authorization transaction.

### **Parent Elements:**

litleOnlineRequest, batchRequest

### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response.
			minLength = N/A maxLength = 25
customerId	String	No	A value assigned by the merchant to identify the consumer.  minLength = N/A maxLength = 50
reportGroup	String	Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.
			minLength = 1 maxLength = 25

## **Child Elements:**

Required: litleTxnId

Optional: amount, actionReason, surchargeAmount

NOTE: If you do not specify an amount child element, the system reverses the full

amount from the associated Authorization transaction.

# 4.32 authReversalResponse

The authReversalResponse element is the parent element for information returned to you in response to an Auth Reversal transaction. It can be a child of either a litleOnlineResponse element or a batchResponse element.

## **Parent Elements:**

litleOnlineResponse, batchResponse

### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	The response returns the same value submitted in the authorization transaction.
			minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the authorization transaction.
			minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the authorization transaction.
			minLength = 1 maxLength = 25

## **Child Elements:**

Required: litleTxnId, orderId, response, responseTime, message

Optional: postDate

NOTE: The postDate child element is returned only in responses to Online

transactions.

# 4.33 availableBalance

The availableBalance element is a required child element of the fundingSource element. It defines the outstanding available balance on the submitted prepaid card. If the balance can not be determined, the element returns, "Not Available."

Type = String; minLength = N/A; maxLength = 20

**Parent Elements:** 

fundingSource

Attributes:

None

**Child Elements:** 

None

Note:

The fundingSource element and its child elements, type and availableBalance are associated with the Insights features (see Customer Insight Features on page 20.)

Please consult your Customer Experience Manager for additional information.

# 4.34 avsResult

The avsResult element is an optional child element of the fraudResult element. It defines the Address Verification response code returned by the networks. For a list of possible values, please refer to AVS Response Codes on page 509.

None

Attributes:

**Child Elements:** 

# 4.35 batchRequest

This is the root element for all LitleXML Batch requests.

## **Parent Elements:**

litleRequest

## Attributes:

Note:

The xxxAmount attributes are required if the associated numXXX attribute is included and greater than 0. For example, if numAuths=5 and each Authorization is \$10.00, then you must include authAmount=5000.

Attribute Name	Туре	Required?	Description
id	String	No	A unique string to identify this batchRequest within the Litle system.
			minLength = N/A maxLength = 50
numAuths	Integer	No	Defines the total count of Authorization transactions in the batchRequest.
			minLength = N/A maxLength = N/A
authAmount	Integer	No	Defines the total dollar amount of Authorization transactions in the batchRequest. The decimal point is implied. For example, you enter \$25.00 as 2500.
			totalDigits = 10
numAuthReversals	Integer	No	Defines the total count of AuthReversal transactions in the batchRequest.
			minLength = N/A maxLength = N/A
authReversalAmount	Integer	No	Defines the total dollar amount of AuthReversal transactions in the batchRequest. The decimal point is implied. For example, you enter \$25.00 as 2500.
			totalDigits = 10
numCaptures	Integer	No	Defines the total count of Capture transactions in the batchRequest.
			$minLength = N/A \qquad maxLength = N/A$

Attribute Name	Туре	Required?	Description
captureAmount	Integer	No	Defines the total dollar amount of Capture transactions in the batchRequest. The decimal point is implied. For example, you enter \$25.00 as 2500.
			totalDigits = 10
numCredits	Integer	No	Defines the total count of Credit transactions in the batchRequest.
			minLength = N/A maxLength = N/A
creditAmount	Integer	No	Defines the total dollar amount of Credit transactions in the batchRequest. The decimal point is implied. For example, you enter \$25.00 as 2500.
			totalDigits = 10
numForceCaptures	Integer	No	Defines the total count of Force Capture transactions in the batchRequest.
			minLength = N/A maxLength = N/A
forceCaptureAmount	Integer	No	Defines the total dollar amount of Force Capture transactions in the batchRequest. The decimal point is implied. For example, you enter \$25.00 as 2500.
			totalDigits = 10
numSales	Integer	No	Defines the total count of Sale transactions in the batchRequest.
			$minLength = N/A \qquad maxLength = N/A$
saleAmount	Integer	No	Defines the total dollar amount of Sale transactions in the batchRequest. The decimal point is implied. For example, you enter \$25.00 as 2500.
			totalDigits = 10
numEmails (not used at this time)	Integer	No	Defines the total count of Email Notification transactions in the batchRequest.
(st dood at tillo tillo)			minLength = N/A maxLength = N/A
emailAmount (not used at this time)	Integer	No	Defines the total dollar amount of Email Notification transactions in the batchRequest. The decimal point is implied. For example, you enter \$25.00 as 2500.
			totalDigits = 10

Attribute Name	Туре	Required?	Description
numCaptureGivenAuths	Integer	No	Defines the total count of Capture Given Auth transactions in the batchRequest.
			minLength = N/A maxLength = N/A
captureGivenAuthAmount	Integer	No	Defines the total dollar amount of Capture Given Auth transactions in the batchRequest. The decimal point is implied. For example, you enter \$25.00 as 2500.
			totalDigits = 10
numEcheckSales	Integer	No	Defines the total count of eCheck Sale transactions in the batchRequest.
			minLength = N/A maxLength = N/A
echeckSaleAmount	Integer	No	Defines the total dollar amount of eCheck Sale transactions in the batchRequest. The decimal point is implied. For example, you enter \$25.00 as 2500.
			totalDigits = 10
numEcheckCredit	Integer	No	Defines the total count of eCheck Credit transactions in the batchRequest.
			minLength = N/A maxLength = N/A
echeckCreditAmount	Integer	No	Defines the total dollar amount of eCheck Credit transactions in the batchRequest. The decimal point is implied. For example, you enter \$25.00 as 2500.
			totalDigits = 10
numEcheckVerification	Integer	No	Defines the total count of eCheck Verification transactions in the batchRequest.
			minLength = N/A maxLength = N/A
echeckVerificationAmount	Integer	No	Defines the total dollar amount of eCheck Verification transactions in the batchRequest. The decimal point is implied. For example, you enter \$25.00 as 2500.
			totalDigits = 10
numEcheckRedeposit	Integer	No	Defines the total count of eCheck Redeposit transactions in the batchRequest.
			minLength = N/A maxLength = N/A
numAccountUpdates	Integer	No	Defines the total count of Account Update transactions in the batchRequest.
			minLength = N/A maxLength = N/A

Attribute Name	Туре	Required?	Description
numTokenRegistrations	Integer	No	Defines the total count of Token Registration transactions in the batchRequest.  minLength = N/A maxLength = N/A
numUpdateCardValidatio nNumOnTokens	Integer	No	Defines the total count of Update Card Validation Number request transactions in the batchRequest. minLength = N/A maxLength = N/A
merchantld	String	Yes	A unique string to identify the merchant within the Litle system.  minLength = N/A maxLength = 50  Note: International currencies are supported on a per merchantId basis.

# **Child Elements:**

Required: authentication

At least one of the following required: authorization, authReversal, capture, captureGivenAuth, credit, echeckCredit, echeckRedeposit, echeckSale, echeckVerification, forceCapture, registerTokenRequest, sale, updateCardValidationNumOnToken

# 4.36 batchResponse

The batchResponse element is the parent element for information returned to you in response to a batch you submitted for processing. It is a child of a litleResponse element.

### Parent Elements:

litleResponse

#### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	The response returns the same value submitted in the authorization transaction.
			minLength = N/A maxLength = 25
litleBatchId	Long	Yes	A unique value assigned by Litle to identify the batch.
			minLength = N/A maxLength = 19
merchantId	String	Yes	The response returns the same value submitted in the authorization transaction.
			minLength = 1 maxLength = 50

#### Child Elements:

Required: authorizationResponse, authReversalResponse, captureResponse, captureGivenAuthResponse, creditResponse, echeckCreditResponse, echeckRedepositResponse, echeckSalesResponse, echeckVerificationResponse, forceCaptureResponse, registerTokenResponse, saleResponse, updateCardValidationNumOnTokenResponse, cancelSubscriptionResponse, updateSubscriptionResponse

#### NOTE:

The batchResponse contains child elements corresponding to the requests submitted in the batchRequest. For example, if the batchRequest contained 10 authorization and 8 capture transactions, the batchResponse would contain 10 authorizationResponse and 8 captureResponse transactions.

# 4.37 billingDate

The billingDate element is an optional child of the updateSubscription element that defines the new date for the recurring billing when the scheduled date need to be changed.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

**Type** = Date; **Format** = YYYY-MM-DD

**Parent Elements:** 

updateSubscription

Attributes:

None

**Child Elements:** 

# 4.38 billMeLaterRequest

The billMeLaterRequest element is the parent of several child elements used to define merchant, product type, terms and conditions, and other items for Bill Me Later authorization transactions, or where you must reference an external (to Litle & Co.) BML transaction.

### **Parent Elements:**

authorization, captureGivenAuth, credit, sale

### Attributes:

None

# **Child Elements: (all optional)**

bmlMerchantId, bmlProductType, itemCategoryCode, termsAndConditions, preapprovalNumber, virtualAuthenticationKeyPresenceIndicator, virtualAuthenticationKeyData, authorizationSourcePlatform

# NOTE: The following elements appear in the schema as children of the billMeLaterRequest element, but are not used at this time:

- authorizationSourcePlatform
- customerBillingAddressChanged
- customerEmailChanged
- customerPasswordChanged
- customerPhoneChanged
- merchantPromotionalCode
- secretQuestionAnswer
- secretQuestionCode

### **Example:** billMeLaterRequest

```
<billMeLaterRequest>
    <billMerchantId>bmlMerchantId</bmlMerchantId>
    <bmlProductType>bmlProductType</bmlProductType>
    <termsAndConditions>termsAndConditions</termsAndConditions>
    <preapprovalNumber>preapprovalNumber</preapprovalNumber>
    <virtualAuthenticationKeyPresenceIndicator> Indicator
</virtualAuthenticationKeyPresenceIndicator>
    <virtualAuthenticationKeyData> virtualAuthenticationKeyData
</virtualAuthenticationKeyData>
```

<itemCategoryCode>itemCategoryCode</itemCategoryCode>
 <authorizationSourcePlatform>platformType</authorizationSourcePlatform>
</billMeLaterRequest>

#### billMeLaterResponseData 4.39

The billMeLaterResponseData element is the parent of several child elements used in the response XML for Bill Me Later authorization transactions.

### Parent Elements:

authorizationResponse, saleResponse

## Attributes:

None

### **Child Elements:**

bmlMerchantId, creditLine, addressIndicator

# Note:

The following elements appear in the schema as children of the billMeLaterResponseData element, but are not used at this time:

- approvedTermsCode
- loanToValueEstimator
- promotionalCodeOffer
- riskEstimator
- riskQueueAssignment

## **Example:** billMeLaterResponseData Structure

```
<billMeLaterResponseData>
 <bmlMerchantId>bmlMerchantId</bmlMerchantId>
 <creditLine>creditLine
 <addressIndicator>addressIndicator</addressIndicator>
</billMeLaterResponseData>
```

# 4.40 billToAddress

The billToAddress element contains several child elements that define the postal mailing address (and telephone number) used for billing purposes. It also contains several elements used for the eCheck verification process.

### **Parent Elements:**

authorization, captureGivenAuth, credit, echeckCredit (required if original transaction was not processed by Litle & Co.), echeckSale, echeckVerification, forceCapture, sale, updateSubscription

#### Attributes:

None

## Child Elements: (all optional)

name, firstName, middleInitial, lastName, companyName, addressLine1, addressLine2, addressLine3, city, state, zip, country, email, phone

#### NOTE:

The name element is required for echeckSale and echeckCredit transactions. If you do not submit the customer name in one of these eCheck transactions, Litle returns the response 709 - Invalid Data.

For an eCheckVerification transaction, you must submit the firstName and lastName elements instead of the name element (middleInitial is optional). For a corporate account you must include the companyName element in addition to the firstName and lastName elements. In both cases, you also must include the address, city, state, zip and phone information.

For a corporate account, if you do not have the name of the check issuer, you can use a value of "unavailable" for the firstName and lastName elements.

### **Example: billToAddress Structure**

billToAddress LitleXML Elements

```
<addressLine2>Address Line 2</addressLine2>
<addressLine3>Address Line 3</addressLine3>
<city>City</city>
  <state>State Abbreviation</state>
  <zip>Postal Code</zip>
  <country>Country Code</country>
  <email>Email Address</email>
  <phone>Telephone Number</phone>
</billToAddress>
```

# 4.41 bin

The bin element provides the 6-digit Bank (or Issuer) Identification Number of the Issuing Bank. The system returns this value in XML responses when issuing new tokens to replace Visa or MasterCard account numbers.

For Discover and American Express cards, this element is empty in a registerTokenResponse.

For Discover, when included with Account Updater information in a payment transaction response, the bin element will have a value of **discov**.

**Type** = String; minLength = 0; maxLength = 6

### **Parent Elements:**

The bin element is an optional child of each listed parent element.

registerTokenResponse, tokenResponse, newCardTokenInfo, originalCardTokenInfo, originalToken, updatedToken

### Attributes:

None

## **Child Elements:**

# 4.42 bmlMerchantld

The bmlMerchantId element is a value assigned by Bill Me Later to identify the merchant within the Bill Me Later system.

**Type** = Long; **minLength** = N/A; **maxLength** = 19

## **Parent Elements:**

The bmlMerchantId element is an optional child of each listed parent element.

 $bill MeLater Request, \, bill MeLater Response Data$ 

### Attributes:

None

## **Child Elements:**

# 4.43 bmlProductType

The bmlProductType element is a value assigned by Bill Me Later to identify the merchant account type within the Bill Me Later system.

**Type** = Long; minLength = N/A; maxLength = 19

## **Parent Elements:**

The bmlProductType element is an optional child of each listed parent element.

 $bill MeLater Request, \, bill MeLater Response Data$ 

NOTE: At this time, the only valid value for this element is BL.

### Attributes:

None

## **Child Elements:**

# 4.44 bypassVelocityCheck

The bypassVelocityCheck element is an optional child of the processingInstructions element, which allows you to specify whether or not the system performs velocity checking on the transaction.

NOTE: Velocity Checking is not currently supported.

Type = Boolean; Valid Values = true or false

Parent Elements:

Attributes:

processingInstructions

None

**Child Elements:** 

# 4.45 campaign

The campaign element is an optional child element of the merchantData element. You can use it to track transactions associated with various marketing campaigns.

**Type** = String; **minLength** = N/A; **maxLength** = 25

#### **Parent Elements:**

merchantData

**Attributes:** 

None

**Child Elements:** 

## 4.46 cancelSubscription

The cancelSubscription element is the parent element for the transaction that cancels a subscription. You can use this element in either Online or Batch transactions.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

#### **Parent Elements:**

litleOnlineRequest, batchRequest

**Attributes:** 

None

**Child Elements:** 

Required: subscriptionId

# 4.47 cancelSubscriptionResponse

The cancelSubscriptionresponse element is the parent element for the response to a cancelSubscription transaction.

NOTE:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

#### **Parent Elements:**

litleOnlineResponse, batchResponse

#### **Attributes:**

None

#### **Child Elements:**

Required: subscriptionId, litleTxnId, response, message, responseTime

# 4.48 capability

The capability element is a required child of the pos element, which describes the capability of the point of sale terminal.

Type = String (Enum); minLength = N/A; maxLength = N/A

P	ar	en	t	ΕI	en	her	nts:

pos

**Attributes:** 

None

**Child Elements:** 

None

#### **Enumerations:**

Enumeration	Description
notused terminal not used	
magstripe	magnetic stripe reader capability
keyedonly	keyed entry only capability

## 4.49 capture

The capture element is the parent element for all Capture (deposit) transactions. You can use this element in either Online or Batch transactions.

#### **Parent Elements:**

litleOnlineRequest, batchRequest

#### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response. This attribute is also used for Duplicate Transaction Detection. For Online transactions, omitting this attribute, or setting it to a null value (id=""), disables Duplicate Detection for the transaction.
			Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.
			minLength = N/A maxLength = 25
customerId	String	No	A value assigned by the merchant to identify the consumer.
			minLength = N/A maxLength = 50
reportGroup	String	Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.
			minLength = 1 maxLength = 25
partial	Boolean	No	If there is more than one capture that references the same <pre><li>litleTxnId&gt;</li></pre> , set this attribute to "true" for each of those partial captures. The default value is false.
			Valid Values = true or false

#### **Child Elements:**

Required: litleTxnId, payPalOrderComplete (required only if closing a PayPal order)

Optional: amount, enhancedData, processingInstructions, surchargeAmount

**NOTE:** If you do not specify an amount child element, the system uses the full amount from the associated Authorization transaction.

## 4.50 captureGivenAuth

The captureGivenAuth element is the parent element for all Capture Given Auth transactions. These are specialized Capture transactions used when the litleTxnId for the associated Authorization is unknown or when the Authorization occurred outside the Litle & Co. system. You can use this element in either Online or Batch transactions.

#### Parent Elements:

litleOnlineRequest, batchRequest

#### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response. This attribute is also used for Duplicate Transaction Detection. For Online transactions, omitting this attribute, or setting it to a null value (id=""), disables Duplicate Detection for the transaction.
			Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.
			minLength = N/A maxLength = 25
customerId	String	No	A value assigned by the merchant to identify the consumer.
			minLength = N/A maxLength = 50
reportGroup String Yes		Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.
			minLength = 1 maxLength = 25

#### **Child Elements:**

Required: orderId, authInformation, amount, orderSource, choice of card, token, or paypage

Optional: billToAddress, shipFromPostalCode, customBilling, taxType, enhancedData, processingInstructions, pos, amexAggregatorData, merchantData, surchargeAmount, debtRepayment

NOTE: If you do not specify an amount child element, the system uses the full amount from the associated Authorization transaction.

# 4.51 captureGivenAuthResponse

The captureGivenAuthResponse element is the parent element for information returned to you in response to a Capture Given Auth transaction. It can be a child of either a litleOnlineResponse element or a batchResponse element.

#### **Parent Elements:**

litleOnlineResponse, batchResponse

#### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	The response returns the same value submitted in the Capture Given Auth transaction.
			minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the Capture Given Auth transaction.
			minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the Capture Given Auth transaction.
			minLength = 1 maxLength = 25
duplicate	Boolean	No	If the request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate flag set to true and the entire original response.
			<b>Note:</b> This attribute applies only to Online transaction responses.

#### **Child Elements:**

Required: litleTxnId, orderId, response, responseTime, message

Optional: postDate, tokenResponse

NOTE: The postDate child element is returned only in responses to Online transactions.

# 4.52 captureResponse

The captureResponse element is the parent element for information returned to you in response to a Capture transaction. It can be a child of either a litleOnlineResponse element or a batchResponse element.

#### **Parent Elements:**

litleOnlineResponse, batchResponse

#### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	The response returns the same value submitted in the capture transaction.
			minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the capture transaction.
			minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the capture transaction.
			minLength = 1 maxLength = 25
duplicate	Boolean	No	If the request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate flag set to true and the entire original response.
			<b>Note:</b> This attribute applies only to Online transaction responses.

#### **Child Elements:**

Required: litleTxnId, orderId (required for Batch), response, responseTime, message

Optional: postDate, accountUpdater

Note: The postDate child element is returned only in responses to Online transactions.

### 4.53 card

The card element defines payment card information. It is a required element for most transaction types unless the transaction uses an alternate payment method such as PayPal. It contains one or more child elements depending upon whether the transaction is a card-not-present or a card-present (face-to-face) transaction.

#### Parent Elements:

accountUpdate, authorization, captureGivenAuth, credit, forceCapture, sale, updateSubscription

#### Attributes:

None

#### **Child Elements:**

For card-not-present transactions (Required): type, number, expDate

For card-present transactions (Required): track

For both transactions types (Optional): cardValidationNum

#### **Example:** card Structure - Card-Not-Present

```
<card>
  <type>Card Type Abbreviation</type>
  <number>Account Number</number>
  <expDate>Expiration Date</expDate>
  <cardValidationNum>Card Validation Number</cardValidationNum>
</card>
```

#### **Example:** card Structure - Card-Present

```
<card>
  <track>Magnetic Stripe Read</track>
</card>
```

# 4.54 cardAcceptorTaxId

The cardAcceptorTaxId element is an optional child of the detailTax element and defines the merchant's Tax Id. This ID is nine digits long if the merchant is domiciled in the U.S. If the card acceptor tax ID is unknown, do not include this element.

$\textbf{Type} = \textbf{String}; \ \textbf{minLength} = 1; \ \textbf{maxLength} = 20$
Parent Elements:
detailTax
Attributes:
None
Child Elements:
None

### 4.55 cardholderAuthentication

The cardholderAuthentication element is an optional child element of the Authorization and Sale transactions. The children of this element have two purposes. The first is to define Verified by Visa or MasterCard SecureCode data in the Authorization or Sale transactions (authenticationValue and authenticationTransactionId elements). The remaining child elements, customerIpAddress and authenticatedByMerchant, are used in Bill Me Later transactions. The customerIpAddress element can also be used to supply the customer IP Address by merchants enabled for American Express Advanced AVS services.

NOTE:

The customerlpAddress child element is required for BML ecommerce transactions to succeed.

#### Parent Elements:

authorization, sale

#### Attributes:

None

#### **Child Elements:**

authenticationValue, authenticationTransactionId, customerIpAddress, authenticatedByMerchant

#### **Example:** cardholderAuthentication Structure

```
<cardholderAuthentication>
    <authenticationValue>BwABBJQ1AgAAAAAgJDUCAAAAAAA=</authenticationValue>
    <authenticationTransactionId>EaOMucALHQqLAEGAgk=</authenticationTransactionId>
    <customerIpAddress>Customer Ip</customerIpAddress>
    <authenticatedByMerchant>Boolean</authenticatedByMerchant>
</cardholderAuthentication>
```

#### Note:

The values for the <authenticationValue> and <authenticationTransactionId> elements in the example above have been truncated.

## 4.56 cardholderld

The cardholderId element is a required child of the pos element, which describes the method used for cardholder identification at the point of sale.

Type = String (Enum); minLength = N/A; maxLength = N/A

Pa	rent	E	lem	en	ts:

pos

#### **Attributes:**

None

#### **Child Elements:**

None

#### **Enumerations:**

Enumeration	Description
signature customer signature obtained	
pin PIN number	
nopin unattended terminal - no PIN pad	
directmarket	mail, telephone, or online

## 4.57 cardOrToken

The cardOrToken element is an abstract that allows the substitution of either the card or token element. You must specify one of the two substitution elements as a child of the accountUpdate element.

#### **Parent Elements:**

accountUpdate

### **Substitution Options:**

card, token

# 4.58 cardProductType

The cardProductType element is an optional child of the enhancedAuthResponse element and whether the card used is commercial or consumer.

Type = String (enum); minLength = N/A; maxLength = N/A

#### **Parent Elements:**

enhanced Auth Response

Attributes:

None

**Child Elements:** 

None

#### **Enumerations:**

Enumeration	Description	
COMMERCIAL	The card is a commercial card.	
CONSUMER	The card is a consumer card.	
UNKNOWN	The type of card is not known.	

### 4.59 cardValidationNum

The cardValidationNum element is an optional child of the card element, which you use to submit either the CVV2 (Visa), CVC2 (MasterCard), or CID (American Express and Discover) value.

#### Note:

Some American Express cards may have a 4-digit CID on the front of the card and/or a 3-digit CID on the back of the card. You can use either of the numbers for card validation, but not both.

When you submit the CVV2/CVC2/CID in a registerTokenRequest, the Litle platform encrypts and stores the value on a temporary basis for later use in a tokenized Auth/Sale transaction submitted without the value. This is done to accommodate merchant systems/workflows where the security code is available at the time of token registration, but not at the time of the Auth/Sale. If for some reason you need to change the value of the security code supplied at the time of the token registration, use an updateCardValidationNumOnToken transaction. To use the store value when submitting an Auth/Sale transaction, set the cardValidationNum value to 000.

