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Litle & Co.

XML Reference Guide

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CONTENTS

About This Guide

Intended Audience	xix
Revision History	xix
Document Structure	xxv
Documentation Set	xxv
Typographical Conventions	xxvii
Contact Information.....	xxviii

Chapter 1 Introduction

The LitleXML Data Format.....	2
Communications Protocols	3
General XML Coding Requirements	3
Other XML Resources.....	4
Batch Transaction Processing	5
Payment Integration Platform (Litle SDKs)	6
Duplicate Transaction Detection	7
Batch Duplicate Checking	7
Online Duplicate Checking.....	8
Coding for Report Groups.....	10
Additional/Alternate Methods of Tagging Transactions	11
Recovery	12
Authorization/Sale Recycling	12
Recycling Engine	12
Automatic Account Updater Service	14
Automatic Account Updater Service Options	14
Full Service Option.....	15
Match and Repair Option	16
Merchant Requirements.....	17
Automatic Account Updater Features	18
Litle Recurring Engine.....	19
Payment Plans	19
Subscriptions.....	20
Add Ons and Discounts	22
Recurring Reports	22
Transaction Types and Uses	23
Customer Insight Features.....	26
Prepaid Indicator	26
Affluence Indicator	27

Issuer Country Indicator	27
Cardholder Type Indicator.....	27
Flow Control for the Insights Feature	28
Fraud Toolkit	29
Prepaid Card Filtering	29
International Card Filtering Service	30
Prior Chargeback Filtering	30
Security Code No-Match Filter	31
Fraud Velocity Filtering	31
Prior Fraud Advice Filtering	31
AVS Filter	32
Application of Filters - Filtering Rules	32
Advanced Fraud Toolkit	34
Modifications to Your Web Page.....	35
LittleXML Transactions.....	36
Information Only Option	38
Fraud Check Transactions.....	38
Tokenization Feature	40
How Tokenization Works	41
Little Token Formats	42
Obtaining Tokens	43
Bulk Token Registration	43
Supported Token Transactions	44
Compliance with Visa Best Practices for Tokenization	45
eCheck Processing	46
Validation Feature	46
Verification Feature	46
Required Contents of Decline Notice	46
Automatic Notice of Change (NoC) Updates	48
Auto Redeposit Feature	48
Healthcare Card Feature	49
Supported Transaction Types.....	52
Authorization Transaction	52
AVS Only Transaction	53
Authorization Reversal Transactions	53
Notes on the Use of Authorization Reversal Transactions.....	54
Using Authorization Reversal to Halt Recycling Engine.....	55
Activate Transaction.....	55
Activate Reversal Transaction (Online Only)	55
Balance Inquiry Transaction.....	55
Cancel Subscription Transaction	55

Capture Transaction.....	56
Capture Given Auth Transaction.....	56
Create Plan Transaction	57
Credit Transaction.....	57
Deactivate Transaction	57
Deactivate Reversal Transaction (Online Only)	57
Deposit Reversal Transaction (Online Only).....	57
eCheck Credit Transaction.....	58
eCheck Redeposit Transaction	58
eCheck Sales Transaction	58
eCheck Verification Transaction	58
eCheck Void Transaction (Online Only).....	58
Force Capture Transaction	59
Load Transaction	59
Load Reversal Transaction (Online Only)	59
Refund Reversal Transaction (Online Only)	59
Sale Transaction	59
Unload Transaction	60
Unload Reversal Transaction (Online Only).....	60
Update Plan Transaction.....	60
Update Subscription Transaction	60
Void Transaction (Online Only)	60
Using Void to Halt Recycling Engine.....	61

Chapter 2 Testing Your LittleXML Transactions

Certification and Testing Environment.....	64
Sandbox Environment.....	64
Pre-Live Environment.....	64
Pre-Live Environment Limitations and Maintenance Schedules	65
Post-Live Environment.....	65
Post-Live Environment Limitations and Maintenance Schedules	65
Overview of Testing	67
Planning for Certification Testing	67
Required Certification Testing.....	68
Optional Testing.....	68
Transferring Files	69
Transferring Batch Files.....	69
Submitting a Batch File for Processing	69
Retrieving Processed Batch Files	70
Transferring Online Files.....	70
ASP Programming Example	71

Java Programming Example	72
Notes on Timeout Settings	73
Notes on Persistent Connections	73
Helpful Web Sites	73
Performing the Required Certification Tests	75
Testing Authorization (including Indicators), AVS Only, Capture, Credit, Sale, and Void Transactions	75
Testing Recycling Advice	90
Testing Authorization Reversal Transactions	91
Testing eCheck Transactions	95
Testing Token Transactions	101
Performing the Optional Tests	106
Testing AVS and Card Validation	106
Testing Address Responses	108
Testing Advanced AVS Response Codes	110
Testing Response Reason Codes and Messages	111
Testing 3DS Responses	114
Testing the Prepaid Filtering Feature	115
Testing the International Card Filter Feature	117
Testing Security Code No-Match Filtering	118
Testing Advanced Fraud Tools	119
Testing Automatic Account Updater	122
Testing Automatic Account Updater Extended Response Codes	123
Testing Automatic Account Updater for Tokenized Merchants	124
Testing Tax Billing and Convenience Fee	124
Testing the Recycling Engine	124
Testing Recycling Engine Cancellation	136
Testing Recurring Engine Transactions	138
Testing Gift Card Transactions	151
Testing Online Duplicate Transaction Processing	160
Testing Transaction Volume Capacity	161

Chapter 3 LittleXML Transaction Examples

Overview of Online and Batch Processing Formats	164
Batch Process Format	164
Supported Communication Protocols	165
Batch Processing Request Format	165
Batch Processing Response Format	167
Online Processing Format	168
Supported Communication Protocols	169
Online Processing Request Format	170

Online Processing Response Format	171
Transaction Types and Examples.....	172
Authorization Transactions.....	174
Authorization Request Structure	174
Authorization Response Structure	181
Authorization Reversal Transactions	186
Authorization Reversal Requests	186
Authorization Reversal Responses	187
Activate Transactions.....	189
Activate Request	189
Activate Response	190
Activate Reversal Transactions (Online Only)	192
Activate Reversal Request.....	192
Activate Reversal Response	192
Balance Inquiry Transactions.....	193
Balance Inquiry Request	193
Balance Inquiry Response	194
Cancel Subscription Transactions.....	195
Cancel Subscription Request.....	195
Cancel Subscription Response	196
Capture Transactions.....	197
Capture Request	197
Capture Response	204
Capture Given Auth Transactions	205
Capture Given Auth Request	205
Capture Given Auth Response	210
Create Plan Transactions.....	211
Create Plan Request.....	211
Create Plan Response	212
Credit Transactions	213
Credit Request for a Little & Co. Processed Transaction.....	213
Credit Request for a Non-Little & Co. Processed Transaction	217
Credit Response	221
Deactivate Transactions.....	223
Deactivate Request	223
Deactivate Response	224
Deactivate Reversal Transactions (Online Only)	225
Deactivate Reversal Request.....	225
Deactivate Reversal Response	226
Deposit Reversal Transactions (Online Only)	227
Deposit Reversal Request	227

Deposit Reversal Response.....	227
eCheck Credit Transactions.....	228
eCheck Credit Request Against a Litle & Co. Transaction.....	229
eCheck Credit Request for a Non-Litle & Co. Processed Sale	230
eCheck Credit Response	231
eCheck Redeposit Transactions	232
eCheck Redeposit Request	232
eCheck Redeposit Response.....	234
eCheck Sale Transactions	235
eCheck Sale Request	235
eCheck Sale Response.....	237
eCheck Verification Transactions.....	238
eCheck Verification Request.....	239
eCheck Verification Response	241
eCheck Void Transactions (Online Only)	242
eCheck Void Request	243
eCheck Void Response.....	243
Force Capture Transactions.....	244
Force Capture Request.....	244
Force Capture Response	247
Load Transactions.....	250
Load Request.....	250
Load Response	251
Load Reversal Transactions (Online Only)	252
Load Reversal Request.....	252
Load Reversal Response	252
Refund Reversal Transactions (Online Only).....	253
Refund Reversal Request	253
Refund Reversal Response	254
Register Token Transactions	255
Register Token Request	255
Register Token Response.....	257
RFR Transactions (Batch Only)	259
RFR Request	259
RFR Response.....	260
Sale Transactions	261
Sale Request.....	261
Sale Response.....	265
Unload Transactions	268
Unload Request	269
Unload Response.....	269

Unload Reversal Transactions (Online Only)	270
Unload Reversal Request	271
Unload Reversal Response	271
Update Plan Transactions	272
Update Plan Request	272
Update Plan Response	273
Update Subscription Transactions	274
Update Subscription Request	274
Update Subscription Response	275
Update Card Validation Number Transactions	276
Update Card Validation Number Request	276
Update Card Validation Number Response	277
Void Transactions (Online Only)	278
Void Request	278
Void Response	279

Chapter 4 LittleXML Elements

accNum	282
accountInformation	283
accountNumber	284
accountNumberLength	285
accountUpdate	286
accountUpdateFileRequestData	287
accountUpdater	288
accountUpdateResponse	292
accType	293
actionReason	294
activate	295
activateResponse	296
activateReversal	297
activateReversalResponse	298
active	299
addOnCode	300
addressIndicator	301
addressLine1, addressLine2, addressLine3	302
advancedAVSResult	303
advancedFraudChecks	304
advancedFraudResults	305
affiliate	306
affluence	307
allowPartialAuth	308

amexAggregatorData	309
amount	310
approvedAmount	311
authAmount	312
authCode	313
authDate	314
authenticatedByMerchant	315
authentication	316
authenticationResult	317
authenticationTransactionId	318
authenticationValue	319
authInformation	320
authorization	321
authorizationResponse	322
authorizationSourcePlatform	323
authReversal	324
authReversalResponse	325
availableBalance	326
avsResult	327
balanceInquiry	328
balanceInquiryResponse	329
batchRequest	330
batchResponse	335
beginningBalance	336
billingDate	337
billMeLaterRequest	338
billMeLaterResponseData	340
billToAddress	341
bin	343
bmlMerchantId	344
bmlProductType	345
bypassVelocityCheck	346
campaign	347
cancelSubscription	348
cancelSubscriptionResponse	349
capability	350
capture	351
captureGivenAuth	352
captureGivenAuthResponse	353
captureResponse	354
card	355

cardAcceptorTaxId	356
cardholderAuthentication	357
cardholderId	358
cardOrToken	359
cardProductType	360
cardValidationNum	361
cardValidationResult	362
cashBackAmount	363
catLevel	364
chargeback	365
checkNum	366
city	367
clinicOtherAmount	368
code	369
commodityCode	370
companyName	371
country	372
createAddOn	373
createDiscount	374
createPlan	375
createPlanResponse	376
credit	377
creditLine	379
creditLittleTxnId	380
creditResponse	381
customBilling	382
customerInfo	384
customerIpAddress	385
customerReference	386
customerRegistrationDate	387
customerType	388
customerWorkTelephone	389
deactivate	390
deactivateResponse	391
deactivateReversal	392
deactivateReversalResponse	393
debtRepayment	394
deleteAddOn	395
deleteDiscount	396
deliveryType	397
dentalAmount	398

depositReversal	399
depositReversalResponse	400
description	401
descriptor	402
destinationCountryCode	403
destinationPostalCode	404
detailTax	405
deviceReputationScore	406
deviceReviewStatus.....	407
discountAmount	408
discountCode	409
dob	410
dutyAmount.....	411
echeck.....	412
eCheckAccountSuffix	413
echeckCredit	414
echeckCreditResponse	415
echeckForToken	416
echeckOrEcheckToken	417
echeckRedeposit	418
echeckRedepositResponse	419
echeckSale	420
echeckSalesResponse	421
echeckToken.....	422
echeckVerification	423
echeckVerificationResponse.....	424
echeckVoid	425
echeckVoidResponse	426
email	427
employerName.....	428
endDate	429
endingBalance	430
enhancedAuthResponse.....	431
enhancedData.....	433
entryMode	437
expDate.....	438
extendedCardResponse	439
filtering	440
finalPayment	441
firstName.....	442
forceCapture	443

forceCaptureResponse	444
fraudCheck	445
fraudCheckResponse	446
fraudFilterOverride	447
fraudResult	448
fundingSource	449
giftCardBin	450
giftCardResponse	451
healthcareAmounts	452
healthcareIIAS	453
IIASFlag	454
incomeAmount	455
incomeCurrency	456
international	457
intervalType	458
invoiceReferenceNumber	459
issuerCountry	460
itemCategoryCode	461
itemDescription	462
itemDiscountAmount	463
itemSequenceNumber	464
lastName	465
lineItemData	466
lineItemTotal	468
lineItemTotalWithTax	469
litleInternalRecurringRequest	470
litleOnlineRequest	471
litleOnlineResponse	472
litleRequest	474
litleResponse	475
litleSessionId	477
litleToken	478
litleTxnId	479
load	480
loadResponse	481
loadReversal	482
loadReversalResponse	483
merchantData	484
merchantGroupingId	485
merchantId	486
message	487

middleInitial	488
name	489
newAccountInfo	490
newCardInfo	491
newCardTokenInfo	492
newTokenInfo	493
nextRecycleTime	494
number	495
numberOfPayments	496
orderDate	497
orderId	498
orderSource	499
originalAccountInfo	501
originalCard	502
originalCardInfo	503
originalCardTokenInfo	504
originalToken	505
originalTokenInfo	506
password	507
payerId	508
paypage	509
paypageRegistrationId	510
paypal	511
paypalOrderComplete	512
phone	513
phone as a child of billToAddress and shipToAddress	513
phone as a child of customBilling	513
planCode	514
pos	515
postDate	516
postDay	517
preapprovalNumber	518
prepaid	519
prepaidCardType	520
processingInstructions	521
productCode	522
quantity	523
recurringRequest	524
recurringResponse	525
recurringTxnId	526
recycleAdvice	527

recycleAdviceEnd	528
recycleBy	529
recycleEngineActive	530
recycleId	531
recycling	532
recycling Element as a Child of authorizationResponse or saleResponse	532
recycling Element as a Child of voidResponse	533
recyclingRequest	534
refundReversal	535
refundReversalResponse	536
registerTokenRequest	537
registerTokenResponse	538
reloadable	539
residenceStatus	540
response	541
responseCode	542
responseMessage	543
responseTime	544
RFRRequest	545
RFRResponse	546
routingNum	547
RxAmount	548
sale	549
saleResponse	551
salesTax	553
sellerId	554
sellerMerchantCategoryCode	555
shipFromPostalCode	556
shippingAmount	557
shipToAddress	558
ssn	559
startDate	560
state	561
subscription	562
subscriptionId	564
surchargeAmount	565
taxAmount	566
taxExempt	567
taxIncludedInTotal	568
taxRate	569
taxType	570

taxTypeIdentifier	571
terminalId	572
termsAndConditions.....	573
threatMetrixSessionId	574
token	575
token (Little generated card number replacement)	575
token (PayPal generated)	575
tokenMessage.....	576
tokenResponse	577
tokenResponseCode	578
totalHealthcareAmount	579
track	580
transactionId	581
trialIntervalType	582
trialNumberOfIntervals	583
triggeredRule	584
type	585
type Element as a Child of the parent elements listed below.....	585
type Element as a Child of fundingSource	586
unitCost.....	587
unitOfMeasure	588
unload	589
unloadResponse	590
unloadReversal	591
unloadReversalResponse	592
updateAddOn	593
updatedCard	594
updateCardValidationNumOnToken	595
updateCardValidationNumOnTokenResponse	596
updateDiscount	597
updatePlan	598
updatePlanResponse	599
updateSubscription	600
updateSubscriptionResponse	604
updatedToken	605
url	606
user	607
verificationCode	608
verify	609
visionAmount	610
virtualAccountNumber	611

virtualAuthenticationKeyData	612
virtualAuthenticationKeyPresenceIndicator	613
virtualGiftCard	614
virtualGiftCardResponse	615
void	616
voidResponse	617
yearsAtEmployer	618
yearsAtResidence	619
zip	620

Appendix A Payment Transaction Response Codes

Payment Transaction Response Codes	622
3DS Authentication Result Codes	640
AVS Response Codes	642
AAVS Response Codes	643
Card Validation Response Codes	646
XML Validation Error Messages	647
Additional Response Header Error Messages	649
eCheck Return Reason Codes	650
eCheck NoC Change Codes	654

Appendix B Credit Card Number Formats

Appendix C Test Card Numbers



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 to reflect change to LitleXML version 7.3. Also, added info to Note for <paypal> element in chapter 4.	Chapters 3 and 4. Appendix A.
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.	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. Clarified information in Online Dupe Checking section. Fixed several errors in Test/Cert scenarios and added test cases for Enhanced Authorization features.	Chapters 1, 3 and 4 Chapter 1 Chapter 2
2.4	Added information and tests for eCheck Tokenization.	All
2.5	Added information about new elements used for Healthcare Card processing. Added Register Token examples to Chapter 3. Added 2 new AAVS Response Codes	All Chapter 3 Appendix A
2.6	Removed information about Amex Auth Reversals. Added “Certification Environment Usage Policy” section to Chapter 2. Removed namespace (xmlns) attribute from all Response examples. This hasn’t been used since schema version 7.0.	Chapter 1 and Appendix A Chapter 2 Chapters 3 and 4
2.7	Removed Response Code 803 Clarified language about the operation of Online duplicate transaction checking for referenced transactions.	Chapter 4 and Appendix A Chapter 1
2.8	Removed <orderId> element from Online Capture Response example. Added info to element definitions. Added information about new Insights elements. Added Information about Filtering Services. Changed Account Number on eCheck test cases that should have returned a Return Reason Code of 301 - Invalid Account Number.	Chapters 3 and 4 All All Chapter 2
2.9	Add information for new <cardProductType> element. Add information for new elements associated with Pay Page. Added descriptions to the Reason Response Codes table. Added info on using <customerIpAddress> element for AAVS.	All All Appendix A Chapter 4

TABLE 1 Document Revision History

Doc. Version	Description	Location(s)
2.10	Misc. minor corrections and clarifications. Added information about Duplicate Transaction Detection. Added Amex AuthReversal test case Added paypageRegistrationId option to Register Token Transactions and new Response Code (879).	All Chapters 1 and 4 Chapter 2 Chapter 3 and Appendix A
2.11	Added information about Automatic Account Updater service. Added information about new elements for recycling advice. Add new PayPal Response Codes (613 thru 628) Removed redepositCount element.	All Chapters 1, 3, and 4 Appendix A Chapters 3 and 4
2.12	Fixed typo in Testing chapter; ".acs" should have been ".asc" Fixed error in Figure 1-4. With Full option, new card data is not returned to the merchant.	Chapter 2 Chapter 1
2.13	Added Response Code 629; removed code 353	Appendix A
2.14	Restructured/rewrote Chapter 2. Added new codes and info for AMEX Advanced AVS. Added the paypage element as an option to the Capture Given Auth, Credit, and Force Capture transactions.	Chapter 2 Appendix A Chapters 3 and 4
2.15	Added Prepaid Indicator (5) and AAVS Cert tests. Added information about Recycling Engine. Added new schema elements for V8.8 Added new Response Codes	Chapter 2 All Chapters 2, 3, & 4 Appendix A
2.16	Added Recycling Engine Cert tests Added new schema element (<actionReason>) for V8.9 maxDigits for <amount> element changed from 8 to 12	Chapter 2 Chapters 3 and 4 Chapter 4
2.17	Added new schema elements for Auth Recycling control Added new response Reason Codes	Chapters 3 and 4 Appendix A
2.18	Removed notes about <chargeback> element not being used. Added section about Chargeback Filtering. Added Appendix B providing info about account number formats.	Chapter 4 Chapter 1 Appendix B
2.19	Added information about new Recycling Engine elements. Added information about alternate transaction tagging.	Chapters 3 and 4 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. Added new certification test cases for Recycling Engine. Also, added new tests for Online Dupe Checking. Added new Response Code for Invalid Report Group.	Chapter 1 and Appendix A Chapter 2 Appendix A
2.22	Clarify info for several 3DS related elements. Change info about Online Dupe checking when id="". Fixed and error in the first cert test for Recycling Advice.	Chapter 4 Chapters 1 and 4 Chapter 2
2.23	Fix error in Recycling engine Cert tests.	Chapter 2
2.24	Adding info for fraudFilterOverride element Changes in Fraud Filtering Services (formerly Transaction Filtering)	Chapter 4 Chapter 1
2.25	Added AmEx test case for AVS Added sections about Little SDK and AVS Filter Added Response reason Code 319	Chapter 2 Chapter 1 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. 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 3 and 4 Appendix A Chapters 1 and 4
2.27	Added Response Reason Code 401	Appendix A
2.28	Added merchantData element to echeckRedeposit and echeckVerification transactions. Added info about Additional Response Header Error Messages. Added Info about timeout behavior for persistent connections.	Chapters 3 and 4 Chapter 4 and Appendix A 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. Minor text corrections in Tokenization sections.	Chapter 2 Chapters 1 and 2

TABLE 1 Document Revision History

Doc. Version	Description	Location(s)
2.32	Changed amounts in some Cert tests. Added info about new <code>surchargeAmount</code> and <code>terminalId</code> elements.	Chapter 2 Chapters 3 and 4
2.33	Added new Response Reason Codes 375 through 378. Removed "blank" AVS response from several test cases. Added Note that <code>terminalId</code> is required for MasterCard POS transactions.	Appendix A Chapter 2 Chapter 4
2.34	Updated for new Recurring elements included in schema V8.18. Updated enhancedData tables providing info about Level 2/Level 3 data requirements.	Chapter 4 Chapter 4
2.35	Added info about new <code>debtRepayment</code> element, including new Response Code - 852. Also added more Recurring engine elements. (NOTE: Recurring Engine is still in development and not yet intended for use.)	Chapters 3 & 4; Appendix A Chapter 4
2.36	Added more Recurring engine elements. (NOTE: Recurring Engine is still in development and not yet intended for use.)	Chapter 4
2.37	Added new Gift Card related elements and also more Recurring engine elements. (NOTE: Both the Recurring Engine and the Gift Card feature are still in development and not yet intended for use.)	Chapter 4
2.38	Added more Gift Card and recurring Engine elements. Also, added examples for Gift Card and Recurring Engine transaction types. (NOTE: Both the Recurring Engine and the Gift Card feature are still in development and not yet intended for use.) Added new Response Codes for Gift Cards and Recurring Engine.	Chapters 3 & 4 Appendix A
2.39	Added Cert test cases for both Recurring Engine and Private Label Gift Cards. Added overview section on Recurring Engine. Minor corrections to some Gift Card and Recurring Engine Examples. Changed definition as for <code><giftCardBin></code> and <code><accountNumberLength></code> to reflect that they are now required when activating a Virtual Gift Card. Added new response codes.	Chapter 2 Chapter 1 Chapter 3 Chapter 4 Appendix A

TABLE 1 Document Revision History

Doc. Version	Description	Location(s)
2.40	Added info for new Advanced Fraud elements and catLevel element. Also added Gift Card and Recurring Engine transactions to Supported Transaction section of Chapter 1. Added two new Response Codes for CAT transactions.	Chapters 1, 3, and 4 Appendix A
2.41	Corrected Virtual Gift Card Activate Cert test. Added Note to authentication element.	Chapter 2 Chapter 4
2.42	Added info about the new triggeredRule element. Updated several XML examples. Added Response Reason Code 550. Fixed some Indexing issues.	Chapter 4 Chapter 3 Appendix A All
2.43	Many changes to Certification tests (card numbers, responses, etc.) Corrected MaxLength of triggeredRule element - was 99, now 64. Added/Removed several test card numbers.	Chapter 2 Chapter 4 Appendix C
2.44	Added info about Advanced Fraud Tools Changes to Chapter 2 to reflect Pre-Live/Post-Live environments. Updates for Schema V8.25	Chapter 1 Chapter 2 Chapters 3 & 4

Document Structure

This manual contains the following sections:

Chapter 1, "Introduction"

This chapter provides an introduction to transaction processing using LittleXML.

Chapter 2, "Testing Your LittleXML Transactions"

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

Chapter 3, "LittleXML Transaction Examples"

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

Chapter 4, "LittleXML Elements"

This chapter provides definitions and other information concerning each LittleXML 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.

Appendix C, "Test Card Numbers"

This appendix provides credit card number that can be used for testing.

Documentation Set

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

- *Little & Co. iQ Reporting and Analytics User Guide*
- *Little & Co. Chargeback XML and Support Documentation API Reference Guide (Legacy)*
- *Little & Co. Chargeback API Reference Guide*
- *Little & Co. Chargeback Process Guide*
- *Little & Co. PayPal Integration Guide*
- *Little & Co. Bill Me Later Integration Guide*
- *Little & Co. PayFac API Reference Guide*

- *Little & Co. PayFac Portal User Guide*
- *Little & Co. Virtual Terminal User Guide (**Legacy**)*
- *Little & Co. Pay Page Integration Guide*
- *Little & Co. XML Differences Guide*
- *Little & 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: <ul style="list-style-type: none">• 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.
<i>Italicized text</i>	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 - 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, 8:30 A.M.– 5:30 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, 7:30 A.M.– 5:00 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.

Customer Experience Management/Customer Service Contact Information

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



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](#)
- [Recovery](#)
- [Litle Recurring Engine](#)
- [Customer Insight Features](#)
- [Fraud Toolkit](#)
- [Advanced Fraud Toolkit](#)
- [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 and Fraud Toolkit
 - Recovery
 - Customer Insights
 - Chargeback Management API
 - PayPal
 - Bill Me Later

1.1.1 Communications Protocols

There are three 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	N/A	Required
TCP/IP Socket	SSL	Supported	N/A
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 **<** and **>** 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 LittleXML Batch the parent or root element is the `<littleRequest>` element. A single `<littleRequest>` can contain many batches and each batch can contain multiple transactions. Little & 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** - Little & 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
- Python

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

Little & 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 Little 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, Little 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 Little 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 `<littleTxnId>` element) against other Online transactions processed within the previous two days.

IMPORTANT: 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 Little system.

If you elect to submit Online Sale transactions, Little 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, Little recommends you re-send the transaction. If Little received and processed the original transaction, you will receive a duplicate response. If Little did not receive the original transaction, the new submission will be processed.

Example: captureResponse for a duplicate Capture

```
<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
```

```
<captureResponse id="2" duplicate="true" reportGroup="ABC Division">
  <littleTxnId>1100030204</littleTxnId>
  <orderId>65347567</orderId>
  <response>000</response>
  <responseTime>2011-08-11T14:48:48</responseTime>
  <postDate>2011-08-11</postDate>
  <message>Approved</message>
</captureResponse>
</littleOnlineResponse>
```

1.5 Coding for Report Groups

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 required 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: 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

By Reporting Group	By Activity Date	By Payment Method	By Reason	All Currencies	By Presenter	Recycling Summary	Recycling By Attempt
Reporting Group ▼	Total Attempts	Declined Auths	Declined %	Approved Auths	Approved %		
[-] Demo	55	21	38.18%	34	61.82%		
[+] Domestic Business	53	21	39.62%	32	60.38%		
International Business	2	0	0.00%	2	100.00%		
Totals:	55	21	38.18%	34	61.82%		

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	Recycling By Attempt
Reporting Group ▼	Total Attempts	Declined Auths	Declined %	Approved Auths	Approved %		
<input checked="" type="checkbox"/> Demo	55	21	38.18%	34	61.82%		
<input checked="" type="checkbox"/> Domestic Business	53	21	39.62%	32	60.38%		
<input checked="" type="checkbox"/> Service A	23	14	60.87%	9	39.13%		
Product 1	19	14	73.68%	5	26.32%		
Product 2	4	0	0.00%	4	100.00%		
Service B	30	7	23.33%	23	76.67%		
International Business	2	0	0.00%	2	100.00%		
Totals:	55	21	38.18%	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 `merchantGroupId`, 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 `merchantgroupId` 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 Recovery

Litle Recovery is a bundle of services that include both Automatic Account Updater 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 12, and (AAU) [Full Service Option](#) on page 15.

1.6.1 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.

1.6.1.1 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.

Recycling Engine has 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

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 with certain declined response codes (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 your Litle FTP account. 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

NOTE: If you submit a transaction with the identical signature, but containing new information (for example, a new card number), the system updates the transaction in the recycling pool with the new info and continues to recycle.

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.

1.6.2 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 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](#)

1.6.3 Automatic Account Updater Service Options

The Account Updater option of Litle Recovery eliminates many of the issues associated with other account updater offerings. 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, requires a significant investment of resources and time on your part.

The two Automatic Account Updater options are:

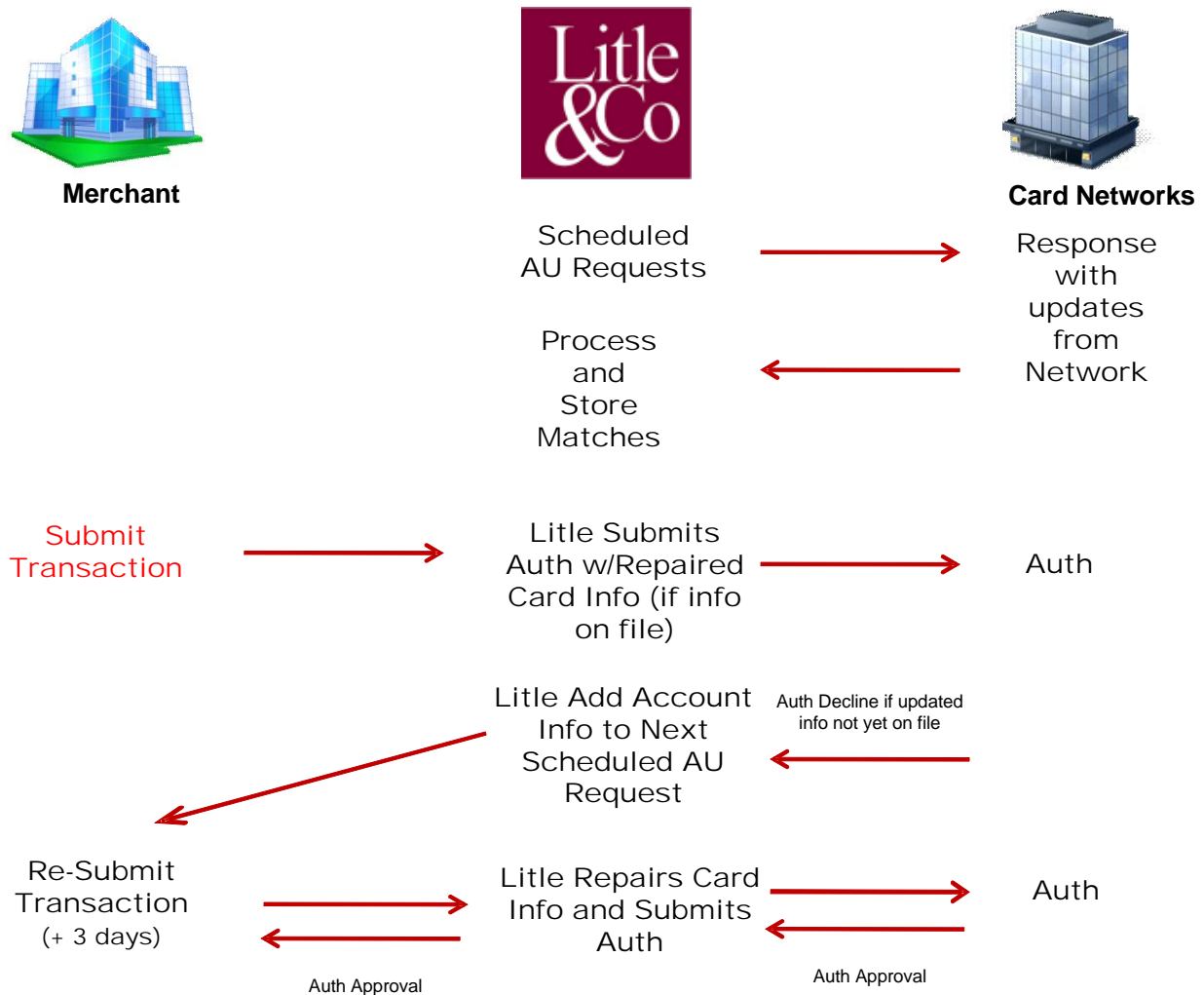
- [Full Service Option](#)
- [Match and Repair Option](#)

NOTE: It is always a best practice to link transactions through the `littleTxnId` 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 `littleTxnId`) 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.