#### NOTE:

The use of the cardValidationNum element in the registertokenRequest only applies when you submit an accountNumber element.

Type = String; minLength = N/A; maxLength = 4

#### Parent Elements:

card, paypage, token, registerTokenRequest, updateCardValidationNumOnToken

#### Attributes:

None

#### **Child Elements:**

## 4.60 cardValidationResult

The cardValidationResult element is an optional child element of the fraudResult element. It defines the Card Validation response code returned by the networks. For a list of possible values, please refer to Card Validation Response Codes on page 513.

possible values, please refer to Card Validation Response Codes on page 513.

Type = String; minLength = N/A; maxLength = 2

Parent Elements:
fraudResult

Attributes:

None

**Child Elements:** 

## 4.61 chargeback

The chargeback element is an optional child of the filtering element. To disable the chargeback filtering operation for a selected transaction include the chargeback element with a setting of **false**.

**Type** = Boolean; **Valid Value** = false

Note:

Although included in the schema, the <chargeback> element is not supported. To override the chargeback filter for a selected transaction, use the fraudFilterOverride flag (see fraudFilterOverride on page 343). Please consult your Litle Relationship Manager for additional information.

Pa	rent	FI	ρm	en	te-
Га			C	C 1 1	

filtering

Attributes:

None

**Child Elements:** 

## 4.62 checkNum

The checkNum element is an optional child of the echeck element defining the check number of used in the transaction.

**Type** = String; minLength = N/A; maxLength = 15

#### **Parent Elements:**

echeck

#### **Attributes:**

None

#### **Child Elements:**

## 4.63 city

The city element defines the customer's city name in the billToAddress and shipToAddress elements. In the customBilling element, city defines the location of the merchant for card-present transactions.

**Type** = String; **minLength** = N/A; **maxLength** = 35

#### **Parent Elements:**

billToAddress, shipFromPostalCode, customBilling

**Attributes:** 

None

**Child Elements:** 

## 4.64 clinicOtherAmount

The clinicAmount element is an optional child of the healthcareAmounts element and defines the healthcare amount used for the clinic/office visits. The decimal is implied. Example: 500 = \$5.00.

Type = Integer; total Digits = 8

**Parent Elements:** 

Optional: healthcareAmounts

**Attributes:** 

None

**Child Elements:** 

## 4.65 code

The code element is a required child of the extendedCardResponse element. The code/message combination can be either 501- The account was closed, or 504 - Contact the cardholder for updated information.

**Type** = String; **minLength** = N/A; **maxLength** = 3

#### **Parent Elements:**

extended Card Response

**Attributes:** 

None

**Child Elements:** 

## 4.66 commodityCode

The commodityCode element is an optional child of the lineItemData element, which specifies the Identifier assigned by the card acceptor that categorizes the purchased item. Although the schema defines it as an optional child of the enhancedData element, it is required by Visa for Level III interchange rates.

**Type** = String; minLength = 1; maxLength = 12

**Parent Elements:** 

lineItemData

Attributes:

None

**Child Elements:** 

None

#### Note:

A commodity code is a numeric code representing a particular product or service. The code can be 3, 5, 7, or 11 digits in length. The longer the code the more granular the description of the product/service. For example, code 045 is used for Appliances and Equipment, Household Type, while code 04506 represents the sub-set of Appliances, Small Electric.

The codes are issued by the NIGP (National Institute of Governmental Purchasing. Their site, www.ngip.com, offers a subscription based code search engine, as well as downloadable lists for purchase.

You can also find many lists published online by performing a simple search on "Commodity Codes".

# 4.67 companyName

The companyName element is an optional child of the billToAddress element, which specifies the name of the company associated with the corporate checking account. This element is required when performing an eCheck Verification of a check from a corporate account, as defined by the <accType> child of the <echeck> element.

Type = String; minLength = N/A; maxLength = 40

Parent Elements:
billToAddress

Attributes:
None

**Child Elements:** 

## 4.68 country

The country element defines the country portion of the postal mailing address in both the billToAddress and shipToAddress elements.

**Type** = String (Enum); minLength = N/A; maxLength = 3

NOTE:

The enumerations for this element are listed under <countryTypeEnum> in the LitleXML Common XSD. The country names corresponding to the abbreviations can be found in the ISO 3166-1 standard.

#### **Parent Elements:**

billToAddress, shipFromPostalCode

**Attributes:** 

None

**Child Elements:** 

### 4.69 credit

The credit element is the parent element for all Credit transactions. You can use this element in either Online or Batch transactions.

#### **Parent Elements:**

litleOnlineRequest, batchRequest

#### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response. This attribute is also used for Duplicate Transaction Detection. For Online transactions, omitting this attribute, or setting it to a null value (id=""), disables Duplicate Detection for the transaction.  Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.  minLength = N/A maxLength = 25
customerId	String	No	A value assigned by the merchant to identify the consumer.  minLength = N/A maxLength = 50
reportGroup	String	Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.  minLength = 1 maxLength = 25

#### **Child Elements:**

For credits to transactions processed by Litle & Co. (Required): litleTxnId

For credits to transactions processed by Litle & Co. (Optional): amount, surchargeAmount

Note: If you do not specify an amount child element, the system uses the full amount from the associated Capture, Force Capture, or Sale transaction.

The amount element is required for credits to transactions not processed by Litle & Co.

For credits to transactions not processed by Litle & Co. (Required): orderId, amount, orderSource, choice of card, token, paypage, or paypal

For credits to transactions not processed by Litle & Co. (Optional): billToAddress, billMeLaterRequest, amexAggregatorData

For both transaction types (Optional): customBilling, taxType, enhancedData, processingInstructions, merchantData, actionReason, pos

## 4.70 creditLine

The creditLine element is an optional child of the billMeLaterResponseData element and indicates the credit line of the customer. The amount is specified using a two-digit implied decimal.

**Type** = Integer; totalDigits = 8

**Parent Elements:** 

bill Me Later Response Data

**Attributes:** 

None

**Child Elements:** 

## 4.71 creditLitleTxnId

The creditLitleTxnId element is the Litle transaction Id (litleTxnId) of a Credit transaction automatically submitted under the following conditions:

- You submitted a Void transaction to halt the recycling of a declined Sale transaction by the Recovery/Recycling Engine.
- The Sale transaction has already been approved and captured.
- Your Recovery/Recycling Engine configuration enables automatic refunds.
- The Litle system has successfully submitted a Credit transaction on your behalf.

**Type** = Long; minLength = N/A; maxLength = 19

• •	0.	U	•	U	
Parent	Elements	s:			

Attributes:

recycling

None

**Child Elements:** 

# 4.72 creditResponse

The creditResponse element is the parent element for information returned to you in response to a Credit transaction. It can be a child of either a litleOnlineResponse element or a batchResponse element.

#### **Parent Elements:**

litleOnlineResponse, batchResponse

#### Attributes:

Attribute Name	Туре	Required?	Description	
id	String	No	The response returns the same value submitted in the credit transaction.	
			minLength = N/A maxLength = 25	
customerId	String	No	The response returns the same value submitted in the credit transaction.	
			minLength = N/A maxLength = 50	
reportGroup	String	Yes	The response returns the same value submitted in the credit transaction.	
			minLength = 1 maxLength = 25	
duplicate	Boolean	No	If the request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate flag set to true and the entire original response.	
			<b>Note:</b> This attribute applies only to Online transaction responses.	

#### **Child Elements:**

Required: litleTxnId, response, responseTime, message

Optional: postDate, orderId, tokenResponse

NOTE: The postDate child element is returned only in responses to Online transactions.

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## 4.73 customBilling

The customBilling element allows you to specify custom billing descriptor information for the transaction. This billing descriptor is used instead of the descriptor defined as the default billing descriptor. If you do not define this element, the default is used.

Note:

If you submit a captureGivenAuth transaction with a customBilling element and a matching Authorization is found (see Capture Given Auth Transaction on page 43), the system uses the customBilling information from the Authorization and discards the information from the captureGivenAuth.

#### Parent Elements: (all Optional)

authorization, captureGivenAuth, credit, echeckCredit, echeckSale, forceCapture, sale,

#### Attributes:

None

#### **Child Elements:**

Required for card-not-present transactions: phone, or url

NOTE:

Please consult your Litle Customer Experience Manager prior to using the <url> element. The contents of this element are discarded unless you are specifically enabled to use it in your LitleXML submissions.

Required for card present transactions: city

Optional for either: descriptor

### **Example:** customBilling Structure - Card-Not-Present (using phone child)

```
<customBilling>
  <phone>Telephone Number</phone>
   <descriptor>Billing Descriptor</descriptor>
</customBilling>
```

#### **Example:** customBilling Structure - Card-Not-Present (using url child)

```
<customBilling>
  <url>retail.url</url>
  <descriptor>www.retail.com</descriptor>
</customBilling>
```

### **Example:** customBilling Structure - Card-Present

```
<customBilling>
  <city>City</city>
  <descriptor>Billing Descriptor</descriptor>
</customBilling>
```

### 4.74 customerInfo

The customerInfo element is the parent of several child elements use to define customer information for Bill Me Later transactions.

#### Parent Elements:

authorization, sale

#### Attributes:

None

#### **Child Elements:**

ssn, dob, customerRegistrationDate, customerType, incomeAmount, employerName, customerWorkTelephone, residenceStatus, yearsAtResidence, yearsAtEmployer

#### NOTE:

Although the schema defines all child elements as optional, under certain conditions ssn, dob, customerRegistrationDate, and customerType are required for the transaction to succeed.

#### **Example:** customerInfo Structure

## 4.75 customerlpAddress

The customerIpAddress element is an optional child element of the cardholderAuthentication element. This element defines the IP Address of the customer's system. This element is used either for Bill Me Later transactions or to supply the customer IP Address by merchants enables for American Express Advanced AVS services.

**Type** = Ip Address; **Format** = nnn.nnn.nnn

	NOTE:	Inis element is required for BML ecommerce transactions to succeed.	
Pa	rent Elem	ients:	
car	dholderAu	thentication	

Attributes:

None

**Child Elements:** 

## 4.76 customerReference

The customerReference element defines a reference string used by the customer for the purchase (for example, a Purchase Order Number). Although the schema defines it as an optional child of the enhancedData element, it is required by Visa for Level III interchange rates; however, you should omit this element if it is blank.

<b>Type</b> = String; <b>minLength</b> = 1; <b>maxLength</b> = 17
Parent Elements:
enhancedData
Attributes:
None
Child Elements:
None

## 4.77 customerRegistrationDate

The customerRegistrationDate element is an optional child of the customerInfo element defining the earliest date on file with this customer. The latest allowable date is the current date. It is used in combination with several other elements to provide required information for some Bill Me Later transactions.

**Type** = Date; **Format** = YYYY-MM-DD

NOTE: In order for a BML transaction to succeed, you must include this element if the customer does not have a BML account.

#### **Parent Elements:**

customerInfo

Attributes:

None

**Child Elements:** 

# 4.78 customerType

The customerType element is an optional child of the customerInfo element defining whether the customer is a new or existing customer. An existing customer is a customer in good standing that has been registered with the merchant for a minimum of 30 days and has made at least one purchase in the last 30 days. It is used in combination with several other elements to provide required information for some Bill Me Later transactions.

**Type** = Choice (Enum); **Enumerations** = New or Existing

NOTE: In order for a BML transaction to succeed, you must include this element if the customer does not have a BML account.

#### **Parent Elements:**

customerInfo

Attributes:

None

**Child Elements:** 

# 4.79 customerWorkTelephone

The customerWorkTelephone element is an optional child of the customerInfo element and defines the customer's work telephone number. It is used in combination with several other elements to provide information for some Bill Me Later transactions.

$\textbf{Type} = String; \ \textbf{minLength} = N/A; \ \textbf{maxLength} = 20$
Parent Elements:
customerInfo
Attributes:
None
Child Elements:
None

# 4.80 debtRepayment

The debtRepayment element is an optional child of authorization, captureGivenAuth, forceCapture, and sale transactions. You use this flag only if the method of payment is Visa and the transaction is a for a debt repayment. Also, your MCC must be either 6012 or 6051. If you set this flag to true and you are not one of the allowed MCCs, the system declines the transaction with a Response Reason Code of 852 - Debt Repayment only allowed for VI transactions on MCCs 6012 and 6051.

**Type** = Boolean; **Valid Values** = true or false (default)

#### **Parent Elements:**

authorization, captureGivenAuth, forceCapture, sale

Attributes:

None

**Child Elements:** 

# 4.81 deliveryType

The deliveryType element is an optional child of the enhancedData element and defines the shipping method used for delivery of the product.

NOTE: Although define in the schema as an optional child of the enhancedData element, deliveryType is required for Bill Me Later transactions.

**Type** = String (enum); minLength = N/A; maxLength = N/A

### **Parent Elements:**

enhancedData

#### Attributes:

None

#### **Child Elements:**

None

#### **Enumerations:**

Enumeration	Description			
CNC	Cash and Carry			
DIG	Digital Delivery			
PHY	Physical Delivery			
SVC	Service Delivery			
TBD (default)	To be determined.			

# 4.82 dentalAmount

The dentalAmount element is an optional child of the healthcareAmounts element and defines the healthcare amount used for dental related purchases. The decimal is implied. Example: 500 = \$5.00.

Type = Integer; total Digits = 8

**Parent Elements:** 

Optional: healthcareAmounts

Attributes:

None

**Child Elements:** 

# 4.83 descriptor

The descriptor element is a required child of the customBilling element. This element defines the text you wish to display on the customer bill, enabling the customer to better recognize the charge.

Type = String; minLength = N/A; maxLength = 25

### **NOTE:** If you include a prefix:

- the prefix must be either 3, 7, or 12 characters in length.
- you must use an asterisk (\*) after the prefix as a separator, in one of the following positions: 4th, 8th, or 13th. Do not use an asterisk in more than one position.
- Use only the following valid characters:
  - Numbers
  - Letters
  - Special characters as follows: ampersand, asterisk (Required; see note above), comma, dash, period, or pound sign.

<b>Parent</b>	Ele	men	ts:
---------------	-----	-----	-----

customBilling

Attributes:

None

**Child Elements:** 

# 4.84 destinationCountryCode

The destinationCountryCode element defines the country portion of the postal mailing address in the enhancedData element.

**Type** = String (Enum); minLength = N/A; maxLength = 3

NOTE:

The enumerations for this element are listed under <countryTypeEnum> in the LitleXML Common XSD. The country names corresponding to the abbreviations can be found in the ISO 3166-1 standard.

#### **Parent Elements:**

enhancedData

**Attributes:** 

None

**Child Elements:** 

#### destinationPostalCode 4.85

The destinationPostalCode element defines the postal code of the destination in the enhancedData element.

**Type** = String; minLength = N/A; maxLength = 20

Although the schema specifies the maxLength of the NOTE:

<destinationPostalCode> element as 20 characters, in practice you

should never exceed 10 characters in your submissions.

Pa	rent	·F	lem	en	ts:

enhancedData

**Attributes:** 

None

**Child Elements:** 

## 4.86 detailTax

The detailTax element is an optional child of both the enhancedData and lineItemData elements, which you use to specify detailed tax information (for example, city or local tax). The total sum of the detailTax values should match either the salesTax value, if detailTax is a child of enhancedData, or the taxAmount element if detailTax is a child of lineItemData.

#### Parent Elements:

enhancedData. lineItemData

NOTE:

The detailTax element can appear a maximum of six times as a child of either parent.

#### Attributes:

None

#### **Child Elements:**

Required: taxAmount

Optional: taxIncludedInTotal, taxRate, taxTypeIdentifier, cardAcceptorTaxId

#### **Example:** detailTax Structure

```
<detailTax>
  <taxIncludedInTotal>true or false</taxIncludedInTotal>
  <taxAmount>Additional Tax Amount</taxAmount>
  <taxRate>Tax Rate of This Tax Amount</taxRate>
  <taxTypeIdentifier>Tax Type Enum</taxTypeIdentifier>
  <cardAcceptorTaxId>Tax ID of Card Acceptor</cardAcceptorTaxId>
</detailTax>
```

# 4.87 discountAmount

The discountAmount element defines the amount of the discount for the order. Although the schema defines it as an optional child of the enhancedData element, it is required by Visa for Level III interchange rates. The decimal is implied. Example: 500 = \$5.00.

Parent Elements:
enhancedData
Attributes:
None
Child Elements:
None

**Type** = Integer; **totalDigits** = 8

dob LitleXML Elements

## 4.88 dob

The dob element is an optional child of the customerInfo element. It is used in combination with several other elements to provide required information for some Bill Me Later transactions.

**Type** = Date; **Format** = YYYY-MM-DD

NOTE:

In order for a BML transaction to succeed, you must include this element if:

the customer does not have a BML account

or

 the customer has a BML account, but the account has not been authenticated.

You do not need to include this element if the BML account has been authenticated.

<b>Parent</b>	Eler	nents:
---------------	------	--------

customerInfo

**Attributes:** 

None

**Child Elements:** 

None

# 4.89 dutyAmount

The dutyAmount element defines duty on the total purchased amount for the order. Although the schema defines it as an optional child of the enhancedData element, it is required by Visa for Level III interchange rates. The decimal is implied. Example: 500 = \$5.00.

Parent Elements:
enhancedData
Attributes:
None
Child Elements:

**Type** = Integer; **totalDigits** = 8

echeck LitleXML Elements

# 4.90 echeck

The echeck element is a required child of the echeckSale, echeckVerification, and echeckCredit (when the credit is against a transaction not originally processed through the Litle & Co. system) elements. It contains child elements used to provide details concerning the eCheck account.

#### Parent Elements:

echeckCredit, echeckSale, echeckVerification

#### Attributes:

None

#### **Child Elements:**

Required: accType, accNum, routingNum

Optional: checkNum

### **Example:** echeck Structure

```
<echeck>
  <accType>Account Type Abbreviation</accType>
  <accNum>Account Number</accNum>
   <routingNum>Routing Number</routingNum>
   <checkNum>Check Number</checkNum>
</echeck>
```

# 4.91 eCheckAccountSuffix

The eCheckAccountSuffix element is an optional child of the tokenResponse element that provides the last three characters of the eCheck account number.

**Type** = String; **minLength** = 3; **maxLength** = 3

#### **Parent Elements:**

registerTokenResponse, tokenResponse

Attributes:

None

**Child Elements:** 

## 4.92 echeckCredit

The echeckCredit element is the parent element for all eCheck Credit transactions. You can use this element in either Batch or Online transactions.

#### Parent Elements:

batchRequest, litleOnlineRequest

#### Attributes:

Attribute Name	Туре	Required?	Description	
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response. This attribute is also used for Duplicate Transaction Detection. For Online transactions, omitting this attribute, or setting it to a null value (id=""), disables Duplicate Detection for the transaction.	
			Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.	
			minLength = N/A maxLength = 25	
customerId	String	No	A value assigned by the merchant to identify the consumer.  minLength = N/A maxLength = 50	
reportGroup	String	Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.	
			minLength = 1 maxLength = 25	

### **Child Elements:**

For credits to transactions processed by Litle & Co. (Required): litleTxnId

For credits to transactions processed by Litle & Co. (Optional): amount

NOTE: If you do not specify an amount child element, the system uses the full amount from the associated echeckSale transaction.

For credits to transactions not processed by Litle & Co. (Required): orderId, amount, orderSource, billToAddress, echeckOrEcheckToken (allows the substitution of either the echeck or echeckToken elements)

For credits to transactions not processed by Litle & Co. (Optional): merchantData

For both (Optional): customBilling

#### echeckCreditResponse 4.93

The echeckCreditResponse element is the parent element for information returned to you in response to an echeckCredit transaction.

## **Parent Elements:**

batchResponse, litleOnlineResponse

#### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	The response returns the same value submitted in the echeckCredit transaction.
			minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the echeckCredit transaction.
			minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the echeckCredit transaction.
			minLength = 1 maxLength = 25
duplicate	Boolean	No	If the request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate flag set to true and the entire original response.
			<b>Note:</b> This attribute applies only to Online transaction responses.

**Child Elements: (all Required)** 

litleTxnId, orderId, response, responseTime, message

Optional: postDate, accountUpdater

The postDate child element is returned only in responses to Online Note:

transactions.

# 4.94 echeckForToken

The echeckForToken element is a child of the registerTokenRequest element. It contains the routing and account number of the eCheck account which the system uses to generate a token.

## **Parent Elements:**

register Token Request

#### Attributes:

None

#### **Child Elements:**

Required: accNum, routingNum

## **Example: echeck Structure**

```
<echeckForToken>
  <accNum>Account Number</accNum>
  <routingNum>Routing Number</routingNum>
</echeckForToken>
```

# 4.95 echeckOrEcheckToken

The echeckOrEcheckToken element is an abstract that allows the substitution of either the echeck or echeckToken element. In eCheck transactions, except echeckVoid, you must specify one of the two substitution elements as a child.

## **Parent Elements:**

echeckCredit, echeckRedeposit, echeckSale, echeckVerification

## **Substitution Options:**

echeck, echeckToken

# 4.96 echeckRedeposit

The echeckRedeposit element is the parent element for all eCheck Redeposit transactions. You use this transaction type to manually attempt redeposits of eChecks returned for either Insufficient Funds or Uncollected Funds. You can use this element in either Batch or Online transactions.

Note:

Do not use this transaction type if you are enabled for the Auto Redeposit feature. If you are enabled for the Auto Redeposit feature, the system will reject any echeckRedeposit transaction you submit.

#### **Parent Elements:**

batchRequest, litleOnlineRequest

#### Attributes:

Attribute Name	Туре	Required?	Description	
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response.	
			minLength = N/A maxLength = 25	
customerId	String	No	A value assigned by the merchant to identify the consumer.  minLength = N/A maxLength = 50	
reportGroup	String	Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.	
			minLength = 1 maxLength = 25	

#### **Child Elements:**

Required: litleTxnId

Optional: echeckOrEcheckToken (allows the substitution of either the echeck or echeckToken

elements), merchantData

# 4.97 echeckRedepositResponse

The echeckRedepositResponse element is the parent element for information returned to you in response to an echeckRedeposit transaction.

## **Parent Elements:**

batchResponse, litleOnlineResponse

#### Attributes:

Attribute Name	Туре	Required?	Description	
id	String	No	The response returns the same value submitted in the echeckSale transaction.	
			minLength = N/A maxLength = 25	
customerId	String	No	The response returns the same value submitted in the echeckSale transaction.	
			minLength = N/A maxLength = 50	
reportGroup	String	Yes	The response returns the same value submitted in the echeckSale transaction.	
			minLength = 1 maxLength = 25	

#### **Child Elements:**

Required: litleTxnId, response, responseTime, message

Optional: postDate, accountUpdater

NOTE: The postDate child element is returned only in responses to Online

transactions.

# 4.98 echeckSale

The echeckSale element is the parent element for all eCheck Sale transactions. You can use this element in either Batch or Online transactions.

## **Parent Elements:**

batchRequest, litleOnlineRequest

### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response. This attribute is also used for Duplicate Transaction Detection. For Online transactions, omitting this attribute, or setting it to a null value (id=""), disables Duplicate Detection for the transaction.  Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.  minLength = N/A maxLength = 25
customerId	String	No	A value assigned by the merchant to identify the consumer.  minLength = N/A maxLength = 50
reportGroup	String	Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.  minLength = 1 maxLength = 25

### **Child Elements:**

Required: orderId, amount, orderSource, billToAddress, echeckOrEcheckToken (allows the substitution of either the echeck or echeckToken elements)

Optional: shipToAddress, verify, customBilling, merchantData

# 4.99 echeckSalesResponse

The echeckSalesResponse element is the parent element for information returned to you in response to an echeckSale transaction.

## **Parent Elements:**

batchResponse, litleOnlineResponse

#### Attributes:

Attribute Name	Туре	Required?	Description	
id	String	No	The response returns the same value submitted in the echeckSale transaction.	
			minLength = N/A maxLength = 25	
customerId	String	No	The response returns the same value submitted in the echeckSale transaction.	
			minLength = N/A maxLength = 50	
reportGroup	String	Yes	The response returns the same value submitted in the echeckSale transaction.	
			minLength = 1 maxLength = 25	
duplicate	Boolean	No	If the request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate flag set to true and the entire original response.	
			<b>Note:</b> This attribute applies only to Online transaction responses.	

### **Child Elements:**

Required: litleTxnId, orderId, response, responseTime, message

Optional: postDate, accountUpdater, tokenResponse

NOTE: The postDate child element is returned only in responses to Online

transactions.

# 4.100 echeckToken

The echeckToken element replaces the echeck element in tokenized eCheck transactions and defines the tokenized account information.

#### **Parent Elements:**

echeckCredit, echeckRedeposit, echeckSale, echeckVerification

#### Attributes:

None

#### **Child Elements:**

Required: litleToken, routingNum, accType

Optional: checkNum

## **Example: echeck Structure**

```
<echeckToken>
  litleToken>Litle Token</litleToken>
  <routingNum>Routing Number</routingNum>
  <accType>Account Type Abbreviation</accType>
  <checkNum>Check Number</checkNum>
</echeckToken>
```

# 4.101 echeckVerification

The echeckVerification element is the parent element for all eCheck Verification transactions. You use this transaction type to initiate a comparison of the consumer's account information against positive/negative databases. You can use this element in either Batch or Online transactions.

#### **Parent Elements:**

batchRequest, litleOnlineRequest

#### Attributes:

Attribute Name	Туре	Required?	Description	
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response.	
			minLength = N/A maxLength = 25	
customerId	String	No	A value assigned by the merchant to identify the consumer.  minLength = N/A maxLength = 50	
reportGroup	String	Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.	
			minLength = 1 maxLength = 25	

## **Child Elements:**

Required: orderId, amount, orderSource, billToAddress, echeckOrEcheckToken (allows the substitution of either the echeck or echeckToken elements)

Optional: litleTxnId, merchantData

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# 4.102 echeckVerificationResponse

The echeckVerificationResponse element is the parent element for information returned to you in response to a eCheck Verification transaction.

## **Parent Elements:**

batchResponse, litleOnlineResponse

#### Attributes:

Attribute Name	Туре	Required?	Description	
id	String	No	The response returns the same value submitted in the capture transaction.	
			minLength = N/A maxLength = 25	
customerId	String	No	The response returns the same value submitted in the capture transaction.	
			minLength = N/A maxLength = 50	
reportGroup	String	Yes	The response returns the same value submitted in the capture transaction.	
			minLength = 1 maxLength = 25	

#### **Child Elements:**

Required: litleTxnId, orderId, response, responseTime, message

Optional: postDate

NOTE: The postDate child element is returned only in responses to Online

transactions.

# 4.103 echeckVoid

The echeckVoid element is the parent element for all eCheck Void transactions. You use this transaction type to either cancel an eCheck Sale transaction, as long as the transaction has not yet settled, or halt automatic redeposit attempts of eChecks returned for either Insufficient Funds or Uncollected Funds. You can use this element only in Online transactions.

## **Parent Elements:**

litleOnlineRequest

#### Attributes:

Attribute Name	Туре	Required?	Description	
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response. This attribute is also used for Duplicate Transaction Detection. For Online transactions, omitting this attribute, or setting it to a null value (id=""), disables Duplicate Detection for the transaction.  Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.	
			minLength = N/A maxLength = 25	
customerId	String	No	A value assigned by the merchant to identify the consumer.	
			minLength = N/A maxLength = 50	
reportGroup	String	Yes	Required attribute that defines the merchant sub-group in the user interface where this transactio will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.	
			minLength = 1 maxLength = 25	

## **Child Elements:**

Required: litleTxnId

# 4.104 echeckVoidResponse

The echeck VoidResponse element is the parent element for information returned to you in response to an eCheck Void transaction.

## **Parent Elements:**

litle On line Response

## Attributes:

Attribute Name	Туре	Required?	Description	
id	String	No	The response returns the same value submitted in the void transaction.	
			minLength = N/A maxLength = 25	
customerId	String	No	The response returns the same value submitted in the void transaction.	
			minLength = N/A maxLength = 50	
reportGroup	String	Yes	The response returns the same value submitted in the void transaction.	
			minLength = 1 maxLength = 25	
duplicate	Boolean	No	If the request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate flag set to true and the entire original response.	
			<b>Note:</b> This attribute applies only to Online transaction responses.	

**Child Elements: (all Required)** 

litleTxnId, response, responseTime, message, postDate

# 4.105 email

The email element defines the email address of the customer in both the billToAddress and shipToAddress elements.

Type = String; minLength = N/A; maxLength = 100

## **Parent Elements:**

billToAddress, shipToAddress

Attributes:

None

**Child Elements:** 

# 4.106 employerName

The employerName element is an optional child of the customerInfo element and defines the name of the customer's place of employment. It is used in combination with several other elements to provide information for some Bill Me Later transactions.

Type = String; minLength = N/A; maxLength = 20

Parent Elements:
customerInfo

Attributes:
None
Child Elements:
None

# 4.107 enhancedAuthResponse

The enhancedAuthResponse element is an optional child of both the authorizationResponse and saleResponse elements. Through its child elements, it can provide information concerning whether the card used for the transaction is Prepaid and if so, the available balance. Depending upon the card used, other elements can indicate affluence, card product type, prepaid card type, and reloadability.

#### Parent Elements:

authorizationResponse, saleResponse

#### Attributes:

None

### **Child Elements: (all Optional)**

fundingSource, affluence, issuerCountry, cardProductType

## Example: enhancedAuthResponse - with fundingSource

```
<enhancedAuthResponse>
  <fundingSource>
    <type>PREPAID</type>
    <availableBalance>0</availableBalance>
    <reloadable>YES|NO|UNKNOWN</reloadable>
    <prepaidCardType>GIFT</prepaidCardType>
    </fundingSource>
</enhancedAuthResponse>
```

#### Example: enhancedAuthResponse - with affluence

```
<enhancedAuthResponse>
  <affluence>AFFLUENT</affluence>
</enhancedAuthResponse>
```

#### Example: enhancedAuthResponse - with issuerCountry

```
<enhancedAuthResponse>
    <issuerCountry>MEX</issuerCountry>
</enhancedAuthResponse>
```

## **Example:** enhancedAuthResponse - with cardProductType

<enhancedAuthResponse>

<cardProductType>CONSUMER</cardProductType>

</enhancedAuthResponse>

## 4.108 enhancedData

The enhancedData element allows you to specify extra information concerning a transaction in order to qualify for certain purchasing interchange rates. The following tables provide information about required elements you must submit to achieve Level 2 or Level 3 Interchange rates for Visa and MasterCard.

In addition to the requirements below, please be aware of the following:

- For Visa:
  - The transaction must be taxable.
  - The tax charged must be between 0.1% and 22% of the transaction amount.
  - For Level 3, the transaction must use a a corporate or purchasing card.
- For MasterCard:
  - The transaction must be taxable.
  - The tax charged must be between 0.1% and 30% of the transaction amount.
  - For Level 3, the transaction must use a a corporate, business, or purchasing card.

Note: You can qualify for MasterCard Level 2 rates without submitting the total tax amount (submit 0) if your MCC is one of the following: 4111, 4131, 4215, 4784, 8211, 8220, 8398, 9661, 9211, 9222, 9311, 9399, 9402.

You must include at least one line item with amount, description, and quantity defined.

**TABLE 1** MasterCard Level 2/Level 3 Data Requirements

MasterCard Level 2 Data	MasterCard Level 3 Data	LitleXML Element (child of enhancedData unless noted)	
Customer Code (if supplied by customer)	Customer Code (if supplied by customer)	customerReference	
Card Acceptor Tax ID	Card Acceptor Tax ID	cardAcceptorTaxId	
Total Tax Amount	Total Tax Amount	salesTax	
	Product Code	productCode (child of lineItemData)	
	Item Description	itemDescription (child of lineItemData)	
	Item Quantity	quantity (child of lineItemData)	
	Item Unit of Measure	unitOfMeasure (child of lineItemData)	

**TABLE 1** MasterCard Level 2/Level 3 Data Requirements

MasterCard Level 2 Data	MasterCard Level 3 Data	LitleXML Element (child of enhancedData unless noted)	
	Extended Item Amount	lineItemTotal (child of lineItemData)	
		or	
		lineItemTotalWithTax (child of lineItemData)	

#### **TABLE 2** Visa Level 2/Level 3 Data Requirements

Visa Level 2 Data	Visa Level 3 Data	LitleXML Element (child of enhancedData unless noted)	
Sales Tax	Sales Tax	salesTax	
	Discount Amount	discountAmount	
	Freight/Shipping Amount	shippingAmount	
	Duty Amount	dutyAmount	
	Item Sequence Number	itemSequenceNumber (child of lineItemData)	
	Item Commodity Code	commodityCode (child of lineItemData)	
	Item Description itemDescription (child of lineItemData)		
	Product Code	productCode (child of lineItemData)	
	Quantity	quantity (child of lineItemData)	
	Unit of Measure	unitOfMeasure (child of lineItemData)	
	unit Cost	unitCost (child of lineItemData)	
	Discount per Line Item	itemDiscountAmount (child of lineItemData)	
	Line Item Total	lineItemTotal (child of lineItemData)	

#### Note:

Litle & Co. always attempts to qualify your transactions for the optimal Interchange Rate. Although in some instances your transaction may qualify for either Level 2 or Level 3 rates without submitting all recommended fields, for the most consistent results, Litle strongly recommends that you adhere to the guidelines detailed above. The requirements for Discover and American Express transactions are similar.

Two child elements, deliveryType and shippingAmount, are required for Bill Me Later Authorization and Sale transactions.

#### **Parent Elements:**

authorization, capture, captureGivenAuth, credit, forceCapture, sale

## Child Elements: (all Optional)

customerReference, salesTax, deliveryType, taxExempt, discountAmount, shippingAmount, dutyAmount, shipFromPostalCode, destinationPostalCode, destinationCountryCode, invoiceReferenceNumber, orderDate, detailTax, lineItemData

### **Example:** enhancedData Structure

```
<enhancedData>
 <customerReference>Customer Reference/customerReference>
 <salesTax>Amount of Sales Tax Included in Transaction/salesTax>
 <deliveryType>TBD</deliveryType>
 <taxExempt>true or false</taxExempt>
 <discountAmount>Discount Amount Applied to Order</discountAmount>
 <shippingAmount>Amount to Transport Order</shippingAmount>
 <dutyAmount>Duty on Total Purchase Amount/dutyAmount>
 <shipFromPostalCode>Ship From Postal Code</shipFromPostalCode>
 <destinationPostalCode>Ship To Postal Code</destinationPostalCode>
 <destinationCountryCode>Ship To ISO Country Code</destinationCountryCode>
 <invoiceReferenceNumber>Merchant Invoice Number/invoiceReferenceNumber>
 <orderDate>Date Order Placed</orderDate>
 <detailTax>
   <taxIncludedInTotal>true or false</taxIncludedInTotal>
   <taxAmount>Additional Tax Amount</taxAmount>
   <taxRate>Tax Rate of This Tax Amount</taxRate>
   <taxTypeIdentifier>Tax Type Enum</taxTypeIdentifier>
   <cardAcceptorTaxId>Tax ID of Card Acceptor/cardAcceptorTaxId>
 </detailTax>
 <lineItemData>
   <itemSequenceNumber>Line Item Number within Order</itemSequenceNumber>
   <itemDescription>Description of Item</itemDescription>
   cproductCode>Product Code of Item
```

# 4.109 entryMode

The entryMode element is a required child of the pos element, which describes the method used for card data entry at the point of sale.

Type = String (Enum); minLength = N/A; maxLength = N/A

Pa	ren	t	E	en	nen	ts:

pos

**Attributes:** 

None

**Child Elements:** 

None

#### **Enumerations:**

Enumeration	Description
notused	terminal not used
keyed	card number manually entered
track1	track 1 read
track2	magnetic stripe read (track 2 when known or when the terminal makes no distinction between tracks 1 and 2.)
completeread	complete magnetic stripe read and transmitted

# 4.110 expDate

The expDate element is a child of the card, token, paypage elements, which specifies the expiration date of the card and is required for card-not-present transactions.

NOTE:

Although the schema defines the expDate element as an optional child of the card, token and paypage elements, you must submit a value for card-not-present transactions.

**Type** = String; **minLength** = 4; **maxLength** = 4

### Parent Elements:

card, newCardInfo, newCardTokenInfo, originalCard, originalCardInfo, originalCardTokenInfo, originalToken, paypage, token, updatedCard, updatedToken

### Attributes:

None

#### **Child Elements:**

None

Note:

You should submit whatever expiration date you have on file, regardless of whether or not it is expired/stale.

Litle & Co. recommends all merchant with recurring and/or installment payments participate in the Automatic Account Updater program.

# 4.111 extendedCardResponse

The extendedCardResponse element is an optional child of the accountUpdater element, which contains two child elements, code and message. The codes/messages can be either "501 - The Account Was Closed." or "504 - Contact the cardholder for updated information."

#### IMPORTANT:

When using Automatic Account Updater (any variation), you must always code to receive the extendedCardResponse element and its children. Litle always returns this information whenever applicable regardless of whether you receive other account updater information in the transaction response message.

### Parent Elements:

accountUpdater

Attributes:

None

**Child Elements:** 

code, message

### **Example:** newCardInfo Structure

```
<extendedCardResponse>
  <message>Message for Code</message>
  <code>Either 501 or 504</code>
</extendedCardResponse>
```

# 4.112 filtering

The filtering element is an optional child of either the Authorization or Sale request transaction. You use its child elements to selectively enable/disable the various Litle Card Filtering features. Setting either the <international> or <chargeback> child element to false disables that filtering feature for the transaction. The prepaid> child can be set to true to enable the feature selectively, or set to false to disable the feature for the transaction, if you elected to use the filter all prepaid configuration option.

#### **Parent Elements:**

authorization, sale

#### Attributes:

None

### **Child Elements:**

Optional: prepaid, international, chargeback

#### NOTE:

Although included in the schema and shown in the example below, the <chargeback> element is not supported. To override the chargeback filter for a selected transaction, use the fraudFilterOverride flag (see fraudFilterOverride on page 343). Please consult your Litle Relationship Manager for additional information.

### **Example: filtering Structure**

# 4.113 firstName

The firstName element is a child of the billtoAddress element, which specifies the first name of the account holder and is required for echeckVerification transactions.

Note:

When performing an eCheck Verification for a corporate account, you must include values for the firstName and lastName elements. If you do not have the name of the check issuer, you can use a value of "unavailable" for both elements.

**Type** = String; **minLength** = N/A; **maxLength** = 25

**Parent Elements:** 

billToAddress

Attributes:

None

**Child Elements:** 

# 4.114 forceCapture

The forceCapture element is the parent element for all Force Capture transactions. These are specialized Capture transactions used when you do not have a valid Authorization for the order, but have fulfilled the order and wish to transfer funds. You can use this element in either Online or Batch transactions.

CAUTION: You must be authorized by Litle & Co. before processing this transaction type. In some instances, using a Force Capture transaction can lead to chargebacks and fines.

### **Parent Elements:**

litleOnlineRequest, batchRequest

#### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response. This attribute is also used for Duplicate Transaction Detection. For Online transactions, omitting this attribute, or setting it to a null value (id=""), disables Duplicate Detection for the transaction.
			Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.
			minLength = N/A maxLength = 25
customerId	String	No	A value assigned by the merchant to identify the consumer.
			minLength = N/A maxLength = 50
reportGroup	String	Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.
			minLength = 1 maxLength = 25

### **Child Elements:**

Required: orderId, amount, orderSource, choice of card, token, or paypage

Optional: billToAddress, customBilling, taxType, enhancedData, processingInstructions, pos, amexAggregatorData, merchantData, surchargeAmount, debtRepayment

# 4.115 forceCaptureResponse

The forceCaptureResponse element is the parent element for information returned to you in response to a Force Capture transaction. It can be a child of either a litleOnlineResponse element or a batchResponse element.

### **Parent Elements:**

litleOnlineResponse, batchResponse

### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	The response returns the same value submitted in the Force Capture transaction.
			minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the Force Capture transaction.
			minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the Force Capture transaction.
			minLength = 1 maxLength = 25
duplicate	Boolean	No	If the request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate flag set to true and the entire original response.
			<b>Note:</b> This attribute applies only to Online transaction responses.

### **Child Elements:**

Required: litleTxnId, orderId, response, responseTime, message

Optional: postDate, tokenResponse, accountUpdater

NOTE: The postDate child element is returned only in responses to Online transactions.

# 4.116 fraudFilterOverride

The fraudFilterOverride element is an optional child of both the authorization and the sale elements. A setting of **true** will override (disable) all fraud filters for the submitted transaction.

 $\textbf{Type} = Boolean; \textbf{Valid Values} = true \ or \ false$ 

**Parent Elements:** 

authorization, sale

**Attributes:** 

None

**Child Elements:** 

## 4.117 fraudResult

The fraudResult element is an optional child of the authorizationResponse, the saleResponse and the authInformation elements. It contains child elements defining any fraud checking results.

### **Parent Elements:**

authorizationResponse, saleResponse, authInformation

### Attributes:

None

## Child Elements: (All Optional)

authenticationResult, avsResult, cardValidationResult, advancedAVSResult

### **Example:** fraudResult Structure

```
<fraudResult>
  <avsResult>00</avsResult>
   <cardValidationResult>N</cardValidationResult>
   <authenticationResult>2</authenticationResult>
   <advancedAVSResult>011</advancedAVSResult>
</fraudResult>
```

#### NOTE:

The <advancedAVSResults> element applies only to American Express transactions. Also, you must be certified to use LitleXML version 7.3 or above and be enabled specifically to use the Advanced AVS feature. Please consult your Litle Customer Experience Manager for additional information.

# 4.118 fundingSource

The fundingSource element is an optional child of the enhancedAuthResponse element. Through its child elements, it provides information concerning whether the card used for the transaction is Prepaid, Credit, Debit, or FSA and if Prepaid, the available balance, the type of prepaid card, and whether it is reloadable.

### Parent Elements:

enhancedAuthResponse

#### Attributes:

None

### **Child Elements:**

Required: type, availableBalance, reloadable, prepaidCardType

## **Example:** fundingSource Structure

```
<fundingSource>
  <type>PREPAID</type>
  <availableBalance>0</availableBalance>
  <reloadable>YES | NO | UNKNOWN</reloadable>
  <prepaidCardType>GIFT</prepaidCardType>
</fundingSource>
```

#### Note:

The fundingSource element and its child elements, type and availableBalance are associated with the Insights features (see Customer Insight Features on page 20.)

Please consult your Customer Experience Manager for additional information.

# 4.119 healthcareAmounts

The healthcareAmount element is a required child of the healthcareIIAS element. Through its child elements, it provides details about the dollar amount and type of IIAS qualified items purchased using Healthcare Prepaid cards.

The value used for the totalHealthcareAmount child must be the sum of the values applied to the following elements: RxAmount, visionAmount, clinicOtherAmount, and dentalAmount.

### **Parent Elements:**

healthcareIIAS

#### Attributes:

None

### **Child Elements:**

Required: totalHealthcareAmount

Optional: RxAmount, visionAmount, clinicOtherAmount, dentalAmount

### **Example:** fundingSource Structure

```
<healthcareAmounts>
  <totalHealthcareAmount>Total of Healthcare Items</totalHealthcareAmount>
  <RxAmount>Amount for Medications</RxAmount>
  <visionAmount>Amount for Vision Items</visionAmount>
  <clinicOtherAmount>Amount for Clinic Charges</clinicOtherAmount>
  <dentalAmount>Amount for Dental Charges</dentalAmount>
  </healthcareAmounts>
```

# 4.120 healthcarelIAS

The healthcareIIAS element is an optional child of Authorization and Sale transactions. Through its child elements, it provides information about IIAS qualified items purchased using Healthcare Prepaid cards.

### **Parent Elements:**

authorization, sale

### Attributes:

None

### **Child Elements:**

Required: healthcareAmounts, IIASFlag

### **Example:** fundingSource Structure

```
<healthcareIIAS>
  <healthcareAmounts>
    <totalHealthcareAmount>Total of Healthcare Items</totalHealthcareAmount>
    <RxAmount>Amount for Medications</RxAmount>
    <visionAmount>Amount for Vision Items</visionAmount>
    <clinicOtherAmount>Amount for Clinic Charges</clinicOtherAmount>
    <dentalAmount>Amount for Dental Charges</dentalAmount>
    </healthcareAmounts>
    <IIASFlag>Y</IIASFlag>
</healthcareIIAS>
```

# 4.121 IIASFlag

The IIASFlag element is a required child of the healthcareIIAS element. This element only supports a value of  $\mathbf{Y}$ .

 $\textbf{Type} = String \ (enum); \ \textbf{minLength} = N/A; \ \textbf{maxLength} = 1; \ \textbf{Valid} \ \ \textbf{Value} = Y$ 

### **Parent Elements:**

healthcareIIAS

### **Child Elements:**

# 4.122 incomeAmount

The incomeAmount element is an optional child of the customerInfo element and defines the yearly income of the customer. It is used in combination with several other elements to provide information for some Bill Me Later transactions.

Type = Long; minLength = N/A; maxLength = N/A

Parent Elements:
customerInfo

Attributes:
None

Child Elements:
None

# 4.123 incomeCurrency

The incomeCurrency element is an optional child of the customerInfo element and defines the currency of the incomeAmount element. The default value is USD (United States Dollars). It is used in combination with several other elements to provide information for some Bill Me Later transactions.

**Type** = String (Enum); minLength = N/A; maxLength = N/A

**Parent Elements:** 

customerInfo

Attributes:

None

**Child Elements:** 

None

**Enumerations:** 

Enumeration	Description
AUD	Australian Dollar
CAD	Canadian Dollar
CHF	Swiss Francs
DKK	Denmark Kroner
EUR	Euro
GBP	United Kingdom Pound
HKD	Hong Kong Dollar
JPY	Japanese Yen
NOK	Norwegian Krone
NZD	New Zealand Dollar
SEK	Swedish Kronor
SGD	Singapore Dollar
USD (default)	United States Dollar

# 4.124 international

The international element is an optional child of the filtering element. To disable the filtering operation for a selected transaction include the international element with a setting of **false**.

of false.

Type = Boolean; Valid Value = false

Parent Elements:
filtering

Attributes:

**Child Elements:** 

None

# 4.125 invoiceReferenceNumber

The invoiceReferenceNumber element is an optional child of the enhancedData element, which specifies the merchant's invoice number. If you do not know the invoice number, do not include this element.

<b>Type</b> = String; <b>minLength</b> = 1; <b>maxLength</b> = 15
Parent Elements:
enhancedData
Attributes:
None
Child Elements:
None

# 4.126 issuerCountry

The issuerCountry element is an optional child of the enhancedAuthResponse element, which defines the country of the bank that issued the card submitted in the Authorization or Sale transaction.

**Type** = String; minLength = N/A; maxLength = 3Parent Elements:

enhancedAuthResponse

**Attributes:** 

None

**Child Elements:** 

# 4.127 itemCategoryCode

The itemCategoryCode element is an optional child of the billMeLaterRequest element and defines the Bill Me Later item category for the type of product sold.

#### Note:

According to the Bill Me Later documentation, merchants typically assign the applicable Item Category Code at the store or department level as opposed to the actual product level. The BML documentation goes on to state, "Your BML Implementation Project Manager will provide you the Item Category Codes that are best associated with your merchandise."