1.6.3.1 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.

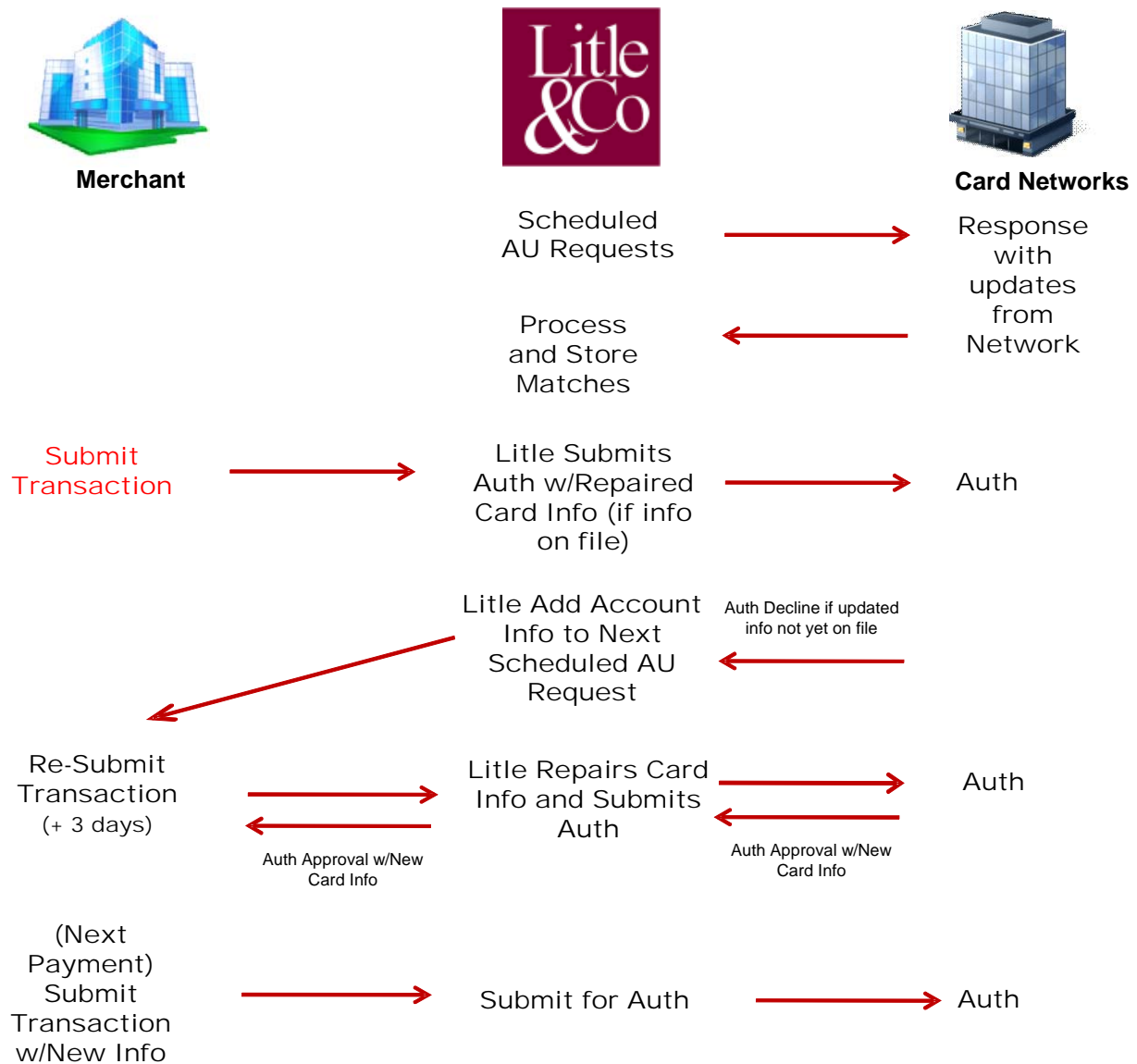
When you submit a transaction, our system checks the submitted card data against our database of updated information and repairs the information if needed. Since with this option Litle does not transmit the update information to you, you can continue to submit transactions using the original card information 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

1.6.3.2 Match and Repair Option

With the Match and Repair 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



1.6.3.3 Merchant Requirements

In order to use the Little 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

1.6.3.4 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 Little Recurring Engine

The Little Recurring Engine is a managed service that relieves the burden of developing an in-house billing solution for merchant engaged in installment or recurring transactions. This powerful, but flexible service allows you to create virtually any payment Plan required by your business model, whether it is part of a predetermined campaign or a marketing test, and then apply the Plan to customers as part of the standard Authorization or Sale transaction.

The Little Recurring Engine provides the following benefits:

- **Reduced Infrastructure Costs** - since you do not need to program your own solution, you save the up-front development cost, as well as ongoing maintenance expenses.
- **Reduced Labor** - once you create a Subscription in the Recurring Engine via a standard Authorization or Sale transaction, no further action is required for the life of the Subscription.
- **Integration with other Little Value Added Services** - if you include the Little Recovery Services (Automatic Account Updater and Recycling Engine) as part of your implementation, you eliminate any concerns (and reduce expenses) associated with issues such as account number changes and recycling of declined payments.
- **Flexible Plans** - You can define the billing interval (weekly, monthly, quarterly, etc.), number of payments (including open ended schedules), amount of payments, as well as trial periods within a Plan. To add flexibility you can override several of these settings and set a specific start date at the individual Subscription level.
- **Flexible Creation of Discounts** - if you wish to offer a discount to selected customers, simply include the information at the time of the Subscription creation, or add it anytime afterward by updating the Subscription.
- **Flexible Creation of Add Ons** - similar to a discount, you can apply changes for additional services at the time of the Subscription, or anytime afterward.
- **Integrated Reporting** - in addition to the normal revenue reconciliation information available in the Little iQ Analytics and Reporting platform, there are a number of recurring specific reports that allow you to better analyze your revenue stream associated with recurring payment plans and strategies.

1.7.1 Payment Plans

The first step in setting up recurring billing on the Little platform is to establish one or more payment Plans. To establish a payment Plan you use a Create Plan transaction type, which allows you to define the payment interval, the number of payments, and the amount. For example, you could easily define any number of Plans to fulfill your business needs.

For example, suppose you are a SaaS company that sells your product under 1, 2, or 3 year deals, with either monthly or quarterly payment schedules and reduced rates for longer deals. You could easily set-up six Plans as shown in the table below.

TABLE 1-3 Example Plans

Plan Code	Payment Interval	Amount per Payment	# of Payments	Total Subscription
1_Year_Monthly	Monthly	\$50.00	12	\$600.00
1_Year_Quarterly	Quarterly	\$150.00	4	\$600.00
2_Year_Monthly	Monthly	\$46.66	24	\$1119.84
2_Year_Quarterly	Quarterly	\$140.00	8	\$1120.00
3_Year_Monthly	Monthly	\$41.66	36	\$1499.76
3_Year_Quarterly	Quarterly	\$125.00	12	\$1500.00

As part of the Plan, you can also specify trial period. You want to have longer trials for longer Plans, so for either 1-year Plan, there is a 1 week trial, for either 2-year Plan there is a 2 week trial, and for the 3-year Plans, a 1 month trial. Below is a LittleXML example transaction to create the 3_Year_Monthly Plan.

Example: 3-Year Monthly Plan

```

<createPlan>
  <planCode>3_Year_Monthly</planCode>
  <name>3Year_Monthly</name>
  <description>3 Year, monthly Payments, 1 month trial</description>
  <intervalType>MONTHLY</intervalType>
  <amount>4166</amount>
  <numberOfPayments>36</numberOfPayments>
  <trialNumberOfIntervals>1</trialNumberOfIntervals>
  <trialIntervalType>MONTH</trialIntervalType>
  <active>true</active>
</createPlan>

```

1.7.2 Subscriptions

Subscriptions marry a customer order to a particular payment Plan and initiate the Recurring Engine to manage your future billing. You create a Subscription using either an Authorization or a Sale transaction. In the Auth/Sale you simply include a <recurringRequest> element to initialize the Subscription using a named Plan and set the start date for the first recurring bill. If you do not include a start date, the Recurring Engine uses the current date for the first payment.

If the recurring bill had an associated set-up or one-time fee use a Sale transaction. The amount of the Sale transaction would represent that fee, whereas the amount of future recurring payments are defined in the Plan. If you use an Authorization to create the Subscription, the transaction would normally be a \$0 Auth (or small amount followed by a reversal) and would include the billing information for Address Verification.

As part of the Subscription creation, you can also override both the number of payments and the amount, as well as include Add Ons and Discounts (discussed in the next section). The overrides give you a granular control to modify a standard payments Plan for a particular consumer without creating additional Plans. For example, if you offered a 1-year Plan with monthly payments as shown in the previous section, you could allow a consumer to complete their payments in 10 months instead of a year. In this case you would override the number of payments defined in the Plan (12) with 10 payments, while increasing the amount of each payment from \$50 to \$60.

Example: Subscription with Overrides

```
<authorization id="834262" reportGroup="ABC Division" customerId="038945">
  <orderId>65347567</orderId>
  <amount>0</amount>
  <orderSource>ecommerce</orderSource>
  <billToAddress>
    .
    .
    .
  </billToAddress>
  <card>
    .
    .
    .
  </card>
  <recurringRequest>
    <subscription>
      <planCode>1_Year_Monthly</planCode>
      <numberOfPayments>10</numberOfRemianingPayments>
      <startDate>2013-09-21</startDate>
      <amount>6000</amount>
    </subscription>
  </recurringRequest>
</authorization>
```

1.7.2.1 Add Ons and Discounts

Occasionally, you might wish to modify a Subscription with either a Discount or an Add On without creating a new Plan that has limited use. A Discount reduces the recurring amount for one or more payments, while an Add On increases the payments in return for an added service or item. You can apply either of these payment modifications at the time you initialize the Subscription or anytime afterward by updating the Subscription. In both cases you define the start date, end date, and amount of the Discount/Add On.

For example, suppose as part of your standard offering, your customers received 2GB of cloud-based storage. You also offer additional storage in 2GB blocks for \$10 each. One of your customers wants an additional 4GB of storage for the 8 months remaining on his contract and you are discounting the first month at 50%, or \$10. The example below show the `updateSubscription` transaction with the Add On and Discount.

Example: Update Subscription with Discount and Add On

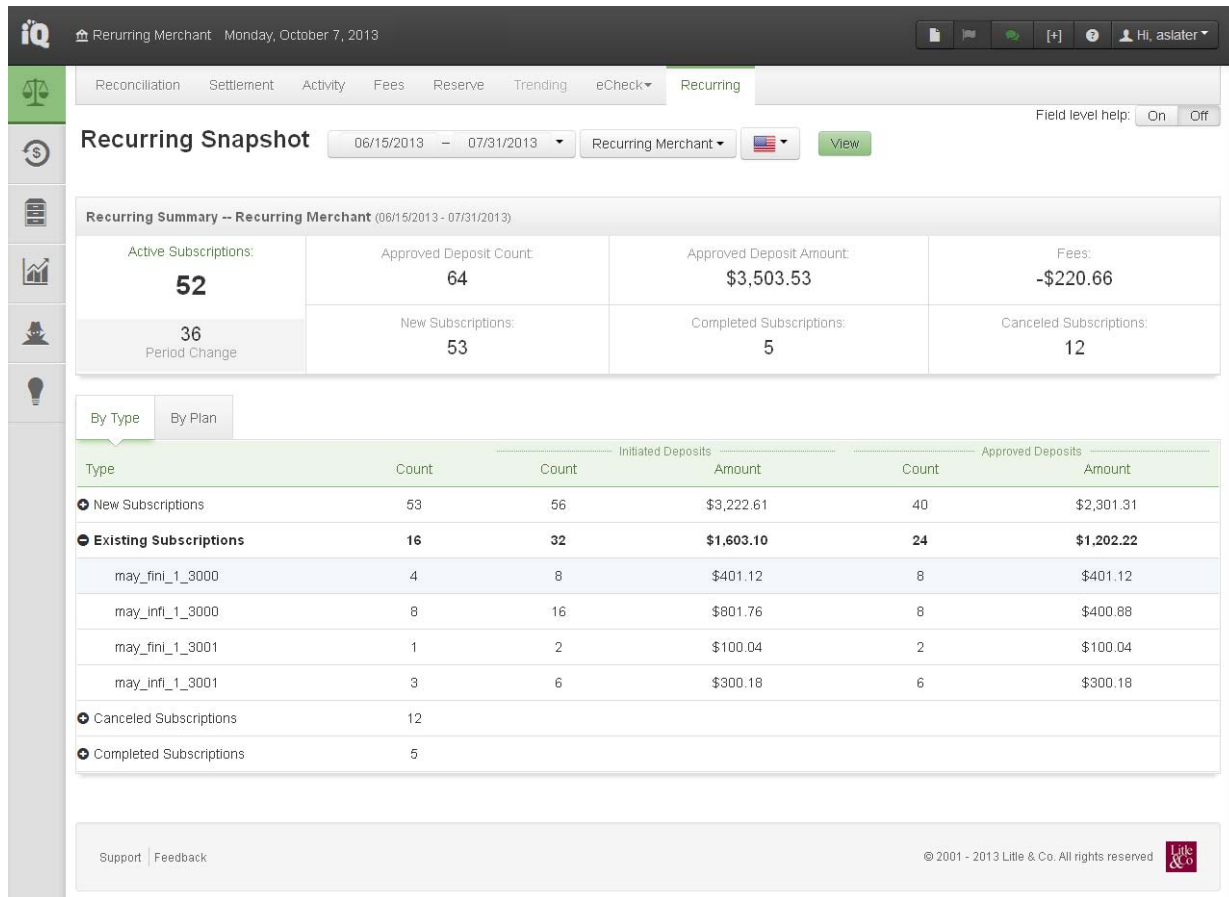
```
<updateSubscription>
  <subscriptionId>1234</subscriptionId>
  <createDiscount>
    <discountCode>4GBExtraDeal</discountCode>
    <name>Half-Off 1st Payment 4GB Extra</name>
    <amount>1000</amount>
    <startDate>2013-09-15</startDate>
    <endDate>2013-10-14</endDate>
  </createDiscount>
  <createAddOn>
    <addOnCode>4GB_Extra</addOnCode>
    <name>Four_GB_Extra</name>
    <amount>2000</amount>
    <startDate>2013-09-15</startDate>
    <endDate>2014-04-15</endDate>
  </createAddOn>
</updateSubscription>
```

1.7.3 Recurring Reports

In addition to recurring transactions appearing in the normal Little reports (i.e., Payment Detail, Reconciliation report, etc.), there are currently two reports associated specifically with the Recurring Engine. The first report is a daily Recurring report available via sFTP. This report is in Batch format and contains LittleXML response messages for all recurring transactions run the day before, including all approvals and declines.

The second report is the Recurring Snapshot report (see below). This report provides insights into the performance of each of your Plan offerings over a selected time period. The report includes metrics on Subscriptions added, completed, and cancelled, as well as information on any associated fees and amounts successfully deposited.

FIGURE 1-5 Recurring Snapshot Report



1.7.4 Transaction Types and Uses

The table below provides information about the various Recurring Engine transaction types and their uses.

TABLE 1-4 Recurring Engine Transaction Types

Use Case/Intent	Parent Element	Description/Uses
Create Plan	createPlan	Used to create new Plans.
Update Plan	updatePlan	Used to toggle a Plan between an active and inactive state. You can not associate an inactive Plan with a Subscription. Toggling a Plan to an inactive state does not effect existing Subscriptions associated with the Plan.
Create Subscription	<authorization> or <sale> <recurringRequest> <subscription>	Used to initiate a Subscription with an associated Plan. The Subscription can include <code>amount</code> and <code>numberOfPayment</code> overrides to the Plan. Also, the Subscription can include <code>createAddOn</code> and <code>createDiscount</code> children.
Update Subscription	updateSubscription	Used to modify Subscription information including: changing the Plan, changing the billing name/address, and changing the method of payment. You can also use this transaction type to create/delete/update Add Ons and Discounts.
Cancel Subscription	cancelSubscription	Used to cancel an existing Subscription.
Create Add On	<authorization> or <sale> <recurringRequest> <subscription> <createAddOn> Or <updateSubscription> <createAddOn>	Used to create an Add On charge associated with the Subscription.
Update Add On	<updateSubscription> <updateAddOn>	Used to modify one or more of the parameters associated with the Add On.
Delete Add On	<updateSubscription> <deleteAddOn>	Used to delete an Add On charge from the associated Subscription.

TABLE 1-4 Recurring Engine Transaction Types

Use Case/Intent	Parent Element	Description/Uses
Create Discount	<code><authorization></code> or <code><sale></code> <code><recurringRequest></code> <code><subscription></code> <code><createDiscount></code> Or <code><updateSubscription></code> <code><createDiscount></code>	Used to create a Discount charge associated with the Subscription.
Update Discount	<code><updateSubscription></code> <code><updateDiscount></code>	Used to modify one or more of the parameters associated with the Discount.
Delete Discount	<code><updateSubscription></code> <code><deleteDiscount></code>	Used to delete a Discount from the associated Subscription.

1.8 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, Little & Co. offers four features in the Customer Insight family of features: Prepaid Indicator, Affluence Indicator, Issuer Country Indicator, Card Type Indicator.

1.8.1 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 than 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.

1.8.2 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.

1.8.3 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.

1.8.4 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.

1.8.5 Flow Control for the Insights Feature

Little & Co. provides flow control functionality that allows you to limit which transactions the system examines for which it returns indicators. Currently there are three flow control options: by Presenter, by report Group, 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.

1.9 Fraud Toolkit

Little & 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 32). As part of the rule definition, you can define the application of the rules based upon MID, Report Group, Billing Descriptor, or order source. Little & Co. currently offers seven types of card filtering services that may aid you in reducing certain types of fraud: Prepaid Card Filtering, International Card Filtering, Prior Chargeback Filtering, Prior Fraud Advice Filtering, Security Code No-match Filtering, Fraud Velocity Filtering, and AVS Filtering.

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

1.9.1 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 Little filter these transactions automatically when you send the Authorization transaction.

If you elect to use the Little & 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 LittleXML schema version 8.3 or above, the system returns a Response Reason Code of **309 - Restricted Card - Prepaid Card Filtering Service**. If you use LittleXML 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 `<prepaid>` 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 `<prepaid>` 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.

1.9.2 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.

1.9.3 Prior Chargeback Filtering

If you elect to use the Chargeback Filter Service, there are two configuration options. You can elect to filter all transactions using a crdd 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**.

1.9.4 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.

1.9.5 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 a configurable time period. Both the number of approved Auths/Sales and the time period are configured in the Litle Merchant Profile.

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**.

1.9.6 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 LittleXML 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 LittleXML version 8.10 or below, the system returns a Response Reason Code of **307 - Restricted Card**.

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

1.9.8 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 Little 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 Little 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 1-5](#) defines five rules that a merchant might define.

TABLE 1-5 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 1-5](#) defines five Filter Rules that a merchant might use. These rules would be applied as follows:

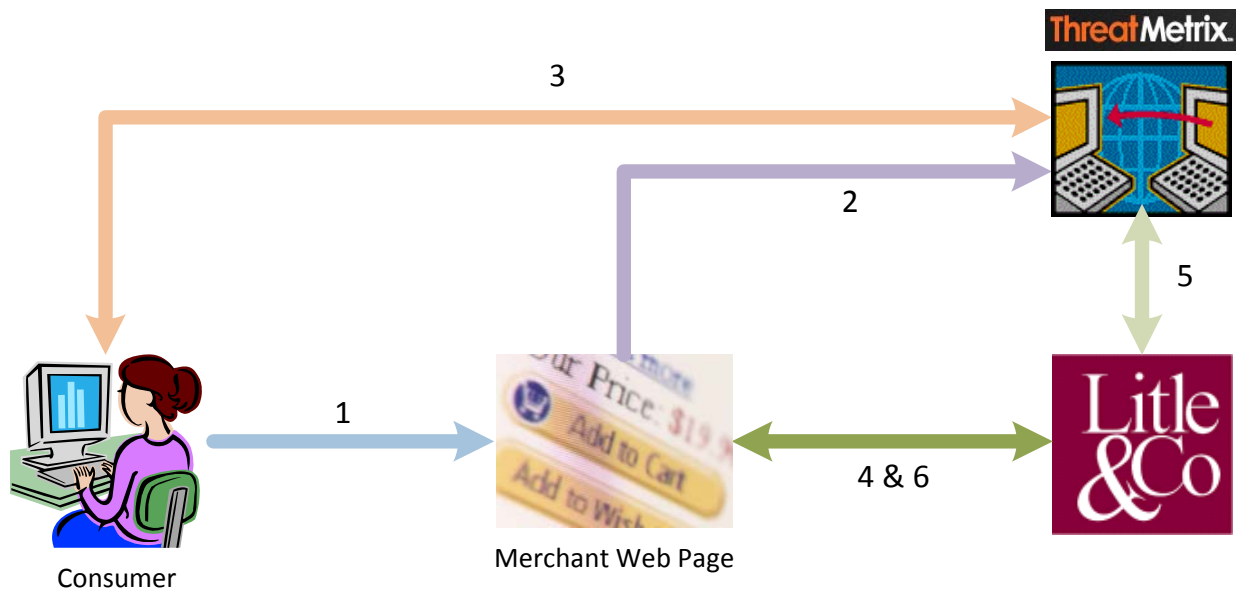
- Filters 1 and 2 are applied to the subset of transactions that are members of Report Group XYZ and use the Prepaid and International Filters. Since the Filter Rules are defined separately, the rules are ORed. So, if a transaction uses either a Prepaid card or a card of International origin, the transaction 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.

1.10 Advanced Fraud Toolkit

To further assist you in limiting fraudulent transactions, Litle & Co. has entered into a partnership with ThreatMetrix™, one of the foremost fraud prevention services in the world. The close integration of Litle and ThreatMetrix allows you to augment the existing Litle filters by taking advantage of several ThreatMetrix fraud detection features. Making use of this feature only requires a simple modification to the code resident on your web page prior to processing your transactions with Litle as you would normally.

The figure below provides a high level overview of the process.

FIGURE 2 Advanced Fraud Tools Process Overview



1. The consumer accesses your web page to make a purchase.
2. Code on your web page makes a call to the ThreatMetrix servers initiating several fraud check mechanisms. At this time, you also supply a unique session Id to ThreatMetrix.

NOTE: While generated by you, each session Id must include a 5-character prefix, supplied by your Litle Implementation Consultant, followed by a dash ("-"). The remainder of the session Id must be unique for each instance of the customer accessing your page.

3. The ThreatMetrix servers examine several properties of the consumer's device and method of access. This process is invisible to the consumer.
4. You submit a normal Authorization/Sale transaction to Litle & Co., including the session ID you designated when making the call to the ThreatMetrix Server.

NOTE: If you are using LittleXML version 8.25 or above, you also have the option of submitting a Fraud Check transaction. This transaction type will retrieve the results of the ThreatMetrix checks without initiating an Auth/Sale.

5. Little & Co. queries the ThreatMetrix servers for the results of their analysis. These results reflect how the information about the consumer device/connection captured in the ThreatMetrix database evaluates against rules and thresholds set in your merchant profile (ThreatMetrix policy). All this information is distilled to a Device Reputation Score.
6. We return the Device Reputation Score in your LittleXML response message with one of three possible Review Statuses: Pass, Fail, or Review. Depending upon your configuration, one of the following scenarios will apply:
 - If you are configured for automatic decline of transactions with a Fail score, Little will decline those transaction. On a Status of Pass or Review, Little will proceed with normal processing. If a transaction with review Status is declined by the card network, you do not need to take action; however, if approved, you must decide whether to allow the transaction to stand or to take action to reverse/void the transaction.
 - If you are configured for information only, Little returns the Advanced Fraud Check results and processes the transaction normally. You must take action to reverse/void any approved transactions that your analysis determines to be fraudulent.

1.10.1 Modifications to Your Web Page

For ThreatMetrix to gather information for analysis, you must add certain profiling tags (see Example below) to selected pages served by your web application. These tags allow ThreatMetrix to collect information by loading objects used for detection into the consumer's browser. These tags are invisible to the consumer and add only a fraction of a second to your page's rendering time. Once loaded, these objects require only 3-5 seconds to gather profiling information from the consumer device.

NOTE: Please consult the *ThreatMetrix TrustDefender Platform - Implementation Guide* for complete information about requirements and procedures for adding the profiling tags.

Example: ThreatMetrix Profiling Tags

```
<!--Begin ThreatMetrix profiling tags below -->

<!-- note: replace 'UNIQUE_SESSION_ID' with a uniquely generated handle
      note: for production, replace 'h.online-metrix.net' with a local URL and
      configure your web server to redirect to 'h.online-metrix.net' -->

<div style="background:url(https://h.online-metrix.net/fp/clear.png?org_id=
q5ua9sl2&amp;session_id=UNIQUE_SESSION_ID&amp;m=1)"> </div>
```

```



<script src="https://h.online-metrix.net/fp/check.js?org_id=q5ua9sl2&
session_id=UNIQUE_SESSION_ID&pageid=##PAGEID##">

</script>

<object type="application/x-shockwave-flash" data="https://h.online-
metrix.net/fp/fp.swf?org_id=q5ua9sl2&session_id=UNIQUE_SESSION_ID" width="1"
height="1">

    <param name="movie" value="https://h.online-
metrix.net/fp/fp.swf?org_id=q5ua9sl2&session_id=UNIQUE_SESSION_ID" />

    <param name="wmode" value="transparent" />

</div></div>

</object>

<!-- End profiling tags -->

```

1.10.2 LittleXML Transactions

To subject a transaction to the advanced fraud checks performed by ThreatMetrix and retrieve the results, you simply submit the `<threatMetrixSessionId>` element as part of your LittleXML Authorization (or Sale) transaction. This session Id is the same unique value you assigned and sent to ThreatMetrix when your web page called the application (designated as `UNIQUE_SESSION_ID` in the ThreatMetrix Profiling Tags example). When we receive an Authorization/Sale that includes the `<threatMetrixSessionId>`, our system automatically queries the ThreatMetrix platform for the associated results. The LittleXML response message includes the `<advancedFraudResults>` element containing the score and status and information about any triggered rules. The following two examples show a standard Authorization transaction, including a `<threatMetrixSessionId>` and a **pass** response.

NOTE: To bypass the ThreatMetrix fraud checks, simply omit the `<threatMetrixSessionId>` from the transaction.

Example: Authorization including `<threatMetrixSessionId>` Element

```

<littleOnlineRequest version="8.25" xmlns="http://www.little.com/schema"
merchantId="81601">
  <authentication>
    <user>ECHK2XMLV8</user>
    <password>password</password>
  </authentication>
  <authorization id="002" reportGroup="001601">
    <orderId>10102013_sessionId_app</orderId>
    <amount>1002</amount>
  </authorization>
</littleOnlineRequest>

```



```
<orderSource>ecommerce</orderSource>
<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>nobody@litle.com</email>
</billToAddress>
<card>
  <type>MC</type>
  <number>5405102001000003</number>
  <expDate>1115</expDate>
</card>
<advancedFraudChecks>
  <threatMetrixSessionId>ASDFG-AXXXXAB999</threatMetrixSessionId>
</advancedFraudChecks>
</authorization>
</litleOnlineRequest>
```

Example: Authorization Response including <advancedFraudResults> Element

```
<litleOnlineResponse version="8.25" xmlns="http://www.litle.com/schema"
  response="0" message="Valid Format">
  <authorizationResponse id="002" reportGroup="001601">
    <litleTxnId>82823534116454639</litleTxnId>
    <orderId>10102013_sessionId_app</orderId>
    <response>000</response>
    <responseTime>2013-11-08T21:36:50</responseTime>
    <postDate>2013-11-08</postDate>
    <message>Approved</message>
    <authCode>000003</authCode>
    <fraudResult>
      <avsResult>00</avsResult>
      <advancedFraudResults>
        <deviceReviewStatus>pass</deviceReviewStatus>
        <deviceReputationScore>50</deviceReputationScore>
```

```

        <triggeredRule>FlashImagesCookiesDisabled</triggeredRule>
    </advancedFraudResults>
</fraudResult>
</authorizationResponse>
</littleOnlineResponse>

```

NOTE: The other possible values for the `<deviceReviewStatus>` element are *fail*, *review*, *unavailable*, *unknown_session*, and *invalid_session*.

The `<deviceReputationScore>` value can range from -100 to 100. The resulting pass, fail, or review value depends upon your profile settings.

The `<triggeredRule>` element can occur multiple times, once for each rule triggered.

1.10.3 Information Only Option

If you wish to retain full control of the decision to accept or decline transactions, Little offers the option of using the Advanced Fraud Tools in an Information Only mode. In this configuration, you receive the same information in the response as you would with the full implementation; however, Little will not automatically decline transactions with a failing score.