For additional information, please refer to the Bill Me Later Implementation documentation.

**Type** = Integer; totalDigits = 4

**Parent Elements:** 

billMeLaterRequest

Attributes:

None

**Child Elements:** 

# 4.128 itemDescription

The itemDescription element is a required child of the lineItemData element, which provides a brief text description of the item purchased.

Type = String; minLength = N/A; maxLength = 26

### **Parent Elements:**

lineItemData

**Attributes:** 

None

**Child Elements:** 

# 4.129 itemDiscountAmount

The itemDiscountAmount element is an optional child of the lineItemData element, which specifies the item discount amount. Although an optional element, it is required by Visa for Level III Interchange rates. The value must be greater than or equal to 0. The decimal is implied. Example: 500 = \$5.00

<b>Type</b> = Integer; <b>totalDigits</b> = 8			

lineItemData

**Parent Elements:** 

Attributes:

None

**Child Elements:** 

None

# 4.130 itemSequenceNumber

The itemSequenceNumber element is an optional child of the lineItemData element (required for Visa transactions). When providing line item data, you must number each item sequentially starting with 1.

Type = Integer; minInclusive value = 1, maxInclusive value = 99

Parent Elements:
lineItemData

Attributes:
None
Child Elements:

## 4.131 lastName

The lastName element is a child of the billtoAddress element, which specifies the last name of the account holder and is required for echeckVerification transactions.

### Note:

When performing an eCheck Verification for a corporate account, you must include values for the firstName and lastName element. If you do not have the name of the check issuer, you can use a value of "unavailable" for both elements.

**Type** = String; **minLength** = N/A; **maxLength** = 25

**Parent Elements:** 

billToAddress

Attributes:

None

**Child Elements:** 

## 4.132 lineItemData

The lineItemData element contains several child elements used to define information concerning individual items in the order. Although the schema defines it as an optional child of the enhancedData element, it is required for Level III interchange rates.

Note:

MasterCard and Visa allow up to 99 instances of this element in a transaction. American Express allows a maximum of 4 instances of this element in a transaction.

#### Parent Elements:

enhancedData

#### Attributes:

None

#### **Child Elements:**

Required: itemDescription

Optional: itemSequenceNumber, productCode, quantity, unitOfMeasure, taxAmount, lineItemTotal, lineItemTotalWithTax, itemDiscountAmount, commodityCode, unitCost, detailTax

### NOTE:

When including the lineItemData element, please be aware of the following rules for its child elements:

- itemSequenceNumber is required by Visa
- productCode, quantity, unitOfMeasure, and lineItemTotal are required by Visa and MasterCard
- itemDiscountAmount, commodityCode, and unitCost are required by Visa for Level III Interchange rates

### **Example: lineItemData Structure**

```
ItemTotal>Total Amount of Line Item/lineItemTotal>
ItemTotalWithTax>taxAmount + lineItemTotal/lineItemTotalWithTax>
<itemDiscountAmount>Discount Amount/itemDiscountAmount>
<commodityCode>Card Acceptor Commodity Code for Item/commodityCode>
<unitCost>Price for One Unit of Item/unitCost>
<detailTax>
<taxIncludedInTotal>true or false/taxIncludedInTotal>
<taxAmount>Additional Tax Amount/taxAmount>
<taxRate>Tax Rate of This Tax Amount/taxRate>
<taxTypeIdentifier>Tax Type Enum/taxTypeIdentifier>
<cardAcceptorTaxId>Tax ID of Card Acceptor/cardAcceptorTaxId>

/detailTax>
```

# 4.133 lineItemTotal

The lineItemTotal element is an optional child of the lineItemData element, which specifies the total cost of the line items purchased, not including tax. For example, if the order was for 500 pencils at \$1.00 each, the lineItemTotal would be \$500. Although an optional element, it is required by Visa and MasterCard when specifying line item data. The decimal is implied. Example: 500 = \$5.00.

**Type** = Integer; **totalDigits** = 8

**Parent Elements:** 

lineItemData

Attributes:

None

**Child Elements:** 

# 4.134 lineItemTotalWithTax

The lineItemTotalWithTax element is an optional child of the lineItemData element, which specifies the total cost of the line items purchased including tax. If the tax is not known, do not include this element. The decimal is implied. Example: 500 = \$5.00.

Type = Integer; totalDigits = 8	
Parent Elements:	
ineItemData	
Attributes:	
None	
Child Elements:	
None	

# 4.135 litleInternalRecurringRequest

The litleInternalRecurringRequest element and its children is an element structure that exists solely for internally (to Litle system) generated transactions associated with recurring payments managed by the Litle Recurring engine. You do not need to code for this structure.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

P	are	nt	F	lem	en	ts:

sale

Attributes:

None

**Child Elements:** 

subscriptionId, recurringTxnId

# 4.136 litleOnlineRequest

This is the root element for all LitleXML Online requests.

### **Parent Elements:**

None

### Attributes:

Attribute Name	Туре	Required?	Description
version	String	Yes	Defines the LitleXML schema version against which the XML is validated. The current version is 8.10, but you may be using an older version.  minLength = N/A maxLength = 10
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and must be specified as: http://www.litle.com/schema.  minLength = N/A maxLength = 38
merchantld	String	Yes	A unique string used to identify the merchant within the Litle system.  minLength = N/A maxLength = 50  Note: International currencies are supported on a per merchantld basis.
loggedInUser	String	No	Internal Use Only

### **Child Elements:**

Required: authentication

One of the following required: authorization, authReversal, capture, echeckVoid, forceCapture, captureGivenAuth, credit, echeckCredit, echeckRedeposit, echeckSale, echeckVerification, echeckVoid, registerTokenRequest, sale, updateCardValidationNumOnToken, void, cancelSubscription

# 4.137 litleOnlineResponse

This is the root element for all LitleXML Online responses.

## **Parent Elements:**

None

### **Attributes:**

Attribute Name	Туре	Required?	Description
version	String	Yes	Defines the LitleXML schema version against which the XML is validated. The current version is 8.10, but you may be using an older version.
			minLength = N/A maxLength = 10
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and must be specified as: http://www.litle.com/schema.
			minLength = N/A maxLength = 38
response	String	Yes	Indicates whether your XML syntax passed validation. Expected values are as follows:
			0 - XML validation succeeded.
			1 - XML validation failed. See the message attribute for more details.
			2 - Indicates that the submitted content was either improperly formatted XML or non-XML content.
			3 - Indicates that the submission contains empty or invalid credentials (user and password).
			4 - Indicates that the merchant has reached the maximum number of concurrent connections.
			5 - Indicates that Litle systems may have detected message content that violates certain restrictions.
			minLength = N/A maxLength = 3

Attribute Name	Туре	Required?	Description
message	String	Yes	XML validation error message. Expected values are as follows:
			If the response attribute returns 0, the message attribute returns the text "Valid Format."
			If the response attribute returns 1, the message attribute returns an error message that helps you to identify and troubleshoot the syntax problem. See XML Validation Error Messages on page 514 for example messages.
			If the response attribute returns 2, the message attribute is "System Error - Call Litle & Co."
			If the response attribute returns a value of 3, 4, or 5, the message attribute is "There is a problem with the Litle System. Contact support@litle.com."
			minLength = N/A maxLength = 512

### **Child Elements:**

One of the following required: authorizationResponse, authReversalResponse, captureResponse, forceCaptureResponse, captureGivenAuthResponse, creditResponse, echeckCreditResponse, echeckRedepositResponse, echeckSalesResponse, echeckVerificationResponse, registerTokenResponse, saleResponse, updateCardValidationNumOnTokenResponse, voidResponse, cancelSubscriptionResponse, updateSubscriptionResponse

# 4.138 litleRequest

This is the root element for all LitleXML Batch requests.

### **Parent Elements:**

None

### Attributes:

Attribute Name	Туре	Required?	Description
version	String	Yes	Defines the LitleXML schema version against which the XML is validated. The current version is 8.10, but you may be using an older version.  minLength = N/A maxLength = 10
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and must be specified as: http://www.litle.com/schema.  minLength = N/A maxLength = 38
id	String	No	A unique string to identify the session within the Litle system.  minLength = N/A maxLength = 25
numBatchRequests	Integer	Yes	Defines the total number of batchRequest children included in the litleRequest. If the litleRequest contains only an RFRRequest, then set this attribute to "0".

## **Child Elements:**

Required: authentication

One of the following required: batchRequest, RFRRequest

# 4.139 litleResponse

This is the root element for all LitleXML Batch responses.

## **Parent Elements:**

None

### **Attributes:**

Attribute Name	Туре	Required?	Description
version	String	Yes	Defines the LitleXML schema version against which the XML is validated. The current version is 8.10, but you may be using an older version.
			minLength = N/A maxLength = 10
xmlns	String	Yes	Defines the URI of the schema definition. This is a fixed location and must be specified as: http://www.litle.com/schema.
			minLength = N/A maxLength = 38
id	String	No	The response returns the same value submitted in the authorization transaction.
			minLength = N/A maxLength = 25
response	String	Yes	Indicates whether your XML syntax passed validation. Expected values are as follows:
			0 - XML validation succeeded.
			1 - XML validation failed. See the message attribute for more details.
			2 - Indicates that the submitted content was either improperly formatted XML or non-XML content.
			3 - Indicates that the submission contains empty or invalid credentials (user and password).
			4 - Indicates that the merchant has reached the maximum number of concurrent connections.
			5 - Indicates that Litle systems may have detected message content that violates certain restrictions.
			minLength = N/A maxLength = 3

Attribute Name	Туре	Required?	Description				
message	String	Yes	XML validation error message. Expected values are as follows:				
			If the response attribute returns 0, the message attribute returns the text "Valid Format."				
			If the response attribute returns 1, the message attribute returns an error message that helps you to identify and troubleshoot the syntax problem. See XML Validation Error Messages on page 514 for example messages.				
			If the response attribute returns 2, the message attribute is "System Error - Call Litle & Co."				
			If the response attribute returns a value of 3, 4, or 5, the message attribute is "There is a problem with the Litle System. Contact support@litle.com."				
			minLength = N/A maxLength = 512				
litleSessionId	Long	Yes	A unique value assigned by Litle to identify the session.				
			minLength = N/A maxLength = 19				

## **Child Elements:**

One of the following required: batchResponse, RFRResponse

# 4.140 litleSessionId

The litleSessionId element is a child of the RFRRequest element used to request the response from a previously submitted Batch. The value of the litleSessionId must be the same at the value returned in the corresponding attribute of the litleResponse.

<b>Type</b> = Long; $minLength = N/A$ ; $maxLength = 19$
Parent Elements:
RFRRequest
Attributes:
None
Child Elements:
None

## 4.141 litleToken

The litleToken element defines the value of the token. The system returns this value in XML responses when issuing new tokens to replace account numbers. The length of the token is the same as the length of the submitted account number for credit card tokens or a fixed length of seventeen (17) characters for eCheck account tokens.

**Type** = String; **minLength** = 13; **maxLength** = 25

### **Parent Elements:**

The litleToken element is an optional child of each listed parent element.

registerTokenResponse, tokenResponse, newCardTokenInfo, originalCardTokenInfo, originalToken, originalTokenInfo, newTokenInfo, updatedToken, token, echeckToken

### **Attributes:**

None

#### **Child Elements:**

## 4.142 litleTxnld

The litleTxnId element is used to identify transactions in the Litle system. The system returns this element in XML responses. You use it in various requests to reference the original transaction. For example, when you submit a Capture transaction, you include the litleTxnId for the associated Authorization.

**Type** = Long; minLength = N/A; maxLength = 19

#### **Parent Elements:**

This element is a required child of the following: accountUpdateResponse, authorizationResponse, authReversalResponse, capture, captureResponse, credit, creditResponse, captureGivenAuthResponse, echeckCredit, echeckCreditResponse, echeckRedeposit, echeckRedepositResponse, echeckSalesResponse, echeckVerificationResponse, echeckVoid, echeckVoidResponse, forceCapture, forceCaptureResponse, saleResponse, void, voidResponse, cancelSubscriptionResponse, updateSubscriptionResponse

NOTE:

Although the schema shows the litleTxnId element as an optional child of the authorization, echeckSale, echeckVerification, and sale transactions, under normal circumstances, merchants would never use this option.

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None

#### **Child Elements:**

# 4.143 merchantData

The merchantData element is an optional child element of several transaction types. You can use its children to track transactions based upon marketing campaigns, affiliates, or other user defined parameter.

# **Parent Elements:**

authorization, captureGivenAuth, credit, echeckCredit, echeckRedeposit, echeckSale, echeckVerification, forceCapture, sale

### Attributes:

None

# Child Elements (all optional):

affiliate, campaign, merchantGroupingId

# 4.144 merchantGroupingld

The merchantGroupingId element is an optional child element of the merchantData element. You can use it to track transactions based upon this user defined parameter.

Type = String; minLength = N/A; maxLength = 25

Parent Elements	nt Element	S
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merchantData

**Attributes:** 

None

**Child Elements:** 

# 4.145 merchantld

The merchantId element is a child of the accountUpdateFileRequestData element used when you request an Account Update file. This value is a unique string used to identify the merchant within the Litle system.

Type = String; minLength = N/A; maxLength = 50

## **Parent Elements:**

account Up date File Request Data

Attributes:

None

**Child Elements:** 

None

NOTE: Several elements use merchantId as an attribute, including batchRequest, batchResponse, and litleOnlineRequest.

# 4.146 message

The message element contains a brief definition of the response code returned for the transaction.

When it is a child of the extendedCardResponse element, the only values allowed are either "The account was closed," or "Contact the cardholder for updated information."

For a complete list of Litle & Co. response codes and associated messages, please refer to Appendix A.

Type = String; minLength = N/A; maxLength = 512

### Parent Elements:

authorizationResponse, captureResponse, captureGivenAuthResponse, creditResponse, echeckCreditResponse, echeckRedepositResponse, echeckSalesResponse, echeckVerificationResponse, echeckVoidResponse, extendedCardResponse, forceCaptureResponse, saleResponse, voidResponse, cancelSubscriptionResponse, updateSubscriptionResponse

None

### **Child Elements:**

# 4.147 middleInitial

The middleInitial element is a child of the billtoAddress element, which specifies the middle initial of the account holder. It is an optional element used for echeckVerification transactions.

 $\label{eq:Type} \textbf{Type} = String; \mbox{ minLength} = N/A; \mbox{ maxLength} = 1$   $\mbox{Parent Elements:}$   $\mbox{billToAddress}$ 

Attributes:

None

**Child Elements:** 

# 4.148 name

The name element defines the customer name in both the billToAddress and shipToAddress elements.

**Type** = String; minLength = N/A; maxLength = 100

### **Parent Elements:**

billToAddress, shipFromPostalCode

Note:

The name element is required for Echeck transactions. If you do not submit the customer name in an Echeck transaction, Litle returns Response Code 330 - Invalid Payment Type.

**Attributes:** 

None

**Child Elements:** 

# 4.149 newAccountInfo

The newAccountInfo element is an optional child of the accountUpdater element, which contains child elements providing the updated information for the submitted account.

## **Parent Elements:**

accountUpdater

### Attributes:

None

### **Child Elements:**

accType, accNum, routingNum

# **Example:** newAccountInfo Structure

```
<newAccountInfo>
  <accType>Account Type</accType>
  <accNum>New Account Number</accNum>
   <routingNum>New Routing Number</routingNum>
</newAccountInfo>
```

# 4.150 newCardInfo

The newCardInfo element is an optional child of the accountUpdater element, which contains child elements providing the updated information for the submitted card.

### Parent Elements:

accountUpdater

# **Attributes:**

None

## **Child Elements:**

type, number, expDate

# **Example:** newCardInfo Structure

```
<newCardInfo>
  <type>Card Type</type>
  <number>New Account Number</number>
  <expDate>New Expiration Date</expDate>
</newCardInfo>
```

# 4.151 newCardTokenInfo

The newCardTokenInfo element is an optional child of the accountUpdater element, which contains child elements providing the updated token information for the submitted token.

### Parent Elements:

accountUpdater

### Attributes:

None

## **Child Elements:**

litleToken, type, expDate, bin

# **Example:** newCardInfo Structure

# 4.152 newTokenInfo

The newTokenInfo element is an optional child of the accountUpdater element, which contains child elements providing the updated information for the submitted account. The system returns this information when processing a tokenized eCheck transactions and a change (NOC) is found against the account.

## **Parent Elements:**

accountUpdater

### Attributes:

None

# **Child Elements:**

accType, litleToken, routingNum

## **Example:** newAccountInfo Structure

```
<newTokenInfo>
  <accType>Account Type</accType>
  tlleToken>New Token Number</litleToken>
  <routingNum>New Routing Number</routingNum>
</newTokenInfo>
```

# 4.153 nextRecycleTime

The nextRecycleTime element is an optional child of the recycleAdvice element, which specifies the date and time (in GMT) recommended for the next recycle of the declined Authorization/Sale transaction. The format of the element is YYYY-MM-DDTHH:MM:SSZ. For example, 2011-04-21T11:00:00Z.

NOTE: Per the ISO8601 standard, the Z appended to the end of the date/time stamp indicates the time is GMT.

**Type** = dateTime; minLength = N/A; maxLength = 20

**Parent Elements:** 

recycleAdvice

Attributes:

None

**Child Elements:** 

# **4.154** number

The number element is defines the account number associated with the transaction or the new/old account number associated with an update. This is a required child of the card element for card-not-present transactions.

**Type** = String; **minLength** = 13; **maxLength** = 25

## **Parent Elements:**

accountInformation, card, newCardInfo, originalCardInfo

Attributes:

None

**Child Elements:** 

# 4.155 numberOfPayments

The numberOfPayments element is defines the number of payments in a recurring billing plan including the initial payment. The timing of subsequent charges is defined by the planCode element. This is a required child of the subscription element.

NOTE: At this time, for an open-ended subscription, please use a value of 99 for the numberOfPayments element.

**Type** = Integer; **minLength** = 1; **maxLength** = 99

Parent Elements:

subscription

Attributes:

None

**Child Elements:** 

None

NOTE: Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

# 4.156 orderDate

The orderDate element is an optional child of the enhancedData element, which specifies the date the order was placed. If you do not know the order date, do not include this element.

 $\textbf{Type} = Date; \, \textbf{Format} = YYYY\text{-}MM\text{-}DD$ 

**Parent Elements:** 

enhancedData

**Attributes:** 

None

**Child Elements:** 

# 4.157 orderld

The orderId element defines a merchant-assigned value representing the order in the merchant's system.

**Type** = String; **minLength** = N/A; **maxLength** = 25

### **Parent Elements:**

accountUpdate, accountUpdateResponse, authorization, authorizationResponse, captureResponse (Batch only), credit, creditResponse, captureGivenAuth, captureGivenAuthResponse, echeckCredit, echeckCreditResponse, echeckSale, echeckSalesResponse, echeckVerification, echeckVerificationResponse, forceCapture, forceCaptureResponse, sale, saleResponse, registerTokenRequest

### Attributes:

None

## **Child Elements:**

# 4.158 orderSource

The orderSource element defines the order entry source for the type of transaction.

**Type** = Choice (enum); minLength = N/A; maxLength = N/A

### **Parent Elements:**

authorization, credit, captureGivenAuth, echeckCredit, echeckSale, echeckVerification forceCapture, sale

## **Attributes:**

None

#### **Child Elements:**

None

## **Enumerations:**

Note:

If you submit the wrong orderSource value, Litle returns the response code 370 - Internal System Error - Contact Litle.

Bill Me Later transactions must use an orderSource of either ecommerce, mailorder, or telephone. Use of other types will cause the authorization to fail.

Enumeration	Description
3dsAuthenticated	Use this value only if you authenticated the cardholder via an approved 3DS system such as Visa VerifiedByVisa and MasterCard SecureCode. This value applies to Visa and MasterCard transactions only.
	NOTE: Your Litle Merchant Profile must be configured to process 3DS type payments and accept this value.
3dsAttempted	Use this value only if you attempted to authenticate the cardholder via an approved 3DS system such as Visa VerifiedByVisa and MasterCard SecureCode, but either the Issuer or cardholder is not participating in the 3DS program. This value applies to Visa and MasterCard transactions only.
	NOTE: Your Litle Merchant Profile must be configured to process 3DS type payments and accept this value.
ecommerce	The transaction is an Internet or electronic commerce transaction.
installment	The transaction in an installment payment.

Enumeration	Description
mailorder	The transaction is for a single mail order transaction.
recurring	The transaction is a recurring transaction. For Visa transactions, you can use this value for all transactions in a recurring stream including the initial transaction.
retail	The transaction is a Swiped or Keyed Entered retail purchase transaction.
telephone	The transaction is for a single telephone order.
recurringtel	(eCheck only) The transaction is a recurring eCheck transaction initiated via telephone

# 4.159 originalAccountInfo

The original Account Info element is an optional child of the account Updater element, which contains child elements providing the original information for the submitted account.

## **Parent Elements:**

accountUpdater

### Attributes:

None

### **Child Elements:**

accType, accNum, routingNum

# **Example:** originalAccountInfo Structure

```
<originalAccountInfo>
  <accType>Account Type</accType>
  tlleToken>Original Token Number</litleToken>
  <routingNum>Original Routing Number</routingNum>
</originalAccountInfo>
```

# 4.160 originalCard

The originalCard element is an optional child of the accountUpdateResponse element, which contains child elements providing the original information for the submitted card.

## **Parent Elements:**

account Up date Response

### Attributes:

None

### **Child Elements:**

type, number, expDate

```
<originalCard>
  <type>Card Type</type>
  <number>Old Account Number</number>
  <expDate>Old Expiration Date</expDate>
</originalCard>
```

# 4.161 originalCardInfo

The originalCardInfo element is an optional child of the accountUpdater element, which contains child elements providing the original information for the submitted card.

### Parent Elements:

account Up dater

# **Attributes:**

None

## **Child Elements:**

type, number, expDate

```
<originalCardInfo>
  <type>Card Type</type>
  <number>Old Account Number</number>
  <expDate>Old Expiration Date</expDate>
</originalCardInfo>
```

# 4.162 originalCardTokenInfo

The originalCardTokenInfo element is an optional child of the accountUpdater element, which contains child elements providing the original information for the submitted token.

### **Parent Elements:**

accountUpdater

### Attributes:

None

## **Child Elements:**

litleToken, type, expDate, bin

```
<originalCardTokenInfo>
  <litleToken>Old Token</litleToken>
  <type>Card Type</type>
  <expDate>Old Expiration Date</expDate>
  <bin>Old Card BIN</bin>
</originalCardTokenInfo>
```

# 4.163 originalToken

The originalToken element is an optional child of the accountUpdateResponse element, which contains child elements providing the original information for the submitted token.

## **Parent Elements:**

accountUpdateResponse

### Attributes:

None

### **Child Elements:**

type, number, expDate, bin

```
<originalToken>
  litleToken>Old Token Number</litleToken>
  <expDate>Old Expiration Date</expDate>
  <type>Card Type</type>
  <bin>Card BIN</bin>
</originalToken>
```

# 4.164 originalTokenInfo

The originalTokenInfo element is an optional child of the accountUpdater element, which contains child elements providing the original token information for the submitted account. The system returns this information when processing a tokenized eCheck transactions and a change (NOC) is found against the account.

### **Parent Elements:**

accountUpdater

### Attributes:

None

### **Child Elements:**

accType, litleToken, routingNum

# **Example:** originalAccountInfo Structure

```
<originalTokenInfo>
  <accType>Account Type</accType>
  tlletoken>Old Account Number</litletoken>
  <routingNum>Old Routing Number</routingNum>
</originalTokenInfo>
```

# 4.165 password

The password element is a required child of the authentication element. It is used in combination with the user element to authenticate that the message is from a valid source.

**Type** = String; minLength = N/A; maxLength = 20

## **Parent Elements:**

authentication

**Attributes:** 

None

**Child Elements:** 

# 4.166 payerld

The payerId element is a required child of the paypal element for all cases except for an Online Credit transaction, where you can choose between this element and the payerEmail element. This element specifies the Payer Id returned from PayPal.

NOTE: The value of the Litle & Co. <payerId> element must match the PAYERID value returned by the GetExpressCheckout call operation to PayPal.

**Type** = String; **minLength** = 1; **maxLength** = 17

**Parent Elements:** 

paypal

Attributes:

None

**Child Elements:** 

# 4.167 paypage

The paypage element defines Pay Page account information. It replaces the card or token elements in transactions using the Pay Page feature of the Litle Vault solution. When you submit the paypage element in a request, response messages will include token information.

## **Parent Elements:**

authorization, captureGivenAuth, credit, forceCapture, sale

## Attributes:

None

### **Child Elements:**

Required: paypageRegistrationId

Optional: expDate, cardValidationNum, type

NOTE:

Although the schema defines the expDate element as an optional child of the paypage element, you must submit a value for card-not-present transactions.

## **Example:** Example: paypage Structure

```
<paypage>
  <paypageRegistrationId>Registration ID from PayPage</paypageRegistrationId>
  <expDate>Expiration Date</expDate>
   <cardValidationNum>Card Validation Number</cardValidationNum>
   <type>Method of Payment</type>
</paypage></paypage>
```

# 4.168 paypageRegistrationId

paypage, registerTokenRequest

The paypageRegistrationId element is a required child of the paypage element, and specifies the Pay Page Registration ID generated by securepaypage.litle.com (Litle Pay Page). It can also be used in a Register Token Request to obtain a token based on Pay Page activity prior to submitting an Authorization or Sale transaction.

can also be used in a Register Token Request to obtain a token based on Pay Page activity prior submitting an Authorization or Sale transaction.

Type = String; minLength = N/A; maxLength = 512

Parent Elements:

Attributes:

None

**Child Elements:** 

# **4.169** paypal

The paypal element defines paypal account information. It replaces the card or token elements in transactions using PayPal as a payment method.

## **Parent Elements:**

authorization, sale

# Attributes:

None

## **Child Elements:**

Required: payerId, transactionId

Optional: token

# **Example:** paypal Structure

```
<paypal>
  <paypal>
   <payerId>PayPal Customer Identifier</payerId>
    <token>Token Value Returned</token>
    <transactionId>PayPal Transaction ID</transactionId>
</paypal>
```

# 4.170 payPalOrderComplete

The payPalOrderComplete element is an optional child of both the capture and sale elements, but is required to close a PayPal order. Set the value to **true** to close the order, when you have fulfilled the order and do not need to send any further auths or deposits against it. Set the value to **false** to keep the order open for additional auths or deposits.

<b>Type</b> = Boolean; <b>Valid values</b> = true or false
Parent Elements:
capture, sale
Attributes:
None
Child Elements:
None

# 4.171 phone

The phone element has two different uses in LitleXML depending upon the parent element. When used as a child of either the billToAddress or shipToAddress elements, it defines the customers phone number. When used as a child of the customBilling element, it defines the phone number of the merchant.

# 4.171.0.1 phone as a child of billToAddress and shipToAddress

The phone element defines the customer's phone number in both the billToAddress and shipToAddress elements.

shipToAddress elements.

Type = String; minLength = N/A; maxLength = 20

Parent Elements:

billToAddress, shipFromPostalCode

Attributes:

None

**Child Elements:** 

None

# 4.171.0.2 phone as a child of customBilling

The phone element defines the merchant's phone number. The string can only contain numbers (0 through 9). Letters and special characters are not allowed.

**Type** = String; minLength = N/A; maxLength = 13

**Parent Elements:** 

customBilling

Attributes:

None

**Child Elements:** 

# 4.172 planCode

The planCode element is the identifier of a defined recurring payment plan. You use it to specify the payment plan when submitting a recurring transaction to the Litle Recurring Engine. For example, there could be a define plan called **Monthly** that instructs the Recurring Engine to bill the consumer the same amount every month for the number of months defined by the numberOfPaymentsRemaining element. This element is a required child of the subscription element.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

**Type** = String; **minLength** = N/A; **maxLength** = 25

### **Parent Elements:**

subscription, updateSubscription

Attributes:

None

**Child Elements:** 

# 4.173 pos

The pos element contains child elements used to specify information required when submitting authorization, captureGivenAuth, credit, forceCapture, and sale transactions from point of sale terminals.

## **Parent Elements:**

authorization, captureGivenAuth, credit, forceCapture, sale

### Attributes:

None

## **Child Elements:**

capability, entryMode, cardholderId, terminalId

## **Example:** pos Structure

```
<pos>
     <capability>Capabilty Enumeration</capability>
     <entryMode>Entry Mode Enumeration</entryMode>
     <cardholderId>Cardholder ID Enumeration</cardholderId>
     <terminalId>1234567890</terminalId>
</pos>
```

# 4.174 postDate

The postDate element defines the date the transaction was posted. The format is YYYY-MM-DD. It occurs only in response to Online transactions.

NOTE:

Although the schema defines this element as optional in all cases except for the voidResponse parent element, the system returns it in the response for all Online transactions.

**Type** = Date; minLength = N/A; maxLength = 10

### **Parent Elements:**

authorizationResponse, authReversalResponse, captureResponse, captureGivenAuthResponse, creditResponse, echeckCreditResponse, echeckSalesResponse, echeckVerificationResponse, forceCaptureResponse, saleResponse, voidResponse

Attributes:

None

**Child Elements:** 

# 4.175 postDay

The postDay element is an optional child of the accountUpdateFileRequestData element that defines the date you submitted the Account Updater request. The format is YYYY-MM-DD.

NOTE: This is also the same date that Litle & Co. created the Account Updater acknowledgement file.

**Type** = Date; minLength = N/A; maxLength = 10

## **Parent Elements:**

account Up date File Request Data

Attributes:

None

**Child Elements:** 

# 4.176 preapprovalNumber

The preapprovalNumber element is an optional child of the billMeLaterRequest element, which you use to specify the pre-approval number issued by Bill Me Later. If you include this

element, the value must be 16 digits in length. Do not include this element to indicate there is no pre-approval. Internal pre-approval is indicated by using 1 as the first digit. **Type** = String; **minLength** = 13; **maxLength** = 25 **Parent Elements:** billMeLaterRequest

Attributes:

None

**Child Elements:** 

# **4.177** prepaid

The prepaid element is an optional child of the filtering element. How you choose to implement the Prepaid Filtering feature determines the use of the prepaid element. If your configuration filters all prepaid card transactions, you can disable the feature on selected

transactions by including the prepaid element with a setting of <b>false</b> . If your configuration filters prepaid card transactions on a per transaction basis, you enable the filtering on a selected transaction by including the prepaid element with a setting of <b>true</b> .
Type = Boolean; Valid Values = true or false
Parent Elements:
filtering

**Attributes:** 

None

**Child Elements:** 

# 4.178 prepaidCardType

The prepaidCardType element is an optional child of the enhancedAuthResponse element, which specifies the type of prepaid card submitted in the Authorization or Sale transaction. For example, a few of the possible values are: GIFT, PAYROLL, and GENERAL\_PREPAID

example, a few of the possible values are: GIFT, PAYROLL, and GENERAL\_PREPAID

Type = String; minLength = N/A; maxLength = 50

Parent Elements:

fundingSource

Attributes:

None

**Child Elements:** 

# 4.179 processingInstructions

The processingInstructions element contains a child element that allows you to specify whether or not the system performs velocity checking on the transaction.

Parent Elements: (optional for all)

authorization, capture, captureGivenAuth, credit, forceCapture, sale, void

Attributes:

None

**Child Elements:** 

bypassVelocityCheck

Note:

Please consult your Customer Experience Manager for additional information concerning Velocity Checking.

### **Example:** processing Instructions Structure

cprocessingInstructions>

<bypassVelocityCheck>true or false/bypassVelocityCheck>

</processingInstructions>

# 4.180 productCode

The productCode element is an optional child of the lineItemData element, which specifies the product code of the purchased item. Although an optional element, it is required by Visa and MasterCard when specifying line item data.

Type = String; minLength = 1; maxLength = 12

Parent Elements:
lineItemData

Attributes:
None

Child Elements:
None

# 4.181 quantity

The quantity element is an optional child of the lineItemData element, which specifies the number of items purchased. Although an optional element, it is required by Visa and MasterCard when specifying line item data. The value must be greater than zero, but no more than 12 digits not including the decimal point.

NOTE: If you accidentally omit the quantity element, our system will submit the transaction using a default value of 1.

**Type** = Decimal; **minInclusive** = 0; **totalDigits** = 12

**Parent Elements:** 

lineItemData

Attributes:

None

**Child Elements:** 

# 4.182 recurringRequest

The recurringRequest element is the parent of several child element that define the number of payments and plan type of recurring transaction to be handled by the Litle Recurring Engine. It is an optional child of the Sale transaction.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

#### Parent Elements:

authorization, sale

#### Attributes:

None

#### **Child Elements:**

subscription

### **Example:** recurringRequest Structure

# 4.183 recurringResponse

The recuringResponse element is the parent element for the subscriptionId, responseCode, responseMessage, and recurringTxnId elements associated with a requested recurring payment. The system returns this element only when the sale transaction includes a recurringRequest element.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

#### **Parent Elements:**

authorizationResponse, saleResponse

#### Attributes:

None

#### **Child Elements:**

subscriptionId, responseCode, responseMessage, recurringTxnId

### **Example:** recurringResponse Structure

```
<recurringResponse>
    <subscriptionId>1234567890</subscriptionId>
    <responseCode>Response Code</responseCode>
    <responseMessage>Response Message</responseMessage>
    <recurringTxnId>1234567890123456</recurringTxnId>
</recurringResponse>
```

# 4.184 recurringTxnld

The recurringTxnId element is an optional child of the **recurringResponse** element used to identify record of recurring, scheduled transactions.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

**Type** = Long; minLength = N/A; maxLength = 19

#### **Parent Elements:**

recurring Response, litle Internal Recurring Request

**Attributes:** 

None

**Child Elements:** 

# 4.185 recycleAdvice

The recyclingAdvice element contains a two child elements that either specifies the date and time (in GMT) recommended for the next recycle of the declined Authorization/Sale transaction or indicates that there is no additional recycling advice. The two children are mutually exclusive.

Parent Elements: (optional for all)

recycling

Attributes:

None

**Child Elements:** 

nextRecycleTime, recycleAdviceEnd

NOTE:

The recycleAdvice element contains either a nextRecycleTime or recycleAdviceEnd element, but not both.

### Example: recycleAdvice Structure - with recommended Date:Time

```
<recycleAdvice>
  <nextRecycleTime>2011-04-15T12:00:00</nextRecycleTime>
</recycleAdvice>
```

### **Example:** recycleAdvice Structure - with end message

```
<recycleAdvice>
  <recycleAdviceEnd>End of Advice</recycleAdviceEnd>
</recycleAdvice>
```

# 4.186 recycleAdviceEnd

The recycleAdviceEnd element is an optional child of the recycleAdvice element and signifies that no further recycling recommendations are available.

**Type** = String; minLength = N/A; maxLength = 20

### **Parent Elements:**

recycleAdvice

**Attributes:** 

None

**Child Elements:** 

# 4.187 recycleBy

The recycleBy element is an optional child of the recyclingRequest element and determines the use of the Litle Recycling Engine/Recycling Advice. The default setting is Litle, so omitting this element is the same as submitting a value of Litle.

#### Note:

Also, if your Litle Merchant Profile includes a preset percentage split of transactions between merchant and Litle controlled, then settings of Merchant and Litle are ignored; you can still use a a setting of None to exclude the transaction.

Also, although the default setting is normally Litle, it can be altered in your merchant profile to a setting of Merchant.

**Type** = String (Enum); minLength = N/A; maxLength = N/A

#### Parent Elements:

recyclingRequest

Attributes:

None

**Child Elements:** 

None

### **Enumerations:**

Enum	Description
Merchant	This setting indicates that the merchant controls the recycling of the transaction. For A/B comparison testing, transactions using this setting will be counted as merchant controlled.
	After setting this value in the initial transaction, subsequent transactions should have same value. Any different value will be ignored.
Litle	This setting indicates either that the Litle Recycling Engine controls the recycling of the transaction or the recycling of the transaction will follow the Recycling Advice returned in the response message. For A/B comparison testing, transactions using this setting will be counted as Litle controlled.
	After setting this value in the initial transaction, subsequent transactions should have same value. Any different value will be ignored.
None	For A/B comparison testing, transactions using this setting are excluded from all counts. These transactions will not be counted as either merchant or Litle controlled.

# 4.188 recycleEngineActive

The recycleEngineActive element is an optional child of the recycling element that indicates whether or not the engine is recycling the declined transaction. This element is returned only if you are using the Litle Recycling Engine.

Type = Boolean; Valid values = true or false

Parent Elements:
recycling

Attributes:
None

Child Elements:
None

# 4.189 recycleId

The recycleId element is an optional child of the recyclingRequest element. Merchants can use this identifier as part of the transaction signature used to track the recycling of a transaction. This element is an alternative to using the orderId element as part of the transaction signature.

signature.
Type = String; $minLength = N/A$ ; $maxLength = 25$
Parent Elements:
recyclingRequest

**Attributes:** 

None

**Child Elements:** 

# 4.190 recycling

The type element has two uses in LitleXML depending upon the parent. When used as a child of either the authorizationResponse or saleResponse elements, the recycling element contains a child element that specify either the recommended date and time for the next recycling attempt for the declined Authorization/Sale transaction or a statement that no further advice is available for merchants using the Recycling Advice feature. For merchants using the Recycling Engine feature there is a child element that specifies whether or not the engine is recycling the declined transaction.

When used as a child of the voidResponse, the recycling element contains a child providing the Litle transaction id of the Credit transaction issued. This occurs only if a Void transaction is used to halt the recycling of a transaction by the recycling and the transaction has already been approved and captured (see Using Void to Halt Recycling Engine on page 46).

# 4.190.1 recycling Element as a Child of authorizationResponse or saleResponse

The recycling element contains child elements indicating the next time to recycle, end of recycling advice, or that the Recycling Engine is active.

#### Parent Elements:

authorizationResponse, saleResponse

#### Attributes:

None

#### **Child Elements:**

recycleAdvice, recycleEngineActive

NOTE:

The recycleAdvice element contains either a nextRecycleTime or recycleAdviceEnd element, but not both.

### **Example:** recycling Structure - with recommended Date:Time

```
<recycling>
  <recycleAdvice>
     <nextRecycleTime>2011-04-15T12:00:00</nextRecycleTime>
     </recycleAdvice>
</recycling>
```

### **Example:** recycling Structure - with end message

```
<recycling>
  <recycleAdvice>
     <recycleAdviceEnd>End of Advice</recycleAdviceEnd>
  </recycleAdvice>
</recycling>
```

### **Example:** recycling Structure - with engine active flag

```
<recycling>
  <recycleEngineActive>true or false</recycleEngineActive>
</recycling>
```

# 4.190.2 recycling Element as a Child of voidResponse

The recycling element in an optional child of the voidResponse element and contains a child providing the Litle transaction id of the Credit transaction issued. This element is present in the Void response only under the following circumstances (see Using Void to Halt Recycling Engine on page 46):

- You submitted a Void transaction to halt the recycling of a declined Sale transaction by the Recovery/Recycling Engine.
- The Sale transaction has already been approved and captured.
- Your Recovery/Recycling Engine configuration enables automatic refunds.
- The Litle system has successfully submitted a Credit transaction on your behalf.

#### **Parent Elements:**

voidResponse

#### Attributes:

None

#### **Child Elements:**

creditLitleTxnId

### Example: recycling Structure - child of voidResponse

```
<recycling>
  <creditLitleTxnId>1234567890123456789</creditLitleTxnId>
</recycling>
```

# 4.191 recyclingRequest

The recyclingrequest element is an optional child of the authorization and sale transactions, which contains a child element that specifies who is responsible for recycling the transaction. It also contains an optional element for an identifier assigned by the merchant to track the recycling of the transaction. This element only applies to merchants using either the Litle Recycling Engine or Recycling Advice.

#### **Parent Elements:**

authorization, sale

#### Attributes:

None

#### **Child Elements:**

recycleBy, recycleId

### **Example:** recyclingRequest Structure

```
<recyclingRequest>
  <recycleBy>Merchant or Litle or None</recycleBy>
  <recycleId>abcdef1234567890</recycleId>
</recyclingRequest>
```

# 4.192 registerTokenRequest

The registerTokenRequest element is the parent element for the Register Token transaction. You use this transaction type when you wish to submit an account number for tokenization, but there is no associated payment transaction.

You can use this element in either Online or Batch transactions.

Note:

When submitting registerTokenRequest elements in a batchRequest, you must also include a numTokenRegistrations= attribute in the batchRequest element.

#### Parent Elements:

litleOnlineRequest, batchRequest

#### Attributes:

Туре	Required?	Description		
String	No	A unique identifier assigned by the presenter and mirrored back in the response.		
		minLength = N/A maxLength = 25		
String	No	A value assigned by the merchant to identify the consumer.		
		minLength = N/A maxLength = 50		
String	Yes	Required attribute defining the merchant sub-group in the user interface where this transaction displays. Also see Coding for Report Groups on page 10 for information.  minLength = 1 maxLength = 25		
	String String	String No String No		

### **Child Elements:**

Required: either accountNumber, echeckForToken, or paypageRegistrationId

Optional: orderId, cardValidationNum

Note:

The use of the cardValidationNum element in the registertokenRequest only applies when you submit an accountNumber element.

# 4.193 registerTokenResponse

The registerTokenResponse element is the parent element for the Litle response to registerTokenRequest transactions. You receive this transaction type in response to the submission of an account number for tokenization in a registerTokenRequest transaction.

#### **Parent Elements:**

litleOnlineResponse, batchResponse

#### Attributes:

Attribute Name	Туре	Required?	Description		
id	String	No	The response returns the same value submitted in the registerTokenRequest transaction.		
			minLength = N/A maxLength = 25		
customerId	String	No	The response returns the same value submitted in the registerTokenRequest transaction.		
			minLength = N/A maxLength = 50		
reportGroup	String	Yes	The response returns the same value submitted in the registerTokenRequest transaction.		
			minLength = 1 maxLength = 25		

### **Child Elements:**

Required: litleTxnId, response, message, responseTime

Optional: eCheckAccountSuffix, orderId, litleToken, bin, type

# 4.194 reloadable

The reloadable element is an optional child of the fundingSource element and defines whether the prepaid card is reloadable.

**NOTE:** This element is never returned for American Express card transaction.

**Type** = String (Enum); **Enumerations** = YES, NO, or UNKNOWN

**Parent Elements:** 

fundingSource

Attributes:

None

**Child Elements:** 

# 4.195 residenceStatus

The residenceStatus element is an optional child of the customerInfo element and defines the type of domicile in which the customer resides. It is used in combination with several other elements to provide required information for some Bill Me Later transactions.

**Type** = String (Enum); **Enumerations** = Own, Rent, or Other

Type – String (Enum), Enumerations – Own, Rent, of Other
Parent Elements:
customerInfo
Attributes:

**Child Elements:** 

None

# 4.196 response

The response element contains a three digit numeric code which specifies either that the transaction is approved (000 code) or declined. The message element provides a brief definition of the response code.

For a complete list of Litle & Co. response codes and associated messages, please refer to Appendix A.

**Type** = String; minLength = N/A; maxLength = 3

#### **Parent Elements:**

authorizationResponse, authReversalResponse, captureResponse, captureGivenAuthResponse, creditResponse, echeckCreditResponse, echeckRedepositResponse, echeckSalesResponse, echeckVerificationResponse, echeckVoidResponse, forceCaptureResponse, registerTokenResponse saleResponse, voidResponse, cancelSubscriptionResponse, updateSubscriptionResponse

None

#### **Child Elements:**

# 4.197 responseCode

The responseCode element contains a three digit numeric code which along with the responseMessage element specifies either acceptance by the Litle Recurring Engine or the reason the recurring Engine was unable to schedule subsequent payments.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

**Type** = String; minLength = N/A; maxLength = 3

**Parent Elements:** 

recurringResponse

Attributes:

None

**Child Elements:** 

# 4.198 responseMessage

The responseMessage element contains a brief definition of the **responseCode** returned for the recurring transaction.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

**Type** = String; **minLength** = N/A; **maxLength** = 512

**Parent Elements:** 

recurringResponse

**Attributes:** 

None

**Child Elements:** 

# 4.199 responseTime

The responseTime element provides a date/time stamp of the response. The format of the element is YYYY-MM-DDTHH:MM:SS. For example, 2009-12-21T11:37:04.

**Type** = dateTime; minLength = N/A; maxLength = 19

#### **Parent Elements:**

authorizationResponse, authReversalResponse, captureResponse, captureGivenAuthResponse, creditResponse, echeckCreditResponse, echeckRedepositResponse, echeckSalesResponse, echeckVerificationResponse, echeckVoidResponse, forceCaptureResponse, registerTokenResponse saleResponse, voidResponse, cancelSubscriptionResponse, updateSubscriptionResponse

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None

### **Child Elements:**

# 4.200 RFRRequest

The RFRRequest element is an optional child of a litleRequest element. You can use this type of request in one of two ways.

- To request a session response from a previously processed litleRequest, include the litleSessionId child. The resulting RFR response will duplicate the original session response (Authorization, Credit, Capture, or Sale response) associated with the litleSessionId. The session ID returned in the response will be the session ID of the original session.
- To request an Account Updater completion response file, include the accountUpdateFileRequestData element. If the completion file is ready, it is returned. If the completion file is not ready, you receive an RFRResponse message with the response attribute set to 1 and the message attribute reading, "The account Update file is not ready yet. Please try again later."

### **Parent Elements:**

litleRequest

#### Attributes:

None

Child Elements: (Choice of)

litleSessionId or accountUpdateFileRequestData

### **Example: RFRRequest Structure - Batch**

```
<RFRRequest>
  litleSessionId>Session ID</litleSessionId>
</RFRRequest>
```

#### **Example: RFRRequest Structure - Account Updater**

```
<RFRRequest>
  <accountUpdateFileRequestData>
        <merchantId>Merchant ID</merchantId>
        <postDay>Post Date</postDay>
        </accountUpdateFileRequestData>
</RFRRequest>
```

# 4.201 RFRResponse

The RFRResponse element is an optional child of a litleResponse element returned in response to a RFRRequest.

### **Parent Elements:**

litleResponse

### Attributes:

Attribute Name	Туре	Required?	Description	
response	String	Yes	The RFR Response Code indicating the result of the RFR request.  minLength = N/A maxLength = 3	
message	String	Yes	A brief definition of the response code returned for this transaction.  minLength = N/A maxLength = 512	

### **Child Elements:**

# 4.202 routingNum

The routingNum element is a required child of the echeck, originalAccountInfo, and newAccountInfo elements defining the routing number of the Echeck account.

**Type** = String; **minLength** = 9; **maxLength** = 9

### **Parent Elements:**

echeck, newAccountInfo, originalAccountInfo, newTokenInfo, originalTokenInfo

Attributes:

None

**Child Elements:** 

None

NOTE: If you submit an invalid routing number, Litle returns the XML Response Code 900 - Invalid Bank Routing Number.

RxAmount LitleXML Elements

# 4.203 RxAmount

The RxAmount element is an optional child of the healthcareAmounts element and defines the healthcare amount used for the purchased medications. The decimal is implied. Example: 500 = \$5.00.

**Type** = Integer; totalDigits = 8

**Parent Elements:** 

Optional: healthcareAmounts

Attributes:

None

**Child Elements:** 

### 4.204 sale

The sale element is the parent element for all Sale transactions. A Sale transaction is a combination Authorization and Capture transaction. You can use this element in either Online or Batch transactions.