If the authorization is declined by the network, you can choose to recycle the transaction or do nothing. If an authorization with a failing score receives approval from the network, it would be up to you to reverse the authorization should you decide not to proceed with the transaction. This is similar to the case of an approved transaction that has a status of Review, but you decide not to proceed. Issuing an authorization reversal allows you to avoid any misuse of Auth fees otherwise imposed by the card networks.

1.10.4 Fraud Check Transactions

If you have coded to LittleXML V8.25 or above and wish to retrieve the Advanced Fraud results without introducing a Authorization or Sale transactions, use a Fraud Check transaction as shown in the example below. Fraud Check transactions are only supported as Online transactions.

Example: Fraud Check Transaction

```

<littleOnlineRequest version="8.25" xmlns="http://www.little.com/schema"
  merchantId="81601">
  <authentication>
    <user>ECHK2XMLV8</user>
    <password>password</password>
  </authentication>
  <fraudCheck id="002" reportGroup="001601">
    <advancedFraudChecks>

```

```
<threatMetrixSessionId>ASDFG-XXXXAB999</threatMetrixSessionId>  
</advancedFraudChecks>  
</authorization>  
</littleOnlineRequest>
```

1.11 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 reduce the cost of compliance and may limit your liability if your systems are breached. You can further reduce the requirements, as well as the possibility of exposure from a breach through the use of the Litle PayPage. By sending the card information from your page directly to our systems you eliminate one more facet of handling the card information.

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:

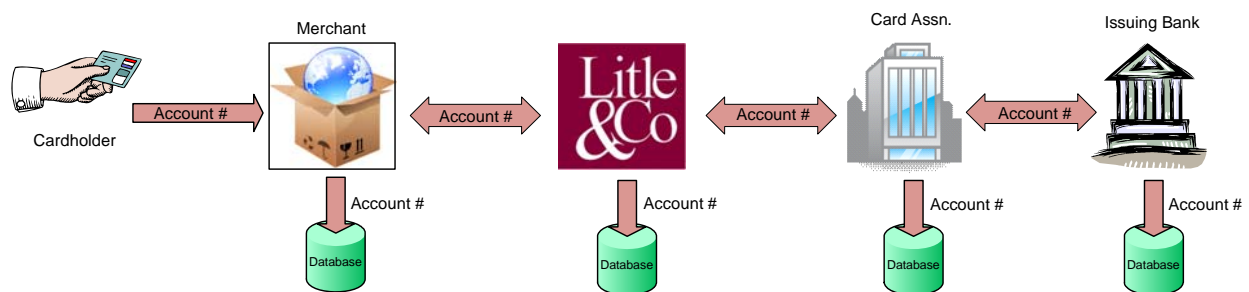
- [How Tokenization Works](#)
- [Litle Token Formats](#)
- [Obtaining Tokens](#)
- [Supported Token Transactions](#)

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

1.11.1 How Tokenization Works

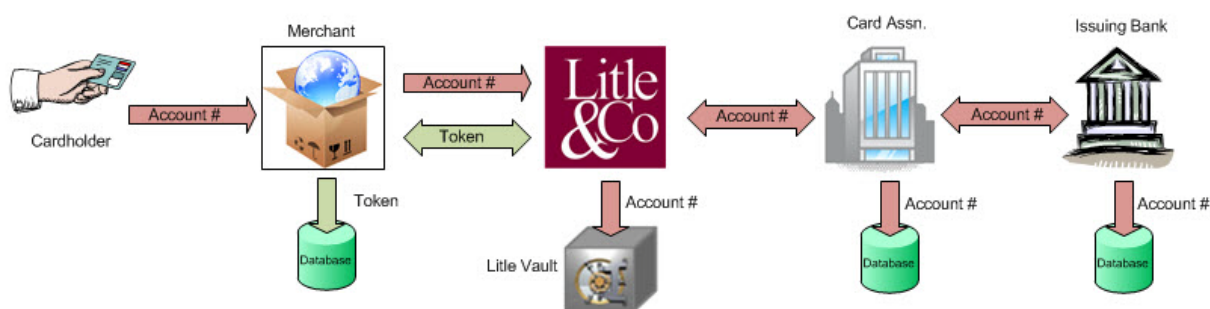
In a non-tokenized environment, customer data, including the card/eCheck account number, is handled and stored by multiple parties for each transaction. From a merchant standpoint, they receive the information, store it in their own database, and transmit it to their processor with the transaction request, as [Figure 1-1](#) 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.

FIGURE 1-1 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 1-2](#) 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.

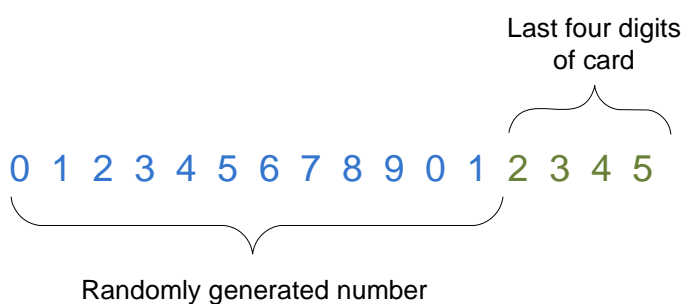
FIGURE 1-2 Card Information Flow in Tokenized Environment

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.

1.11.2 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 1-3 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.

1.11.3 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 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 255.) 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.

1.11.3.1 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:

7. 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.
8. Litle performs a bulk token registration of all of the card numbers contained in the file.

9. 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.

1.11.4 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.

1.11.5 Compliance with Visa Best Practices for Tokenization

As shown below, the Little 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 Little solution would satisfy this item, as would protecting it per PCI DSS requirements.

TABLE 1-6 Visa Best Practices for Tokenization Compliance

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

1.12 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.

1.12.1 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.

1.12.2 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.

1.12.2.1 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, Little & 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 | • Driver's License Number & State |
| • Current Address | • Home Telephone Number |
| • Date Declined | • Date of Birth |
| • Dollar Amount | • Social Security Number |
| • Check/Draft/Transfer Number | • Merchant Name |
| • Checking Account Number | • Name of Financial Institution |

1.12.3 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.

1.12.4 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. iQ Reporting and Analytics User 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.

1.13 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, Little & Co. has augmented the LittleXML 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 healthcareIIAS 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.

```
<littleOnlineRequest version="8.2" xmlns="http://www.little.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>
    <billToAddress>
      <name>John Smith</name>
      <addressLine1>100 Main St</addressLine1>
      <city>Boston</city>
      <state>MA</state>
      <zip>12345</zip>
      <email>jsmith@someaddress.com</email>
      <phone>555-123-4567</phone>
    </billToAddress>
    <card>
      <type>VI</type>
```

```

<number>4000000000000001</number>
<expDate>1211</expDate>
<cardValidationNum>555</cardValidationNum>
</card>
<cardholderAuthentication>
  <authenticationValue>BwABBJQ1gJDUCAAAAAA= </authenticationValue>
  <authenticationTransactionId>gMV75TmjAgk= </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>
</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 Little Certification Testing for the use of this feature, as well as the Partial Auth feature.
- Transactions must include the `IIASFlag` element set to **Y**.

1.14 Supported Transaction Types

Little Batch processing supports all transaction types except Voids, eCheck Voids and Private Label Gift Card reversal transactions, 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.

1.14.1 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 1-7](#) provides information concerning Authorization lifespans for various card types and alternate payment methods.

TABLE 1-7 Lifespan of Payment Authorizations

Payment Type	Lifespan of Authorization
MasterCard	7 days
Visa	7 days
American Express	7 days
Discover	10 days
PayPal	29 days total by default; Little & Co. recommends capture submission within three days. For more information, see the <i>Little & Co. PayPal Integration Guide</i> .
Bill Me Later	30 days by default; for more information about Bill Me Later authorizations, see the <i>Little & 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 56).

1.14.1.1 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.

1.14.2 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 an 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, Little automatically performs a partial Authorization Reversal for the unused amount (also see [Capture Request](#) on page 197).

1.14.2.1 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 LittleXML format.
- Little & 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 associated 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, Little 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 littleTxnId* 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.

1.14.2.2 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.

1.14.3 Activate Transaction

You use an Activate transaction changes the status of a (Closed Loop) Gift Card from an inactive to an active state with a value as specified by the `amount` element. You can also use this transaction type to create a Virtual Gift Card.

1.14.4 Activate Reversal Transaction (Online Only)

You use as Activate Reversal transaction to change the status of a newly activated (Closed Loop) Gift Card from active to inactive, thus reversing the operation of an Active transaction. The Activate Reversal references the associated Activate transaction by means of the `littleTxnId` element returned in the Activate response.

1.14.5 Balance Inquiry Transaction

You use the Balance Inquiry transaction to determine the balance available for use on a (Closed Loop) Gift Card.

1.14.6 Cancel Subscription Transaction

If you are using the Litle Recurring Engine, you create Subscriptions as part of an Authorization or Sale transaction. You use the Cancel Subscription transaction to cancel the specified subscription, removing the transaction stream managed by the Recurring Engine.

1.14.7 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.

1.14.8 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.

1.14.9 Create Plan Transaction

You use the Create Plan transaction to define several attributes of a recurring payment schedule. Later, as part of an Authorization or sale transaction, you can associate existing, active plans with Subscriptions. This association establishes a recurring payment schedule managed by the Litle Recurring Engine.

1.14.10 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.

1.14.11 Deactivate Transaction

You use a Deactivate transaction to change the status of a (Closed Loop) Gift Card from an active to an inactive state.

1.14.12 Deactivate Reversal Transaction (Online Only)

You use a Deactivate Reversal transaction to change the status of a newly deactivated Gift Card from inactive to active, thus reversing the operation of an Deactivate transaction. The Deactivate Reversal references the associated Deactivate transaction by means of the `litleTxnId` element returned in the Deactivate response.

1.14.13 Deposit Reversal Transaction (Online Only)

Used only for (Closed Loop) Gift Card related transactions, a Deposit Reversal transaction to reverse the funds capture initiate by either a Capture or Sale transaction. The Deposit Reversal references the associated Capture/Sale transaction by means of the `litleTxnId` element returned in the Capture/Sale response. You should never attempt to use this transaction type to reverse credit card or eCheck transactions.

1.14.14 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 Little & Co. system.

1.14.15 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.

1.14.16 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.

1.14.17 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.

1.14.18 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.

1.14.19 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.

1.14.20 Load Transaction

You use a Load transaction to add funds to an active Gift Card. The load amount cannot exceed the maximum allowed amount for the Gift Card. If you attempt to load more than the maximum amount, the transaction will be declined with a response Code of 221 - Over Max Balance.

1.14.21 Load Reversal Transaction (Online Only)

You use a Load Reversal transaction to reverse the operation of a Load transaction, removing the newly loaded amount from the Gift Card. The Load Reversal references the associated Load transaction by means of the `litleTxnId` element returned in the Load response. You cannot perform a partial Load Reversal. This transaction always reverses the full amount of the referenced Load transaction.

1.14.22 Refund Reversal Transaction (Online Only)

The Refund Reversal transaction is a (Closed Loop) Gift Card only transaction that reverses the operation of a Refund transaction on the Gift Card. The Refund Reversal references the associated Credit transaction by means of the `litleTxnId` element returned in the Credit response. You cannot perform a partial Refund Reversal. This transaction always reverses the full amount of the referenced Refund transaction.

1.14.23 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.

1.14.24 Unload Transaction

You use an Unload transaction to remove funds from an active Gift Card. The unload amount cannot exceed the available balance on the Gift Card. If you attempt to unload more than the available balance, the transaction will be declined with a response Code of 209 - Invalid Amount.

1.14.25 Unload Reversal Transaction (Online Only)

The Unload Reversal transaction reverses the operation of a Unload transaction, returning the value removed from the Gift Card by the Unload transaction. The Unload Reversal references the associated Unload transaction by means of the `littleTxnId` element returned in the Unload response. You cannot perform a partial Unload Reversal. This transaction always reverses the full amount of the referenced Unload transaction.

1.14.26 Update Plan Transaction

You use the Update Plan transaction to activate/deactivate Plans associated with recurring payments. When you deactivate a Plan, by setting the `active` flag to **false**, you can no longer reference that Plan for use with subscriptions. Existing subscriptions already using the deactivated Plan will continue to use the Plan until the subscription is either modified or completed. You can also reactivate a deactivated Plan by updating the Plan and setting the `active` flag to **true**.

1.14.27 Update Subscription Transaction

You use an Update Subscription transaction to change certain 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 also create, update, or delete a Discount and/or an Add On.

1.14.28 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 `littleTxnId`).

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 53.)
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1.14.28.1 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 (`creditLitleTxnId` 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.



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 and Testing Environment](#)
- [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."

2.1 Certification and Testing Environment

Little has several testing and certification platforms optimized for different uses. These environments are called: Sandbox, Pre-Live, and Post-Live. This section discusses the various environments, their uses, and limitations. The certification and testing environments do not have the full capacity, performance, or availability of the Little Production platform.

2.1.1 Sandbox Environment

The Sandbox environment is a simulator that provides a basic interface for functional level testing of transaction messages. Typically, merchants using one of the available Software Development Kits (SDKs) would use the Sandbox to test basic functionality, but it could also be used by any merchant using LittleXML. This is a stateless simulator, so it has no historical transactional data, and does not provide full functionality. This environment is not intended for certification or regression testing.

NOTE: At his time, the Sandbox does not support Batch transactions (Online transactions only).

Use of the Sandbox does not require a password. The environment is available on the public internet (at www.testlitle.com/sandbox/communicator/online). The source code is hosted at GitHub (www.github.com), with supporting documentation, including test case documentation, available at www.little.com/developers/little-sandbox.

2.1.2 Pre-Live Environment

The Pre-Live test environment is the platform used for all merchant Certification testing. This environment should be used by both newly on-boarding Little merchants (for example, coding a direct XML integration for the first time), and existing Little merchants seeking to incorporate additional features or functionalities into their current XML integrations. While the Pre-Live system provides a working version of the Little production system, it does not have the full capacity or performance of the production platform and operates using simulators rather than communicating with the card associations.

It provides for the self-provisioning of a basic test account via www.testlitle.com, and the self-certification of basic processing through report cards that are auto-distributed to merchants as they send in test transactions. Additional features you plan to use once qualified for the submission of transactions to the production platform, will be configured by your Little Implementation Consultant, such that your test merchant(s) configuration will be the same as you will have in production.

2.1.2.1 Pre-Live Environment Limitations and Maintenance Schedules

When using the Pre-Live environment for testing, please keep in mind the following limitations and maintenance schedules:

- The number of merchants configured per organization will be limited to the number necessary to perform the required certification testing.
- Data retention is limited to a maximum of 30 days.

NOTE: Depending upon overall system capacity and/or system maintenance requirements, data purges may occur frequently. Whenever possible, advanced notification will be provided.

- Merchant profile and data deleted after 7 consecutive days with no activity.
- Maintenance window - each Tuesday and Thursday from 8:00-11:00 AM ET.
- Daily limit of 1000 Online transactions.
- Daily limit of 10000 Batch transactions.

2.1.3 Post-Live Environment

The Post-Live testing environment is intended for merchants that are already fully certified and submitting transactions to the Litle Production platform, but wish to perform regression or other tests to confirm the operational readiness of modifications to their own systems. Upon completion of the initial certification and on-boarding process, Litle migrates merchants that are Production-enabled to the Post-Live environment for any on-going testing needs.

In Post-Live, the merchant profile matches your profile from the Litle Production environment. Similar to Pre-Live, the Post-Live system provides a working version of the Litle production system, but it does not have the full capacity or performance of the production platform and operates using simulators rather than communicating with the card associations. Unlike the Pre-live platform, all Merchant accounts/IDs are synchronized with the Litle Production environment.

2.1.3.1 Post-Live Environment Limitations and Maintenance Schedules

When using the Post-Live environment for testing, please keep in mind the following limitations and maintenance schedules:

- Daily limit of 1000 Online transactions.
- Daily limit of 10000 Batch transactions.
- Maintenance window - each Tuesday and Thursday from 8:00-11:00 AM ET.
- Data retention limited to a maximum of 30 days.

NOTE:	Depending upon overall system capacity and/or system maintenance requirements, data purges may occur frequently. Whenever possible, advanced notification will be provided.
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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 LittleXML requirements. The Little & Co. testing process involves submitting Little supplied data for specific fields in a request, and receiving specific data back in a response. The response returned by Little allows you to verify that you parse the LittleXML 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 LittleXML 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, Little 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 offer many options/optional fields that you may wish to utilize 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 75.

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 and Testing Environment](#) on page 64). 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

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](#)

NOTE: 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

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 LittleXML Authorization transaction submitted via HTTPS Post using ASP.

```
Dim xml

Dim strXML

strXML = strXML & "<litleOnlineRequest version=\""8.8\""
xmlns=\""http://www.little.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>0516</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>
- <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>

2.4 Performing the Required Certification Tests

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 `littleTxnId` 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 26)
- Order Ids 21 through 24 - include if you plan to use the **Affluence Indicator** feature (see [Affluence Indicator](#) on page 27)
- Order Id 25 - include if you plan to use the **Issuer Country** feature (see [Issuer Country Indicator](#) on page 27)

- Order Ids 26 through 31 - include if you plan to use the **Healthcare Card** feature (see [Healthcare Card Feature](#) on page 49)

To test **Authorization** transactions:

1. Verify that your Authorization XML template is coded correctly (refer to [Authorization Transactions](#) on page 174.)
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 21 through 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 261.)
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 197.).
2. Submit `capture` transactions for Order Ids 1A through 5A using the `littleTnxId` 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 213.)
2. Submit `credit` transactions for Order Ids 1B through 5B using the `littleTnxId` 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 278.)
2. Submit `void` transactions for Order Ids 1C through 5C (and 6B if voiding Sale transactions) using the `littleTnxId` 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

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
1	Authorization/Sale/AVS: <amount> 10100 <name> John Smith <addressLine1> 1 Main St. <city> Burlington <state> MA <zip> 01803-3747 <country> US <type> VI <number> 4457010000000009 <expDate> 0116 <cardValidationNum> 349		Authorization Response: <response> 000 <message> Approved <authCode> 11111 <avsResult> 01 <cardValidationResult> M	
1A	Capture: <litleTxnId>	Value returned in Auth response for Order Id 1	Capture Response: <response> 000 <message> Approved	
1B	Credit: <litleTxnId>	Value returned in Capture response for Order Id 1A	Credit Response: <response> 000 <message> Approved	
1C	Void: <litleTxnId>	Use either the value returned in the Credit response for Order Id 1B, or the value returned in the Sale response (not Auth) for Order Id 1.	Void Response: <response> 000 <message> Approved	

TABLE 2-1 Authorization Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
2	Authorization/Sale/AVS: <amount> 10100 <name> Mike J. Hammer <addressLine1> 2 Main St. <addressLine2> Apt. 222 <city> Riverside <state> RI <zip> 02915 <country> US <type> MC <number> 5112010000000003 <expDate> 0216 <cardValidationNum> 261 <authenticationValue> BwABBJQ1AgAAA AAgJDUCAAAAAA A=		Authorization Response: <response> 000 <message> Approved <authCode> 22222 <avsResult> 10 <cardValidationResult> M <authenticationResult> Note: Not returned for MasterCard	
2A	Capture: <littleTxnId>	Value returned in Auth response for Order Id 2	Capture Response: <response> 000 <message> Approved	
2B	Credit: <littleTxnId>	Value returned in Capture response for Order Id 2A	Credit Response: <response> 000 <message> Approved	
2C	Void: <littleTxnId>	Use either the value returned in the Credit response for Order Id 2B, or the value returned in the Sale response (not Auth) for Order Id 2.	Void Response: <response> 000 <message> Approved	

TABLE 2-1 Authorization Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
3	Authorization/Sale/AVS: <amount> 10100 <name> Eileen Jones <addressLine1> 3 Main St. <city> Bloomfield <state> CT <zip> 06002 <country> US <type> DI <number> 6011010000000003 <expDate> 0316 <cardValidationNum> 758		Authorization Response: <response> 000 <message> Approved <authCode> 33333 <avsResult> 10 <cardValidationResult> M	
3A	Capture: <littleTxnId> Value returned in Auth response for Order Id 3		Capture Response: <response> 000 <message> Approved	
3B	Credit: <littleTxnId> Value returned in Capture response for Order Id 3A		Credit Response: <response> 000 <message> Approved	
3C	Void: <littleTxnId> Use either the value returned in the Credit response for Order Id 3B, or the value returned in the Sale response (not Auth) for Order Id 3.		Void Response: <response> 000 <message> Approved	

TABLE 2-1 Authorization Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
4	Authorization/Sale/AVS: <amount> 10100 <name> Bob Black <addressLine1> 4 Main St. <city> Laurel <state> MD <zip> 20708 <country> US <type> AX <number> 3750010000000005 <expDate> 0416		Authorization Response: <response> 000 <message> Approved <authCode> 44444 <avsResult> 13	
4A	Capture: <littleTxnId>	Value returned in Auth response for Order Id 4	Capture Response: <response> 000 <message> Approved	
4B	Credit: <littleTxnId>	Value returned in Capture response for Order Id 4A	Credit Response: <response> 000 <message> Approved	
4C	Void: <littleTxnId>	Use either the value returned in the Credit response for Order Id 4B, or the value returned in the Sale response (not Auth) for Order Id 4.	Void Response: <response> 000 <message> Approved	

TABLE 2-1 Authorization Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
5	Authorization/Sale/AVS: <amount> 10100 <type> VI <number> 4100200300011001 <expDate> 0516 <cardValidationNum> 463 <authenticationValue> BwABBJQ1AgAAA AAgJDUCAAAAAA A=		Authorization Response: <response> 000 <message> Approved <authCode> 55555 <avsResult> 32 <cardValidationResult> M	
5A	Capture: <littleTxnId>	Value returned in Auth response for Order Id 5	Capture Response: <response> 000 <message> Approved	
5B	Credit: <littleTxnId>	Value returned in Capture response for Order Id 5A	Credit Response: <response> 000 <message> Approved	
5C	Void: <littleTxnId>	Use either the value returned in the Credit response for Order Id 5B, or the value returned in the Sale response (not Auth) for Order Id 5.	Void Response: <response> 000 <message> Approved	

TABLE 2-1 Authorization Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
6	Authorization/Sale: <amount> 10100 <name> Joe Green <addressLine1> 6 Main St. <city> Derry <state> NH <zip> 03038 <country> US <type> VI <number> 4457010100000008 <expDate> 0616 <cardValidationNum> 992		Authorization Response: <response> 110 <message> Insufficient Funds <avsResult> 34 <cardValidationResult> P	
6A	Void: <littleTxnId> Use the value returned in the Sale response (not Auth) for Order Id 6.		Void Response: <response> 360 <message> No transaction found with specified littleTxnId	
7	Authorization/Sale/AVS: <amount> 10100 <name> Jane Murray <addressLine1> 7 Main St. <city> Amesbury <state> MA <zip> 01913 <country> US <type> MC <number> 5112010100000002 <expDate> 0716 <cardValidationNum> 251		Authorization Response: <response> 301 <message> Invalid Account Number <avsResult> 34 <cardValidationResult> N	

TABLE 2-1 Authorization Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
8	Authorization/Sale/AVS:		Authorization Response:	
	<amount>	10100	<response>	123
	<name>	Mark Johnson	<message>	Call Discover
	<addressLine1>	8 Main St.	<avsResult>	34
	<city>	Manchester	<cardValidationResult>	P
	<state>	NH		
	<zip>	03101		
	<country>	US		
	<type>	DI		
	<number>	6011010100000002		
9	Authorization/Sale/AVS:		Authorization Response:	
	<amount>	10100	<response>	303
	<name>	James Miller	<message>	Pick Up Card
	<addressLine1>	9 Main St.	<avsResult>	34
	<city>	Boston	<cardValidationResult>	P
	<state>	MA		
	<zip>	02134		
	<country>	US		
	<type>	AX		
	<number>	3750010100000003		
10	NOTE:	The data sets for orderId 10 through 13 are designed to test Authorization transactions resulting in partial authorizations. If you are not coding to use partial authorizations, you may skip these tests.		
	<amount>	10100	<response>	010
	<type>	VI	<message>	Partially Approved
	<number>	4457010140000141	<approvedAmount>	32000
	<expDate>	0916		
	<allowPartialAuth>	true		

TABLE 2-1 Authorization Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
11	<amount> 10100 <type> MC <number> 5112010140000004 <expDate> 1116 <allowPartialAuth> true		<response> 010 <message> Partially Approved <approvedAmount> 48000	
12	<amount> 10100 <type> AX <number> 3750010140000009 <expDate> 0416 <allowPartialAuth> true		<response> 010 <message> Partially Approved <approvedAmount> 40000	
13	<amount> 10100 <type> DI <number> 6011010140000004 <expDate> 0816 <allowPartialAuth> true		<response> 010 <message> Partially Approved <approvedAmount> 12000	
NOTE: The data sets for orderId 14 through 20 are designed to test Authorization transactions that return Prepaid Indicator information in the response message. If you are not coding to use the optional Prepaid Indicator feature of the Insights feature set, you may skip these tests.				
14	<amount> 10100 <type> VI <number> 4457010200000247 <expDate> 0816		<response> 000 <message> Approved <type> PREPAID <availableBalance> 2000 <reloadable> NO <prepaidCardType> GIFT	
15	<amount> 10100 <type> MC <number> 5500000254444445 <expDate> 0316		<response> 000 <message> Approved <type> PREPAID <availableBalance> 2000 <reloadable> YES <prepaidCardType> PAYROLL	

TABLE 2-1 Authorization Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
16	<amount> 10100 <type> MC <number> 5592106621450897 <expDate> 0316		<response> 000 <message> Approved <type> PREPAID <availableBalance> 0 <reloadable> YES <prepaidCardType> PAYROLL	
17	<amount> 10100 <type> MC <number> 5590409551104142 <expDate> 0316		<response> 000 <message> Approved <type> PREPAID <availableBalance> 6500 <reloadable> YES <prepaidCardType> PAYROLL	
18	<amount> 10100 <type> MC <number> 5587755665222179 <expDate> 0316		<response> 000 <message> Approved <type> PREPAID <availableBalance> 12200 <reloadable> YES <prepaidCardType> PAYROLL	
19	<amount> 10100 <type> MC <number> 5445840176552850 <expDate> 0316		<response> 000 <message> Approved <type> PREPAID <availableBalance> 20000 <reloadable> YES <prepaidCardType> PAYROLL	
20	<amount> 10100 <type> MC <number> 5390016478904678 <expDate> 0316		<response> 000 <message> Approved <type> PREPAID <availableBalance> 10050 <reloadable> YES <prepaidCardType> PAYROLL	

TABLE 2-1 Authorization Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
NOTE: The data sets for orderId 21 through 24 are designed to test Authorization transactions that return Affluence Indicator information in the response message. If you are not coding to use the optional Affluence Indicator feature of the Insights feature set, you may skip these tests.				
21	<amount> <type> <number> <expDate>	10100 VI 4100200300012009 0916	<response> <message> <affluence>	000 Approved AFFLUENT
22	<amount> <type> <number> <expDate>	10100 VI 4100200300013007 1116	<response> <message> <affluence>	000 Approved MASS AFFLUENT
23	<amount> <type> <number> <expDate>	10100 MC 5112010201000109 0416	<response> <message> <affluence>	000 Approved AFFLUENT
24	<amount> <type> <number> <expDate>	10100 MC 5112010202000108 0816	<response> <message> <affluence>	000 Approved MASS AFFLUENT
NOTE: The data set for orderId 25 is designed to test Authorization transactions that return Issuer Country information in the response message. If you are not coding to use the optional Issuer Country feature of the Insights feature set, you may skip these tests.				
25	<amount> <type> <number> <expDate>	10100 VI 4100200310000002 1116	<response> <message> <issuerCountry>	000 Approved BRA

TABLE 2-1 Authorization Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
NOTE: The data sets for orderId 26 through 31 are designed to test Authorization transactions involving Healthcare Care (IIAS) transaction. If you are not coding to use the optional Healthcard feature of the Insights feature set, you may skip these tests.				
26	<amount> <type> <number> <expDate> <allowPartialAuth> <totalHealthcareAmount>	18698 MC 5194560012341234 1216 true 20000	<response> <message>	341 Invalid healthcare amounts
27	<amount> <type> <number> <expDate> <allowPartialAuth> <totalHealthcareAmount> <RxAmount>	18698 MC 5194560012341234 1216 true 15000 16000	<response> <message>	341 Invalid healthcare amounts
28	<amount> <type> <number> <expDate> <allowPartialAuth> <totalHealthcareAmount> <RxAmount>	15000 MC 5194560012341234 1216 true 15000 3698	<response> <message>	000 Approved
29	<amount> <type> <number> <expDate> <allowPartialAuth> <totalHealthcareAmount> <RxAmount> <visionAmount> <clinicOtherAmount> <dentalAmount>	18699 VI 4024720001231239 1216 true 31000 1000 19901 9050 1049	<response> <message>	314 Invalid healthcare amounts

TABLE 2-1 Authorization Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
30	<amount> 20000 <type> VI <number> 4024720001231239 <expDate> 1216 <allowPartialAuth> true <totalHealthcareAmount> 20000 <RxAmount> 1000 <visionAmount> 19901 <clinicOtherAmount> 9050 <dentalAmount> 1049		<response> 341 <message> Invalid healthcare amounts	
31	<amount> 25000 <type> VI <number> 4024720001231239 <expDate> 1216 <allowPartialAuth> true <totalHealthcareAmount> 18699 <RxAmount> 1000 <visionAmount> 15099		<response> 010 <message> Partially Approved <approvedAmount> 18699	

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 91.

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 532). 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

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

TABLE 2-2 Authorization Recycling Advice Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
Vlprepaid13201	<amount>	13201	Initial Auth Response:	
	<type>	VI		
	<number>	4457013200000001		
	<expDate>	1220		
			<response>	349
			<message>	Do Not Honor
			<nextRecycleTime>	Auth Date + 1 Day
			First Recycle Attempt:	
			<response>	349
			<message>	Do Not Honor
			<nextRecycleTime>	(Original) Auth Date + 3 Days
			Second Recycle Attempt:	
			<response>	349
			<message>	Do Not Honor
			<recycleAdviceEnd>	(Original) Auth Date + 5 Days

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 95.

To test Authorization Reversal Transactions:

1. Verify that your Authorization Reversal XML templates are coded correctly (refer to [Authorization Reversal Transactions](#) on page 186).
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

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
32	Authorization: <amount> 10010 <name> John Smith <addressLine1> 1 Main St. <city> Burlington <state> MA <zip> 01803-3747 <country> US <type> VI <number> 4457010000000009 <expDate> 0116 <cardValidationNum> 349		Authorization Response: <response> 000 <message> Approved <authCode> 11111 <avsResult> 01 <cardValidationResult> M	
32A	Capture: <amount> 5050 <litleTxnId> Value returned in Auth response for Order Id 32		Capture Response: <response> 000 <message> Approved	
32B	Authorization Reversal: <litleTxnId> Value returned in Auth response for Order Id 32 <amount> Do Not Submit an Amount		Auth Reversal Response: <response> 111 <message> Authorization amount has already been depleted Note: This transaction returns 111 instead of 000, because it is unnecessary to submit an Authorization Reversal for the Visa payment card.	

TABLE 2-3 Authorization Reversal Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
33	Authorization: <amount> 20020 <name> Mike J. Hammer <addressLine1> 2 Main St. <addressLine2> Apt. 222 <city> Riverside <state> RI <zip> 02915 <country> US <type> MC <number> 5112010000000003 <expDate> 0216 <cardValidationNum> 261 <authenticationValue> BwABBJQ1AgAAA AAGJDUCAAAAAA A=		Authorization Response: <response> 000 <message> Approved <authCode> 22222 <avsResult> 10 <cardValidationResult> M <authenticationResult> Note: Not returned for MasterCard	
33A	Authorization Reversal: <littleTxnId> Value returned in Auth response for Order Id 33 <amount> Do Not Submit an amount		Auth Reversal Response: <response> 000 <message> Approved	
34	Authorization: <amount> 30030 <name> Eileen Jones <addressLine1> 3 Main St. <city> Bloomfield <state> CT <zip> 06002 <country> US <type> DI <number> 6011010000000003 <expDate> 0316 <cardValidationNum> 758		Authorization Response: <response> 000 <message> Approved <authCode> 33333 <avsResult> 10 <cardValidationResult> M	

TABLE 2-3 Authorization Reversal Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
34A	Authorization Reversal: <litleTxnId> <amount>	Value returned in Auth response for Order Id 34 Do Not Submit an Amount	Auth Reversal Response: <response> <message>	000 Approved
35	Authorization: <amount> <name> <addressLine1> <city> <state> <zip> <country> <type> <number> <expDate>	10100 Bob Black 4 Main St. Laurel MD 20708 US AX 375001000000005 0416	Authorization Response: <response> <message> <authCode> <avsResult>	000 Approved 44444 13
35A	Capture: <amount> <litleTxnId>	5050 Value returned in Auth response for Order Id 35	Capture Response: <response> <message>	000 Approved
35B	Authorization Reversal: <litleTxnId> <amount>	Value returned in Auth response for Order Id 35 5050	Auth Reversal Response: <response> <message>	336 Reversal amount does not match Authorization amount
36	Authorization: <amount> <type> <number> <expDate>	20500 AX 375000026600004 0516	Authorization Response: <response> <message>	000 Approved

TABLE 2-3 Authorization Reversal Test Data

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

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 238.)
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

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
37	<amount> <orderSource> <firstName> <lastName> <accType> <accNum> <routingNum>	3001 telephone Tom Black Checking 10@BC99999 053100300	<response> <message>	301 Invalid Account Number
38	<amount> <orderSource> <firstName> <lastName> <accType> <accNum> <routingNum>	3002 telephone John Smith Checking 1099999999 011075150	<response> <message>	000 Approved
39	<amount> <orderSource> <firstName> <lastName> <companyName> <accType> <accNum> <routingNum>	3003 telephone Robert Jones Good Goods Inc Corporate 3099999999 053100300	<response> <message>	950 Declined - Negative Information on File
40	<amount> <orderSource> <firstName> <lastName> <companyName> <accType> <accNum> <routingNum>	3004 telephone Peter Green Green Co Corporate 8099999999 011075150	<response> <message>	951 Absolute Decline

To test **eCheck Sale** transactions:

1. Verify that your eCheck XML template is coded correctly (refer to [eCheck Sale Transactions](#) on page 235).
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

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
41	<code><amount></code> <code><orderSource></code> <code><firstName></code> <code><middleInitial></code> <code><lastName></code> <code><accType></code> <code><accNum></code> <code><routingNum></code>	2008 telephone Mike J Hammer Checking 10@BC99999 053100300	<code><response></code> <code><message></code>	301 Invalid Account Number
42	<code><amount></code> <code><orderSource></code> <code><firstName></code> <code><lastName></code> <code><accType></code> <code><accNum></code> <code><routingNum></code>	2004 telephone Tom Black Checking 4099999992 011075150	<code><response></code> <code><message></code>	000 Approved

TABLE 2-5 eCheck Sale Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
43	<amount> 2007 <orderSource> telephone <firstName> Peter <lastName> Green <companyName> Green Co <accType> Corporate <accNum> 6099999992 <routingNum> 011075150		<response> 000 <message> Approved Note: This response will include the accountUpdater element (see accountUpdater on page 288).	
44	<amount> 2009 <orderSource> telephone <firstName> Peter <lastName> Green <companyName> Green Co <accType> Corporate <accNum> 9099999992 <routingNum> 053133052		<response> 900 <message> Invalid Bank Routing Number	

To test **eCheck Credit** transactions:

1. Verify that your eCheck XML template is coded correctly (refer to [eCheck Credit Transactions](#) on page 228.)

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

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
45	<amount> <orderSource> <firstName> <lastName> <accType> <accNum> <routingNum>	1001 telephone John Smith Checking 10@BC99999 053100300	<response> <message>	301 Invalid Account Number
46	<amount> <orderSource> <firstName> <lastName> <companyName> <accType> <accNum> <routingNum>	1003 telephone Robert Jones Widget Inc Corporate 3099999999 011075150	<response> <message>	000 Approved
47	<amount> <orderSource> <firstName> <lastName> <companyName> <accType> <accNum> <routingNum>	1007 telephone Peter Green Green Co Corporate 6099999993 211370545	<response> <message>	000 Approved Note: This response will include the accountUpdater element (see accountUpdater on page 288.)
48	<littleTxnId>	Value returned in eCheck Sale response for Order Id 43	<response> <message>	000 Approved
49	<littleTxnId>	2	<response> <message>	360 No transaction found with specified littleTxnId

To test **eCheck Void** transactions:

1. Verify that your eCheck XML template is coded correctly (refer to [eCheck Void Transactions \(Online Only\)](#) on page 242.)
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 littleTxnId 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 littleTxnId returned in the echeckCreditResponse message for Order ID #46, 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 littleTxnId.
 - a. The system returns an echeckVoidResponse Response Code of “360” and a message of “**No transaction found with specified littleTxnId**”.
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: 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 537.)
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

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
50	<accountNumber>	4457119922390123	<litleToken> <bin> <type> <response> <message>	xxxxxxxxxxxx0123 445711 VI 801 Account number was successfully registered Note:

TABLE 2-7 Register Token Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
51	<accountNumber>	4457119999999999	<litleToken> <response> <message>	none returned 820 Credit card number was invalid
52	<accountNumber>	4457119922390123	<litleToken> <bin> <type> <response> <message>	xxxxxxxxxxxx0123 445711 VI 802 Account number was previously registered
53	<accNum> <routingNum>	1099999998 114567895	<litleToken> <type> <eCheckAccountSuffix> <response> <message>	xxxxxxxxxx EC 998 801 Account number was successfully registered
54	<accNum> <routingNum>	1022222102 1145_7895	<response> <message>	900 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 174.)
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 LittleXML 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 LittleXML template is coded correctly for these transaction types as applicable (refer to [eCheck Sale Transactions](#) on page 235 and [eCheck Credit Transactions](#) on page 228).
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

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
55	<amount>	15000	<response>	000
	<type>	MC	<message>	Approved
	<number>	5435101234510196	<litleToken>	xxxxxxxxxxxx0196
	<expDate>	1116	<tokenResponseCode>	801
	<cardValidationNum>	987	<tokenMessage>	Account number was successfully registered
			<type>	MC
56			<bin>	543510
	<amount>	15000	<<response>	301
	<type>	MC	<message>	Invalid account number
	<number>	5435109999999999		
	<expDate>	1116		
	<cardValidationNum>	987		

TABLE 2-8 Implicit Registration Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
57	<amount> <type> <number> <expDate> <cardValidationNum>	15000 MC 5435101234510196 1116 987	<response> <message> <litleToken> <tokenResponseCode> <tokenMessage> <type> <bin>	000 Approved xxxxxxxxxxxxx0196 802 Account number was previously registered MC 543510
58	<amount> <litleToken> <expDate> <cardValidationNum>	15000 xxxxxxxxxxxxx0196 1116 987 Note: Use the token returned in Order Id 57.	<response> <message>	000 Approved
59	<amount> <litleToken> <expDate>	15000 1111000100092332 1116	<response> <message>	822 Token was not found
60	<amount> <litleToken> <expDate>	15000 1112000100000085 1116	<response> <message>	823 Token was invalid
61	eCheck Sale: <accType> <accNum> <routingNum>	Checking 1099999003 114567895	<litleToken> <tokenResponseCode> <tokenMessage> <type> <eCheckAccountSuffix>	xxxxxxxxxxxxxxxxxxxx 801 Account number was successfully registered EC 003

TABLE 2-8 Implicit Registration Test Data (Continued)

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
62	eCheck Sale: <accType> Checking <accNum> 1099999999 <routingNum> 114567895		<littleToken> xxxxxxxxxxxxxxxxx <tokenResponseCode> 801 <tokenMessage> Account number was successfully registered <type> EC <eCheckAccountSuffix> 999	
63	eCheck Credit: <accType> Checking <accNum> 1099999999 <routingNum> 214567892		<littleToken> xxxxxxxxxxxxxxxxx <tokenResponseCode> 801 <tokenMessage> Account number was successfully registered <type> EC <eCheckAccountSuffix> 999	
64	eCheck Sale: <accType> Corporate <accNum> 6099999993 <routingNum> 211370545		<originalTokenInfo> (parent element) <accType> Checking <littleToken> 11190000001003001 <routingNum> 211370545 <newTokenInfo> (parent element) <accType> Checking <littleToken> 11190000001154101 <routingNum> 211370545 <littleToken> xxxxxxxxxxxxxxxxx <tokenResponseCode> 801 <tokenMessage> Account number was successfully registered <type> EC <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 Little & 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 Recurring Engine Transactions](#)
- [Testing Gift Card Transactions](#)
- [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 642.

For a list of all possible card validation response codes, see [Card Validation Response Codes](#) on page 646.

TABLE 2-9 AVS and Card Validation Test Data

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

TABLE 2-9 AVS and Card Validation Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
75	<type> <number>	MC 5112000400000000	<avsResult> <cardValidationResult>	31 U
76	<type> <number>	MC 5112010400000009	<avsResult> <cardValidationResult>	32 S
78	<type> <number>	MC 5112000600000008	<avsResult> <cardValidationResult>	34 P
80	<type> <number>	AX 374313304211118 Note: American Express CID failures are declined by American Express.	<cardValidationResult> <response> <message>	N 352 Decline CVV2/CID Fail

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 in [Table 2-10](#). The AVS tests always return an `avsResult` of 00 when submitting 95 Main St. and 95022. If you extend the Zip Code to 9 digits, by appending 1111, the system returns an `avsResult` of 01, as shown in the second test.
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 as shown in the tests for orderIds AVS3 and AVS4.

For a detailed list of all possible AVS response codes, see [AVS Response Codes](#) on page 642.

TABLE 2-10 AVS and Card Validation Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
AVS1	<type> VI <number> 44570006000000004 <addressLine1> 95 Main St. <zip> 95022		<avsResult>	00
AVS2	<type> VI <number> 44570006000000004 <addressLine1> 95 Main St. <zip> 950221111		<avsResult>	01
AVS3	<type> VI <number> 44570006000000004 <addressLine1> 100 Main St. <zip> 95022		<avsResult>	10
AVS4	<type> VI <number> 44570006000000004 <addressLine1> 100 Main St. <zip> 02134		<avsResult>	20

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 643 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.

NOTE: The Certification environment cannot return any AAVS result containing a value of 3 in any position.

TABLE 2-11 Advanced AVS Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
81	<amount>	12523	<advancedAVSResults>	111
	<name>	John Doe		
	<addressLine1>	95 Main St.		
	<city>	Palo Alto		
	<state>	CA		
	<zip>	950221111		
	<country>	US		
	<email>	test@test.com		
	<phone>	6178675309		
	<type>	AX		
	<number>	341234567890127		
	<expDate>	1116		

2.5.4 Testing Response Reason Codes and Messages

Use the data provided 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](#). In each case use the supplied card number with a prefix of **RRC-** as the orderId.
2. Verify that you handle the response correctly.

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 622.
- For a list of all possible AVS response codes, see [AVS Response Codes](#) on page 642.

TABLE 2-12 Response Code Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
RRC-card #	<type>	VI	<response>	000
	<number>	4457000800000002	<message>	Approved
	<type>	VI	<response>	000
	<number>	4457000900000001	<message>	Approved
	<type>	VI	<response>	000
	<number>	4457001000000008	<message>	Approved
	<type>	MC	<response>	000
	<number>	5112000900000005	<message>	Approved

TABLE 2-12 Response Code Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
RRC-card #	<type> <number>	AX 3750000300000001	<response> <message>	120 Call Issuer
	<type> <number>	DI 6011000400000000	<response> <message>	123 Cal Discover
	<type> <number>	VI 4457001200000006	<response> <message>	120 Call Issuer
	<type> <number>	VI 4457001300000005	<response> <message>	120 Call Issuer
	<type> <number>	VI 4457001400000004	<response> <message>	120 Call Issuer
	<type> <number>	MC 5112001000000002	<response> <message>	101 Issuer Unavailable
	<type> <number>	VI 4457001900000009	<response> <message>	321 Invalid Merchant
	<type> <number>	VI 4457002000000006	<response> <message>	303 Pick Up Card
	<type> <number>	VI 4457002100000005	<response> <message>	110 Insufficient Funds
	<type> <number>	VI 4457002200000004	<response> <message>	120 Call Issuer
	<type> <number>	AX 3750000500000006	<response> <message>	350 Generic Decline
	<type> <number>	VI 4457002300000003	<response> <message>	349 Do Not Honor
	<type> <number>	VI 4457002500000001	<response> <message>	340 Invalid Amount
	<type> <number>	MC 5112001600000006	<response> <message>	301 Invalid Account Number

TABLE 2-12 Response Code Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
RRC-card #	<type> <number>	MC 5112001700000005	<response> <message>	301 Invalid Account Number
	<type> <number>	MC 5112001800000004	<response> <message>	321 Invalid Merchant
	<type> <number>	VI 4457002700000009	<response> <message>	101 Issuer Unavailable
	<type> <number>	MC 5112001900000003	<response> <message>	305 Expired Card
	<type> <number>	VI 4457002800000008	<response> <message>	322 Invalid Transaction
	<type> <number>	VI 4457002900000007	<response> <message>	350 Generic Decline
	<type> <number>	VI 4457003000000004	<response> <message>	101 Issuer Unavailable
	<type> <number>	MC 5112002000000000	<response> <message>	101 Issuer Unavailable
	<type> <number>	VI 4457000100000000	<response> <message>	301 Invalid Account Number

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:

BwABBJQ1AgAAAAgJDUCAAAAAA=

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

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
3DS1	<code><type></code> <code><number></code>	VI 4100200300000004	<code><authenticationResult></code>	0
3DS2	<code><type></code> <code><number></code>	VI 4100200300000012	<code><authenticationResult></code>	1
3DS3	<code><type></code> <code><number></code>	VI 4100200300000103	<code><authenticationResult></code>	2
3DS4	<code><type></code> <code><number></code>	VI 4100200300001002	<code><authenticationResult></code>	A
3DS5	<code><type></code> <code><number></code>	VI 4100200300000020	<code><authenticationResult></code>	3
3DS6	<code><type></code> <code><number></code>	VI 4100200300000038	<code><authenticationResult></code>	4
3DS7	<code><type></code> <code><number></code>	VI 4100200300000046	<code><authenticationResult></code>	5
3DS8	<code><type></code> <code><number></code>	VI 4100200300000053	<code><authenticationResult></code>	6
3DS9	<code><type></code> <code><number></code>	VI 4100200300000061	<code><authenticationResult></code>	7

TABLE 2-13 3DS Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
3DS10	<type> <number>	VI 4100200300000079	<authenticationResult>	8
3DS11	<type> <number>	VI 4100200300000087	<authenticationResult>	9
3DS12	<type> <number>	VI 4100200300000095	<authenticationResult>	B
3DS13	<type> <number>	VI 4100200300000111	<authenticationResult>	C
3DS14	<type> <number>	VI 4100200300000129	<authenticationResult>	D
3DS15	<type> <number>	MC 5112010200000001	<authenticationResult>	N/A

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

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
filterPrepaidMC	<amount> <orderSource> <name> <addressLine1> <city> <state> <zip> <country> <email> <phone> <type> <number> <expDate> <prepaid>	9100 recurring John Doe 10 Main St. San Jose CA 95032 US jdoe@phoenixProcessing.com 7812701111 MC 5500000958501839 1116 true	<response> <message> <avsResult>	309 Restricted Card - Prepaid Card Filtering Service 02
filterPrepaidVI	<amount> <orderSource> <name> <addressLine1> <city> <state> <zip> <country> <email> <phone> <type> <number> <expDate> <prepaid>	9100 recurring John Doe 10 Main St. San Jose CA 95032 US jdoe@phoenixProcessing.com 7812701111 VI 4650002010001478 1116 true	<response> <message> <authCode> <avsResult>	309 Restricted Card - Prepaid Card Filtering Service none 34

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

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
filterInternational1	<amount>	9100	<response>	312
	<orderSource>	recurring	<message>	Restricted Card - International Card Filtering Service
	<name>	John Doe		
	<addressLine1>	10 Main St.	<avsResult>	34
	<city>	San Jose		
	<state>	CA		
	<zip>	95032		
	<country>	US		
	<email>	jdoe@phoenixProcessing.com		
	<phone>	7812701111		
	<type>	VI		
	<number>	4100200309950001		
	<expDate>	1116		

TABLE 2-15 International Filtering Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
filterInternational2	<amount>	9100	<response>	000
	<orderSource>	recurring	<message>	Approved
	<name>	John Doe	<authCode>	123457
	<addressLine1>	10 Main St.	<avsResult>	00
	<city>	San Jose		
	<state>	CA		
	<zip>	95032		
	<country>	US		
	<email>	jdoe@phoenixProcessing.com		
	<phone>	7812701111		
	<type>	VI		
	<number>	4100200309950001		
	<expDate>	1116		
	<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

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
securityCodeFilter1	<amount> 9100 <orderSource> ecommerce <name> John Doe <addressLine1> 10 Main St. <city> San Jose <state> CA <zip> 95032 <country> US <type> MC <number> 5112002200000008 <expDate> 1116 <cardValidationNum> 123		<response> 358 <message> Restricted by Litle due to security code mismatch. <avsResult> 14 <cardValidationResult> N	
securityCodeFilter2	<amount> 9100 <orderSource> ecommerce <name> Jane Doe <addressLine1> 10 Main St. <city> San Jose <state> CA <zip> 95032 <country> US <type> MC <number> 5112000200000002 <expDate> 1116 <cardValidationNum> 123 <international> false		<response> 358 <message> Restricted by Litle due to security code mismatch. <avsResult> 20 <cardValidationResult> N	

2.5.9 Testing Advanced Fraud Tools

Complete this test only if you are planning on using the Litle & Co. Advanced Fraud Tools Feature.

To test the Advanced Fraud Tools feature:

1. Submit authorization transactions using the values provided in Supplied Data Elements of [Table 2-17](#). For each test, replace "Your Prefix-" with the prefix supplied by your Implementation Consultant.
2. Verify that your response values match those shown in Key Response Elements section of [Table 2-17](#).

NOTE: Please note that the first test, orderId = tmx_fail_order_id, has two possible results depending upon whether you are configured for Info Only or Auto-Decline.

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

TABLE 2-17 Security Code No-Match Filtering Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
tmx_fail_order_id	<amount>	150	Result if Info Only:	
	<type>	VI	<response>	000
	<number>	4111111111111111	<message>	Approved
	<expDate>	1230	<deviceReviewStatus>	fail
	<threatMetrixSessionId>	Your Prefix- Q1W2E3R4T5Y6U7I8-KHF-100	<deviceReputationScore>	-100
			<triggeredRule>	TransparentProxy
			<triggeredRule>	Elevated Risk Persona
			Result if Auto-decline:	
			<response>	550
			<message>	Restricted Device or IP - ThreatMetrix Fraud Score Below Threshold
			<deviceReviewStatus>	fail
			<deviceReputationScore>	-100
			<triggeredRule>	TransparentProxy
			<triggeredRule>	Elevated Risk Persona

TABLE 2-17 Security Code No-Match Filtering Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
tmx_review_order_id	<amount> <type> <number> <expDate> <threatMetrixSessionId>	150 VI 411111111111111 1230 Your Prefix -A0S9D8F7G6H5J4-KMR-020	Result if Info Only: <response> <message> <deviceReviewStatus> <deviceReputationScore> <triggeredRule> <triggeredRule>	000 Approved review -20 TransparentProxy Elevated Risk Persona
tmx_unk_order_id	<amount> <type> <number> <expDate> <threatMetrixSessionId>	150 VI 411111111111111 1230 Your Prefix -A980A93LP2O3-ULP0000	<response> <message> <deviceReviewStatus> <deviceReputationScore> <triggeredRule>	000 Approved unknown_session 0 NoDeviceId
tmx_pass_order_id	<amount> <type> <number> <expDate> <threatMetrixSessionId>	150 VI 411111111111111 1230 Your Prefix -A980A93LP2O3-KNP0050	<response> <message> <deviceReviewStatus> <deviceReputationScore> <triggeredRule> <triggeredRule>	000 Approved pass 50 TransparentProxy Elevated Risk Persona

2.5.10 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 2-18](#).
2. Verify that your response values match those shown in Key Response Elements section of [Table 2-18](#).
3. If you have coded to receive Extended Response Codes, proceed to the next test.

TABLE 2-18 Automatic Account Updater Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
100	<amount>	10000	<originalCardInfo>	(parent element)
	<type>	VI	<type>	VI
	<number>	4457000300000007	<number>	4457000300000007
	<expDate>	0115	<expDate>	0115
			<newCardInfo>	(parent element)
			<type>	MC
			<number>	5112000100000003
			<expDate>	0115
101	<amount>	10000	<originalCardInfo>	(parent element)
	<type>	DI	<type>	DI
	<number>	6500102087026221	<number>	6500102087026221
	<expDate>	0115	<expDate>	0115
			<newCardInfo>	(parent element)
			<type>	DI
			<number>	6011102077026225
			<expDate>	0115

2.5.10.1 Testing Automatic Account Updater Extended Response Codes

To test the Automatic Account Updater Extended Response Codes feature:

NOTE: You are required to code to LittleXML 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 2-19](#).
2. Verify that the response values match those shown in Key Response Elements section of [Table 2-19](#) and that your systems parse the data correctly. The second test case does not include account repair information only the Extended Response Code.

TABLE 2-19 Automatic Account Updater Extended Response Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
102	<code><amount></code>	10000	<code><originalCardInfo></code>	(parent element)
	<code><type></code>	MC	<code><type></code>	MC
	<code><number></code>	5112000101110009	<code><number></code>	5112000101110009
	<code><expDate></code>	1199	<code><expDate></code>	1199
			<code><newCardInfo></code>	(parent element)
			<code><type></code>	VI
			<code><number></code>	4457000302200001
			<code><expDate></code>	1199
			<code><extendedCardResponse></code>	(parent element)
			<code><code></code>	501
			<code><message></code>	The account was closed.
103	<code><amount></code>	10000	<code><extendedCardResponse></code>	(parent element)
	<code><type></code>	VI	<code><code></code>	504
	<code><number></code>	4457000301100004	<code><message></code>	Contact the cardholder for updated information.
	<code><expDate></code>	1199		

2.5.10.2 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 2-18](#). 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 290).

2.5.11 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 2-20](#). 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 851 - MCC 9311 requires `taxType` element for the second.

TABLE 2-20 Tax Billing and Convenience Fee Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
MCC9311Test	<code><amount></code> <code><type></code> <code><number></code> <code><expDate></code> <code><taxType></code>	3000 VI 4457010200000247 1116 fee	<code><response></code> <code><message></code>	000 Approved
MCC9311Test2	<code><amount></code> <code><type></code> <code><number></code> <code><expDate></code>	3000 VI 4457010200000247 1116	<code><response></code> <code><message></code>	851 MCC 9311 requires taxType element

2.5.12 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 LittleXML 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 LittleXML schema version V8.5 or below, perform the tests in Scenario 2.
- If you are using LittleXML 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 2-21](#). Please use the same value for the `orderId` and if applicable, the `recycleId` elements.

NOTE: If your configuration is set for Little 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 2-21 Recycling Engine Test Data - Results Batch File Pick-up

orderId or recycleId (replace XXX with your merchantId)	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
XXXCase1Order1	<code><amount></code>	10000	Initial Response:	
	<code><type></code>	VI	<code><response></code>	110
	<code><number></code>	4457012400000027	<code><message></code>	Insufficient Funds
	<code><expDate></code>	1220	<code><recyclingEngineActive></code>	true
	<code><recycleBy></code>	Little	Final Response (in FTP Batch File):	
			<code><response></code>	000
			<code><message></code>	Approved

TABLE 2-21 Recycling Engine Test Data - Results Batch File Pick-up

orderId or recycleId (replace XXX with your merchantId)	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
XXXCase1Order2	<amount> 10000 <type> MC <number> 5160124000000029 <expDate> 1220 <recycleBy> Litle		Initial Response: <response> 110 <message> Insufficient Funds <recyclingEngineActive> true Final Response (in FTP Batch File): <response> 000 <message> Approved	
XXXCase1Order3	<amount> 10000 <type> VI <number> 4100200700000059 <expDate> 1220 <recycleBy> Litle		Initial Response: <response> 110 <message> Insufficient Funds <recyclingEngineActive> true Final Response (in FTP Batch File): <response> 110 <message> Insufficient Funds	
XXXCase1Order4	<amount> 10000 <type> MC <number> 5500010000000052 <expDate> 1220 <recycleBy> Litle		Initial Response: <response> 110 <message> Insufficient Funds <recyclingEngineActive> true Final Response (in FTP Batch File): <response> 110 <message> Insufficient Funds	

TABLE 2-21 Recycling Engine Test Data - Results Batch File Pick-up

orderId or recycleId (replace XXX with your merchantId)	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
XXXCase1Order5	<amount> 10000 <type> VI <number> 4457032800000047 <expDate> 1220 <recycleBy> Little		Initial Response: <response> 110 <message> Insufficient Funds <recyclingEngineActive> true Final Response (in FTP Batch File): <response> 328 <message> Cardholder requests that recurring or installment payment be stopped	
XXXCase1Order6	<amount> 10000 <type> MC <number> 5160328000000042 <expDate> 1220 <recycleBy> Little		Initial Response: <response> 110 <message> Insufficient Funds <recyclingEngineActive> true Final Response (in FTP Batch File): <response> 120 <message> Call Issuer	

TABLE 2-21 Recycling Engine Test Data - Results Batch File Pick-up

orderId or recycleId (replace XXX with your merchantId)	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
XXCase1Order7	<amount>	10000	Initial Response:	
	<type>	VI	<response>	302
	<number>	5160328000000042	<message>	Account Number Does Not Match Payment Type
	<expDate>	1220		false
	<recycleBy>	Litle	<recyclingEngineActive>	
			Final Response (in FTP Batch File):	
			None - This type of decline is not recycled.	

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 2-22](#). 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. 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 2-22 Recycling Engine Test Data - Online or Results Batch File Pick-up V8.5 and below

orderId or recycleId (replace XXX with your merchantId)	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
XXXCase2Order1	<amount> 20000 <type> VI <number> 4457012400000027 <expDate> 1220 <recycleBy> Little		Initial Response: <response> 110 <message> Insufficient Funds <recyclingEngineActive> true Final Response (Online/Normal Batch, or in FTP Batch File): <response> 000 <message> Approved	
XXXCase2Order2	<amount> 20000 <type> MC <number> 5160124000000029 <expDate> 1220 <recycleBy> Little		Initial Response: <response> 110 <message> Insufficient Funds <recyclingEngineActive> true Final Response (Online/Normal Batch, or in FTP Batch File): <response> 000 <message> Approved	

TABLE 2-22 Recycling Engine Test Data - Online or Results Batch File Pick-up V8.5 and below

orderId or recycleId (replace XXX with your merchantId)	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
XXXCase2Order3	<amount> 20000 <type> VI <number> 4100200700000059 <expDate> 1220 <recycleBy> Little		Initial Response: <response> 110 <message> Insufficient Funds <recyclingEngineActive> true Final Response in Online or Normal Batch File): <response> 110 <message> Insufficient Funds <recyclingEngineActive> false Final Response in FTP Batch File): <response> 110 <message> Insufficient Funds	
XXXCase2Order4	<amount> 20000 <type> MC <number> 5500010000000052 <expDate> 1220 <recycleBy> Little		Initial Response: <response> 110 <message> Insufficient Funds <recyclingEngineActive> true Final Response in Online or Normal Batch File): <response> 110 <message> Insufficient Funds <recyclingEngineActive> false Final Response in FTP Batch File): <response> 110 <message> Insufficient Funds	

TABLE 2-22 Recycling Engine Test Data - Online or Results Batch File Pick-up V8.5 and below

orderId or recycleId (replace XXX with your merchantId)	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
XXXCas2Order5	<amount>	20000	Initial Response:	
	<type>	VI	<response>	302
	<number>	5160328000000042	<message>	Account Number Does Not Match Payment Type
	<expDate>	1220		false
	<recycleBy>	Little	<recyclingEngineActive>	
			Final Response (in Batch File):	
			None - This type of decline is not recycled.	

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 2-23](#). Please use the same value for the orderId and if applicable, the recycleId elements.