### **Parent Elements:**

litleOnlineRequest, batchRequest

#### Attributes:

Attribute Name	Туре	Required?	Description		
id	String No		A unique identifier assigned by the presenter and mirrored back in the response. This attribute is also used for Duplicate Transaction Detection. For Online transactions, omitting this attribute, or setting it to a null value (id=""), disables Duplicate Detection for the transaction.		
			Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.		
			minLength = N/A maxLength = 25		
customerId	String	No	A value assigned by the merchant to identify the consumer.		
			minLength = N/A maxLength = 50		
reportGroup	portGroup String Yes		Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.		
			minLength = 1 maxLength = 25		

### **Child Elements:**

Required: orderId, amount, orderSource, (choice of) card, paypal, paypage, or token

NOTE: The cardholderAuthentication child element is required only for 3-D Secure transactions and for BML ecommerce transactions.

Optional: litleTxnId, customerInfo, billToAddress, shipToAddress, billMeLaterRequest, cardholderAuthentication, customBilling, taxType, enhancedData, processingInstructions, pos, payPalOrderComplete, amexAggregatorData, allowPartialAuth, healthcareIIAS, merchantData,

LitleXML Elements sale

recycling Request, fraud Filter Override, surcharge Amount, recurring Request,litleInternalRecurringRequest, debtRepayment

### Note:

The fraudCheck element has been deprecated; use the cardholderAuthentication element instead.

Also, the enhancedData element and two of its child elements, deliveryType and shippingAmount, are required for Bill Me Later Authorizations.

# 4.205 saleResponse

The saleResponse element is the parent element for information returned in response to a Sale transaction. It can be a child of either a litleOnlineResponse element or a batchResponse element.

### **Parent Elements:**

litleOnlineResponse, batchResponse

#### Attributes:

Attribute Name	Туре	Required?	Description		
id	String	No	The response returns the same value submitted in the Sale transaction.		
			minLength = N/A maxLength = 25		
customerId	String	No	The response returns the same value submitted in the Sale transaction.		
			minLength = N/A maxLength = 50		
reportGroup	String	Yes	The response returns the same value submitted in the Sale transaction.		
			minLength = 1 maxLength = 25		
duplicate	Boolean	No	If the request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate flag set to true and the entire original response.		
			<b>Note:</b> This attribute applies only to Online transaction responses.		

### **Child Elements:**

Required: litleTxnId, orderId, response, responseTime, message

Optional: postDate, cardProductId (see Note below), authCode, authorizationResponseSubCode (see Note below), approvedAmount, accountInformation, fraudResult, billMeLaterResponseData, tokenResponse, enhancedAuthResponse, accountUpdater, recycling, recurringResponse

# NOTE: The postDate child element is returned only in responses to Online transactions.

The cardProductId element returns a raw code referencing the card type. Please consult your Litle Customer Experience Manager for additional information.

The  ${\tt authorizationResponseSubCode}$  element is not used at this time.

### 4.206 salesTax

The salesTax element defines the amount of sales tax included in the transaction amount. Although the schema defines it as an optional child of the enhancedData element, it is required to receive the best interchange rate for Level II and Level III corporate purchases. The decimal is implied. Example: 500 = \$5.00.

Note:

For a non-taxable transaction, use 0 as the value. In this case you must also set the taxExempt element to true.

If you provide detailTax data, the salesTax should be the sum of the detailTax.

**Type** = Integer; totalDigits = 8

**Parent Elements:** 

enhancedData

Attributes:

None

**Child Elements:** 

# 4.207 sellerId

The sellerId element is a required child of the amexAggregatorData element, which defines the Seller Id as assigned by American Express.

**Type** = String; **minLength** = 1; **maxLength** = 16

### **Parent Elements:**

amexAggregatorData

Attributes:

None

**Child Elements:** 

# 4.208 sellerMerchantCategoryCode

The sellerMerchantCategoryCode element is a required child of the amexAggregatorData element, which defines the Merchant Category Code as assigned by American Express.

**Type** = String; **minLength** = 1; **maxLength** = 4

### **Parent Elements:**

amexAggregatorData

Attributes:

None

**Child Elements:** 

# 4.209 shipFromPostalCode

The shipFromPostalCode element defines the postal code from which the product ships in the enhancedData element.

**Type** = String; minLength = N/A; maxLength = 20

NOTE:

Although the schema specifies the maxLength of the <shipFromPostalCode> element as 20 characters, in practice you should never exceed 10 characters in your submissions.

### **Parent Elements:**

enhancedData

**Attributes:** 

None

**Child Elements:** 

None

# 4.210 shippingAmount

The shippingAmount element defines shipping cost for the order. Although the schema defines it as an optional child of the enhancedData element, it is required by Visa for Level III interchange rates. The decimal is implied. Example: 500 = \$5.00.

This element is also required for Bill Me Later transactions.

Type = Integer; totalDigits = 8					
Parent Elemen	ts:				
enhancedData					
Attributes:					
None					
Child Elements	<b>:</b> :				

# 4.211 shipToAddress

The shipToAddress element contains several child elements that define the postal mailing address (and telephone number) used for shipping purposes.

#### **Parent Elements:**

authorization, captureGivenAuth, sale

#### Attributes:

None

**Child Elements: (all Optional)** 

name, addressLine1, addressLine2, addressLine3, city, state, zip, country, email, phone

#### **Example: shipToAddress Structure**

```
<shipToAddress>
  <name>Customer's Full Name</name>
  <addressLine1>Address Line 1</addressLine1>
  <addressLine2>Address Line 2</addressLine2>
  <addressLine3>Address Line 3</addressLine3>
  <city>City</city>
  <state>State Abbreviation</state>
  <zip>ZIP Code</zip>
  <country>Country Code</country>
  <email>Email Address</email>
  <phone>Telephone Number</phone>
</shipToAddress>
```

### 4.212 ssn

The ssn element is an optional child of the customerInfo element. It is used in combination with several other elements to provide required information for some Bill Me Later transactions.

**Type** = Pattern; **minLength** = 4 (last four digits of SSN); **maxLength** = 9 (full SSN)

NOTE:

In order for a BML transaction to succeed, you must include this element if:

· the customer does not have a BML account

or

 the customer has a BML account, but the account has not been authenticated.

You do not need to include this element if the BML account has been authenticated.

<b>Parent</b>	Eler	nents:
---------------	------	--------

customerInfo

**Attributes:** 

None

**Child Elements:** 

### 4.213 startDate

The startDate element is a required child of the subscription element, which specifies the date the recurring billing should begin.

Type = Date; Format = YYYY-MM-DD

NOTE:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

#### **Parent Elements:**

subscription

Attributes:

None

**Child Elements:** 

### 4.214 state

The state element defines the customer's state name in the billToAddress, shipToAddress, taxBilling and elements.

**Type** = String; minLength = N/A; maxLength = 2

NOTE:

Although the schema defines the maxLength for this element as 30, the best practice is to use the 2 character abbreviation. When submitting an eCheck Verification transaction, you must use the 2 character abbreviation or the transaction will be rejected with a 370 reason code.

#### **Parent Elements:**

billToAddress, shipToAddress, taxExempt

Attributes:

None

**Child Elements:** 

# 4.215 subscription

The subscription element is a required child of the recurringRequest element and the parent of several child element that define information about the recurring transaction stream to be handled by the Litle Recurring Engine.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

#### Parent Elements:

recurringRequest

#### Attributes:

None

#### **Child Elements (required):**

planCode, startDate

#### Child Elements (optional):

numberOfPayments, amount

#### **Example:** subscription Structure

```
<subscription>
  <planCode>Plan Id</planCode>
   <numberOfPayments>1 to 99</numberOfRemianingPayments>
   <startDate>Start Date of recurring Cycle</startDate>
    <amount>Amount of Recurring Payment</amount>
</subscription>
```

# 4.216 subscriptionId

The subscriptionId element is a required child of the recurringResponse element and defines the Litle assigned identifier for the sequence of recurring billing transactions. You also use this element in the updateSubscription and cancelSubscription transactions to identify the subscription for changes/cancellation.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

**Type** = Long; minLength = N/A; maxLength = 19

#### Parent Elements:

recurringResponse, litleInternalRecurringRequest, cancelSubscription, updateSubscription, updateSubscriptionResponse, cancelSubscriptionResponse

#### Attributes:

None

#### **Child Elements:**

# 4.217 surchargeAmount

The surchargeAmount element defines the amount of the surcharge applied to the transaction by the merchant. Supply the value in cents without a decimal point. For example, a value of 400 signifies \$4.00.

**Type** = Integer; **totalDigits** = 12

#### Note:

Use of the surchargeAmount element applies to Visa or MasterCard credit card payments only. Also, you are required to notify the card networks and Litle & Co. of your intent to applying surcharges at least 30 days prior to implementing the surcharges. Please consult your Litle Customer Experience Manager if you have additional questions.

Although included in the LitleXML V8.17 schema released on March 20, 2013, the use of the surcharge element will not be supported in the production environment until April 19, 2013.

#### Parent Elements:

authorization, authReversal, capture, credit, captureGivenAuth, forceCapture, sale

Attributes:

None

**Child Elements:** 

### 4.218 taxAmount

The taxAmount element is a required child of the detailTax element and an optional child of the lineItemData element and defines the detail tax amount on the purchased good or service. The decimal is implied. Example: 500 = \$5.00.

**Type** = Integer; totalDigits = 8

#### **Parent Elements:**

Required: detailTax

Optional: lineItemData

Note:

If you include taxAmount as a child of lineItemData along with detailTax, the lineItemData taxAmount should be the sum of the taxAmount children from detailTax children.

#### Attributes:

None

#### **Child Elements:**

# 4.219 taxExempt

The taxExempt element is an optional child of the enhancedData element and specifies whether or not the transaction is exempt from sales tax. If you do not include this element, the value defaults to **false**.

NOTE: You must set this element to true, if you set the salesTax element to 0.

**Type** = Boolean; **Valid values** = true or false

**Parent Elements:** 

enhancedData

**Attributes:** 

None

**Child Elements:** 

# 4.220 taxIncludedInTotal

The taxIncludedInTotal element is an optional child of the detailTax element and defines whether or not the tax is included in the total purchase amount.

Type = Boolean; Valid Values = true or false

**Parent Elements:** 

detailTax

**Attributes:** 

None

**Child Elements:** 

taxRate LitleXML Elements

## 4.221 taxRate

The taxRate element is an optional child of the detailTax element and defines the tax rate applied to this specific taxable amount.

**Type** = Decimal; **totalDigits** = 5

**Parent Elements:** 

detailTax

**Attributes:** 

None

**Child Elements:** 

# **4.222** taxType

The taxType element is an optional child of several transaction types that designates the transaction as either a convenience fee or tax payment for merchants using the Visa Tax Payment Program or the MasterCard Convenience Fee Program.

**Type** = String (enum); **minLength** = N/A; **maxLength** = 1; **Valid Values** = payment or fee

#### **Parent Elements:**

authorization, captureGivenAuth, credit, forceCapture, sale

Attributes:

None

**Child Elements:** 

# 4.223 taxTypeldentifier

The taxTypeIdentifier element is an optional child of the detailTax element and defines the type of tax collected on this specific tax amount. If the tax type identifier is unknown, do not include this element.

**Type** = String (Enum); **minLength** = N/A; **maxLength** = 2

**Parent Elements:** 

detailTax

Attributes:

None

**Child Elements:** 

None

#### **Enumerations:**

Enumeration	Description	
00	Unknown	
01	Federal/National Sales Tax	
02	State Sales Tax	
03	City Sales Tax	
04	Local Sales Tax	
05	Municipal Sales Tax	
06	Other Tax	
10	Value Added Tax (VAT)	
11	Goods and Services Tax (GST)	
12	Provincial Sales Tax (PST)	
13	Harmonized Sales Tax (HST)	
14	Quebec Sales Tax (QST)	
20	Room Tax	
21	Occupancy Tax	
22	Energy Tax	

## 4.224 terminalld

The terminalId element is an optional child of the pos element and defines the identifier of the terminal used at the point of sale.

**Type** = String; **minLength** = N/A; **maxLength** = 10

**Parent Elements:** 

pos

Attributes:

None

**Child Elements:** 

## 4.225 termsAndConditions

The termsAndConditions element is an optional child of the billMeLaterRequest element and defines the specific lending terms of the BML account.

Note:

The Bill Me Later documentation requires you use code 12103 for Call Center purchases and code 32103 for Web purchases.

Please refer to your Bill Me Later documentation for additional information.

**Type** = Integer; totalDigits = 5

**Parent Elements:** 

billMeLaterRequest

Attributes:

None

**Child Elements:** 

### 4.226 token

The token element has two uses depending upon whether the element concerns a Litle generated token (for tokenized merchants) or a PayPal generated token.

## 4.226.1 token (Litle generated card number replacement)

In this case, the token element replaces the card element in tokenized card transactions or the echeck element in eCheck transactions, and defines the tokenized payment card/account information.

#### Parent Elements:

authorization, captureGivenAuth, credit, forceCapture, sale, accountUpdate

#### Attributes:

None

#### **Child Elements:**

Required: litleToken

Optional: expDate, cardValidationNum, routingNum, accType

# 4.226.2 token (PayPal generated)

In this case, the token element is the token generated by PayPal.

Type = String; minLength = N/A; maxLength = N/A

#### Parent Elements:

paypal

#### Attributes:

None

#### **Child Elements:**

# 4.227 tokenMessage

The tokenMessage element provides a short, human-readable explanation of the tokenResponseCode (see Table 4-1).

Type = String; minLength = N/A; maxLength = N/A

#### **Parent Elements:**

tokenResponse

#### **Attributes:**

None

#### **Child Elements:**

# 4.228 tokenResponse

The tokenResponse element is the parent element for several children defining the registered token, as well the either card type and BIN, or last three characters of the account number in the case of eChecks. This element appears in the response only if a tokenized merchant submits card or eCheck account information in the transaction request.

#### Parent Elements:

authorizationResponse, captureGivenAuthResponse, creditResponse, echeckCreditResponse, echeckRedepositResponse, echeckSalesResponse, echeckVerificationResponse, forceCaptureResponse, saleResponse

#### Attributes:

None

#### **Child Elements:**

Required: tokenResponseCode, tokenMessage

Optional: litleToken, type, bin, eCheckAccountSuffix

#### **Example: tokenResponse Structure**

```
<tokenResponse>
  tlleToken>Litle Token</litleToken>
  <tokenResponseCode>Response Code</tokenResponseCode>
  <tokenMessage>Response Message</tokenMessage>
  <type>Method of Payment</type>
  <bin>BIN</bin>
  <eCheckAccountSuffix>Last 3 of Account Number</eCheckAccountSuffix> (returned for eCheck account tokens)

</tokenResponse>
```

# 4.229 tokenResponseCode

The tokenResponseCode element provides a 3-digit code (see Table 4-1) indicating the results of a transaction involving the conversion or attempted conversion of an account number to a token. The tokenMessage element contains a short, human-readable explanation of the tokenResponseCode.

**Type** = String; minLength = N/A; maxLength = 3

#### **Parent Elements:**

tokenResponse

#### Attributes:

None

#### **Child Elements:**

**TABLE 4-1** tokenResponseCode and tokenMessage Values

Code	Message	
801	Account number was successfully registered	
802	Account number was previously registered	
820	Credit card number was invalid	
821	Merchant is not authorized for tokens	
822	Token was not found	
823	Token was Invalid	
898	Generic token registration error	
899	Generic token use error	

## 4.230 totalHealthcareAmount

The totalHealthcateAmount element is a required child of the healthcareAmounts element and defines the total amount of healthcare related purchases. This value must be the sum of the values applied to the following elements: RxAmount, visionAmount, clinicOtherAmount, and dentalAmount. The decimal is implied. Example: 500 = \$5.00.

**Type** = Integer; **totalDigits** = 8

**Parent Elements:** 

Optional: healthcareAmounts

Attributes:

None

**Child Elements:** 

track LitleXML Elements

## 4.231 track

The track element is child of the card element, which is required for card-present transactions. The contents of the track element is the data read from the magnetic stripe.

**Type** = String; **minLength** = 1; **maxLength** = 256

#### **Parent Elements:**

card

#### **Attributes:**

None

#### **Child Elements:**

## 4.232 transactionId

The transactionId element is a required child of the paypal element, specifying the transaction Id returned from PayPal.

Note:

The value of the Litle & Co. <transactionId> element must match the TRANSACTIONID returned by the DoExpressCheckoutPayment call operation to PayPal.

Type = String; minLength = N/A; maxLength = N/A

**Parent Elements:** 

paypal

**Attributes:** 

None

**Child Elements:** 

# 4.233 type

type

The type element has two uses in LitleXML depending upon the parent. In one case it defines the type of account used in the transaction in terms of association, company, Bill Me Later, PayPal, or eCheck. When used as a child of the fundingSource element, it defines the card type in terms of prepaid, credit, debit, FSA, or unknown.

### 4.233.1 type Element as a Child of the parent elements listed below

This type element defines the type of account used in the transaction in terms of card association, card company, Bill Me Later, PayPal, or eCheck.

**Type** = String (Enum); minLength = N/A; maxLength = 2

#### Parent Elements:

accountInformation, newCardInfo, newCardTokenInfo, originalCard, originalCardInfo, originalCardTokenInfo, originalToken, updatedCard, updatedToken, registerTokenResponse, tokenResponse, card, paypage

#### Attributes:

None

#### **Child Elements:**

None

#### **Enumerations:**

Enumeration	Description	
MC	MasterCard	
VI	Visa	
AX	American Express	
DC	Diner's Club	
DI	Discover	
PP	PayPal	
JC	JCB (Japanese Credit Bureau)	
BL	Bill Me Later	
EC	eCheck	

Enumeration	Description	
GC	Gift Card	
"" (empty)	Card type unknown or undefined	

# 4.233.2 type Element as a Child of fundingSource

This type element defines the card type in terms of prepaid, credit, debit, FSA, or unknown.

**Type** = String (Enum); minLength = N/A; maxLength = N/A

#### Parent Elements:

fundingSource

Attributes:

None

**Child Elements:** 

None

#### **Enumerations:**

Enumeration	Description	
UNKNOWN	The card type can not be determined.	
PREPAID	This is a prepaid card.	
CREDIT	This is a credit card.	
DEBIT	This is a debit card.	
FSA	This is a Flexible Spending Account card. Cards of this type can be used only for IRS-approved healthcare items.	

Note:

The fundingSource element and its child elements, type and availableBalance are associated with the Insights features (see Customer Insight Features on page 20.)

Please consult your Customer Experience Manager for additional information.

### 4.234 unitCost

The unitCost element is an optional child of the lineItemData element, which specifies the price of one unit of the item purchased. Although the schema defines it as an optional child of the enhancedData element, it is required by Visa for Level III interchange rates. The value must be greater than or equal to 0.

**Type** = Decimal; **minInclusive value** = 0, **totalDigits** = 12 **Parent Elements:** 

lineItemData

Attributes:

None

**Child Elements:** 

## 4.235 unitOfMeasure

The unitOfMeasure element is an optional child of the lineItemData element, which specifies the unit of measure of the purchased item. For example, each, kit, pair, gallon, and month would all be valid values. Although an optional element, it is required by Visa and MasterCard when specifying line item data.

<b>Type</b> = String; <b>minLength</b> = 1; <b>maxLength</b> = 12
Parent Elements:
lineItemData
Attributes:
None
Child Elements:
None

# 4.236 updatedCard

The updatedCard element is an optional child of the accountUpdateResponse element, which contains child elements providing the updated information for the submitted card.

#### **Parent Elements:**

account Up date Response

#### Attributes:

None

#### **Child Elements:**

type, number, expDate

#### **Example: updatedCard Structure**

```
<updatedCard>
  <type>Card Type</type>
  <number>New Account Number</number>
  <expDate>New Expiration Date</expDate>
</updatedCard>
```

# 4.237 updateCardValidationNumOnToken

The updateCardValidationNumOnToken element is the parent element for the transaction type used to update a CVV2/CVC2/CID code stored temporarily on the Litle platform. You should only use this transaction type if you had previously submitted the account number and security code in a registerTokenRequest transaction and now need to change the CVV2/CVC2/CID value.

#### **Parent Elements:**

litleOnlineRequest, batchRequest

#### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response. This attribute is also used for Duplicate Transaction Detection. For Online transactions, omitting this attribute, or setting it to a null value (id=""), disables Duplicate Detection for the transaction.
			Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.
			minLength = N/A maxLength = 25
customerId	String	No	A value assigned by the merchant to identify the consumer.
			minLength = N/A maxLength = 50
reportGroup	String	Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.
			minLength = 1 maxLength = 25

#### **Child Elements:**

Required: litleToken, cardValidationNum

Optional: orderId

# 4.238 updateCardValidationNumOnTokenResponse

The updateCardValidationOnTokenResponse element is the parent element for the Litle response to updateCardValidationNumOnToken transactions.

#### **Parent Elements:**

litleOnlineResponse, batchResponse

#### Attributes:

Attribute Name	Туре	Required?	Description
id	String	No	The response returns the same value submitted in the updateCardValidationOnToken transaction.
			minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the updateCardValidationOnToken transaction.
			minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the updateCardValidationOnToken transaction.
			minLength = 1 maxLength = 25

#### **Child Elements:**

Required: litleTxnId, response, message, responseTime

Optional: orderId

# 4.239 updateSubscription

The updateSubscription element is the parent element for the transaction that updates the subscription information associated with a recurring payment. Using this transaction type you can change the plan, card, billing information, and/or billing date. You can use this transaction type in either Online or Batch transactions.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

#### Parent Elements:

litleOnlineRequest, batchRequest

#### Attributes:

None

#### **Child Elements:**

Required: subscriptionId

Optional: planCode, billToAddress, card, billingDate

#### Example: updateSubscription - Change Plan

```
<updatedSubscription>
  <subscriptionId>Subscription Id</subscriptionId>
  <planCode>New Plan Code</planCode>
  </updatedSubscription>
```

#### **Example:** updateSubscription - Change Card

```
<updatedSubscription>
  <subscriptionId>Subscription Id
  <card>
      <type>Card Type Abbreviation</type>
      <number>Account Number</number>
      <expDate>Expiration Date</expDate>
  </card>
</updatedSubscription>
```

#### **Example:** updateSubscription - Change Billing Date

```
<updatedSubscription>
  <subscriptionId>Subscription Id/subscriptionId>
  <billingDate>New Billing Date</billingDate>
</updatedSubscription>
</updatedSubscription>
```

#### **Example: updateSubscription - Change Billing Info**

```
<updatedSubscription>
 <subscriptionId>Subscription Id</subscriptionId>
 <br/>
<br/>
ddress>
   <name>Customer's Full Name
   <companyName>Company's Name
   <addressLine1>Address Line 1</addressLine1>
   <addressLine2>Address Line 2</addressLine2>
   <addressLine3>Address Line 3</addressLine3>
   <city>City</city>
   <state>State Abbreviation</state>
   <zip>Postal Code</zip>
   <country>Country Code</country>
   <email>Email Address
   <phone>Telephone Number</phone>
 </billToAddress>
</updatedSubscription>
```

# 4.240 updateSubscriptionResponse

The updateSubscriptionresponse element is the parent element for the response to an updateSubscription transaction.

Note:

Although included in the schema, the Litle Recurring Engine is under development and not yet available for use. At this time, you should ignore all elements associated with the Recurring Engine.

#### **Parent Elements:**

litleOnlineResponse, batchResponse

#### **Attributes:**

None

#### **Child Elements:**

subscriptionId, litleTxnId, response, message, responseTime

# 4.241 updatedToken

The updatedToken element is an optional child of the accountUpdateResponse element, which contains child elements providing the updated information for the submitted token.