NOTE: If your configuration is set for Little 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 2-23 Recycling Engine Test Data - Intercept and Online or Results Batch File Pick-up

orderId or recycleId (replace XXX with your merchantId)	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
XXXCase3Order1	<amount>	20000	Initial Response:	
	<type>	DI	<response>	350
	<number>	6223012400000025	<message>	Generic Decline
	<expDate>	1220	<recyclingEngineActive>	true
	<recycleBy>	Little	Intermediate Attempts (V8.6):	
			<response>	372
			<message>	Soft decline - Recycling In Progress
			<recyclingEngineActive>	true
			Final Response (Online/Normal Batch, or in FTP Batch File):	
			<response>	000
			<message>	Approved

TABLE 2-23 Recycling Engine Test Data - Intercept and Online or Results Batch File Pick-up

orderId or recycleId (replace XXX with your merchantId)	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
XXXCas3Order2	<amount>	20000	Initial Response:	
	<type>	AX	<response>	350
	<number>	377201240000025	<message>	Generic Decline
	<expDate>	1220	<recyclingEngineActive>	true
	<recycleBy>	Little	Intermediate Attempts (V8.6):	
			<response>	372
			<message>	Soft decline - Recycling In Progress
			<recyclingEngineActive>	true
			Final Response (Online/Normal Batch, or in FTP Batch File):	
			<response>	000
			<message>	Approved

TABLE 2-23 Recycling Engine Test Data - Intercept and Online or Results Batch File Pick-up

orderId or recycleId (replace XXX with your merchantId)	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
XXXCas3Orde r3	<amount>	20000	Initial Response:	
	<type>	DI	<response>	350
	<number>	6223012400000033	<message>	Generic Decline
	<expDate>	1220	<recyclingEngineActive>	true
	<recycleBy>	Litle	Intermediate Attempts (V8.6):	
			<response>	372
			<message>	Soft decline - Recycling In Progress
			<recyclingEngineActive>	true
			Final Response (Online/Normal Batch, or in FTP Batch File):	
			<response>	373
			<message>	Hard Decline - Auto Recycling Complete

TABLE 2-23 Recycling Engine Test Data - Intercept and Online or Results Batch File Pick-up

orderId or recycleId (replace XXX with your merchantId)	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
XXXCase3Order4	<amount> <type> <number> <expDate> <recycleBy>	20000 DI 6011002078551608 1220 Little	Initial Response: <response> <message> <recyclingEngineActive> Intermediate Attempts (V8.6): <response> <message> <recyclingEngineActive> Final Response (Online/Normal Batch, or in FTP Batch File): <response> <message>	101 Issuer Unavailable true 372 Soft decline - Recycling In Progress true 373 Hard Decline - Auto Recycling Complete
XXXCase3Order5	<amount> <type> <number> <expDate> <recycleBy>	20000 VI 377203280000048 1220 Little	Initial Response: <response> <message> <recyclingEngineActive> All Responses: None - This type of decline is not recycled.	302 Account Number Does Not Match Payment Type false

2.5.12.1 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 2-24](#).
2. Two (2) hours after receiving the decline message, submit a `void` transaction using the `littleTxnId` 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 `littleTxnId` returned in the response message for `Case1Order2a`. You should receive an `authReversalResponse` with a response code of 000 - Approved.

TABLE 2-24 Recycling Engine Cancellation Test Data

orderId or recycleId (replace XXX with your merchantId)	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
XXXCase1Order1a	<amount>	11000	Initial Response:	
	<type>	VI	<response>	110
	<number>	4457012400000027	<message>	Insufficient Funds
	<expDate>	1220	<recyclingEngineActive>	true
	<recycleBy>	Little		
	Submit Void using littleTxnId from Initial Response		Void Response (if enabled for Auto-Refund):	
			<response>	000
			<message>	Approved
			<creditLittleTxnId>	(Random Value)
			Void Response (if not enabled for Auto-Refund):	
			<response>	362
			<message>	Transaction Not Voided - Already Settled
XXXCase1Order2a	<amount>	11000	Initial Response:	
	<type>	MC	<response>	110
	<number>	5160124000000029	<message>	Insufficient Funds
	<expDate>	1220	<recyclingEngineActive>	true
	<recycleBy>	Little		
	Submit authReversal using littleTxnId from Initial Response		authReversalResponse:	
			<response>	000
			<message>	Approved

2.5.13 Testing Recurring Engine Transactions

Use the following Certification tests to verify transactions associated with the Little Recurring Engine functionality. For testing purposes, the Certification environment will process the first recurring transaction within 2 hours. The system cancels subsequent recurring transactions in the payment stream. For example, if you submitted an Authorization at 9:00 AM that set-up a subscription for twelve monthly payments, the Cert Recurring Engine would process the first payment by 11:00 AM and cancel the remaining eleven payments.

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.

To test the Recurring Engine functionality using the data supplied in [Table 2-25](#):

1. Submit `createPlan` transactions for Order Ids R1.1, R1.2, R1.3, R1.4, R1.5, and R1.6. These transactions establish Plans used in the remaining tests, as well as verify your LittleXML used to create Plans. You can use whatever values you wish for the `<planCode>` and `<name>` elements. Verify that each transaction receives an approval code in the response message.
2. Submit `createPlan` transactions for Order Id R1.7 using the same `<planCode>` value you used in R1.3. This transaction is declined, because the Plan Code already exists. Verify that the transaction receives a response code of 487 - Plan code already exists.
3. Submit a `sale` transaction for Order Id R2.1. This transaction creates a subscription using the plan established in Order R1.1. The amount in the sale transaction represents a set-up fee and not the initial payment. Verify that the transaction receives an approval code in the response message.
4. Submit an `authorization` transaction for Order Id R2.2. This transaction creates a subscription using the plan established in Order R1.1. Because the Authorization did not specify a start date, the Recurring Engine schedules the first payment for the current date. Verify that the transaction receives an approval code in the response message.

NOTE: The transaction specified in Order 2.2 is a \$0 Auth. If you include an amount when using an Auth to establish a subscription, you should plan on reversing the Auth to avoid a Misuse of Auth fee. The Recurring Engine obtains its own Auth for the first payment.

5. Submit an `updateSubscription` transaction for Order Id R2.3. This transaction updates the subscription initiated with Order Id 2.1, changing the Plan to the plan you created in R1.2. Verify that the transaction receives an approval code in the response message.

6. Submit a `sale` transaction for Order Id R3.1. This transaction utilizes a `Sale` transaction to initialize a subscription based upon the plan created in R1.3, but overrides both the number of payments and the amount specified in the Plan. Verify that the transaction receives an approval code in the response message.
7. Submit an `authorization` transaction for Order Id R3.2. This transaction utilizes an `Authorization` transaction to initialize a subscription based upon the plan created in R1.3, but overrides both the number of payments and the amount specified in the Plan. Verify that the transaction receives an approval code in the response message.
8. Submit an `updateSubscription` transaction for Order Id R3.3. This transaction updates an existing subscription, changing the billing date. Verify that the transaction receives an approval code in the response message.
9. Submit an `authorization` transaction for Order Id R4.1. This transaction utilizes an `Authorization` transaction to initialize a subscription that overrides the default amount in the Plan and has a trial period. Verify that the transaction receives an approval code in the response message.
10. Submit an `updateSubscription` transaction for Order Id R4.2. This transaction updates an existing subscription with a new credit card number. Verify that the transaction receives an approval code in the response message.
11. Submit an `authorization` transaction for Order Id R5.1. This transaction utilizes an `Authorization` transaction to initialize a subscription based upon the `SEMIANNUAL_PLAN`, but overrides the number of payments. Verify that the transaction receives an approval code in the response message.
12. Submit an `updateSubscription` transaction for Order Id R5.2. This transaction updates an existing subscription with new billing information. Verify that the transaction receives an approval code in the response message.
13. Submit an `updateSubscription` transaction for Order Id R5.3. Since the transaction does not include any updated information, the transaction is declined with a response code of 484 - Insufficient data to update subscription. Verify that the transaction receives a response code of 484.
14. Submit an `updateSubscription` transaction for Order Id R5.4. Since the transaction specifies a new billing date in the past, the transaction is declined with a response code of 485 - Invalid billing date. Verify that the transaction receives a response code of 485.
15. Submit an `authorization` transaction for Order Id R6.1. The system declines this transaction, since it uses an invalid Plan Code. Verify that the transaction receives a response code of 472 - Invalid plan code.
16. Submit an `updateSubscription` transaction for Order Id R6.2. The system declines this transaction, since it uses an invalid subscription Id. Verify that the transaction receives a response code of 482 - Invalid start date.
17. Submit an `authorization` transaction for Order Id R6.3. The system declines this transaction, since it uses a start date in the past. Verify that the transaction receives a response code of 475 - Invalid Subscription Id.

18. Submit an `authorization` transaction for Order Id R7.1. This transaction utilizes an `Authorization` transaction to initialize a subscription based upon the `PLAN_WITH_PROMOTIONS` Plan with an add On and a Discount applied. Verify that the transaction receives an approval code in the response message.
19. Submit an `updateSubscription` transaction for Order Id R7.2. This transaction attempts to update an existing subscription with a new Add On, but is declined because the Add On already exists. Verify that the transaction receives a response code of 476 - Add On already exists.
20. Submit an `updateSubscription` transaction for Order Id R7.3. This transaction attempts to update an Add On for an existing subscription, but is declined because the specified Add On is not associated with the Subscription. Verify that the transaction receives a response code of 478 - No matching Add On code for the subscription.
21. Submit an `updateSubscription` transaction for Order Id R7.4. This transaction attempts to update an Add On for an existing subscription, but is declined because the specified Add On is not associated with the Subscription. Verify that the transaction receives a response code of 478 - No matching Add On code for the subscription.
22. Submit an `updateSubscription` transaction for Order Id R7.5. This transaction attempts to update a Discount for an existing subscription, but is declined because the specified Discount is not associated with the Subscription. Verify that the transaction receives a response code of 480 - No matching Discount code for the subscription.
23. Submit an `authorization` transaction for Order Id R8.1. This transaction utilizes an `Authorization` transaction to initialize a subscription, but includes duplicate Add Ons. Verify that the transaction receives a response code of 477 - Duplicate add-on codes in request.
24. Submit an `authorization` transaction for Order Id R8.2. This transaction utilizes an `Authorization` transaction to initialize a subscription, but includes duplicate Discounts. Verify that the transaction receives a response code of 481 - Duplicate discount codes in request.
25. Submit an `authorization` transaction for Order Id R9.1. In this case the parent `Authorization` transaction is declined with a response code of 301 - Invalid Account Number. The response code associated with the recurring request is 471 - Parent transaction declined - Recurring subscription not created.`PREMIUM_MONTHLY`
26. Submit an `cancelSubscription` transaction for Order Id R10.1. Verify that the transaction receives an approval code in the response message.
27. Submit an `updatePlan` transaction for Order Id R11.1. This transaction changes the Plan to an inactive state. Verify that the transaction receives an approval code in the response message.

TABLE 2-25 Recurring Engine Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
R1.1	<createPlan>	(parent element)	<response>	000
	<planCode>	Your Value	<message>	Approved
	<name>	Your Value	<planCode>	Your Value
	<description>	Basic monthly plan		
	<intervalType>	MONTHLY		
	<amount>	5000		
	<numberOfPayments>	12		
R1.2	<createPlan>	(parent element)	<response>	000
	<planCode>	Your Value	<message>	Approved
	<name>	Your Value	<planCode>	Your Value
	<description>	Premium monthly plan		
	<intervalType>	MONTHLY		
	<amount>	7000		
	<numberOfPayments>	12		
R1.3	<createPlan>	(parent element)	<response>	000
	<planCode>	Your Value	<message>	Approved
	<name>	Your Value	<planCode>	Your Value
	<description>	An annual plan		
	<intervalType>	ANNUAL		
	<amount>	14000		
R1.4	<createPlan>	(parent element)	<response>	000
	<planCode>	Your Value	<message>	Approved
	<name>	Your Value	<planCode>	Your Value
	<description>	A monthly plan with trial period		
	<intervalType>	MONTHLY		
	<amount>	5000		
	<trialIntervalType>	MONTH		
	<trialNumberOfIntervals>	2		

TABLE 2-25 Recurring Engine Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
R1.5	<createPlan> <planCode> <name> <description> <intervalType> <amount>	(parent element) Your Value Your Value A semi-annual plan SEMIANNUAL 7000	<response> <message> <planCode>	000 Approved Your Value
R1.6	<createPlan> <planCode> <name> <description> <intervalType> <amount>	(parent element) Your Value Your Value A plan with Add Ons and Discounts MONTHLY 5000	<response> <message> <planCode>	000 Approved Your Value
R1.7	<createPlan> <planCode> <name> <description> <intervalType> <amount>	(parent element) Value from R1.3 Value from R1.3 An annual plan ANNUAL 5000	<response> <message> <planCode>	487 Plan code already exists Value from R1.3
R2.1	<sale> <amount> <recurringRequest> <subscription> <planCode> <startDate>	(parent element) 1000 (parent element) (parent element) Value from R1.1 Use any date	<recurringResponse> <responseCode> <responseMessage>	(parent element) 470 Approved - Recurring subscription created
R2.2	<authorization> <amount> <recurringRequest> <subscription> <planCode>	(parent element) 000 (parent element) (parent element) Value from R1.1	<recurringResponse> <responseCode> <responseMessage>	(parent element) 470 Approved - Recurring subscription created

TABLE 2-25 Recurring Engine Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
R2.3	<updateSubscription> <subscriptionId> <planCode>	(parent element) Value returned in R2.1 response Value from R1.2	<subscriptionId> <response> <message>	(parent element) 000 Approved
R3.1	<sale> <recurringRequest> <subscription> <planCode> <startDate> <numberOfPayments> <amount>	(parent element) (parent element) (parent element) Value from R1.3 Use any valid date in the future. 6 4000	<recurringResponse> <responseCode> <responseMessage>	(parent element) 470 Approved - Recurring subscription created
R3.2	<authorization> <recurringRequest> <subscription> <planCode> <startDate> <numberOfPayments> <amount>	(parent element) (parent element) (parent element) Value from R1.3 Use any valid date in the future. 6 4000	<recurringResponse> <responseCode> <responseMessage>	(parent element) 470 Approved - Recurring subscription created
R3.3	<updateSubscription> <subscriptionId> <billingDate>	(parent element) Value returned in R3.1 response Use any valid date in the future and different from date used in R3.1.	<response> <message>	000 Approved

TABLE 2-25 Recurring Engine Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
R4.1	<authorization> <recurringRequest> <subscription> <planCode> <startDate> <amount>	(parent element) (parent element) (parent element) Value from R1.4 Use any valid date in the future. 4000	<recurringResponse> <responseCode> <responseMessage>	(parent element) 470 Approved - Recurring subscription created
R4.2	<updateSubscription> <subscriptionId> <card> <type> <number> <expDate>	(parent element) Value returned in R4.1 response (parent element) VI 445701000000009 1216	<response> <message>	000 Approved
R5.1	<authorization> <recurringRequest> <subscription> <planCode> <startDate> <numberOfPayments>	(parent element) (parent element) (parent element) Value from R1.5 Use any valid date in the future. 6	<recurringResponse> <responseCode> <responseMessage>	(parent element) 470 Approved - Recurring subscription created

TABLE 2-25 Recurring Engine Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
R5.2	<updateSubscription> <subscriptionId> <billToAddress> <name> <addressLine1> <city> <state> <zip> <country> <email> <phone>	(parent element) Value returned in R5.1 response (parent element) John 900 Chelmsford St. Lowell MA 01781 US john@gmail.com 8559658965	<subscriptionId> <response> <message>	Value returned in R5.1 response 000 Approved
R5.3	<updateSubscription> <subscriptionId>	(parent element) Value returned in R5.1 response	<recurringResponse> <response> <message>	(parent element) 484 Insufficient data to update subscription
R5.4	<updateSubscription> <subscriptionId> <billingDate>	(parent element) Value returned in R5.1 response 2000-10-01	<recurringResponse> <response> <message>	(parent element) 485 Invalid billing date
R6.1	<authorization> <recurringRequest> <subscription> <planCode>	(parent element) (parent element) (parent element) INVALID_PLAN	<responseCode> <responseMessage>	472 Invalid plan code

TABLE 2-25 Recurring Engine Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
R6.2	<updateSubscription> <subscriptionId> <billToAddress> <name> <addressLine1> <city> <state> <zip> <country> <email> <phone>	<i>(parent element)</i> 111111111 <i>(parent element)</i> John 900 Chelmsford St. Lowell MA 01781 US john@gmail.com 8559658965	<response> <message>	475 Invalid Subscription Id
R6.3	<authorization> <recurringRequest> <subscription> <planCode> <startDate>	<i>(parent element)</i> <i>(parent element)</i> <i>(parent element)</i> Value from R1.1 2000-04-04	<recurringResponse> <responseCode> <responseMessage>	<i>(parent element)</i> 482 Invalid start date

TABLE 2-25 Recurring Engine Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
R7.1	<authorization> (parent element) <recurringRequest> (parent element) <subscription> (parent element) <planCode> Value from R1.6 (parent element) <createAddOn> SSL_ADDON <addOnCode> Additional Service <name> 1000 <amount> 2013-08-30 <startDate> 2050-08-30 <endDate> (parent element) <createDiscount> PROMO_DISCOUN <discountCode> T Special Offer <name> 1000 <amount> 2013-08-30 <startDate> 2050-08-30 <endDate>		<recurringResponse> (parent element) <responseCode> 470 <responseMessage> Approved - Recurring Subscription Created	
R7.2	<updateSubscription> (parent element) <subscriptionId> Value returned in R7.1 response <createAddOn> (parent element) <addOnCode> SSL_ADDON <name> Additional Service <amount> 1000 <startDate> 2013-08-30 <endDate> 2050-08-30		<recurringResponse> (parent element) <response> 476 <message> Add-on code already exists	

TABLE 2-25 Recurring Engine Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
R7.3	<updateSubscription> <subscriptionId> <createDiscount> <discountCode> <name> <amount> <startDate> <endDate>	(parent element) Value returned in R7.1 response (parent element) PROMO_DISCOUNT Special Offer 1000 2013-08-30 2050-08-30	<recurringResponse> <response> <message>	(parent element) 486 Discount code already exists
R7.4	<updateSubscription> <subscriptionId> <updateAddOn> <addOnCode> <name> <amount>	(parent element) Value returned in R7.1 response (parent element) INVALID_ADDON_CODE Extra Features 1000	<recurringResponse> <response> <message>	(parent element) 478 No matching Add-on code for the subscription
R7.5	<updateSubscription> <subscriptionId> <updateDiscount> <discountCode> <name> <amount> <startDate> <endDate>	(parent element) Value returned in R7.1 response (parent element) INVALID_DISCOUNT_CODE Special Offer 1000 2013-08-30 2050-08-30	<recurringResponse> <response> <message>	(parent element) 480 No matching Discount code for the subscription

TABLE 2-25 Recurring Engine Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
R8.1	<authorization>	(parent element)	<recurringResponse>	(parent element)
	<recurringRequest>	(parent element)	<response>	477
	<subscription>	(parent element)	<message>	Duplicate Add-on codes in request
	<planCode>	Value from R1.6		
		(parent element)		
	<createAddOn>	SSL_ADDON		
	<addOnCode>	Additional Service		
	<name>	1000		
	<amount>	2013-08-30		
	<startDate>	2050-08-30		
	<endDate>	(parent element)		
	<createAddOn>	SSL_ADDON		
	<addOnCode>	Additional Service		
	<name>	1000		
	<amount>	2013-08-30		
	<startDate>	2050-08-30		
	<endDate>			

TABLE 2-25 Recurring Engine Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
R8.2	<authorization> <recurringRequest> <subscription> <planCode> <createDiscount> <discountCode> <name> <amount> <startDate> <endDate> <createDiscount> <discountCode> <name> <amount> <startDate> <endDate>	(parent element) (parent element) (parent element) Value from R1.6 (parent element) PROMO_DISCOUN T Discount 1000 2013-08-30 2050-08-30 (parent element) PROMO_DISCOUN T Discount 1000 2013-08-30 2050-08-30	<recurringResponse> <responseCode> <responseMessage>	(parent element) 481 Duplicate discount codes in request
R9.1	<authorization> <card> <type> <number> <expDate> <recurringRequest> <subscription> <planCode>	(parent element) (parent element) MC 5112010100000002 07146 (parent element) (parent element) Value from R1.6	<recurringResponse> <responseCode> <responseMessage>	(parent element) 471 Parent transaction declined - Recurring subscription not created
R10.1	<cancelSubscription> <subscriptionId>	(parent element) Value returned in R7.1 response	<recurringResponse> <subscriptionId> <response> <message>	(parent element) Submitted value 000 Approved

TABLE 2-25 Recurring Engine Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
R11.1	<updatePlan>	(parent element)	<response>	000
	<planCode>	Value from R1.2	<message>	Approved
	<active>	false		

2.5.14 Testing Gift Card Transactions

Use the following Certification tests to verify transactions associated with the Private Label Gift Card functionality. The tests are designed so that you can verify your XML structure for each transaction type, as well as your ability to parse the response data.

To test the Recurring Engine functionality using the data supplied in [Table 2-26](#):

1. Submit an `activate` transaction for Order Id GC1. Verify that the data in the response message matches the Key Response Elements specified in the table.
2. Submit an `activate` transaction for Order Id GC1A. This transaction activates a Virtual Gift Card. Verify that the data in the response message matches the Key Response Elements specified in the table.
3. Submit an `authorization` transaction for Order Id GC2. Verify that the data in the response message matches the Key Response Elements specified in the table.
4. Submit a `capture` transaction for Order Id GC2A. Verify that the data in the response message matches the Key Response Elements specified in the table.
5. Submit a `credit` transaction for Order Id GC2B. Verify that the data in the response message matches the Key Response Elements specified in the table.
6. Submit a `deactivate` transaction for Order Id GC3. Verify that the data in the response message matches the Key Response Elements specified in the table.
7. Submit a `load` transaction for Order Id GC4. Verify that the data in the response message matches the Key Response Elements specified in the table.
8. Submit a `unload` transaction for Order Id GC5. Verify that the data in the response message matches the Key Response Elements specified in the table.
9. Submit a `balanceInquiry` transaction for Order Id GC6. Verify that the data in the response message matches the Key Response Elements specified in the table.
10. Submit an `activate` transaction for Order Id GC7. Verify that the data in the response message matches the Key Response Elements specified in the table.
11. Submit an `activateReversal` transaction for Order Id GC7A. Verify that the data in the response message matches the Key Response Elements specified in the table.

12. Submit an `activateReversal` transaction for Order Id GC1A. Verify that the data in the response message matches the Key Response Elements specified in the table.
13. Submit an `authorization` transaction for Order Id GC8. Verify that the data in the response message matches the Key Response Elements specified in the table.
14. Submit an `authorizationReversal` transaction for Order Id GC8A. Verify that the data in the response message matches the Key Response Elements specified in the table.
15. Submit a `sale` transaction for Order Id GC9. Verify that the data in the response message matches the Key Response Elements specified in the table.
16. Submit a `depositReversal` transaction for Order Id GC9A. Verify that the data in the response message matches the Key Response Elements specified in the table.
17. Submit a `sale` transaction for Order Id GC10. Verify that the data in the response message matches the Key Response Elements specified in the table.
18. Submit a `credit` transaction for Order Id GC10A. Verify that the data in the response message matches the Key Response Elements specified in the table.
19. Submit a `refundReversal` transaction for Order Id GC10B. Verify that the data in the response message matches the Key Response Elements specified in the table.
20. Submit a `deactivate` transaction for Order Id GC11. Verify that the data in the response message matches the Key Response Elements specified in the table.
21. Submit a `loadReversal` transaction for Order Id GC12. Verify that the data in the response message matches the Key Response Elements specified in the table.
22. Submit an `unload` transaction for Order Id GC13. Verify that the data in the response message matches the Key Response Elements specified in the table.
23. Submit an `unloadReversal` transaction for Order Id GC13A. Verify that the data in the response message matches the Key Response Elements specified in the table.
24. Submit an `activate` transaction for Order Id GC14. This transaction is declined with a response code of 301 - Invalid Account Number. Verify that the data in the response message matches the Key Response Elements specified in the table.
25. Submit an `activate` transaction for Order Id GC15. This transaction is declined with a response code of 217 - Already active, because it attempts to activate the same card already activated in Order Id GC1. Verify that the data in the response message matches the Key Response Elements specified in the table.
26. Submit an `authorization` transaction for Order Id GC16. This transaction is declined with a response code of 110 - Insufficient Funds. Verify that the data in the response message matches the Key Response Elements specified in the table.
27. Submit an `authorization` transaction for Order Id GC17. This transaction is declined with a response code of 281 - Card not active. Verify that the data in the response message matches the Key Response Elements specified in the table.
28. Submit a `capture` transaction for Order Id GC18. This transaction is declined with a response code of 360 - No transaction found with the specified `littleTxnId`. Verify that the data in the response message matches the Key Response Elements specified in the table.

29. Submit a `sale` transaction for Order Id GC19. Verify that the data in the response message matches the Key Response Elements specified in the table.
30. Submit a `credit` transaction for Order Id GC19A. This transaction is declined with a response code of 304 - Lost/Stolen Card. Verify that the data in the response message matches the Key Response Elements specified in the table.
31. Submit a `balanceInquiry` transaction for Order Id GC20. This transaction is declined with a response code of 352 - Invalid CVV2. Verify that the data in the response message matches the Key Response Elements specified in the table.

TABLE 2-26 Private Label Gift Card Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
GC1	Activate: <amount> 15000 <type> GC <number> 6035716390000000000 <expDate> 1215 <cardValidationNum> 123		Activate Response: <response> 000 <message> Approved <cardValidationResult> M <availableBalance> 15000	
GC1A	Virtual Activate: <amount> 8000 <accountNumberLength> 16 <giftCardBin> 603571		Activate Response: <response> 000 <message> Approved <availableBalance> 8000 <accountNumber> 603571xxxxxxxxxx	
GC2	Authorization: <amount> 1500 <type> GC <number> 6035716390000000000 <expDate> 1215 <cardValidationNum> 123		Authorization Response: <response> 000 <message> Approved <authCode> 11111 <cardValidationResult> M <availableBalance> 13500	
GC2A	Capture: <littleTxnId> Value received in response message for Order Id GC2.		Capture Response: <response> 000 <message> Approved <availableBalance> 13500	

TABLE 2-26 Private Label Gift Card Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
GC2B	Credit: <littleTxnId> <amount>	Value received in response message for Order Id GC2A. 500	Credit Response: response> <message> <availableBalance>	000 Approved 14000
CG3	Deactivate: <type> <number>	GC 60357164000000000007	Deactivate Response: response> <message> <availableBalance>	000 Approved 0
GC4	Load: <amount> <type> <number> <expDate> <cardValidationNum>	5000 GC 60357165000000000004 0116 123	Load Response: <response> <message> <cardValidationResult> <availableBalance>	000 Approved M 5000
GC5	Unload: <amount> <type> <number> <expDate> <cardValidationNum>	2500 GC 60357165000000000004 0116 123	Unload Response: <response> <message> <cardValidationResult> <availableBalance>	000 Approved M 2500
GC6	Balance Inquiry: <type> <number> <expDate> <cardValidationNum>	GC 60357163900000000000 0116 123	Balance Inquiry Response: <response> <message> <cardValidationResult> <availableBalance>	000 Approved M 2500

TABLE 2-26 Private Label Gift Card Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
GC7	Activate: <amount> 8000 <type> GC <number> 6035712132130000003 <expDate> 1215 <cardValidationNum> 123		Activate Response: <response> 000 <message> Approved <cardValidationResult> M <availableBalance> 8000	
GC7A	Activate Reversal: <littleTxnId>	Value received in response message for Order Id GC7.	Activate Reversal Response: <response> 000 <message> Approved	
GC7B	Activate Reversal: <littleTxnId>	Value received in response message for Order Id GC1A.	Activate Reversal Response: <response> 000 <message> Approved	
GC8	Authorization: <amount> 2000 <type> GC <number> 6035746100000000007 <expDate> 1215 <cardValidationNum> 123		Authorization Response: <response> 000 <message> Approved <authCode> 11111 <cardValidationResult> M <availableBalance> 4000	
GC8A	Auth Reversal: <littleTxnId>	Value received in response message for Order Id GC8.	Auth Reversal Response: <response> 000 <message> Approved <availableBalance> 6000	

TABLE 2-26 Private Label Gift Card Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
GC9	Sale: <amount> 2000 <type> GC <number> 6035716431320000005 <expDate> 1215 <cardValidationNum> 123		Sale Response: <response> 000 <message> Approved <authCode> 11111 <cardValidationResult> M <availableBalance> 8000	
GC9A	Deposit Reversal: <littleTxnId>	Value received in response message for Order Id GC9.	Deposit Reversal Response: <response> 000 <message> Approved <availableBalance> 10000	
GC10	Sale: <amount> 2000 <type> GC <number> 6035716431320000005 <expDate> 1215 <cardValidationNum> 123		Sale Response: <response> 000 <message> Approved <authCode> 11111 <cardValidationResult> M <availableBalance> 8000	
GC10A	Credit: <littleTxnId>	Value received in response message for Order Id GC10.	Credit Response: <response> 000 <message> Approved <availableBalance> 10000	
GC10B	Refund Reversal: <littleTxnId>	Value received in response message for Order Id GC10A.	Refund Reversal Response: <response> 000 <message> Approved <availableBalance> 8000	

TABLE 2-26 Private Label Gift Card Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
GC11	Deactivate Reversal: <littleTxnId>	Value received in response message for Order Id GC3.	Deactivate Reversal Response: <response> <message> <availableBalance>	000 Approved 0
GC12	Load Reversal: <littleTxnId>	Value received in response message for Order Id GC4.	Load Reversal Response: <response> <message> <availableBalance>	000 Approved 0
GC13	Unload: <amount> <type> <number> <expDate> <cardValidationNum>	2500 GC 60357123000000000003 0116 123	Unload Response: <response> <message> <cardValidationResult> <availableBalance>	000 Approved M 1500
GC13A	Unload Reversal: <littleTxnId>	Value received in response message for Order Id GC13.	Unload Reversal Response: <response> <message> <availableBalance>	000 Approved 4000
GC14	Activate: <amount> <type> <number> <expDate> <cardValidationNum>	15000 GC 60357163963600000001 1216 123	Activate Response: <response> <message>	301 Invalid Account Number

TABLE 2-26 Private Label Gift Card Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
GC15	Activate: <amount> 10000 <type> GC <number> 6035716390000000000 <expDate> 1216 <cardValidationNum> 123		Activate Response: <response> 217 <message> Already active <availableBalance> 14000	
GC16	Authorization: <amount> 1500000 <type> GC <number> 6035716390000000000 <expDate> 1216 <cardValidationNum> 123		Authorization Response: <response> 352 <message> Decline CVV/CID Fail <cardValidationResult> M <availableBalance> 14000	
GC17	Authorization: <amount> 15000 <type> GC <number> 6035709896360000009 <expDate> 1216 <cardValidationNum> 123		Authorization Response: <response> 281 <message> Card not active	
GC18	Capture: <littleTxnId> 5555		Capture Response: <response> 360 <message> No transaction found with specified littleTxnId	
GC19	Sale: <amount> 1000 <type> GC <number> 6035716490000000008 <expDate> 1215 <cardValidationNum> 123		Sale Response: <response> 000 <message> Approved <authCode> 11111 <cardValidationResult> M <availableBalance> 1500	

TABLE 2-26 Private Label Gift Card Test Data

orderId	Supplied Data Elements		Key Response Elements	
	Element	Value	Element	Value
GC19A	Credit: <littleTxnId> <amount>	Value received in response message for Order Id GC19. 10000	Credit Response: <response> <message>	304 Lost/Stolen Card
GC20	Balance Inquiry: <type> <number> <expDate> <cardValidationNum>	GC 60357165000000000004 0116 476	Balance Inquiry Response: <response> <message>	352 Invalid CVV2

2.5.15 Testing Online Duplicate Transaction Processing

When you submit certain Online transactions, the Little 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 <code>id</code> attribute, is identical.
	Online Duplicate Transaction checking is disabled if you submit a null value (<code>id=""</code>).

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.

2.5.16 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.

Little & 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.



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.

NOTE: In the Litle XML, the order of the elements is enforced. Failure to adhere to the element order as defined in the schema will result in XML validation errors.

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;

- Activate Transactions
- Authorization Transactions
- Authorization Reversal
- Balance Inquiry Transactions
- Cancel Subscription Transactions
- Capture Transactions
- Capture Given Auth Transactions
- Create Plan Transactions
- Credit Transactions
- Deactivate Transactions
- Force Capture Transactions
- Load Transactions
- eCheck Sale Transactions
- eCheck Credit Transactions
- eCheck Redeposit Transactions
- eCheck Verification Transactions
- RFR Batch Transactions (Batch Only)
- Sale Transactions
- Unload Transactions
- Update Card Validation Number Transactions
- Update Plan Transactions

- Update Subscription Transactions

For more information about Batch processing, see [Batch Transaction Processing](#) on page 5.

3.1.1.1 Supported Communication Protocols

Little & Co. supports the following communication protocols for Batch processing:

- Encrypted FTP (PGP or GPG key encryption)
- sFTP
- TCP/IP Socket (using SSL)

For additional information concerning the recommended transmission methods, see [Transferring Batch Files](#) on page 69.

3.1.1.2 Batch Processing Request Format

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

- Header information - one `<littleRequest>` 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.

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 example 500=5.00).

FIGURE 3-1 Batch Request XML Format

```

• ◇ Structure ID="littleRequest" ref="" taxonomy="XML"
  • ◇ <xp:littleRequest>
    • @version = "%xp:versionType%"
    • ? @id = "%xp:string25Type%"
    • @numBatchRequests = "%12345%"
    • ◇ <xp:authentication>
      • *? <xp:batchRequest>
        • @merchantSdk = "%string%"
        • ? @id = "%xp:string25Type%"
        • @numAuths = "%12345%"
        • ? @authAmount = "%xp:batchTotalAmountType%"
        • ? @numAuthReversals = "%12345%"
        • ? @authReversalAmount = "%xp:batchTotalAmountType%"
        • ? @numCaptures = "%12345%"
        • ? @captureAmount = "%xp:batchTotalAmountType%"
        • ? @numExtCaptures = "%12345%"
        • ? @extCaptureAmount = "%xp:batchTotalAmountType%"
        • ? @numCredits = "%12345%"
        • ? @creditAmount = "%xp:batchTotalAmountType%"
        • ? @numForceCaptures = "%12345%"
        • ? @forceCaptureAmount = "%xp:batchTotalAmountType%"
        • ? @numSales = "%12345%"
        • ? @saleAmount = "%xp:batchTotalAmountType%"
        • ? @numCaptureGivenAuths = "%12345%"
        • ? @captureGivenAuthAmount = "%xp:batchTotalAmountType%"
        • ? @numEcheckSales = "%12345%"
        • ? @echeckSalesAmount = "%xp:batchTotalAmountType%"
        • ? @numEcheckCredit = "%12345%"
        • ? @echeckCreditAmount = "%xp:batchTotalAmountType%"
        • ? @numEcheckVerification = "%12345%"
        • ? @echeckVerificationAmount = "%xp:batchTotalAmountType%"
        • ? @numEcheckRedeposit = "%12345%"
        • ? @numAccountUpdates = "%12345%"
        • ? @numTokenRegistrations = "%12345%"
        • ? @numUpdateCardValidationNumOnTokens = "%12345%"
        • ? @numCancelSubscriptions = "%12345%"
        • ? @numUpdateSubscriptions = "%12345%"
        • ? @numCreatePlans = "%12345%"
        • ? @numUpdatePlans = "%12345%"
        • ? @numActivates = "%12345%"
        • ? @numDeactivates = "%12345%"
        • ? @activateAmount = "%xp:batchTotalAmountType%"
        • ? @numLoads = "%12345%"
        • ? @loadAmount = "%xp:batchTotalAmountType%"
        • ? @numUnloads = "%12345%"
        • ? @unloadAmount = "%xp:batchTotalAmountType%"
        • ? @numBalanceInquiries = "%12345%"
        • @merchantId = "%xp:merchantIdentificationType%"
        • * <xp:authorization>
        • * <xp:authReversal>
        • * <xp:capture>
        • * <xp:forceCapture>
        • * <xp:captureGivenAuth>
        • * <xp:sale>
        • * <xp:credit>
        • * <xp:activate>
        • * <xp:deactivate>
        • * <xp:load>
        • * <xp:unload>
        • * <xp:balanceInquiry>
        • * <xp:registerTokenRequest>
        • * <xp:echeckSale>
        • * <xp:echeckCredit>
        • * <xp:echeckVerification>
        • * <xp:echeckRedeposit>
        • * <xp:updateCardValidationNumOnToken>
        • * <xp:accountUpdate>
        • * <xp:cancelSubscription>
        • * <xp:updateSubscription>
        • * <xp:createPlan>
        • * <xp:updatePlan>

```

3.1.1.3 Batch Processing Response Format

The Batch processing response is composed of the following elements:

- Header information - one `<littleResponse>` 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

```

Structure ID="littleResponse" ref="" taxonomy="XML"
<xp:littleResponse>
  @version = "%xp:versionType%"
  ? @id = "%xp:string25Type%"
  @response = "%xp:responseType%"
  @message = "%xp:messageType%"
  @littleSessionId = "%xp:littleIdType%"
  *? <xp:batchResponse>
    ? @id = "%xp:string25Type%"
    @littleBatchId = "%xp:littleIdType%"
    @merchantId = "%xp:merchantIdentificationType%"
    *? <xp:registerTokenResponse>
    *? <xp:authorizationResponse>
    *? <xp:authReversalResponse>
    *? <xp:captureResponse>
    *? <xp:forceCaptureResponse>
    *? <xp:captureGivenAuthResponse>
    *? <xp:saleResponse>
    *? <xp:creditResponse>
    *? <xp:activateResponse>
    *? <xp:loadResponse>
    *? <xp:unloadResponse>
    *? <xp:balanceInquiryResponse>
    *? <xp:deactivateResponse>
    *? <xp:echeckSalesResponse>
    *? <xp:echeckCreditResponse>
    *? <xp:echeckVerificationResponse>
    *? <xp:echeckRedepositResponse>
    *? <xp:updateCardValidationNumOnTokenResponse>
    *? <xp:accountUpdateResponse>
    *? <xp:cancelSubscriptionResponse>
    *? <xp:updateSubscriptionResponse>
    *? <xp:createPlanResponse>
    *? <xp:updatePlanResponse>

```

NOTE: For information on the XML Validation response and message attributes, please refer to [XML Validation Error Messages](#) on page 647.

3.2 Online Processing Format

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

Online processing supports the following transaction types:

- Activate Transactions
- Activate Reversal Transactions (Online Only)
- Authorization Transactions
- Authorization Reversal
- Balance Inquiry Transactions
- Cancel Subscription Transactions
- Capture Transactions
- Capture Given Auth Transactions
- Create Plan Transactions
- Credit Transactions
- Deactivate Transactions
- Deactivate Reversal Transactions (Online Only)
- Deposit Reversal Transactions (Online Only)
- Force Capture Transactions
- Load Transactions
- Load Reversal Transactions (Online Only)
- eCheck Sale Transactions
- eCheck Credit Transactions
- eCheck Redeposit Transactions
- eCheck Verification Transactions
- eCheck Void Transactions (Online Only)
- Refund Reversal Transactions (Online Only)
- Sale Transactions
- Unload Transactions
- Unload Reversal Transactions (Online Only)
- Update Card Validation Number Transactions
- Update Plan Transactions
- Update Subscription Transactions

- Void Transactions (Online Only)

3.2.1 Supported Communication Protocols

Little & Co. supports the HTTPS POST communication protocol for Online processing.

For additional information concerning the recommended transmissions methods, see [Transferring Online Files](#) on page 70.

3.2.2 Online Processing Request Format

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

- Header information - one `<littleOnlineRequest>` 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



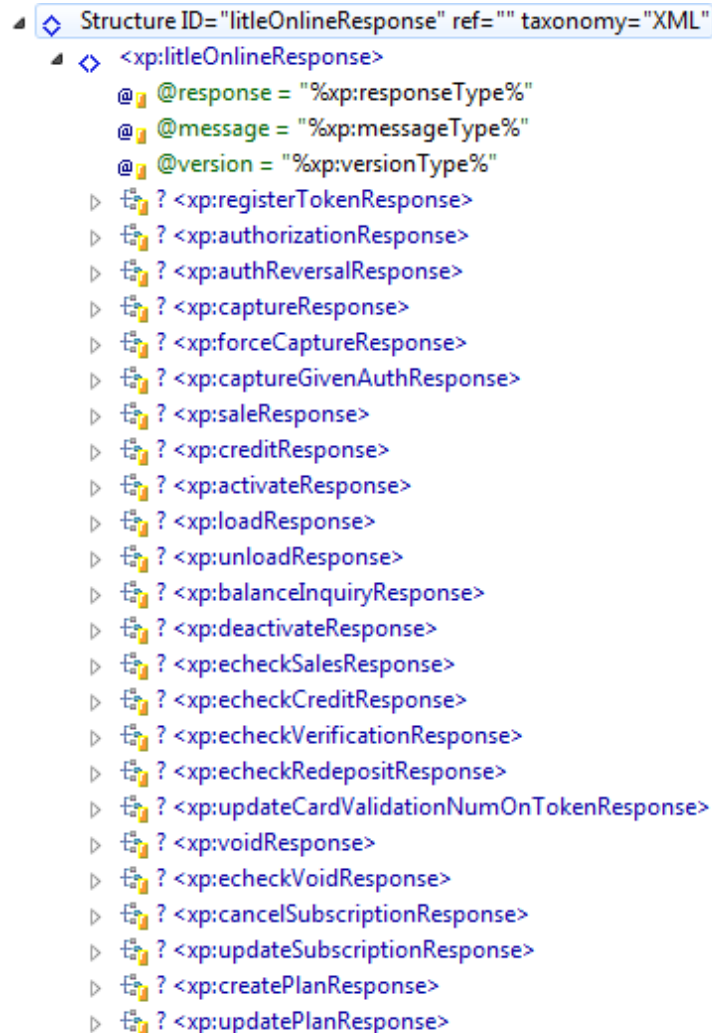
3.2.3 Online Processing Response Format

An Online processing response is composed of the following elements:

- Header information - one `<littleOnlineResponse>`
- 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 647.

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 LittleXML transaction. Each structural example shows the parent and all child elements, but does not show grandchildren. The LittleXML 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 LittleXML transactions. The examples may not include every possible element for a particular transaction type. When coding your XML, always consult the LittleXML schema files for information concerning all available elements.

This section contains examples of the following transaction types:

NOTE: In the LittleXML, the order of the elements is enforced. Failure to adhere to the element order as defined in the schema will result in XML validation errors.

- [Authorization Transactions](#)
- [Authorization Reversal Transactions](#)
- [Activate Transactions](#) (Private Label Gift Card transaction)
- [Activate Reversal Transactions \(Online Only\)](#) (Private Label Gift Card transaction)
- [Balance Inquiry Transactions](#) (Private Label Gift Card transaction)
- [Cancel Subscription Transactions](#) (Recurring Engine transaction)
- [Capture Transactions](#)
- [Capture Given Auth Transactions](#)
- [Create Plan Transactions](#) (Recurring Engine transaction)
- [Credit Transactions](#)
- [Deactivate Transactions](#) (Private Label Gift Card transaction)
- [Deactivate Reversal Transactions \(Online Only\)](#) (Private Label Gift Card transaction)
- [Deposit Reversal Transactions \(Online Only\)](#) (Private Label Gift Card transaction)
- [eCheck Credit Transactions](#)
- [eCheck Redeposit Transactions](#)
- [eCheck Sale Transactions](#)

- [eCheck Verification Transactions](#)
- [eCheck Void Transactions \(Online Only\)](#)
- [Force Capture Transactions](#)
- [Load Transactions](#) (Private Label Gift Card transaction)
- [Load Reversal Transactions \(Online Only\)](#) (Private Label Gift Card transaction)
- [Refund Reversal Transactions \(Online Only\)](#) (Private Label Gift Card transaction)
- [Register Token Transactions](#)
- [RFR Transactions \(Batch Only\)](#)
- [Sale Transactions](#)
- [Unload Transactions](#) (Private Label Gift Card transaction)
- [Unload Reversal Transactions \(Online Only\)](#) (Private Label Gift Card transaction)
- [Update Plan Transactions](#) (Recurring Engine transaction)
- [Update Subscription Transactions](#) (Recurring Engine transaction)
- [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 <i>Litle & Co. Bill Me Later Integration Guide</i> .
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 & 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.

```
<authorization id="Authorization Id" reportGroup="iQ Report Group"
customerId="Customer Id">
  <orderId>Order Id</orderId>
  <amount>Authorization Amount</amount>
  <orderSource>Order Entry Source</orderSource>
  <customerInfo>
```

```

    <billToAddress>
    <shipToAddress>
    [ <card> | <paypal> | <paypage> | <token>]
    <billMeLaterRequest>
    <cardholderAuthentication>
    <processingInstructions>
    <pos>
    <customBilling>
    <taxType>payment or fee</taxType>
    <enhancedData>
    <amexAggregatorData>
    <allowPartialAuth>
    <healthcareIIAS>
    <filtering>
    <merchantData>
    <recyclingRequest> (for Recycling Engine merchants)
    <fraudFilterOverride>
    <recurringRequest> (for Recurring Engine merchants)
    <debtRepayment>true or false</debtRepayment>
    <advancedFraudChecks>
  </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 its 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.

```

<littleRequest version="8.24" xmlns="http://www.little.com/schema"
  numBatchRequests = "1">
  <authentication>
    <user>XMLTESTP7</user>
    <password>password</password>
  </authentication>
  <batchRequest numAuths="1" authAmount="2500" merchantId="000902">
    <authorization id="test1" reportGroup="core" customerId="test1">
      <orderId>visa_test1</orderId>
    </authorization>
  </batchRequest>
</littleRequest>

```

```
<amount>2500</amount>
<orderSource>telephone</orderSource>
<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</email>
</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>
<card>
  <type>VI</type>
  <number>4005550000081019</number>
  <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.

```
<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"
  numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="01234567" numAuths="2" authAmount="68336"
  merchantId="100">
    <authorization id="AX54321678" reportGroup="RG27">
      <orderId>12z58743y1</orderId>
      <amount>12522</amount>
      <orderSource>retail</orderSource>
      <billToAddress>
        <zip>95032</zip>
      </billToAddress>
      <card>
        <track>%B40000001^Doe/JohnP^06041...?;40001=0604101064200?</track>
      </card>
      <pos>
        <capability>magstripe</capability>
        <entryMode>completeread</entryMode>
        <cardholderId>signature</cardholderId>
      </pos>
    </authorization>
    <authorization id="AX54325432" reportGroup="RG12">
      <orderId>12z58743y7</orderId>
      <amount>55814</amount>
      <orderSource>retail</orderSource>
      <billToAddress>
        <zip>01854</zip>
      </billToAddress>
      <card>
        <type>VI</type>
        <number>4005550000081019</number>
        <expDate>0911</expDate>
      </card>
      <pos>
        <capability>keyedonly</capability>
```

```

    <entryMode>keyed</entryMode>
    <cardholderId>directmarket</cardholderId>
  </pos>
  <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="8.24" 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>
    <billToAddress>
      <name>John Smith</name>
      <addressLine1>100 Main St</addressLine1>
      <city>Boston</city>
      <state>MA</state>
      <zip>12345</zip>
      <email>jsmith@someaddress.com</email>
      <phone>555-123-4567</phone>
    </billToAddress>
    <card>
      <type>VI</type>
      <number>4000000000000001</number>
      <expDate>1209</expDate>
      <cardValidationNum>555</cardValidationNum>
    </card>
  </authorization>
</litleOnlineRequest>

```

```

</card>
<cardholderAuthentication>
  <authenticationValue>BwABBJQ1gJDUCAAAAAA= </authenticationValue>
  <authenticationTransactionId>gMV75TmjAgk= </authenticationTransactionId>
</cardholderAuthentication>
</authorization>
</littleOnlineRequest>

```

Example: Authorization Request using token Element

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

NOTE: When you submit the CVV2/CVC2/CID in a registerTokenRequest, the Little 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>
  <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</email>
  </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>

```

```

</shipToAddress>
<token>
  <litleToken>1111000101039449</litleToken>
  <expDate>1112</expDate>
  <cardValidationNum>987</cardValidationNum>
</token>
</authorization>

```

Example: Authorization Request with Recurring Request

```

<litleOnlineRequest version="8.24" xmlns="http://www.little.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>
    <billToAddress>
      <name>John Smith</name>
      <addressLine1>100 Main St</addressLine1>
      <city>Boston</city>
      <state>MA</state>
      <zip>12345</zip>
      <email>jsmith@someaddress.com</email>
      <phone>555-123-4567</phone>
    </billToAddress>
    <card>
      <type>VI</type>
      <number>4000000000000001</number>
      <expDate>1209</expDate>
      <cardValidationNum>555</cardValidationNum>
    </card>
    <cardholderAuthentication>
      <authenticationValue>BwABBJQ1gJDUCAAAAAA= </authenticationValue>
      <authenticationTransactionId>gMV75TmjAgk= </authenticationTransactionId>
    </cardholderAuthentication>
    <recurringRequest>
      <subscription>
        <planCode>Gold_Monthly_1</planCode>
        <numberOfPayments>12</numberOfRemianingPayments>

```



```

    <startDate>2013-07-21</startDate>
    <amount>1500</amount>
    <createDiscount>
      <discountCode>New_Customer_Discount_1</addOnCode>
      <name>New_Customer</name>
      <amount>750</amount>
      <startDate>2013-07-21</startDate>
      <endDate>2013-07-22</endDate>
    </createDiscount>
    <createAddOn>
      <addOnCode>Extra_Feature_1</addOnCode>
      <name>Extra_1</name>
      <amount>900</amount>
      <startDate>2013-08-21</startDate>
      <endDate>2014-07-21</endDate>
    </createAddOn>
  </subscription>
</recurringRequest>
</authorization>
</littleOnlineRequest>

```

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="iQ Report
Group" customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <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)
<recurringResponse> (for Recurring Engine merchants)
<giftCardResponse> (included if Gift Card is Method of Payment)
</authorizationResponse>

```

Example: Batch Authorization Response

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

```

<littleResponse version="8.24" xmlns="http://www.little.com/schema" id="123"
  response="0" message="Valid Format" littleSessionId="987654321">
  <batchResponse id="01234567" littleBatchId="4455667788" merchantId="100">
    <authorizationResponse id="AX54321678" reportGroup="RG27">
      <littleTxnId>84568456</littleTxnId>
      <orderId>12z58743y1</orderId>
      <response>000</response>
      <responseTime>2011-03-01T10:24:31</responseTime>
      <message>Approved</message>
      <authCode>123456</authCode>
      <fraudResult>
        <avsResult>00</avsResult>
      </fraudResult>
    </authorizationResponse>
    <authorizationResponse id="AX54325432" reportGroup="RG12">
      <littleTxnId>84568457</littleTxnId>
      <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>
          <prepaidCardType>GIFT</prepaidCardType>
        </fundingSource>
      </enhancedAuthResponse>
    </authorizationResponse>
  </batchResponse>
</littleResponse>

```

```

    </fundingSource>
  </enhancedAuthResponse>
</authorizationResponse>
</batchResponse>
</littleResponse>

```

Example: Online Authorization Response including Advanced Fraud Results

NOTE: The online response format contains a `<postDate>` element, which indicates the date the financial transaction will post.

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <authorizationResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>969506</littleTxnId>
    <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>
      <cardValidationResult>N</cardValidationResult>
      <authenticationResult>2</authenticationResult>
      <advancedFraudResults>
        <deviceReviewStatus>pass</deviceReviewStatus>
        <deviceReputationScore>70</deviceReputationScore>
        <triggeredRule>FlashImagesCookiesDisabled</triggeredRule>
      </advancedFraudResults>
    </fraudResult>
    <enhancedAuthResponse>
      <fundingSource>
        <type>PREPAID</type>
        <availableBalance>0</availableBalance>
        <reloadable>YES</reloadable>
        <prepaidCardType>TEEN</prepaidCardType>
      </fundingSource>
    </enhancedAuthResponse>
  </authorizationResponse>
</littleOnlineResponse>

```

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 (`littleOnlineResponse` element not shown); therefore, it includes the `postDate` element.

```
<authorizationResponse id="99999" reportGroup="RG1" customerId="444">
  <littleTxnId>21200000001108</littleTxnId>
  <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>
    <littleToken>1111100100240005</littleToken>
    <tokenResponseCode>801</tokenResponseCode>
    <tokenMessage>Account number was successfully registered</tokenMessage>
    <type>VI</type>
    <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 reported the new account as closed. Although the Authorization was approved, this information allows you to make an informed decision about how to proceed with the sale.

```
<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <authorizationResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>969506</littleTxnId>
    <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>
    <littleToken>1111100100240005</littleToken>
    <type>VI</type>
    <expDate>1112</expDate>
    <bin>400555</bin>
  </originalCardTokenInfo>
  <newCardTokenInfo>
    <littleToken>1111100100250017</littleToken>
    <type>VI</type>
    <expDate>1114</expDate>
    <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>
</littleOnlineResponse>

```

Example: Online Authorization Response with Recurring Response

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <authorizationResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>969506</littleTxnId>
    <orderId>65347567</orderId>
    <response>000</response>
    <responseTime>2013-07-25T15:13:43</responseTime>
    <postDate>2013-07-25</postDate>
    <message>Approved</message>
    <authCode>123457</authCode>
    <fraudResult>
      <avsResult>00</avsResult>
      <cardValidationResult>N</cardValidationResult>
      <authenticationResult>2</authenticationResult>
    </fraudResult>
  </authorizationResponse>
</littleOnlineResponse>

```

```

    <recurringResponse>
      <subscriptionId>1234567890</subscriptionId>
      <responseCode>000</responseCode>
      <responseMessage>Approved</responseMessage>
    </recurringResponse>
  </authorizationResponse>
</littleOnlineResponse>

```

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 Little system. For information on how to use the Authorization Reversal transaction, see [Notes on the Use of Authorization Reversal Transactions](#) on page 54. Also, if you use Little'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="iQ Report Group"
customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <amount>Authorization Amount to Reverse</amount>
  <actionReason>SUSPECT_FRAUD</actionReason>
</authReversal>

```

Example: Batch Authorization Reversal Request

The following example contains three Authorization Reversal Requests.

```

<littleRequest version="8.24" xmlns="http://www.little.com/schema"
numBatchRequests="1">
  <authentication>
    <user>PHXMLTEST</user>
    <password>password</password>
  </authentication>
  <batchRequest numAuthReversals="3" authReversalAmount="3005"
merchantId="000057">
    <authReversal id="ID" customerId="customerId" reportGroup="000057">
      <littleTxnId>12345678</littleTxnId>
    </authReversal>
  </batchRequest>
</littleRequest>

```

```

        <amount>1002</amount>
    </authReversal>
    <authReversal id="ID" customerId="customerId" reportGroup="000057">
        <littleTxnId>81234567</littleTxnId>
        <amount>1003</amount>
    </authReversal>
    <authReversal id="ID" customerId="customerId" reportGroup="000057">
        <littleTxnId>78123456</littleTxnId>
        <amount>1000</amount>
    </authReversal>
</batchRequest>
</littleRequest>

```

Example: Online Authorization Reversal Request

```

<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <authReversal id="12345" customerId="Customer Id" reportGroup="Auth
  Reversals">
    <littleTxnId>12345678</littleTxnId>
    <amount>2999</amount>
  </authReversal>
</littleOnlineRequest>

```

3.3.2.2 Authorization Reversal Responses

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

```

<authReversalResponse id="Authorization Id" reportGroup="iQ Report
  Group" customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <orderId>Order Id</orderId>
  <response>Response Code</response>
  <responseTime>Date and Time in GMT</responseTime>
  <message>Response Message</message>
</authReversalResponse>

```

Example: Batch Authorization Reversal Response

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

```
<littleResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="ValidFormat" littleSessionId="21500040809">
  <batchResponse littleBatchId="21500040908" merchantId="000902">
    <authReversalResponse id="ID" reportGroup="core" customerId="Rev1">
      <littleTxnId>21200000002700</littleTxnId>
      <orderId>diAuth2</orderId>
      <response>000</response>
      <responseTime>2011-10-14T13:15:43</responseTime>
      <message>Approved</message>
    </authReversalResponse>
    <authReversalResponse id="ID" reportGroup="core" customerId="viRev2">
      <littleTxnId>21200000002809</littleTxnId>
      <orderId>visaAuth2</orderId>
      <response>000</response>
      <responseTime>2011-10-14T13:15:43</responseTime>
      <message>Approved</message>
    </authReversalResponse>
    <authReversalResponse id="ID" reportGroup="core" customerId="mcRev3">
      <littleTxnId>21200000002908</littleTxnId>
      <orderId>mcAuth2</orderId>
      <response>000</response>
      <responseTime>2011-10-14T13:15:43</responseTime>
      <message>Approved</message>
    </authReversalResponse>
  </batchResponse>
</littleResponse>
```

Example: Online Authorization Reversal Response

```
<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <authReversalResponse id="12345" customerId="Customer Id"
    reportGroup="Auth Reversals">
    <littleTxnId>12345678</littleTxnId>
    <orderId>abc123</orderId>
    <response>000</response>
    <responseTime>2011-08-30T13:15:43</responseTime>
    <message>Approved</message>
  </authReversalResponse>
</littleOnlineResponse>
```


3.3.3 Activate Transactions

The Activate transaction changes the status of a (Closed Loop) Gift Card from inactive to active with a value as specified by the `amount` element. You can also use this transaction type to create a Virtual Gift Card.

NOTE: You must be enabled for (Closed Loop) Gift Card transactions to use this transaction type. Please consult you Little Customer Experience Manager for additional information about Gift Card transactions.

3.3.3.1 Activate Request

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

```
<activate id="Activate Id" reportGroup="iQ Report Group" customerId="Customer
Id">
  <orderId>Order Id</orderId>
  <amount>Activation Amount</amount>
  <orderSource>Order Entry Source</orderSource>
  [ <card> | <virtualGiftCard> ]
</activate>
```

Example: Activate Request - Gift Card

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <activate id="834262" reportGroup="ABC Division" customerId="038945">
    <orderId>65347567</orderId>
    <amount>40000</amount>
    <orderSource>ecommerce</orderSource>
    <card>
      <type>GC</type>
      <number>9000000000000001</number>
    </card>
  </activate>
```

```
</littleOnlineRequest>
```

Example: Activate Request - Virtual Gift Card

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <activate id="834262" reportGroup="ABC Division" customerId="038945">
    <orderId>65347567</orderId>
    <amount>40000</amount>
    <orderSource>ecommerce</orderSource>
    <virtualGiftCard>
      <accountNumberLength>16</accountNumberLength>
      <giftCardBin>900000</giftCardBin>
    </virtualGiftCard>
  </activate>
</littleOnlineRequest>
```

3.3.3.2 Activate Response

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

```
<activateResponse id="Activate Id" reportGroup="iQ Report Group"
  customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <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>
  <fraudResult>
  <giftCardResponse>
  <virtualGiftCardResponse>
</activateResponse>
```

Example: Activate Response - Gift Card

```
<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <activateResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>9695064321</littleTxnId>
    <orderId>65347567</orderId>
    <response>000</response>
    <responseTime>2013-07-25T15:13:43</responseTime>
    <postDate>2013-07-25</postDate>
    <message>Approved</message>
    <giftCardResponse>
      <availableBalance>5000</availableBalance>
    </giftCardResponse>
  </activateResponse>
</littleOnlineResponse>
```

Example: Activate Response - Virtual Gift Card

```
<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <activateResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>9695064321</littleTxnId>
    <orderId>65347567</orderId>
    <response>000</response>
    <responseTime>2013-07-25T15:13:43</responseTime>
    <postDate>2013-07-25</postDate>
    <message>Approved</message>
    <giftCardResponse>
      <availableBalance>5000</availableBalance>
    </giftCardResponse>
    <virtualGiftCardResponse>
      <accountNumber>9000000000000001</accountNumber>
      <cardValidationNum>978</cardValidationNum>
    </virtualGiftCardResponse>
  </activateResponse>
</littleOnlineResponse>
```

3.3.4 Activate Reversal Transactions (Online Only)

The Activate Reversal transaction changes the status of a newly activated Gift Card from active to inactive, thus reversing the operation of an Active transaction. The Activate Reversal references the associated Activate transaction by means of the `littleTxnId` element returned in the Activate response. This transaction type is available only for Online transactions.

NOTE: You must be enabled for (Closed Loop) Gift Card transactions to use this transaction type. Please consult you Little Customer Experience Manager for additional information about Gift Card transactions.

3.3.4.1 Activate Reversal Request

You must structure an Activate Reversal request as shown in the following examples.

```
<activateReversal id="Activate Reversal Id" reportGroup="iQ Report Group"
customerId="Customer Id">

  <littleTxnId>Little & Co. Transaction Id from Activate Response</littleTxnId>

</activateReversal>
```

Example: Activate Reversal Request

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <activateReversal id="12345" customerId="Customer Id"
reportGroup="Activate Reversals">
    <littleTxnId>12345678</littleTxnId>
  </activateReversal>
</littleOnlineRequest>
```

3.3.4.2 Activate Reversal Response

An Activate Reversal response has the following structure.

```
<activateReversalResponse id="Activate Reversal Id" reportGroup="iQ
Report Group" customerId="Customer Id">

  <littleTxnId>Little & Co. Transaction Id</littleTxnId>

  <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>
<giftCardResponse>
</activateReversalResponse>

```

Example: Activate Reversal Response

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <activateReversalResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>9695064321</littleTxnId>
    <orderId>65347567</orderId>
    <response>000</response>
    <responseTime>2013-07-25T15:13:43</responseTime>
    <postDate>2013-07-25</postDate>
    <message>Approved</message>
    <giftCardResponse>
      <availableBalance>0</availableBalance>
    </giftCardResponse>
  </activateReversalResponse>
</littleOnlineResponse>

```

3.3.5 Balance Inquiry Transactions

A Balance Inquiry transaction returns the available balance of a Gift Card.