#### **Parent Elements:**

account Up date Response

#### Attributes:

None

#### **Child Elements:**

type, number, expDate, bin

#### **Example: originalCard Structure**

```
<updatedToken>
  litleToken>New Token Number</litleToken>
  <expDate>New Expiration Date</expDate>
  <type>Card Type</type>
  <bin>Card BIN</bin>
</updatedToken>
```

## 4.242 url

The url element is an optional child of the customBilling element. You use it to designate your customer service web site instead of providing a customer service phone number. This element may include any of the following characters: A-Z, a-z, 0-9, /, \, -, ., or \_.

**Type** = String; minLength = N/A; maxLength = 13

Note:

Please consult your Litle Customer Experience Manager prior to attempting to use the <url> element. This contents of this element are discarded unless you are specifically enabled to use in your LitleXML submissions.

**Parent Elements:** 

customBilling

**Attributes:** 

None

**Child Elements:** 

user LitleXML Elements

### 4.243 user

The user element is a required child of the authentication element. It is a unique identifier of the user/merchant used to authenticate that the message is from a valid source.

**Type** = String; minLength = N/A; maxLength = 20

#### **Parent Elements:**

authentication

**Attributes:** 

None

**Child Elements:** 

## 4.244 verificationCode

NOTE: This element is not used at this time.

The verificationCode element is an optional child of the echeckSaleResponse element. It specifies the verification code from the associated eCheck Sale transaction.

**Type** = String; minLength = N/A; maxLength = 6

#### **Parent Elements:**

echeckSalesResponse

Attributes:

None

**Child Elements:** 

## **4.245** verify

The verify element is an optional child of the echeckSale element, which allows you to specify to perform an eCheck Verification prior to processing the sale. If the account fails the

verification operation, the system does not process the sale. **Type** = Boolean; **Valid Values** = true or false **Parent Elements:** 

**Attributes:** 

echeckSale

None

**Child Elements:** 

### 4.246 visionAmount

The visionAmount element is an optional child of the healthcareAmounts element and defines the healthcare amount used for vision related purchases. The decimal is implied. Example: 500 = \$5.00.

**Type** = Integer; **totalDigits** = 8

**Parent Elements:** 

Optional: healthcareAmounts

Attributes:

None

**Child Elements:** 

## 4.247 virtualAuthenticationKeyData

The virtualAuthenticationKeyData is an optional child of the billMeLaterRequest element.

Type = String; minLength = N/A; maxLength = 4

#### **Parent Elements:**

billMeLaterRequest

Attributes:

None

**Child Elements:** 

## 4.248 virtualAuthenticationKeyPresenceIndicator

The virtualAuthenticationKeyPresenceIndicator is an optional child of the billMeLaterRequest element.

<b>Type</b> = String; <b>minLength</b> = N/A; <b>maxLength</b> = 1		
Parent Elements:		
batchRequest		
Attributes:		
None		
Child Elements:		
None		

### 4.249 void

The void element is the parent element for all Void transactions. You can use this element only in Online transactions. If you use this Litle Recycling Engine, you can use the void transaction to halt the recycling of a sale transaction.

#### **Parent Elements:**

litleOnlineRequest

#### Attributes:

Attribute Name	Туре	Required?	Description	
id	String	No	A unique identifier assigned by the presenter and mirrored back in the response. This attribute is also used for Duplicate Transaction Detection. For Online transactions, omitting this attribute, or setting it to a null value (id=""), disables Duplicate Detection for the transaction.	
			Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.	
			$minLength = N/A \qquad maxLength = 25$	
customerId	String	No	A value assigned by the merchant to identify the consumer.	
			minLength = N/A maxLength = 50	
reportGroup	String	Yes	Required attribute that defines the merchant sub-group in the user interface where this transaction will be displayed. Please refer to Coding for Report Groups on page 10 for additional information.	
			minLength = 1 maxLength = 25	

#### **Child Elements:**

Required: litleTxnId

Optional: processingInstructions

## 4.250 voidResponse

The voidResponse element is the parent element for information returned to you in response to a Void transaction.

#### **Parent Elements:**

litle On line Response

#### Attributes:

Attribute Name	Туре	Required?	Description	
id	String	No	The response returns the same value submitted in the void transaction.	
			minLength = N/A maxLength = 25	
customerId	String	No	The response returns the same value submitted in the void transaction.	
			minLength = N/A maxLength = 50	
reportGroup	String	Yes	The response returns the same value submitted in the void transaction.	
			minLength = 1 maxLength = 25	
duplicate	Boolean	No	If the request is a duplicate (see Online Duplicate Checking on page 8), the response includes the duplicate flag set to true and the entire original response.	
			<b>Note:</b> This attribute applies only to Online transaction responses.	

**Child Elements: (Required)** 

litleTxnId, response, responseTime, message, postDate

**Child Elements: (Optional)** 

recycling

## 4.251 yearsAtEmployer

The yearsAtEmployer element is an optional child of the customerInfo element and defines the number of years the customer has worked for their current employer. It is used in combination with several other elements to provide required information for some Bill Me Later transactions.

<b>Type</b> = Integer; <b>totalDigits</b> = 2
Parent Elements:
customerInfo
Attributes:
None
Child Elements:
None

## 4.252 yearsAtResidence

The yearsAtResidence element is an optional child of the customerInfo element and defines the number of years the customer has resided in their current domicile. It is used in combination with several other elements to provide required information for some Bill Me Later transactions.

<b>Type</b> = Integer; <b>totalDigits</b> = 2
Parent Elements:
customerInfo
Attributes:
None
Child Elements:
None

## 4.253 zip

The zip element defines the customer's postal code in both the billToAddress and shipToAddress elements.

**Type** = String; minLength = N/A; maxLength = 20

NOTE:

Although the schema specifies the maxLength of the  ${\tt zip}$  element as 20 characters, in practice you should never exceed 10 characters in your submissions.

If including the zip element for eCheck Verification, do not exceed 9 characters and do not use dashes.

#### **Parent Elements:**

billToAddress, shipToAddress

Attributes:

None

**Child Elements:** 





# PAYMENT TRANSACTION RESPONSE CODES

This appendix provides reference material regarding the codes that are returned in a LitleXML response for a payment transaction. This appendix contains the following sections:

- Payment Transaction Response Codes
- 3DS Authentication Result Codes
- AVS Response Codes
- AAVS Response Codes
- Card Validation Response Codes
- XML Validation Error Messages
- Additional Response Header Error Messages
- eCheck Return Reason Codes

## **A.1** Payment Transaction Response Codes

This section contains a list of codes and messages that the system can return in the response message for a payment transaction.

NOTE: For information concerning Chargeback Response Code, see the Chargeback XML and Support Documentation API Reference Guide.

Table A-1 shows all possible values for the response> and <message> elements. You should code appropriately to handle all codes applicable to the transactions you use.

- The Response Code value appears in the <response> element.
- The Response Message value appears in the <message> element.

**TABLE A-1** Valid Values for the Response and Message Elements

Response Code	Response Message	Response Type	Description
000	Approved	Approved	No action required.
010	Partially Approved	Approved	The authorized amount is less than the requested amount.
100	Processing Network Unavailable	Soft Decline	There is a problem with the card network. Contact the network for more information.
101	Issuer Unavailable	Soft Decline	There is a problem with the issuer network. Please contact the issuing bank.
102	Re-submit Transaction	Soft Decline	There is a temporary problem with your submission. Please re-submit the transaction.
110	Insufficient Funds	Soft Decline	The card does not have enough funds to cover the transaction.
111	Authorization amount has already been depleted	Hard Decline	The total amount of the original Authorization has been used.
120	Call Issuer	Referral or Soft Decline	There is an unspecified problem, contact the issuing bank.
121	Call AMEX	Referral	There is an unspecified problem; contact AMEX.

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
122	Call Diners Club	Referral	There is an unspecified problem; contact Diners Club.
123	Call Discover	Referral	There is an unspecified problem; contact Discover.
124	Call JBS	Referral	There is an unspecified problem; contact JBS.
125	Call Visa/MasterCard	Referral	There is an unspecified problem; contact Visa or MasterCard.
126	Call Issuer - Update Cardholder Data	Referral	Some data is out of date; contact the issuer to update this information.
127	Exceeds Approval Amount Limit	Hard Decline	This transaction exceeds the daily approval limit for the card.
130	Call Indicated Number	Referral	There is an unspecified problem; contact the phone number provided.
140	Update Cardholder Data	Referral	Cardholder data is incorrect; contact the issuing bank.
191	The merchant is not registered in the update program.	N/A	This is an Account Updater response indicating a set-up problem that must be resolved prior to submitting another request file. Escalate this to your Litle Customer Experience Manager.
192	Merchant not certified/enabled for IIAS	Hard Decline	Your organization is not certified or enabled for IIAS/FSA transactions.
301	Invalid Account Number	Hard Decline	The account number is not valid; contact the cardholder to confirm information or inquire about another form of payment.
302	Account Number Does Not Match Payment Type	Hard Decline	The payment type was selected as one card type (e.g. Visa), but the card number indicates a different card type (e.g. MasterCard).
303	Pick Up Card	Hard Decline	This is a card present response, but in a card not present environment. Do not process the transaction and contact the issuing bank.

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
304	Lost/Stolen Card	Hard Decline	The card has been designated as lost or stolen; contact the issuing bank.
305	Expired Card	Hard Decline	The card is expired.
306	Authorization has expired; no need to reverse	Hard Decline	The original Authorization is no longer valid, because it has expired. You can not perform an Authorization Reversal for an expired Authorization.
307	Restricted Card	Hard Decline	The card has a restriction preventing approval for this transaction. Please contact the issuing bank for a specific reason.
			You may also receive this code if the transaction was declined due to Prior Fraud Advice Filtering and you are using a schema version V8.10 or older.
308	Restricted Card - Chargeback	Hard Decline	This transaction is being declined due the operation of the Litle Prior Chargeback Card Filtering Service or the card has a restriction preventing approval if there are any chargebacks against it.
309	Restricted Card - Prepaid Card Filtering Service	Hard Decline	This transaction is being declined due the operation of the Litle Prepaid Card Filtering service.
310	Invalid track data	Hard Decline	The track data is not valid.
311	Deposit is already referenced by a chargeback	Hard Decline	The deposit is already referenced by a chargeback; therefore, a refund cannot be processed against the original transaction.
312	Restricted Card - International Card Filtering Service	Hard Decline	This transaction is being declined due the operation of the Litle International Card Filtering Service.

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
315	Restricted Card - Auth Fraud Velocity Filtering Service	Hard Decline	This transaction is being declined due the operation of the Litle Auth Fraud Velocity Filtering Service.
316	Automatic Refund Already Issued	Hard Decline	This refund transaction is a duplicate for one already processed automatically by the Litle Fraud Chargeback Prevention Service (FCPS).
318	Restricted Card - Auth Fraud Advice Filtering Service	Hard Decline	This transaction is being declined due the operation of the Litle Auth Fraud Advice Filtering Service.
319	Restricted Card - Fraud AVS Filtering Service	Hard Decline	This transaction is being declined due the operation of the Litle Auth Fraud AVS Filtering Service.
320	Invalid Expiration Date	Hard Decline	The expiration date is invalid
321	Invalid Merchant	Hard Decline	The card is not allowed to make purchases from this merchant (e.g. a Travel only card trying to purchase electronics).
322	Invalid Transaction  Note: If you are enabled for Transaction Filtering, but have not upgraded to use schema version 8.3 or above, the system returns this code for transactions filtered by the Prepaid or International Card Filtering Service. If you are enabled for Velocity Fraud Filtering, but have not upgraded to V8.9, you will receive this code for filtered transactions. If you are enabled for AVS Fraud Filtering, but have not upgraded to V8.13, you will receive this code for filtered transactions.	Hard Decline	The transaction is not permitted; contact the issuing bank.
323	No such issuer	Hard Decline	The card number references an issuer that does not exist. Do not process the transaction.

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
324	Invalid Pin	Hard Decline	The PIN provided is invalid.
325	Transaction not allowed at terminal	Hard Decline	The transaction is not permitted; contact the issuing bank.
326	Exceeds number of PIN entries	Hard Decline	(Referring to a debit card) The incorrect PIN has been entered excessively and the card is locked.
327	Cardholder transaction not permitted	Hard Decline	Merchant does not allow that card type or specific transaction.
328	Cardholder requested that recurring or installment payment be stopped	Hard Decline	Recurring/Installment Payments no longer accepted by the card issuing bank.
330	Invalid Payment Type	Hard Decline	This payment type is not accepted by the issuer.
335	This method of payment does not support authorization reversals	Hard Decline	You can not perform an Authorization Reversal transaction for this payment type.
336	Reversal amount does not match Authorization amount.	Hard Decline	For a merchant initiated reversal against an American Express authorization, the reversal amount must match the authorization amount exactly.
340	Invalid Amount	Hard Decline	The transaction amount is invalid (too high or too low). For example, less than 0 for an authorization, or less than .01 for other payment types.
341	Invalid Healthcare Amounts	Hard Decline	The amount submitted with this FSA/Healthcare transaction is invalid. The FSA amount must be greater than 0, and cannot be greater than the transaction amount.
346	Invalid billing descriptor prefix	Hard Decline	The billing descriptor prefix submitted is not valid.
347	Invalid billing descriptor	Hard Decline	The billing descriptor is not valid because you are not authorized to send transactions with custom billing fields.

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
348	Invalid Report Group	Hard Decline	The Report Group specified in the transaction is invalid, because it is either not in the defined list of acceptable Report Groups or there is a mis-match between the Report Group and the defined Billing Descriptor.
349	Do Not Honor	Soft Decline	The issuing bank has put a temporary hold on the card.
350	Generic Decline	Soft or Hard Decline	There is an unspecified problem; contact the issuing bank for more details.  Note: This code can be a hard or soft decline, depending on the method of payment, and other variables.
351	Decline - Request Positive ID	Hard Decline	Card Present transaction that requires a picture ID match.
352	Decline CVV2/CID Fail	Hard Decline	The CVV2/CID is invalid.
354	3-D Secure transaction not supported by merchant	Hard Decline	You are not certified to submit 3-D Secure transactions.
356	Invalid purchase level III, the transaction contained bad or missing data	Soft Decline	Submitted Level III data is bad or missing.
357	Missing healthcarelIAS tag for an FSA transaction	Hard Decline	The FSA Transactions submitted does not contain the <pre><healtcareiias> data element.</healtcareiias></pre>
358	Restricted by Litle due to security code mismatch.	Hard Decline	The transaction was declined due to the security code (CVV2, CID, etc) not matching.
360	No transaction found with specified litleTxnld	Hard Decline	There were no transactions found with the specified litleTxnld.
361	Authorization no longer available	Hard Decline	The authorization for this transaction is no longer available. Either the authorization has already been consumed by another capture, or the authorization has expired.

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
362	Transaction Not Voided - Already Settled	Hard Decline	This transaction cannot be voided; it has already been delivered.
363	Auto-void on refund	Hard Decline	This transaction (both capture and refund) has been voided.
364	Invalid Account Number - original or NOC updated eCheck account required	Hard Decline	The submitted account number is invalid. Confirm the original account number or check NOC for new account number.
365	Total credit amount exceeds capture amount	Hard Decline	The amount of the credit is greater than the capture, or the amount of this credit plus other credits already referencing this capture are greater than the capture amount.
366	Exceed the threshold for sending redeposits	Hard Decline	NACHA rules allow two redeposit attempts within 180 days of the settlement date of the initial deposit attempt. This threshold has been exceeded.
367	Deposit has not been returned for insufficient/non-sufficient funds	Hard Decline	NACHA rules only allow redeposit attempts against deposits returned for Insufficient or Uncollected Funds.
368	Invalid check number	Soft Decline	The check number is invalid.
369	Redeposit against invalid transaction type	Hard Decline	The redeposit attempted against an invalid transaction type.
370	Internal System Error - Call Litle	Hard Decline	There is a problem with the Litle System. Contact support@litle.com.
372	Soft Decline - Auto Recycling In Progress	Soft Decline	The transaction was intercepted because it is being auto recycled by the Recycling Engine.
373	Hard Decline - Auto Recycling Complete	Hard Decline	The transaction was intercepted because auto recycling has completed with a final decline.

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
375	Merchant is not enabled for surcharging	Hard Decline	The submitted transaction contained a surcharge and the merchant is not enabled for surcharging.
376	This method of payment does not support surcharging	Hard Decline	The use of a surcharge is only allowed for Visa and MasterCard methods of payment.
377	Surcharge is not valid for debit or prepaid cards	Hard Decline	You cannot apply a surcharge to a transaction using a debit or prepaid card.
378	Surcharge cannot exceed 4% of the sale amount	Hard Decline	The surcharge in the submitted transaction exceeded 4% maximum allowed for a surcharge.
401	Invalid E-mail	Hard Decline	The e-mail address provided is not valid. Verify that it was entered correctly.
469	Invalid Recurring Request - See Recurring Response for Details	Hard Decline	The Recurring Request was invalid, which invalidated the transaction. The Response Code and Message in the Recurring Response contains additional information.
470	Approved - Recurring Payment Scheduled	Approved	The recurring request was processed successfully.
471	Original Payment Declined	Hard Decline	The original payment transaction was declined, so the recurring payments have not been scheduled.
472	Invalid Billing Plan	Hard Decline	The plan specified in the recurring request was invalid.
500	The account number was changed	Hard Decline	An Account Updater response indicating the Account Number changed from the original number.
501	The account was closed	Hard Decline	An Account Updater response indicating the account was closed. Contact the cardholder directly for updated information.

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description	
502	The expiration date was changed	N/A	An Account Updater response indicating the Expiration date for the card has changed.	
503	The issuing bank does not participate in the update program		An Account Updater response indicating the issuing bank does not participate in the update program	
504	504 Contact the cardholder for updated information		An Account Updater response indicating you should contact the cardholder directly for updated information.	
505			An Account Updater response indicating no match was found in the updated information.	
506	No changes found	N/A	An Account Updater response indicating there have been no changes to the account information.	
601	Soft Decline - Primary Funding Source Failed	Soft Decline	, , ,	
602	Soft Decline - Buyer has alternate funding source	Soft Decline	A PayPal response indicating the merchant may resubmit the transaction immediately, and the use of an alternate funding source will be attempted.	
610	Hard Decline - Invalid Billing Agreement Id	Hard Decline	A PayPal response indicating the Billing Agreement ID is invalid.	
611	11 Hard Decline - Primary Funding Source Failed		A PayPal response indicating the issuer is unavailable.	
612	Hard Decline - Issue with Paypal Account	Hard Decline	A PayPal response indicating the transaction failed due to an issue with the buyer account.	
613	Hard Decline - PayPal authorization ID missing	Hard Decline	A PayPal response indicating the need to correct the authorization ID before resubmitting.	

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
614	Hard Decline - confirmed email address is not available	Hard Decline	A PayPal response indicating your account is configured to decline transactions without a confirmed address. request another payment method or contact support@litle.com to modify your account settings.
615	Hard Decline - PayPal buyer account denied	Hard Decline	A PayPal response indicating account unauthorized payment risk.
616	Hard Decline - PayPal buyer account restricted	Hard Decline	A PayPal response indicating PayPal is unable to process the payment. Buyer should contact PayPal with questions.
617	Hard Decline - PayPal order has been voided, expired, or completed	Hard Decline	A PayPal response indicating no further authorizations/captures can be processed against this order. A new order must be created.
618	Hard Decline - issue with PayPal refund	Hard Decline	A PayPal response indicating one of these potential refund related issues: duplicate partial refund must be less than or equal to original or remaining amount, past time limit, not allowed for transaction type, consumer account locked/inactive, or complaint exists - only a full refund of total/remaining amount allowed. Contact support@litle.com for specific details.
619	Hard Decline - PayPal credentials issue	Hard Decline	A PayPal response indicating you do not have permissions to make this API call.
620	Hard Decline - PayPal authorization voided or expired	Hard Decline	A PayPal response indicating you cannot capture against this authorization. You need to perform a brand new authorization for the transaction.

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
621	Hard Decline - required PayPal parameter missing	Hard Decline	A PayPal response indicating missing parameters are required. Contact support@litle.com for specific details.
622	Hard Decline - PayPal transaction ID or auth ID is invalid	Hard Decline	A PayPal response indicating the need to check the validity of the authorization ID prior to reattempting the transaction.
623	Hard Decline - Exceeded maximum number of PayPal authorization attempts	Hard Decline	A PayPal response indicating you should capture against a previous authorization.
624	Hard Decline - Transaction amount exceeds merchant's PayPal account limit.	Hard Decline	A PayPal response indicating the transaction amount exceeds the merchant's account limit. Contact support@litle.com to modify your account settings.
625	Hard Decline - PayPal funding sources unavailable.	Hard Decline	A PayPal response indicating the buyer needs to add another funding sources to their account.
626	Hard Decline - issue with PayPal primary funding source.	Hard Decline	A PayPal response indicating there are issues with the buyer's primary funding source.
627	Hard Decline - PayPal profile does not allow this transaction type.	Hard Decline	Contact Litle to adjust your PayPal merchant profile preferences.
628	Internal System Error with PayPal - Contact Litle	Hard Decline	There is a problem with Litle's username and password. Contact support@litle.com.
629	Hard Decline - Contact PayPal consumer for another payment method	Hard Decline	A PayPal response indicating you should contact the consumer for another payment method.
637	Invalid terminal Id	Hard Decline	The terminal Id submitted with the POS transaction is invalid.
701	Under 18 years old	Hard Decline	A Bill Me Later (BML) response indicating the customer is under 18 years of age based upon the date of birth.
702	Bill to outside USA	Hard Decline	A BML response indicating the billing address is outside the United States.

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
703	Bill to address is not equal to ship to address	Hard Decline	A BML response indicating that the billing address does not match the shipping address.
704	Declined, foreign currency, must be USD	Hard Decline	A BML response indicating the transaction is declined, because it is not in US dollars.
705	On negative file	Hard Decline	A BML response indicating the account is on the negative file.
706	Blocked agreement	Hard Decline	A BML response indicating a blocked agreement account status.
707	Insufficient buying power	Other	A BML response indicating that the account holder does not have sufficient credit available for the transaction amount.
708	Invalid Data	Hard Decline	A BML response indicating that there are one or more problems with the submitted data.
709	Invalid Data - data elements missing	Hard Decline	A BML response indicating one or more required data elements are missing.
			Also, returned for an eCheck transaction that is missing a required data element. For example, failure to include the name element in an echeckSale or echeckCredit transaction would result in this code being returned.
710	Invalid Data - data format error	Hard Decline	A BML response indicating that some data was formatted incorrectly.
711	Invalid Data - Invalid T&C version	Hard Decline	A BML response indicating the T&C version is invalid.
712	Duplicate transaction	Hard Decline-	A BML response indicating that the transaction is a duplicate.
713	Verify billing address	Hard Decline	A BML response indicating that you should verify the billing address.

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description	
714	Inactive Account	Hard Decline	A BML response indicating the customer account is inactive.	
716	Invalid Auth	Hard Decline	A BML response indicating that the referenced authorization is invalid.	
717	Authorization already exists for the order	Hard Decline	A BML response indicating that an authorization already exists for the transaction.	
801	Account number was successfully registered	Approved	The card number was successfully registered and a token number was returned.	
802	Account number was previously registered	Approved	The card number was previously registered for tokenization.	
805	Card Validation Number Updated	Approved	The stored value for CVV2/CVC2/CID has been successfully updated.	
820	Credit card number was invalid	Hard Decline	The card number submitted for tokenization is invalid.	
821	Merchant is not authorized for tokens	Hard Decline	Your organization is not authorized to use tokens.	
822	Token was not found	Hard Decline	The token number submitted with this transaction was not found.	
850	Tax Billing only allowed for MCC 9311	Hard Decline	Tax Billing elements are allowed only for MCC 9311.	
851	Incomplete Tax Billing	Hard Decline	Missing taxType element	
852	Debt Repayment only allowed for VI transactions on MCCs 6012 and 6051	Hard Decline	You must be either MCC 6012 or 6051 to designate a Visa transaction as Debt Repayment (debtRepayment element set to true).	
877	Invalid Pay Page Registration Id	Hard Decline	A Pay Page response indicating that the Pay Page Registration ID submitted is invalid.	