NOTE: You must be enabled for (Closed Loop) Gift Card transactions to use this transaction type. Please consult you Little Customer Experience Manager for additional information about Gift Card transactions.

3.3.5.1 Balance Inquiry Request

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

```

<balanceInquiry id="Balance Inquiry Id" reportGroup="iQ Report Group"
  customerId="Customer Id">
  <orderId>Order Id</orderId>
  <orderSource>Order Entry Source</orderSource>

```

```

    <card>
</balanceInquiry>

```

Example: Balance Inquiry Request

```

<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <balanceInquiry id="834262" reportGroup="ABC Division"
    customerId="038945">
    <orderId>65347567</orderId>
    <orderSource>ecommerce</orderSource>
    <card>
      <type>GC</type>
      <number>9000000000000001</number>
    </card>
  </balanceInquiry>
</littleOnlineRequest>

```

3.3.5.2 Balance Inquiry Response

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

```

<balanceInquiryResponse id="Balance Inquiry Id" reportGroup="iQ
Report Group" customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <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>
  <fraudResult>
  <giftCardResponse>
</balanceInquiryResponse>

```

Example: Balance Inquiry Response

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"

```

```

response="0" message="Valid Format">
<balanceInquiryResponse id="834262" reportGroup="ABC Division">
  <littleTxnId>9695064321</littleTxnId>
  <orderId>65347567</orderId>
  <response>000</response>
  <responseTime>2013-07-25T15:13:43</responseTime>
  <postDate>2013-07-25</postDate>
  <message>Approved</message>
  <fraudResult>
    <cardValidationResult>N</cardValidationResult>
  </fraudResult>
  <giftCardResponse>
    <availableBalance>2000</availableBalance>
  </giftCardResponse>
</activateReversalResponse>
</littleOnlineResponse>

```

3.3.6 Cancel Subscription Transactions

The Cancel Subscription transaction cancels the specified subscription, removing the transaction stream managed by the Recurring Engine.

3.3.6.1 Cancel Subscription Request

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

```

<cancelSubscription>
  <subscriptionId>ID of Subscription to Cancel</subscriptionId>
</cancelSubscription>

```

Example: Cancel Subscription Request

```

<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>password</password>
  </authentication>
  <cancelSubscription>
    <subscriptionId>1234</subscriptionId>
  </cancelSubscription>

```

```
</littleOnlineRequest>
```

3.3.6.2 Cancel Subscription Response

A Cancel Subscription response has the following structure. The response message is identical for Online and Batch transactions except Online includes the `<postDate>` element.

```
<cancelSubscriptionResponse>
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <response>Response Code</response>
  <message>Response Message</message>
  <responseTime>Date and Time in GMT</responseTime>
  <subscriptionId>ID of Subscription Canceled</subscriptionId>
</cancelSubscriptionResponse>
```

Example: Cancel Subscription Response

```
<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <cancelSubscriptionResponse>
    <littleTxnId>1100030055</littleTxnId>
    <response>000</response>
    <message>Approved</message>
    <responseTime>2013-07-11T14:48:46</responseTime>
    <subscriptionId>123457</subscriptionId>
  </cancelSubscriptionResponse>
</littleOnlineResponse>
```


3.3.7 Capture Transactions

The Capture transaction transfers funds from the customer to the merchant. The Capture references the associated Authorization by means of the `littleTxnId` 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.

3.3.7.1 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.

```
<capture id="Capture Id" reportGroup="iQ Report Group" customerId="Customer Id"
partial="false">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <amount>Authorization Amount</amount>
  <enhancedData>
  <processingInstructions>
  <paypalOrderComplete>Set to true for final Capture</paypalOrderComplete>
</capture>
```

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.

```
<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"
numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="01234567" numAuths="0" authAmount="0" numCaptures="1"
captureAmount="55814" numCredits="0" creditAmount="0" numSales="0"
saleAmount="0" merchantId="100">
    <capture id="AX54325432" reportGroup="RG12" partial="false">
      <littleTxnId>84568457</littleTxnId>
      <amount>55814</amount>
      <enhancedData>
```

```
<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</orderDate>
<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>
  <productCode>TB123</productCode>
  <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>
  <productCode>CH123</productCode>
  <quantity>1</quantity>
```

```

        <unitOfMeasure>EACH</unitOfMeasure>
        <lineItemTotal>20000</lineItemTotal>
        <itemDiscountAmount>0</itemDiscountAmount>
        <commodityCode>301</commodityCode>
        <unitCost>200.00</unitCost>
    </lineItemData>
</enhancedData>
</capture>
</batchRequest>
</littleRequest>

```

Example: Batch Capture Request - Partial Capture

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

```

<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"
  numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="01234567" numAuths="0" authAmount="0" numCaptures="1"
    captureAmount="45814" numCredits="0" creditAmount="0" numSales="0"
    saleAmount="0" merchantId="100">
    <capture id="AX54325432" reportGroup="RG12" partial="true">
      <littleTxnId>84568457</littleTxnId>
      <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</orderDate>
        <detailTax>
          <taxIncludedInTotal>true</taxIncludedInTotal>
          <taxAmount>500</taxAmount>
          <taxRate>0.01667</taxRate>
        </detailTax>
      </enhancedData>
    </capture>
  </batchRequest>
</littleRequest>

```

```
<taxTypeIdentifier>00</taxTypeIdentifier>
<cardAcceptorTaxId>011234567</cardAcceptorTaxId>
</detailTax>
<lineItemData>
  <itemSequenceNumber>1</itemSequenceNumber>
  <itemDescription>table</itemDescription>
  <productCode>TB123</productCode>
  <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>
  <productCode>CH123</productCode>
  <quantity>1</quantity>
  <unitOfMeasure>EACH</unitOfMeasure>
  <lineItemTotal>20000</lineItemTotal>
  <itemDiscountAmount>0</itemDiscountAmount>
  <commodityCode>301</commodityCode>
  <unitCost>200.00</unitCost>
</lineItemData>
</enhancedData>
</capture>
</batchRequest>
</littleRequest>
```

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.

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>password</password>
  </authentication>
  <capture id="2" reportGroup="ABC Division" customerId="038945"
    partial="false">
    <littleTxnId>13254123434</littleTxnId>
    <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</orderDate>
      <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>
      <productCode>CH123</productCode>
      <quantity>1</quantity>
      <unitOfMeasure>EACH</unitOfMeasure>
      <taxAmount>125</taxAmount>
      <lineItemTotal>9380</lineItemTotal>
      <lineItemTotalWithTax>9505</lineItemTotalWithTax>
      <itemDiscountAmount>0</itemDiscountAmount>
    </lineItemData>
  </capture>
</littleOnlineRequest>
```

```

    <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>
    <productCode>TB123</productCode>
    <quantity>1</quantity>
    <unitOfMeasure>EACH</unitOfMeasure>
    <lineItemTotal>30000</lineItemTotal>
    <itemDiscountAmount>0</itemDiscountAmount>
    <commodityCode>300</commodityCode>
    <unitCost>300.00</unitCost>
  </lineItemData>
</enhancedData>
</capture>
</littleOnlineRequest>

```

Example: Online Capture Request - Partial Capture

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

```

<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>password</password>
  </authentication>
  <capture id="2" reportGroup="ABC Division" customerId="038945"
    partial="true">
    <littleTxnId>13254123434</littleTxnId>
    <amount>100</amount>
    <enhancedData>
      <customerReference>PO12345</customerReference>
      <salesTax>125</salesTax>
    </enhancedData>
  </capture>
</littleOnlineRequest>

```

```
<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</orderDate>
<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>
  <productCode>CH123</productCode>
  <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>
  <productCode>TB123</productCode>
  <quantity>1</quantity>
  <unitOfMeasure>EACH</unitOfMeasure>
  <lineItemTotal>30000</lineItemTotal>
```

```

        <itemDiscountAmount>0</itemDiscountAmount>
        <commodityCode>300</commodityCode>
        <unitCost>300.00</unitCost>
    </lineItemData>
</enhancedData>
</capture>
</littleOnlineRequest>

```

3.3.7.2 Capture Response

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

```

<captureResponse id="Authorization Id" duplicate="true or false" reportGroup="iQ
Report Group" customerId="Customer Id">
    <littleTxnId>Little & Co. Transaction Id</littleTxnId>
    <orderId>Order Id</orderId> (Batch Only)
    <response>Response Code</response>
    <responseTime>Date and Time in GMT</responseTime>
    <postDate>Date Of Posting</postDate> (Online Only)
    <message>Response Message</message>
    <accountUpdater>
</captureResponse>

```

Example: Batch Capture Response

```

<littleResponse version="8.24" xmlns="http://www.little.com/schema" id="123"
littleSessionId="987654321" response="0" message="Valid Format">
    <batchResponse id="01234567" littleBatchId="4455667788" merchantId="100">
        <captureResponse id="AX54321678" reportGroup="RG27">
            <littleTxnId>84568456</littleTxnId>
            <orderId>12z58743y1</orderId>
            <response>000</response>
            <responseTime>2011-09-01T10:24:31</responseTime>
            <message>message</message>
        </captureResponse>
        <captureResponse id="AX54325432" reportGroup="RG12">
            <littleTxnId>84568457</littleTxnId>
            <orderId>12z58743y7</orderId>
            <response>000</response>
            <responseTime>2011-09-01T10:24:31</responseTime>

```



```

        <message>message</message>
    </captureResponse>
</batchResponse>
</littleResponse>

```

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.

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <captureResponse id="2" reportGroup="ABC Division" customerId="038945">
    <littleTxnId>1100030204</littleTxnId>
    <response>000</response>
    <responseTime>2011-07-11T14:48:48</responseTime>
    <postDate>2011-07-11</postDate>
    <message>Approved</message>
  </captureResponse>
</littleOnlineResponse>

```

3.3.8 Capture Given Auth Transactions

You typically use a Capture Given Auth transaction when the associated Authorization occurred outside of the Little & 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 Little system, but the `<littleTxnId>` is unknown by the submitting party (for example, if the Auth was submitted by a merchant, but a fulfiller submits a Capture Given Auth).

3.3.8.1 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.

```

<captureGivenAuth id="Capture Given Auth Id" reportGroup="iQ Report Group"
  customerId="Customer Id">
  <orderId>Order Id</orderId>
  <authInformation>
    <amount>Authorization Amount</amount>
  </authInformation>
</captureGivenAuth>

```

```

<orderSource>Order Entry Source</orderSource>
<billToAddress>
<shipToAddress>
[ <card> | <token> | <paypage> ]
<customBilling>
<taxType>payment or fee</taxType>
<billMeLaterRequest>
<enhancedData>
<processingInstructions>
<pos>
<amexAggregatorData>
<merchantData>
<debtRepayment>true or false</debtRepayment>
</captureGivenAuth>

```

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.

```

<littleRequest version="8.24" xmlns="http://www.little.com/schema"
  numBatchRequests="1">
  <authentication>
    <user>XMLTEST</user>
    <password>password</password>
  </authentication>
  <batchRequest id="batchId" numCaptureGivenAuths="1"
    captureGivenAuthAmount="10000" merchantId="100">
    <captureGivenAuth id="AX54321678" reportGroup="RG27">
      <orderId>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>
    </captureGivenAuth>
  </batchRequest>
</littleRequest>

```

```

</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>2011-09-21</orderDate>
  <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>
    <productCode>CH123</productCode>
    <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>
</littleRequest>

```

Example: Online Capture Given Auth Request

```

<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>

```

```
<user>XMLTESTV3</user>
<password>password</password>
</authentication>
<captureGivenAuth id="AX54321678" reportGroup="RG27">
  <orderId>orderId</orderId>
  <authInformation>
    <authDate>2011-08-24</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>
    <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</orderDate>
    <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>
      <productCode>CH123</productCode>
      <quantity>1</quantity>
      <unitOfMeasure>EACH</unitOfMeasure>
      <taxAmount>125</taxAmount>
    </lineItemData>
  </enhancedData>
</captureGivenAuth>
```

```

    <lineItemTotal>9380</lineItemTotal>
    <lineItemTotalWithTax>9505</lineItemTotalWithTax>
    <itemDiscountAmount>0</itemDiscountAmount>
    <commodityCode>300</commodityCode>
    <unitCost>93.80</unitCost>
  </lineItemData>
</enhancedData>
</captureGivenAuth>
</littleOnlineRequest>

```

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 [littleToken](#).

```

<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>
  <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>
    <littleToken>1112000100010085</littleToken>
    <expDate>1112</expDate>
    <cardValidationNum>987</cardValidationNum>
  </token>
</captureGivenAuth>

```

3.3.8.2 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.

```
<captureGivenAuthResponse id="Capture Id" reportGroup="iQ Report Group"
customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <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)
</captureGivenAuthResponse>
```

Example: Batch Capture Given Auth Response

```
<littleResponse version="8.24" xmlns="http://www.little.com/schema" id="123"
  littleSessionId="987654321" response="0" message="Valid Format">
  <batchResponse id="01234567" littleBatchId="4455667788" merchantId="100">
    <captureGivenAuthResponse id="AX54325432" reportGroup="RG12">
      <littleTxnId>84568457</littleTxnId>
      <orderId>12z58743y7</orderId>
      <response>000</response>
      <responseTime>2011-09-01T10:24:31</responseTime>
      <message>message</message>
    </captureGivenAuthResponse>
  </batchResponse>
</littleResponse>
```

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.

```
<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <captureGivenAuthResponse id="2" reportGroup="ABC Division"
  customerId="038945">
```

```

<littleTxnId>1100030204</littleTxnId>
<orderId>65347567</orderId>
<response>000</response>
<responseTime>2011-07-11T14:48:48</responseTime>
<postDate>2011-07-11</postDate>
<message>Approved</message>
</captureGivenAuthResponse>
</littleOnlineResponse>

```

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

```

<captureGivenAuthResponse id="99999" reportGroup="RG1" customerId="444">
  <littleTxnId>21200000022005</littleTxnId>
  <orderId>F12345</orderId>
  <response>000</response>
  <responseTime>2011-10-25T04:00:00</responseTime>
  <postDate>2011-10-26</postDate>
  <message>Approved</message>
  <tokenResponse>
    <littleToken>1111000100409510</littleToken>
    <tokenResponseCode>801</tokenResponseCode>
    <tokenMessage>Account number was successfully registered</tokenMessage>
    <type>VI</type>
    <bin>432610</bin>
  </tokenResponse>
</captureGivenAuthResponse>

```

3.3.9 Create Plan Transactions

The Create Plan transaction allows you to define several attributes of a recurring payment schedule. Later, you can associate existing, active plans with subscriptions, which establishes a recurring payment schedule managed by the Little Recurring Engine.

3.3.9.1 Create Plan Request

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

```

<createPlan>
  <planCode>Plan Reference Code</planCode>

```

```

    <name>Name of Plan</name>
    <description>Description of Plan</description>
    <intervalType>The Type of Interval</intervalType>
    <amount>Amount of Recurring Payment</amount>
    <numberOfPayments>1 to 99</numberOfRemianingPayments>
    <trialNumberOfIntervals>Number of Trial Intervals</trialNumberOfIntervals>
    <trialIntervalType>Type of Trial Period Interval</trialIntervalType>
    <active>true or false</active>
  </createPlan>

```

Example: Online Create Plan Request

```

<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>password</password>
  </authentication>
  <createPlan>
    <planCode>Gold12</planCode>
    <name>Gold_Monthly</name>
    <description>Gold Level with Monthly Payments</description>
    <intervalType>MONTHLY</intervalType>
    <amount>5000</amonut>
    <numberOfPayments>4</numberOfPayments>
    <trialNumberOfIntervals>1</trialNumberOfIntervals>
    <trialIntervalType>MONTH</trialIntervalType>
    <active>true</active>
  </createPlan>
</littleOnlineRequest>

```

3.3.9.2 Create Plan Response

The Create Plan response message is identical for Online and Batch transactions.

```

<createPlanResponse>
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <response>Response Code</response>
  <message>Response Message</message>

```



```

    <responseTime>Date and Time in GMT</responseTime>
    <planCode>Plan Reference Code</subscriptionId>
  </createPlanResponse>

```

Example: Online Create Plan Response

```

<litleOnlineResponse version="8.24" xmlns="http://www.litle.com/schema"
  response="0" message="Valid Format">
  <createPlanResponse>
    <litleTxnId>1100030055</litleTxnId>
    <response>000</response>
    <message>Approved</message>
    <responseTime>2011-07-11T14:48:46</responseTime>
    <planCode>Gold12</planCode>
  </createPlanResponse>
</litleOnlineResponse>

```

3.3.10 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.

3.3.10.1 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="iQ Report Group" customerId="Customer Id">
  <litleTxnId>Litle & Co. Transaction Id</litleTxnId>
  <amount>Authorization Amount</amount>

```

```

<customBilling>

<enhancedData>

<processingInstructions>

<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="8.24" xmlns="http://www.litle.com/schema" id="123"
  numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="01234567" numAuths="0" authAmount="0" numCaptures="0"
    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</orderDate>
        <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>
    <productCode>CH123</productCode>
    <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>
</credit>
</batchRequest>
</littleRequest>

```

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

To request a Credit against a sale settled by Little & Co., you need only specify the <littleTxnId> element. The application uses the <littleTxnId> 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.

```

<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>password</password>
  </authentication>

```

```
<credit id="2" reportGroup="ABC Division" customerId="038945">
  <littleTxnId>13254123434</littleTxnId>
  <customBilling>
    <phone>8888888888</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>2011-07-14</orderDate>
    <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>
      <productCode>CH123</productCode>
      <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>
</credit>
```

```

    </detailTax>
  </lineItemData>
  <lineItemData>
    <itemSequenceNumber>2</itemSequenceNumber>
    <itemDescription>table</itemDescription>
    <productCode>TB123</productCode>
    <quantity>1</quantity>
    <unitOfMeasure>EACH</unitOfMeasure>
    <lineItemTotal>30000</lineItemTotal>
    <itemDiscountAmount>0</itemDiscountAmount>
    <commodityCode>300</commodityCode>
    <unitCost>300.00</unitCost>
  </lineItemData>
</enhancedData>
</credit>
</littleOnlineRequest>

```

3.3.10.2 Credit Request for a Non-Little & Co. Processed Transaction

You must specify the Credit request for a Non-Little & 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-Little & Co. processed transaction, refunds of this type are not supported for PayPal. If you need to refund non-Little & Co. processed transactions and have not maintained a temporary relationship with your former processor for this purpose, please ask your Little Customer Experience Manager for alternative options.

```

<credit id="Credit Id" reportGroup="iQ Report Group" customerId="Customer Id">
  <orderId>Order Id</orderId>
  <amount>Authorization Amount</amount>
  <orderSource>Order Entry Source</orderSource>
  <billToAddress>
    [ <card> | <token> | <paypage> ]
  <customBilling>
  <taxType>payment or fee</taxType>
  <billMeLaterRequest>
  <enhancedData>

```

```

    <processingInstructions>

    <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).

```

<litleRequest version="8.24" xmlns="http://www.litle.com/schema" id="123"
  numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="01234567" numCredits="1" creditAmount="10000"
    merchantId="100">
    <credit id="AX54321678" reportGroup="RG27">
      <orderId>12z58743y1</orderId>
      <amount>10000</amount>
      <orderSource>ecommerce</orderSource>
      <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</number>
        <expDate>1110</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</orderDate>
<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>
  <productCode>CH123</productCode>
  <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>
</litleRequest>

```

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="8.24" xmlns="http://www.litle.com/schema"
```

```
merchantId="100">
<authentication>
  <user>User Name</user>
  <password>password</password>
</authentication>
<credit id="2" reportGroup="ABC Division" customerId="038945">
  <orderId>56789</orderId>
  <amount>10000</amount>
  <orderSource>ecommerce</orderSource>
  <billToAddress>
    <name>Mike J. Hammer</name>
    <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</email>
    <phone>5555555555</phone>
  </billToAddress>
  <card>
    <type>VI</type>
    <number>4005550000081019</number>
    <expDate>0907</expDate>
  </card>
  <customBilling>
    <phone>5555555555</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</orderDate>
    <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>
  <productCode>CH123</productCode>
  <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>
<lineItemData>
  <itemSequenceNumber>2</itemSequenceNumber>
  <itemDescription>table</itemDescription>
  <productCode>TB123</productCode>
  <quantity>1</quantity>
  <unitOfMeasure>EACH</unitOfMeasure>
  <lineItemTotal>30000</lineItemTotal>
  <itemDiscountAmount>0</itemDiscountAmount>
  <commodityCode>300</commodityCode>
  <unitCost>300.00</unitCost>
</lineItemData>
</enhancedData>
</credit>
</littleOnlineRequest>

```

3.3.10.3 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.

```

<creditResponse id="Credit Id" reportGroup="iQ Report Group"
customerId="Customer Id">

  <littleTxnId>Little & Co. Transaction Id</littleTxnId>

```

```

<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)
</creditResponse>

```

Example: Credit Response

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

```

<littleResponse version="8.24" xmlns="http://www.little.com/schema" id="123"
  littleSessionId="987654321" response="0" message="Valid Format">
  <batchResponse id="01234567" littleBatchId="4455667788" merchantId="100">
    <creditResponse id="AX54325432" reportGroup="RG12">
      <littleTxnId>84568457</littleTxnId>
      <orderId>12z58743y7</orderId>
      <response>000</response>
      <responseTime>2011-09-01T10:24:31</responseTime>
      <message>Approved</message>
    </creditResponse>
  </batchResponse>
</littleResponse>

```

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 (<littleOnlineResponse> element not shown), so it includes the <postDate> element.

```
<creditResponse id="99999" reportGroup="RG1" customerId="444">
  <littleTxnId>21200000473208</littleTxnId>
  <orderId>F12345</orderId>
  <response>000</response>
  <responseTime>2011-10-19T19:29:45</responseTime>
  <postDate>2011-10-19</postDate>
  <message>Approved</message>
  <tokenResponse>
    <littleToken>1111102200202001</littleToken>
    <tokenResponseCode>801</tokenResponseCode>
    <tokenMessage>Account number was successfully registered</tokenMessage>
    <type>VI</type>
    <bin>402410</bin>
  </tokenResponse>
</creditResponse>
```

3.3.11 Deactivate Transactions

The Deactivate transaction changes the status of a (Closed Loop) Gift Card from active to inactive.

NOTE: You must be enabled for (Closed Loop) Gift Card transactions to use this transaction type. Please consult you Little Customer Experience Manager for additional information about Gift Card transactions.

3.3.11.1 Deactivate Request

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

```
<deactivate id="Activate Id" reportGroup="iQ Report Group" customerId="Customer
Id">
  <orderId>Order Id</orderId>
  <orderSource>Order Entry Source</orderSource>
  <card>
</deactivate>
```

Example: Online Deactivate Request

```

<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <deactivate id="834262" reportGroup="ABC Division" customerId="038945">
    <orderId>65347567</orderId>
    <orderSource>ecommerce</orderSource>
    <card>
      <type>GC</type>
      <number>9000000000000001</number>
    </card>
  </deactivate>
</littleOnlineRequest>

```

3.3.11.2 Deactivate Response

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

```

<deactivateResponse id="Deactivate Id" reportGroup="iQ Report Group"
  customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <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>
  <fraudResult>
  <approvedAmount>5000</approvedAmount>
  <giftCardResponse> (included if Gift Card is Method of Payment)
</deactivateResponse>

```

Example: Online Deactivate Response

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <deactivateResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>9695064321</littleTxnId>
  </deactivateResponse>
</littleOnlineResponse>

```

```

<orderId>65347567</orderId>
<response>000</response>
<responseTime>2013-07-25T15:13:43</responseTime>
<postDate>2013-07-25</postDate>
<message>Approved</message>
<approvedAmount>5000</approvedAmount>
<giftCardResponse>
  <availableBalance>0</availableBalance>
  <beginningBalance>5000</beginningBalance>
  <endingBalance>0</endingBalance>
</giftCardResponse>
</deactivateResponse>
</littleOnlineResponse>

```

3.3.12 Deactivate Reversal Transactions (Online Only)

The Deactivate Reversal transaction changes the status of a newly deactivated Gift Card from inactive to active, thus reversing the operation of an Deactivate transaction. The Deactivate Reversal references the associated Deactivate transaction by means of the `littleTxnId` element returned in the Deactivate response. This transaction type is available only for Online transactions.

NOTE: You must be enabled for (Closed Loop) Gift Card transactions to use this transaction type. Please consult you Little Customer Experience Manager for additional information about Gift Card transactions.

3.3.12.1 Deactivate Reversal Request

You must structure an Deactivate Reversal request as shown in the following examples.

```

<deactivateReversal id="Deactivate Reversal Id" reportGroup="iQ Report Group"
customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id from Deactivate Response</littleTxnId>
</deactivateReversal>

```

Example: Deactivate Reversal Request

```

<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>

```

```

</authentication>
<deactivateReversal id="12345" customerId="Customer Id"
reportGroup="Deactivate Reversals">
  <littleTxnId>12345678</littleTxnId>
</deactivateReversal>
</littleOnlineRequest>

```

3.3.12.2 Deactivate Reversal Response

An Deactivate Reversal response has the following structure.

```

<deactivateReversalResponse id="Deactivate Reversal Id" reportGroup="iQ
Report Group" customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <orderId>Order Id</orderId>
  <response>Response Code</response>
  <responseTime>Date and Time in GMT</responseTime>
  <postDate>Date transaction posted</postDate>
  <message>Response Message</message>
  <giftCardResponse>
</deactivateReversalResponse>

```

Example: Online Deactivate Reversal Response

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
response="0" message="Valid Format">
  <deactivateReversalResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>9695064321</littleTxnId>
    <orderId>65347567</orderId>
    <response>000</response>
    <responseTime>2013-07-25T15:13:43</responseTime>
    <postDate>2013-07-25</postDate>
    <message>Approved</message>
    <giftCardResponse>
      <availableBalance>5000</availableBalance>
      <beginningBalance>0</beginningBalance>
      <endingBalance>5000</endingBalance>
    </giftCardResponse>
  </deactivateReversalResponse>
</littleOnlineResponse>

```

3.3.13 Deposit Reversal Transactions (Online Only)

The Deposit Reversal transaction is a Gift Card transaction that reverses the deposit initiate by either a Capture or Sale transaction. The Deposit Reversal references the associated Capture/Sale transaction by means of the `littleTxnId` element returned in the Capture/Sale response. This transaction type is available only for Online transactions.

NOTE: You must be enabled for (Closed Loop) Gift Card transactions to use this transaction type. Please consult you Little Customer Experience Manager for additional information about Gift Card transactions.

3.3.13.1 Deposit Reversal Request

You must structure an Deposit Reversal request as shown in the following examples.

```
<depositReversal id="Deposit Reversal Id" reportGroup="iQ Report Group"
customerId="Customer Id">

  <littleTxnId>Little & Co. Transaction Id from Capture/Sale Response</littleTxnId>

</depositReversal>
```

Example: Deposit Reversal Request

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <depositReversal id="12345" customerId="Customer Id" reportGroup="Deposit
Reversals">
    <littleTxnId>12345678</littleTxnId>
  </depositReversal>
</littleOnlineRequest>
```

3.3.13.2 Deposit Reversal Response

An Deposit Reversal response has the following structure.

```
<depositReversalResponse id="Deactivate Reversal Id" reportGroup="iQ
Report Group" customerId="Customer Id">

  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <orderId>Order Id</orderId>
  <response>Response Code</response>
```

```

    <responseTime>Date and Time in GMT</responseTime>
    <postDate>Date transaction posted</postDate>
    <message>Response Message</message>
    <giftCardResponse>
  </depositReversalResponse>

```

Example: Online Deposit Reversal Response

```

<litleOnlineResponse version="8.24" xmlns="http://www.litle.com/schema"
  response="0" message="Valid Format">
  <depositReversalResponse id="834262" reportGroup="ABC Division">
    <litleTxnId>9695064321</litleTxnId>
    <orderId>65347567</orderId>
    <response>000</response>
    <responseTime>2013-07-25T15:13:43</responseTime>
    <postDate>2013-07-25</postDate>
    <message>Approved</message>
    <giftCardResponse>
      <availableBalance>5000</availableBalance>
      <beginningBalance>0</beginningBalance>
      <endingBalance>5000</endingBalance>
    </giftCardResponse>
  </depositReversalResponse>
</litleOnlineResponse>

```

3.3.14 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 of 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.

3.3.14.1 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="iQ 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="8.24" xmlns="http://www.litle.com/schema"
numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="xmlbat01" numEcheckCredit="3" echeckCreditAmount="12100"
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>
  <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>
</litleRequest>

```

3.3.14.2 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 <litleTxnId> for the original eCheck Sale transaction is not available, specify eCheck Credit request as follows:

```

<echeckCredit id="eCheckCredit Id" reportGroup="iQ Report Group"
customerId="Customer Id">
  <orderId>Order Id</orderId>
  <amount>Credit Amount</amount>
  <orderSource>Order Entry Source</orderSource>
  <billToAddress>
  <echeck> or <echeckToken>
  <customBilling>

```

```

    <merchantData>
  </echeckCredit>

```

The third transaction shown in the [eCheck Credit Request](#) example on page 229 shows an example of a Credit request against a non-Little & Co. processed transaction.

3.3.14.3 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="iQ Report Group"
customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <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

```

<littleResponse version="8.24" xmlns="http://www.little.com/schema" id="123"
response="0" message="Valid Format" littleSessionId="987654321">
  <batchResponse id="01234567" littleBatchId="4455667788" merchantId="100">
    <echeckCreditResponse id="AX54321678" reportGroup="RG27"
customerId="53">
      <littleTxnId>84568456</littleTxnId>
      <orderId>12z58743y1</orderId>
      <response>000</response>
      <responseTime>2011-09-01T10:24:31</responseTime>
      <message>Approved</message>
    </echeckCreditResponse>
  </batchResponse>
</littleResponse>

```

3.3.15 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.