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
878	Expired Pay Page Registration Id	Hard Decline	A Pay Page response indicating that the Pay Page Registration ID has expired (Pay Page Registration IDs expire 24 hours after being issued).
879	Merchant is not authorized for Pay Page	Hard Decline	Your organization is not authorized to use the Pay Page.
898	Generic token registration error	Soft Decline	There is an unspecified token registration error; contact Litle & Co.
899	Generic token use error	Soft Decline	There is an unspecified token use error; contact Litle & Co.
900	Invalid Bank Routing Number	Hard Decline	The eCheck routing number submitted with this transaction has failed validation.
950	Decline - Negative Information on File	Hard Decline	An eCheck response indicating the account is on the negative file.
951	Absolute Decline	Hard Decline	An eCheck response indicating that this transaction was declined.
952	The Merchant Profile does not allow the requested operation	Hard Decline	An eCheck response indicating that your Merchant Profile does not allow the requested operation. Contact your Litle & Co. Customer Experience Manager for additional information.
953	The account cannot accept ACH transactions	Hard Decline	An eCheck response indicating the customer's checking account does not accept ACH transactions.
954	The account cannot accept ACH transactions or site drafts	Hard Decline	An eCheck response indicating the customer's checking account does not accept ACH transactions or site drafts.

**TABLE A-1** Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
955	Amount greater than limit specified in the Merchant Profile	Hard Decline	An eCheck response indicating that the dollar amount of this transaction exceeds the maximum amount specified in your Merchant Profile. Contact your Litle & Co. Customer Experience Manager for additional information.
956	Merchant is not authorized to perform eCheck Verification transactions	Hard Decline	An eCheck response indicating that your organization is not authorized to perform eCheck verifications. Contact your Litle & Co. Customer Experience Manager for additional information.
957	First Name and Last Name required for eCheck Verifications	Hard Decline	An eCheck response indicating that the first and last name of the customer is required for eCheck verifications.
958	Company Name required for corporate account for eCheck Verifications	Hard Decline	An eCheck response indicating that the company name is required for verifications on corporate accounts.
959	Phone number required for eCheck Verifications	Hard Decline	An eCheck response indicating that the phone number of the customer is required for eCheck verifications.

### A.2 3DS Authentication Result Codes

Table A-2 contains a list of valid authentication result codes returned by Visa for the Verified by Visa service or MasterCard for the MasterCard SecureCode service. It specifies what authentication result values apply to what order sources.

**TABLE A-2** Authentication Result Codes

Authentication Result Code	Description			
Order Source - Ecomme	Order Source - Ecommerce			
Blank	Standard ecommerce or non-ecommerce transactions, not an authentication or attempted authentication. CAVV not present			
Order Source - any				
В	CAVV passed verification, but no liability shift because a) ECI was not 5 or 6 or b) the card type is an excluded (e.g., Commercial Card)			
Order Source - 3DSAuth	nenticated or 3DSAttempted			
0	CAVV data field not properly formatted; verification cannot be performed.			
6	CAVV not verified because Issuer has requested no verification. VisaNet processes as if CAVV is valid.			
Order Source - 3DSAuth	nenticated			
1	CAVV failed verification			
2	CAVV passed verification			
D	Issuer elected to return CAVV verification results and Field 44.13 blank. Value is set by VisaNet; means CAVV Results are valid.			
Order Source - 3DSAtte	mpted			
3	CAVV passed verification			
4	CAVV failed verification			
5	Not currently used			
7	CAVV failed verification			
8	CAVV passed verification			
9	CAVV failed verification; Visa generated CAVV because Issuer ACS was not available.			
А	CAVV passed verification; Visa generated CAVV because Issuer Access Control Server (ACS) was not available.			

### **TABLE A-2** Authentication Result Codes (Continued)

Authentication Result Code	Description
В	CAVV passed verification but no liability shift because a) ECI was not 5 or 6 or b) the card type is an excluded (e.g., Commercial Card)
С	Issuer elected to return CAVV verification results and Field 44.13 blank. Value is set by VisaNet; means CAVV Results are valid

## A.3 AVS Response Codes

Table A-3 contains a list of AVS response codes that can be returned in the response for a payment transaction. There are some codes that you may never receive. Code your system to expect codes from this list. The description is not included in the response.

TABLE A-3 AVS Response Codes

AVS Response Code	Description
00	5-Digit zip and address match
01	9-Digit zip and address match
02	Postal code and address match
10	5-Digit zip matches, address does not match
11	9-Digit zip matches, address does not match
12	Zip does not match, address matches
13	Postal code does not match, address matches
14	Postal code matches, address not verified
20	Neither zip nor address match
30	AVS service not supported by issuer
31	AVS system not available
32	Address unavailable
33	General error
34	AVS not performed
40	Address failed Litle & Co. edit checks

### A.4 AAVS Response Codes

Table A-4 contains a list of American Express Advanced AVS response codes that can be returned as verification of information supplied in the <name>, <phone> and/or <email> child elements of the <billToAddress> element. The system returns the AAVS response code in the <advancedAVSResult> child of the <fraudResult> element.

The code returned has the following format:

- **1st position** name match
- **2nd position** phone match
- 3rd position email match
- Each position can have one of the following values:
  - 0 No Match (failure)
  - 1 Match
  - 2 Not Sent
  - 3 No Response (unchecked, retry, or service not allowed)

For example, a code of 210 would indicate that the name was not sent, the phone matches, and the email does not match.

You should code your system to parse all codes from this list. The description is not included in the response.

TABLE A-4 Advances AVS Response Codes

AAVS Response Code	Description
000	No Match
001	Email matches, name and phone do not match
002	Name and phone do not match, email not sent
003	Name and phone do not match, no response for email
010	Phone matches, name and email do not match
011	Phone and email match, name does not match
012	Phone matches, name does not match, email not sent
013	Phone matches, name does not match, no response for email
020	Name and email do not match, phone not sent

TABLE A-4 Advances AVS Response Codes

AAVS Response Code	Description		
021	Email matches, name does not match, phone not sent		
030	Name and email do not match, no response for phone		
031	Email matches, name does not match, no response for phone		
033	Name does not match, no response for phone or email		
100	Name matches, phone and email do not match		
101	Name and email match, phone does not match		
102	Name matches, phone does not match, email not sent		
103	Name matches, phone does not match, no response for email		
110	Name and phone match, no match for email		
111	Full match		
112	Name and phone match, email not sent		
113	Name and phone match, no response for email		
120	Name matches, email does not match, phone not sent		
121	Name and email match, phone not sent		
130	Name matches, email does not match, no response for phone		
131	Name and email match, no response for phone		
133	Name matches, no response for phone or email		
200	Name not sent, phone and email do not match		
201	Email matches, phone does not match, name not sent		
202	Phone does not match, name and email not sent		
203	Phone does not match, name not sent, no response for email		
210	Phone matches, email does not match, name not sent		
211	Phone and email match, name not sent		
212	Phone matches, name and email not sent		
213	Phone matches, name not sent, no response for email		
220	Email does not match, name and phone not sent		

TABLE A-4 Advances AVS Response Codes

AAVS Response Code	Description		
221	Email matches, name and phone not sent		
230	Email does not match, name not sent, no response for phone		
231	Email matches, name not sent, no response for phone		
233	Name not sent, no response for phone and email		
300	Phone and email do not match, no response for name		
301	Email matches, phone does not match, no response for name		
302	Phone does not match, no response for name, email not sent		
303	Phone does not match, no response for name and email		
310	Phone matches, email does not match, no response for name		
311	Phone and email match, no response for name		
312	Phone matches, email not sent, no response for name		
313	Phone matches, no response for name and email		
320	Email does not match, phone not sent, no response for name		
321	Email matches, phone not sent, no response for name		
330	Email does not match, no response for name and phone		
331	Email matches, no response for name and phone		
333	No response		

## A.5 Card Validation Response Codes

Table A-5 contains a normalized list of response codes that can be returned when requesting a card validation check.

- CVV2
- CVC2
- CID

The description is not included in the response.

NOTE: For American Express transactions, if the submitted security

code does not match, the transaction is declined with a Response Reason Code of 352 - Decline CVV2/CID Fail.

**TABLE A-5** Card Validation Response Codes

CVV2/CVC2/CID Response Code	Description	
М	Match	
N	No Match	
Р	Not Processed	
S	CVV2/CVC2/CID should be on the card, but the merchant has indicated CVV2/CVC2/CID is not present	
U	Issuer is not certified for CVV2/CVC2/CID processing	
"" (empty response)	Check was not done for an unspecified reason	

## A.6 XML Validation Error Messages

Table A-6 provides examples of XML Validation Error Messages. These messages are the value associated with the message attribute of either a litleResponse or litleOnlineResponse, when the response="1" (the response attribute).

NOTE: If response="0", the associated message="Valid Format".

For information about response values 2 through 5, please refer to Additional Response Header Error Messages on page 516.

**TABLE A-6** Response Header Error Message Examples

Example Message (message attribute of litleOnlineResponse)	Description (line numbers will vary according to the location of the error)	
Error validating xml data against the schema on line 13. The length of the value is 3, but the required minimum is 4.	The value on line 13 does not meet the minimum length requirement for the element as specified in the schema. For example, if you specified 812 as a value for the <expdate> element, which has a minLength of 4, the system returns this error message.</expdate>	
Error validating xml data against the schema on line 18. The length of the value is 6, but the required maximum is 4.	The value on line 18 exceeds the maximum length requirement for the element as specified in the schema. For example, if you specified 082012 as a value for the <expdate> element, which has a maxLength of 4, the system returns this error message.</expdate>	
Error validating xml data against the schema on line 11. The value is not a member of the enumeration.	The value on line 11 is not a valid enumeration for the specified element. For example, The <type> element allows values of VI, MC, DI, AX, DC, JC, PP and BL. If you submitted a value of VISA, the system returns this error message.</type>	
Error validating xml data against the schema on line 8. Content of element "amount" is incomplete.	The <amount> element does not contains a valid value. For example, if you submitted a captureGivenAuth request and included the amount element without specifying a value, the system returns this error message.</amount>	
Error validating xml data against the schema on line 6 tag name "echeckSale" is not allowed. Possible tag names are: <authorization>,<capture>,<credit>, <sale>,<void></void></sale></credit></capture></authorization>	The submitted transaction failed validation against the schema, because an element name was out of sequence or not allowed in the transaction. The error message specifies the invalid element ( <echecksale> in the example), as well as the possible valid elements.</echecksale>	

**TABLE A-6** Response Header Error Message Examples (Continued)

Example Message (message attribute of litleOnlineResponse)	Description (line numbers will vary according to the location of the error)	
System Error - Call Litle & Do.	Typically, the system returns this error if there was a problem with authentication due to an error in the submitted Merchant Id, user, and/or password.	
	The problem may also be due to the use of single quotes around the attribute (merchantId) value.	
Error validating xml data against the schema on line 1. Probably namespace URI of tag "litleOnlineRequest" is wrong (correct	The URI named in the xmlns= attribute is incorrect. The problem may also be due to the use of single quotes around the attribute value.	
one is "http://www.litle.com/schema")	<b>Note:</b> The URI may differ based upon the version of Litle XML you are using.	
Error validating xml data against the schema on line 12786. The entity name must immediately follow the amp; in the entity reference.	The '&' symbol is used in XML to designate certain special characters. The error indicates that the symbol was submitted without an entity name (for example, " or &).	
	Typically, the error occurs when the name or one of the address lines of the billToAddress element includes the symbol instead of the entity reference. For example, "John & Mary Smith" should be sent as "John & Mary Smith" or "John and Mary Smith").	
Error validating xml data against the schema on line 1. Content is not allowed in prolog.	This error is usually an indication of extraneous characters appearing in front of the first XML element. For example, the "?" before the "<"symbol in the following line would cause this error to be returned:	
	<pre>?<?xml version="1.0" encoding="utf-8"></pre>	
Duplicate Batch (Litle ID: 28292109643, session sequence: 1, unique ID:) not processed - 29 duplicate transactions (57 total) in a row found.	(Batch file only) The system has determined that the Batch file is a duplicate and therefore not processed.	
Duplicate Batch (Litle ID: 23829210964, session sequence: 1, unique ID:) not processed - 96.49% of the transactions (57 total) in the batch are duplicates.	The first part of the message provides the count of the greatest number of consecutive duplicate transaction in the batch (29 in the example). The second part of the message the overall percentage of duplicates in the batch (96.49% in the example).	
	The limits are more than 10 consecutive duplicate transactions detected and/or more than 25% of all transaction in the batch detected as duplicates.	

### A.7 Additional Response Header Error Messages

Normally, all submissions from merchants to the Litle production systems, as well as access to the Litle UI and Litle Virtual Terminal must originate from a static IP address, for which Litle sets access permissions in our firewall. Under certain circumstances, Litle & Co. can allow access from non-static IP Address. When submitting transactions in this manner, there are additional HTTP responses and validation errors that may occur. The table below provides information about these responses/error messages.

NOTE:

The response value and message in the table represent the values for the response and message attributes of either a litleResponse or litleOnlineResponse.

**TABLE A-7** HTTP Status Message and Validation Errors

response value	message	HTTP Status Code/Message	Description
2	Invalid XML. Contact support@litle.com.	200 OK	The submission is not valid XML containing the user and password elements.
3	Invalid credentials. Contact support@litle.com.	200 OK	The submission contains empty or invalid credentials (user and password).
4	Connection limit exceeded. Contact support@litle.com.	200 OK	The merchant has exceeded the maximum number of concurrent connections.
5	Objectionable content detected. Contact support@litle.com.	200 OK	The system has determined that the submission may contain objectionable content.
N/A	N/A	405 Method Not Allowed	Only HTTP POST method is allowed.
N/A	N/A	404 Not Found	An invalid URI was used. Verify the URI you are using is correct and that you have not appended any parameters to the URI.

### A.8 eCheck Return Reason Codes

Table A-8 is a list of eCheck Return Reason Codes. These codes are not returned in the LitleXML response messages. The codes are visible in the Litle Merchant Accounting System UI on the eCheck Returns Received report, as well as the Payment Detail screen.

NOTE: If an eCheck is returned for reason Code R01 or R09, it is eligible for redeposit.

TABLE A-8 eCheck Return Reason Codes

eCheck Return Reason Code	Description
R01	Insufficient funds in account
R02	Account is closed
R03	No account on file
R04	Invalid account number
R05	Unauthorized debit to consumer account
R06	Returned at request of ODFI
R07	Authorization revoked by customer
R08	Payment stopped
R09	Insufficient collected funds in account being charged
R10	Customer advises not Authorized, notice not provided, improper source document, or amount of entry not accurately obtained from source document
R11	Check truncation return
R12	Account sold to another financial institution
R13	Invalid ACH routing number
R14	Representative payee is deceased or cannot continue in that capacity
R15	Beneficiary or account holder other than representative payee deceased
R16	Account funds have been frozen
R17	Item returned because of invalid data; refer to addenda fro information

**TABLE A-8** eCheck Return Reason Codes

eCheck Return Reason Code	Description
R18	Improper effective date
R19	Amount error
R20	Account does not allow ACH transactions or limit for transactions has been exceeded
R21	Invalid company identification
R22	Invalid individual ID
R23	Credit entry refused by receiver
R24	Duplicate entry
R25	Addenda record error
R26	Mandatory field error
R27	Trace number error
R28	Routing/transit number check digit error
R29	Corporate customer advised not authorized
R30	RDFI not participant in check truncation program
R31	Permissible return entry
R32	RDFI non-settlement
R33	Return of item
R34	Limited participation ODFI
R35	Return of improper debit entry
R36	Return of improper credit entry
R37	Source document presented for payment
R38	Stop payment on source document
R39	Improper source document
R40	Return of item by government agency
R41	invalid Transaction Code
R42	Routing/transit number check digit error
R43	Invalid account number
R44	Invalid individual ID
R45	Invalid individual name or company name

TABLE A-8 eCheck Return Reason Codes

eCheck Return Reason Code	Description
R46	Invalid representative payee indicator code
R47	Duplicate enrollment
R50	State law affecting RCK acceptance
R51	Item is ineligible, notice not provided, signature not genuine, or original item altered for adjustment entry
R52	Stop payment on item
R53	Item and ACH entry presented for payment
R61	Misrouted return - RDFI for original entry has placed incorrect routing/transit number in RDFI identification field
R67	Duplicate return
R68	Untimely return - return was not sent within the established timeframe
R69	Field errors
R70	Permissible return entry not accepted
R71	Misrouted dishonored return -incorrect routing/transit number in RDFI identification field
R72	Untimely return - dishonored return was not sent within the established timeframe
R73	Timely original return - RDFI certifies the original return entry was sent within established timeframe for original returns
R74	Corrected return - RDFI is correcting a previous return entry that was dishonored because it contained incomplete or incorrect information
R75	Original return not a duplicate
R76	No errors found
R80	Cross-border payment coding error
R81	Non-participant in cross-border program
R82	Invalid foreign RDFI identification
R83	Foreign RDFI unable to settle
R84	Cross-border entry not processed by originating gateway operator
R94	Administrative return item was processed and resubmitted as a photocopy

**TABLE A-8** eCheck Return Reason Codes

eCheck Return Reason Code	Description
R95	Administrative return item was processed and resubmitted as a MICR-Split
R97	Administrative return item was processed and resubmitted with corrected dollar amount
R98	Indicates a return PAC (pre-authorized check); RDFI provides a text reason and indicated a new account number on the PAC itself
R99	Indicates a return PAC (pre-authorized check); RDFI provides a text reason on the PAC itself for which there is no equivalent return reason code

# A.9 eCheck NoC Change Codes

Table A-9 is a list of eCheck NOC Change Codes. These codes are included in the daily NOC report made available to you via sFTP.

TABLE A-9 eCheck NOC Change Codes

eCheck Return Reason Code	Description
C01	Incorrect account number
C02	Incorrect routing/transit number
C03	Incorrect routing/transit number and incorrect account number
C04	Incorrect account name
C05	Incorrect transaction code
C06	Incorrect account number and transaction code
C07	Incorrect routing/transit number, account number and transaction code
C08	Incorrect foreign RDFI identification
C09	Incorrect individual ID
C13	Addenda format error
C61	Misrouted NOC
C62	Incorrect trace number
C63	Incorrect company ID
C64	Incorrect individual ID
C65	Incorrectly formatted correct data
C66	Incorrect discretionary data
C67	Routing/transit number not from original entry
C68	Account number not from original entry
C69	Incorrect transaction code
C96	Administrative return dishonor (dollar amount will be zero)
C99	Converted to MICR draft (check conversion items)



# **CREDIT CARD NUMBER FORMATS**

This appendix has two parts. The first provides basic information about card numbers, such as length, prefixes, and validation numbers. The second part provides information about the Luhn Mod-10 algorithm used to validate account numbers.

#### **Credit Card Number Formats:**

Table B-1 provides information on number formats for various credit card types.

CAUTION: The data presented here is for informational proposes only and is subject to change by the Credit Card Associations/Companies. You should verify the information using additional sources prior to using it to create or alter any of your business systems, processes, or procedures.

**TABLE B-1** Card Number Formats

Card Type	Card Number Prefix/Range	Number Length	Card Validation Number Length	Comments
American Express	34 and 37	15 digits	4 digits	
Diners Club International	36	14 digits	3 digits	Account Numbers starting with 36 may be submitted as either Discover (recommended) or Diners Club.
Diners Club (US and Canada)	54 and 55	16 digits	3 digits	These are processed through the MasterCard network and must be submitted as MasterCard.

Card Type	Card Number Prefix/Range	Number Length	Card Validation Number Length	Comments
Discover	300000-306000	14 digits	3 digits	Account Numbers starting
	309500-309600	or		with 36 may be submitted as either Discover
	352800-359000	16 digits		(recommended) or Diners
	36			Club.
	38			
	39			
	64			
	65			
	6011			
	622126-622925			
	624000-262999			
	628200-628899			
JCB	35 (except 352800-358999)	16 digits	3 digits	Account numbers 352800-358999 are processed through the Discover network
MasterCard	51-55	16 digits	3 digits	
		or		
		19 digits		
Visa	4	16 digits	3 digits	
		or		
		19 digits		

#### **Luhn Mod-10 Algorithm for Card Number Validation:**

The Luhn Mod-10 algorithm was invented in 1954 by IBM scientist Hans Peter Luhn and is a relatively simple formula used in numerous applications to validate identification numbers, including credit cards. The algorithm detects all single digit errors in an account number, as well as most transpositions of adjacent numbers.

Use the following method to determine if an account number is Mod-10 compliant:

- 1. Working from the right, double every other number. If the result of any doubling is a 2-digit number, treat them as individual digits for step 2. For example, 2 \* 9 = 18, should be treated as a 1 and an 8.
- 2. Add all the numbers together, including those you did not double. Remember to treat any 2-digit numbers as individual numbers.

3. If the result of step 2 is a multiple of 10, the account number is Mod-10 compliant.

### **Example: Mod-10 Algorithm**

For the account number 4005550000081019, the computations are shown in the table below.

4	0	0	5	5	5	0	0	0	0	0	8	1	0	1	9
x2		x2		x2		x2		x2		x2		x2		x2	
8	0	0	5	10	5	0	0	0	0	0	8	2	0	2	9
8+	0+	0+	5+	1+0+	5+	0+	0+	0+	0+	0+	8+	2+	0+	2+	9

The result is 40, which is a multiple of 10 and therefore compliant.



C

# TEST CARD NUMBERS

The following table provides a list of credit card numbers you can use in our Certification environment to construct your own transactions beyond what is required for certification. These account numbers are extracted from the Certification tests of Chapter 2 and the transaction examples of Chapter 3. Never use these account numbers in the live, production environment.

IMPORTANT: Per PCI DSS Requirements and Security Assessment Procedure, Section 6.4.3, "Production data (live PANs) are not used for testing or development."

TABLE C-1 Test Card Numbers

Account Number	Card Type	CVV2/CID
4457010000000009	Visa	349
4457010200000007	Visa	463
4457010100000008	Visa	992
4457010140000141	Visa	N/A
4457010200000247	Visa	N/A
4457010201000246	Visa	N/A
4457010202000245	Visa	N/A
4100204446270000	Visa	N/A
4024720001231239	Visa	N/A
4457119922390123	Visa	N/A
4457000800000002	Visa	N/A
4457000900000001	Visa	N/A

**TABLE C-1** Test Card Numbers

Account Number	Card Type	CVV2/CID
4457001000000008	Visa	N/A
4005550000081019	Visa	N/A
400000000000001	Visa	555
5112010000000003	MasterCard	261
5112010100000002	MasterCard	251
5112010140000004	MasterCard	N/A
5500000254444445	MasterCard	N/A
5592106621450897	MasterCard	N/A
5590409551104142	MasterCard	N/A
5587755665222179	MasterCard	N/A
5445840176552850	MasterCard	N/A
5390016478904678	MasterCard	N/A
5112010201000109	MasterCard	N/A
5112010202000108	MasterCard	N/A
5194560012341234	MasterCard	N/A
5435101234510196	MasterCard	987
5112000900000005	MasterCard	N/A
5186005800001012	MasterCard	N/A
6011010000000003	Discover	758
6011010100000002	Discover	184
6011010140000004	Discover	N/A
375001000000005	American Express	0414
375001010000003	American Express	0421
375001014000009	American Express	N/A
341234567890127	American Express	N/A

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