3.3.15.1 eCheck Redeposit Request

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

```
<echeckRedeposit id="eCheck Redeposit Id" reportGroup="iQ Report Group"
customerId="Customer Id">

  <littleTxnId>Little Transaction Id</littleTxnId>

  <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

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
merchantId="81603">
  <authentication>
    <user>User Name</user>
    <password>password</password>
  </authentication>
  <echeckRedeposit reportGroup="001603">
    <littleTxnId>345454444</littleTxnId>
    <echeck>
      <accType>Checking</accType>
      <accNum>1099999903</accNum>
      <routingNum>114567895</routingNum>
    </echeck>
    <merchantData>
      <campaign>New Marketing Campaign</campaign>
    </merchantData>
```

```
</echeckRedeposit>
</littleOnlineRequest>
```

Example: Batch eCheck Redeposit Request

```
<littleRequest version="8.24" xmlns="http://www.little.com/schema"
  numBatchRequests="1">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <batchRequest id="uniqueId" numEcheckRedeposit="4" merchantId="1603">
    <echeckRedeposit reportGroup="001603">
      <littleTxnId>3456456444</littleTxnId>
      <merchantdata>
        <affiliate>ABC Marketing</affiliate>
      </merchantdata>
    </echeckRedeposit>
    <echeckRedeposit reportGroup="001603">
      <littleTxnId>3456456449</littleTxnId>
      <echeck>
        <accType>Checking</accType>
        <accNum>1099999903</accNum>
        <routingNum>114567895</routingNum>
      </echeck>
      <merchantdata>
        <affiliate>ABC Marketing</affiliate>
      </merchantdata>
    </echeckRedeposit>
    <echeckRedeposit reportGroup="001603">
      <littleTxnId>3456557123</littleTxnId>
      <echeck>
        <accType>Savings</accType>
        <accNum>10999999444</accNum>
        <routingNum>114567895</routingNum>
      </echeck>
      <merchantdata>
        <affiliate>ABC Marketing</affiliate>
      </merchantdata>
    </echeckRedeposit>
    <echeckRedeposit reportGroup="001603">
      <littleTxnId>123456789</littleTxnId>
    </echeckRedeposit>
```

```

    </batchRequest>
</littleRequest>

```

3.3.15.2 eCheck Redeposit Response

The eCheck Redeposit response indicates that Little & 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:

```

<echeckRedepositResponse id="eCheckRedeposit Id" reportGroup="iQ Report Group"
customerId="Customer Id">
    <littleTxnId>Little & Co. Transaction Id</littleTxnId>
    <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>
</echeckRedepositResponse>

```

Example: Batch eCheck Redeposit Response

```

<littleResponse version="8.24" xmlns="http://www.little.com/schema" id="123"
response="0" message="Valid Format" littleSessionId="987654321">
    <batchResponse id="01234567" littleBatchId="4455667788" merchantId="100">
        <echeckRedepositResponse id="AX54321678" reportGroup="RG27"
customerId="53">
            <littleTxnId>84568456</littleTxnId>
            <response>000</response>
            <responseTime>2010-06-01T10:24:31</responseTime>
            <message>Approved</message>
        </echeckRedepositResponse>
        <echeckRedepositResponse id="AX54325432" reportGroup="RG12">
            <littleTxnId>84568457</littleTxnId>
            <response>000</response>
            <responseTime>2010-06-01T10:24:31</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>
</echeckRedepositResponse>
</batchResponse>
</littleResponse>

```

3.3.16 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**, **zip**, and **phone**.

3.3.16.1 eCheck Sale Request

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

```

<echeckSale id="eCheckSale Id" reportGroup="iQ Report Group"
customerId="Customer Id">
  <orderId>Order Id</orderId>
  <verify>true or false</verify>
  <amount>Authorization Amount</amount>
  <orderSource>Order Entry Source</orderSource>
  <billToAddress>
  <shipToAddress>
  <echeck> or <echeckToken>
  <customBilling>

```

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

Example: eCheck Sale Request

```
<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"  
  numBatchRequests="1">  
  <authentication>  
    <user>userName</user>  
    <password>password</password>  
  </authentication>  
  <batchRequest id="654321" numEcheckSales="1" echeckSalesAmount="10000"  
    merchantId="100">  
    <echeckSale id="AX54321678" reportGroup="RG27" customerId="53">  
      <orderId>12z58743y1</orderId>  
      <verify>true</verify>  
      <amount>10000</amount>  
      <orderSource>telephone</orderSource>  
      <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>  
</littleRequest>
```


3.3.16.2 eCheck Sale Response

The eCheck Sale response indicates that Little & 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:

```
<echeckSalesResponse id="eCheckSale Id" reportGroup="iQ Report Group"
customerId="Customer Id">

  <littleTxnId>Little Transaction Id</littleTxnId>

  <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)

</echeckSalesResponse>
```

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.

```
<littleResponse version="8.24" xmlns="http://www.little.com/schema" id="123"
response="0" message="Valid Format" littleSessionId="987654321">
  <batchResponse id="01234567" littleBatchId="4455667788" merchantId="100">
    <echeckSalesResponse id="AX54321678" reportGroup="RG27" customerId="53">
      <littleTxnId>84568456</littleTxnId>
      <orderId>12z58743y1</orderId>
      <response>000</response>
      <responseTime>2011-09-01T10:24:31</responseTime>
      <message>Approved</message>
    </echeckSalesResponse>
  <echeckSalesResponse id="AX54325432" reportGroup="RG12">
```

```
<littleTxnId>84568457</littleTxnId>
<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>
</littleResponse>
```

3.3.17 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.
--------------	---

3.3.17.1 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.

```
<echeckVerification id="echeckVerification Id" reportGroup="iQ Report Group"
customerId="Customer Id">

  <littleTxnId>Little & Co. Transaction Id</littleTxnId>

  <orderId>Order Id</orderId>

  <amount>Authorization Amount</amount>

  <orderSource>Order Entry Source</orderSource>

  <billToAddress>

  <echeck> or <echeckToken>

  <merchantData>

</echeckVerification>
```

Example: eCheck Verification Request - Personal Checking

```
<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"
numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="654321" numEcheckVerification="1"
echeckVerificationAmount="10000" merchantId="100">
    <echeckVerification id="AX54321678" reportGroup="RG27" customerId="53">
      <orderId>12z58743y1</orderId>
      <amount>10000</amount>
      <orderSource>telephone</orderSource>
      <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</campaign>
  </merchantData>
</echeckVerification>
</batchRequest>
</littleRequest>

```

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.

```

<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"
  numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="654321" numEcheckVerification="1"
    echeckVerificationAmount="10000" merchantId="100">
    <echeckVerification id="AX54321678" reportGroup="RG27" customerId="53">
      <orderId>12z58743y1</orderId>
      <amount>10000</amount>
      <orderSource>telephone</orderSource>
      <billToAddress>
        <firstName>Paul</firstName>
        <lastName>Jones</lastName>
      </billToAddress>
    </echeckVerification>
  </batchRequest>
</littleRequest>

```

```

    <companyName>Widget Company</companyName>
    <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</email>
    <phone>408-555-1212</phone>
  </billToAddress>
  <echeck>
    <accType>Corporate</accType>
    <accNum>5186005800001012</accNum>
    <routingNum>000010101</routingNum>
    <checkNum>1104</checkNum>
  </echeck>
</echeckVerification>
</batchRequest>
</littleRequest>8.6

```

3.3.17.2 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:

```

<echeckVerificationResponse id="echeckVerification Id" reportGroup="iQ Report
Group" customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <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)
  <tokenResponse> (for Tokenized merchants submitting account data)
  <accountUpdater>Account Change Info</accountUpdater>
</echeckSaleResponse>

```

Example: eCheck Verification Response

```

<littleResponse version="8.24" xmlns="http://www.little.com/schema" id="123"
  response="0" message="Valid Format" littleSessionId="987654321">
  <batchResponse id="01234567" littleBatchId="4455667788" merchantId="100">
    <echeckVerificationResponse id="AX54321678" reportGroup="RG27"
      customerId="53">
      <littleTxnId>84568456</littleTxnId>
      <orderId>12z58743y1</orderId>
      <response>000</response>
      <responseTime>2011-09-01T10:24:31</responseTime>
      <message>Approved</message>
    </echeckVerificationResponse>
    <echeckVerificationResponse id="AX54325432" reportGroup="RG12">
      <littleTxnId>84568457</littleTxnId>
      <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>
</littleResponse>

```

3.3.18 eCheck Void Transactions (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.

3.3.18.1 eCheck Void Request

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

```
<echeckVoid id = "echeckVoid Id" reportGroup="iQ Report Group">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
</echeckVoid>
```

Example: eCheck Void Request

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="81601">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <echeckVoid id="101" reportGroup="001601">
    <littleTxnId>345454444</littleTxnId>
  </echeckVoid>
</littleOnlineRequest>
```

3.3.18.2 eCheck Void Response

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

```
<echeckVoidResponse id="eCheck Void Id" reportGroup="iQ Report Group"
  numDeposits="1">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <response>Response Code</response>
  <responseTime>Date and Time in GMT</responseTime>
  <postDate>Date of Posting</postDate>
  <message>Response Message</message>
</echeckVoidResponse>
```

Example: Online eCheck Void Response

```
<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <echeckVoidResponse id="101" reportGroup="001601">
    <littleTxnId>21200000026600</littleTxnId>
    <response>000</response>
```

```

    <responseTime>2010-06-17T21:20:50</responseTime>
    <message>Approved</message>
    <postDate>2010-06-17</postDate>
  </echeckVoidResponse>
</litleOnlineResponse>

```

3.3.19 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.

3.3.19.1 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.

```

<forceCapture id="Id" reportGroup="iQ Report Group" customerId="Customer Id">
  <orderId>Order Id</orderId>
  <amount>Force Capture Amount</amount>
  <orderSource>Order Entry Source</orderSource>
  <billToAddress>
    [ <card | token> | <paypage> ]
  <customBilling>
  <taxType>payment or fee</taxType>
  <enhancedData>
  <processingInstructions>
  <pos>
  <amexAggregatorData>
  <merchantData>
  <debtRepayment>true or false</debtRepayment>
</forceCapture>

```


Example: Batch Force Capture Request

```
<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"
  numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="01234567" numForceCaptures="1"
    forceCaptureAmount="10000" merchantId="100">
    <forceCapture id="AX54321678" reportGroup="RG27" customerId="038945">
      <orderId>orderId</orderId>
      <amount>10000</amount>
      <orderSource>ecommerce</orderSource>
      <card>
        <type>VI</type>
        <number>4005550000081019</number>
        <expDate>0910</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</orderDate>
        <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>
          <productCode>CH123</productCode>
          <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>
</littleRequest>

```

Example: Online Force Capture Request

```

<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="123">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <forceCapture id="AX54321678" reportGroup="RG27" customerId="038945">
    <orderId>orderId</orderId>
    <amount>10000</amount>
    <orderSource>ecommerce</orderSource>
    <card>
      <type>VI</type>
      <number>4005550000081019</number>
      <expDate>0907</expDate>
    </card>
    <enhancedData>
      <customerReference>PO12345</customerReference>
      <salesTax>125</salesTax>
      <taxExempt>false</taxExempt>
      <discountAmount>0</discountAmount>
      <shippingAmount>495</shippingAmount>
      <dutyAmount>0</dutyAmount>
    </enhancedData>
  </forceCapture>
</littleOnlineRequest>

```

```

<shipFromPostalCode>01851</shipFromPostalCode>
<destinationPostalCode>01851</destinationPostalCode>
<destinationCountryCode>USA</destinationCountryCode>
<invoiceReferenceNumber>123456</invoiceReferenceNumber>
<orderDate>2011-08-14</orderDate>
<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>
  <productCode>CH123</productCode>
  <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>
</littleOnlineRequest>

```

3.3.19.2 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="iQ Report Group"
customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <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

```

<littleResponse version="8.24" xmlns="http://www.little.com/schema" id="123"
  littleSessionId="987654321" response="0" message="Valid Format">
  <batchResponse id="01234567" littleBatchId="4455667788" merchantId="100">
    <forceCaptureResponse id="AX54325432" reportGroup="RG12"
      customerId="038945">
      <littleTxnId>84568457</littleTxnId>
      <orderId>12z58743y7</orderId>
      <response>000</response>
      <responseTime>2011-09-01T10:24:31</responseTime>
      <message>Approved</message>
    </forceCaptureResponse>
  </batchResponse>
</littleResponse>

```

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.

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <forceCaptureResponse id="2" reportGroup="ABC Division"
    customerId="038945">
    <littleTxnId>1100030204</littleTxnId>
    <orderId>65347567</orderId>
    <response>000</response>
    <responseTime>2011-07-11T14:48:48</responseTime>
    <postDate>2011-07-11</postDate>
    <message>Approved</message>
  </forceCaptureResponse>
</littleOnlineResponse>

```

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.

```
<forceCaptureResponse id="99999" reportGroup="RG1" customerId="444">
  <littleTxnId>21200000039504</littleTxnId>
  <orderId>F12345</orderId>
  <response>000</response>
  <responseTime>2011-10-20T18:25:38</responseTime>
  <postDate>2011-10-20</postDate>
  <message>Approved</message>
  <tokenResponse>
    <littleToken>111310880008000</littleToken>
    <tokenResponseCode>801</tokenResponseCode>
    <tokenMessage>Account number was successfully registered</tokenMessage>
    <type>AX</type>
    <bin></bin>
  </tokenResponse>
</forceCaptureResponse>
```

3.3.20 Load Transactions

The Load transaction adds funds to an active Gift Card. The load amount cannot exceed the maximum allowed amount for the Gift Card. If you attempt to load more than the maximum amount, the transaction will be declined with a response Code of 221 - Over Max Balance.

NOTE: You must be enabled for (Closed Loop) Gift Card transactions to use this transaction type. Please consult you Little Customer Experience Manager for additional information about Gift Card transactions.

3.3.20.1 Load Request

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

```
<load id="Load Id" reportGroup="iQ Report Group" customerId="Customer Id">
  <orderId>Order Id</orderId>
  <amount>Amount to Load</amount>
  <orderSource>Order Entry Source</orderSource>
  <card>
</load>
```

Example: Online Load Request

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <load id="834262" reportGroup="ABC Division" customerId="038945">
    <orderId>65347567</orderId>
    <amount>40000</amount>
    <orderSource>ecommerce</orderSource>
    <card>
      <type>GC</type>
      <number>90000000000000001</number>
    </card>
  </load>
</littleOnlineRequest>
```

3.3.20.2 Load Response

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

```
<loadResponse id="Load Id" reportGroup="iQ Report Group"
customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <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>
  <fraudResult>
  <giftCardResponse> (included if Gift Card is Method of Payment)
</loadResponse>
```

Example: Load Response

```
<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
response="0" message="Valid Format">
  <loadResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>9695064321</littleTxnId>
    <orderId>65347567</orderId>
    <response>000</response>
    <responseTime>2013-07-25T15:13:43</responseTime>
    <postDate>2013-07-25</postDate>
    <message>Approved</message>
    <giftCardResponse>
      <availableBalance>5000</availableBalance>
      <beginningBalance>1000</beginningBalance>
      <endingBalance>5000</endingBalance>
    </giftCardResponse>
  </loadResponse>
</littleOnlineResponse>
```

3.3.21 Load Reversal Transactions (Online Only)

The Load Reversal transaction reverses the operation of a Load transaction, removing the newly loaded amount from the Gift Card. The Load Reversal references the associated Load transaction by means of the `littleTxnId` element returned in the Load response. You cannot perform a partial Load Reversal. This transaction always reverses the full amount of the referenced Load transaction. This transaction type is available only for Online transactions.

NOTE: You must be enabled for (Closed Loop) Gift Card transactions to use this transaction type. Please consult you Little Customer Experience Manager for additional information about Gift Card transactions.

3.3.21.1 Load Reversal Request

You must structure a Load Reversal request as shown in the following examples.

```
<loadReversal id="Load Reversal Id" reportGroup="iQ Report Group"
customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id from Load Response</littleTxnId>
</loadReversal>
```

Example: Online Load Reversal Request

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <loadReversal id="12345" customerId="Customer Id" reportGroup="Load
Reversals">
    <littleTxnId>12345678</littleTxnId>
  </loadReversal>
</littleOnlineRequest>
```

3.3.21.2 Load Reversal Response

An Load Reversal response has the following structure.

```
<loadReversalResponse id="Load Reversal Id" reportGroup="iQ Report
Group" customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <orderId>Order Id</orderId>
```



```

<response>Response Code</response>
<responseTime>Date and Time in GMT</responseTime>
<postDate>Date transaction posted</postDate>
<message>Response Message</message>
<giftCardResponse>
</loadReversalResponse>

```

Example: Online Load Reversal Response

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <loadReversalResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>9695064321</littleTxnId>
    <orderId>65347567</orderId>
    <response>000</response>
    <responseTime>2013-07-25T15:13:43</responseTime>
    <postDate>2013-07-25</postDate>
    <message>Approved</message>
    <giftCardResponse>
      <availableBalance>1000</availableBalance>
    </giftCardResponse>
  </loadReversalResponse>
</littleOnlineResponse>

```

3.3.22 Refund Reversal Transactions (Online Only)

The Refund Reversal transaction is a Gift Card only transaction that reverses the operation of a Refund transaction on the Gift Card. The Refund Reversal references the associated Credit transaction by means of the `littleTxnId` element returned in the Credit response. You cannot perform a partial Refund Reversal. This transaction always reverses the full amount of the referenced Refund transaction. This transaction type is available only for Online transactions.

NOTE: You must be enabled for (Closed Loop) Gift Card transactions to use this transaction type. Please consult you Little Customer Experience Manager for additional information about Gift Card transactions.

3.3.22.1 Refund Reversal Request

You must structure a Refund Reversal request as shown in the following examples.

```

<refundReversal id="Refund Reversal Id" reportGroup="iQ Report Group"

```

```

customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id from Refund Response</littleTxnId>
</refundReversal>

```

Example: Online Refund Reversal Request

```

<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <refundReversal id="12345" customerId="Customer Id" reportGroup="Refund
  Reversals">
    <littleTxnId>12345678</littleTxnId>
  </refundReversal>
</littleOnlineRequest>

```

3.3.22.2 Refund Reversal Response

An Refund Reversal response has the following structure.

```

<refundReversalResponse id="Refund Reversal Id" reportGroup="iQ Report
Group" customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <orderId>Order Id</orderId>
  <response>Response Code</response>
  <responseTime>Date and Time in GMT</responseTime>
  <postDate>Date transaction posted</postDate>
  <message>Response Message</message>
  <giftCardResponse>
</refundReversalResponse>

```

Example: Online Refund Reversal Response

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <refundReversalResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>9695064321</littleTxnId>
    <orderId>65347567</orderId>
    <response>000</response>
    <responseTime>2013-07-25T15:13:43</responseTime>
  </refundReversalResponse>
</littleOnlineResponse>

```

```
<postDate>2013-07-25</postDate>
<message>Approved</message>
<giftCardResponse>
  <availableBalance>1000</availableBalance>
</giftCardResponse>
</refundReversalResponse>
</litleOnlineResponse>
```

3.3.23 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.

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

For eCheck accounts:

```
<registerTokenRequest id="Id" reportGroup="iQ 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="iQ Report Group">
  <orderId>Order Id</orderId>
  <paypageRegistrationId>
</registerTokenRequest>
```

Example: Batch Register Token Request - Credit Card

```
<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"
  numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="01234567" numTokenRegistrations="1" merchantId="000902">
    <registerTokenRequest id="99999" reportGroup="RG1">
      <orderId>F12345</orderId>
      <accountNumber>4005101001000002</accountNumber>
      <cardValidationNum>999</cardValidationNum>
    </registerTokenRequest>
  </batchRequest>
</littleRequest>
```

Example: Batch Register Token Request - eCheck

```

<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"
  numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="01234567" numTokenRegistrations="1" merchantId="000902">
    <registerTokenRequest id="99999" reportGroup="RG1">
      <orderId>F12345</orderId>
      <echeckForToken>
        <accNum>12345678901234567</accNum>
        <routingNum>000010101</routingNum>
      </echeckForToken>
    </registerTokenRequest>
  </batchRequest>
</littleRequest>

```

Example: Batch Register Token Request - paypageRegistrationId

```

<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"
  numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="01234567" numTokenRegistrations="1" merchantId="000902">
    <registerTokenRequest id="99999" reportGroup="RG1">
      <orderId>F12345</orderId>
      <paypageRegistrationId>12345678901234567</paypageRegistrationId>
    </registerTokenRequest>
  </batchRequest>
</littleRequest>

```

3.3.23.2 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">
  <littleTxnId>Little Transaction Number</littleTxnId>
  <orderId>Order Id</orderId>
  <littleToken>Little Token</littleToken>
  <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

```

<registerTokenResponse id="99999" reportGroup="RG1">
  <littleTxnId>Little Transaction Number</littleTxnId>
  <orderId>Order Id</orderId>
  <littleToken>Little Token</littleToken>
  <type>Method of Payment</type>
  <eCheckAccountSuffix>Last 3 of Acct Number</eCheckAccountSuffix>
  <response>Response Code</response>
  <responseTime>Response Time</responseTime>
  <message>Response Message</message>
</registerTokenResponse>

```

Example: Batch Register Token Response - Credit Card

```

<littleResponse version="8.24" xmlns="http://www.little.com/schema" id="123"
  response="0" message="Valid Format" littleSessionId="987654321">
  <batchResponse id="01234567" littleBatchId="4455667788" merchantId="100">
    <registerTokenResponse id="99999" reportGroup="RG1">
      <littleTxnId>21122700</littleTxnId>
      <orderId>F12345</orderId>
      <littleToken>1111000100360002</littleToken>
      <bin>400510</bin>
      <type>VI</type>
      <response>801</response>
      <responseTime>2010-10-26T17:21:51</responseTime>
      <message>Account number was successfully registered</message>
    </registerTokenResponse>
  </batchResponse>

```

```
</littleResponse>
```

Example: Batch Register Token Request - eCheck

```
<littleResponse version="8.2" xmlns="http://www.little.com/schema" id="123"
  response="0" message="Valid Format" littleSessionId="987654321">
  <batchResponse id="01234567" littleBatchId="4455667788" merchantId="100">
    <registerTokenResponse id="99999" reportGroup="RG1">
      <littleTxnId>21122700</littleTxnId>
      <orderId>F12345</orderId>
      <littleToken>1111000100360002</littleToken>
      <type>VI</type>
      <eCheckAccountSuffix>511</eCheckAccountSuffix>
      <response>801</response>
      <responseTime>2010-10-26T17:21:51</responseTime>
      <message>Account number was successfully registered</message>
    </registerTokenResponse>
  </batchResponse>
</littleResponse>
```

3.3.24 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 `littleSessionId` 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.

3.3.24.1 RFR Request

You must specify the RFR request as follows.

```
<RFRRequest>
  <littleSessionId | 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 `<littleSessionId>` element.

```
<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"
  numBatchRequests="0">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <RFRRequest>
    <littleSessionId>7766554321</littleSessionId>
  </RFRRequest>
</littleRequest>
```

Example: RFR Request for an Account Updater File

```
<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"
  numBatchRequests="0">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <RFRRequest>
    <merchantId>100</merchantId>
    <postDate>2010-01-15</postDate>
  </RFRRequest>
</littleRequest>
```

3.3.24.2 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 <littleSessionId> 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

```
<littleResponse version="8.24" xmlns="http://www.little.com/schema">
  <RFRResponse response="1" message="The account update file is not ready
  yet. Please try again later.">
  </RFRResponse>
</littleResponse>
```


3.3.25 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.

3.3.25.1 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 Little 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.

```
<sale id="Sale Id" reportGroup="iQ Report Group" customerId="Customer Id">
  <orderId>Order Id</orderId>
  <amount>Authorization Amount</amount>
  <orderSource>Order Entry Source</orderSource>
  <customerInfo>
  <billToAddress>
  <shipToAddress>
  [ <card> | <paypage> | <token> | <paypal> ]
  <billMeLaterRequest>
  <cardholderAuthentication>
  <customBilling>
  <taxType>payment or fee</taxType>
  <enhancedData>
  <processingInstructions>
  <pos>
```

```

    <paypalOrderComplete>Send true in the final Sale</paypalOrderComplete>
    <amexAggregatorData>
    <allowPartialAuth>
    <healthcareIIAS>
    <filtering>
    <merchantData>
    <recyclingRequest> (for Recycling Engine merchants)
    <fraudFilterOverride>
    <recurringRequest> (for Recurring Engine merchants)
    <debtRepayment>true or false</debtRepayment>
    <advancedFraudChecks>
  </sale>

```

Example: Batch Sale Request

```

<littleRequest version="8.24" xmlns="http://www.little.com/schema" id="123"
  numBatchRequests="1">
  <authentication>
    <user>userName</user>
    <password>password</password>
  </authentication>
  <batchRequest id="01234567" numSales="1" saleAmount="12522"
    merchantId="100">
    <sale id="AX54321678" reportGroup="RG27">
      <orderId>12z58743y1</orderId>
      <amount>12522</amount>
      <orderSource>ecommerce</orderSource>
      <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</number>
        <expDate>1110</expDate>
    </card>
</sale>
</batchRequest>
</littleRequest>

```

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.

```

<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>password</password>
  </authentication>
  <sale id="1" reportGroup="ABC Division" customerId="038945">
    <orderId>5234234</orderId>
    <amount>40000</amount>
    <orderSource>3dsAuthenticated</orderSource>
    <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</number>
    </card>
  </sale>
</littleOnlineRequest>

```

```
<expDate>1210</expDate>
<cardValidationNum>555</cardValidationNum>
</card>
<cardholderAuthentication>
  <authenticationValue>BwABBJQ1AgJDUCAAAAAA= </authenticationValue>
  <authenticationTransactionId>gMV75TAgk= </authenticationTransactionId>
</cardholderAuthentication>
<customBilling>
  <phone>8888888888</phone>
  <descriptor>bdi*Little&Co Test</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</orderDate>
  <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>
  <productCode>CH123</productCode>
  <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>
    <productCode>TB123</productCode>
    <quantity>1</quantity>
    <unitOfMeasure>EACH</unitOfMeasure>
    <lineItemTotal>30000</lineItemTotal>
    <itemDiscountAmount>0</itemDiscountAmount>
    <commodityCode>300</commodityCode>
    <unitCost>300.00</unitCost>
</lineItemData>
</enhancedData>
</sale>
</littleOnlineRequest>

```

3.3.25.2 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:

```

<saleResponse id="Sale Id" reportGroup="iQ Report Group" customerId="Customer
Id">
    <littleTxnId>Little & Co. Transaction Id</littleTxnId>
    <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>
    <authCode>Approval Code</authCode>
    <approvedAmount>Approved amount for partial Auth</approvedAmount>
    <accountInformation>
    <fraudResult>

```

```

<billMeLaterResponseData>
<tokenResponse> (for Tokenized merchants submitting card data)
<enhancedAuthResponse>
<accountUpdater>
<recycling> (included for declined Auths if featrure is enabled)
<recurringResponse> (for Recurring Engine merchants)
<giftCardResponse> (included if Gift Card is Method of Payment)
</saleResponse>

```

Example: Batch Sale Response

```

<littleResponse version="8.24" xmlns="http://www.little.com/schema" id="123"
response="0" message="Valid Format" littleSessionId="987654321">
<batchResponse id="01234567" littleBatchId="4455667788" merchantId="100">
  <saleResponse id="AX54321678" reportGroup="RG27">
    <littleTxnId>84568456</littleTxnId>
    <orderId>12z58743y1</orderId>
    <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">
    <littleTxnId>84568457</littleTxnId>
    <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>
</littleResponse>

```

Example: Online Sale Response

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <saleResponse id="1" reportGroup="ABC Division" customerId="038945">
    <littleTxnId>1100030055</littleTxnId>
    <orderId>23423434</orderId>
    <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>
  </saleResponse>
</littleOnlineResponse>

```

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">
  <littleTxnId>21200000028606</littleTxnId>
  <orderId>F12345</orderId>
  <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>
    <littleToken>1111000100329510</littleToken>
    <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

```
<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <saleResponse id="1" reportGroup="ABC Division" customerId="038945">
    <littleTxnId>1100030055</littleTxnId>
    <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</number>
        <expDate>1112</expDate>
      </originalCardInfo>
      <newCardInfo>
        <type>VI</type>
        <number>4234823490005777</number>
        <expDate>1114</expDate>
      </newCardInfo>
    </accountUpdater>
    <fraudResult>
      <avsResult>01</avsResult>
      <cardValidationResult>U</cardValidationResult>
      <authenticationResult>2</authenticationResult>
    </fraudResult>
  </saleResponse>
</littleOnlineResponse>
```

3.3.26 Unload Transactions

The Unload transaction removes funds from an active Gift Card. The unload amount cannot exceed the available balance on the Gift Card. If you attempt to unload more than the available balance, the transaction will be declined with a response Code of 209 - Invalid Amount.

NOTE: You must be enabled for (Closed Loop) Gift Card transactions to use this transaction type. Please consult you Little Customer Experience Manager for additional information about Gift Card transactions.

3.3.26.1 Unload Request

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

```
<unload id="Unload Id" reportGroup="iQ Report Group" customerId="Customer Id">
  <orderId>Order Id</orderId>
  <amount>Amount to Load</amount>
  <orderSource>Order Entry Source</orderSource>
  <card>
</unload>
```

Example: Online Unload Request

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <unload id="834262" reportGroup="ABC Division" customerId="038945">
    <orderId>65347567</orderId>
    <amount>40000</amount>
    <orderSource>ecommerce</orderSource>
    <card>
      <type>GC</type>
      <number>9000000000000001</number>
    </card>
  </unload>
</littleOnlineRequest>
```

3.3.26.2 Unload Response

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

```
<unloadResponse id="Unload Id" reportGroup="iQ Report Group"
```

```

customerId="Customer Id">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <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>
  <fraudResult>
  <giftCardResponse>
</unloadResponse>

```

Example: Unload Response

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <unloadResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>9695064321</littleTxnId>
    <orderId>65347567</orderId>
    <response>000</response>
    <responseTime>2013-07-25T15:13:43</responseTime>
    <postDate>2013-07-25</postDate>
    <message>Approved</message>
    <giftCardResponse>
      <availableBalance>1000</availableBalance>
      <beginningBalance>5000</beginningBalance>
      <endingBalance>1000</endingBalance>
    </giftCardResponse>
  </unloadResponse>
</littleOnlineResponse>

```

3.3.27 Unload Reversal Transactions (Online Only)

The Unload Reversal transaction reverses the operation of a Unload transaction, returning the value removed from the Gift Card by the Unload transaction. The Unload Reversal references the associated Unload transaction by means of the `littleTxnId` element returned in the Unload response. You cannot perform a partial Unload Reversal. This transaction always reverses the full amount of the referenced Unload transaction. This transaction type is available only for Online transactions.

NOTE: You must be enabled for (Closed Loop) Gift Card transactions to use this transaction type. Please consult you Little Customer Experience Manager for additional information about Gift Card transactions.

3.3.27.1 Unload Reversal Request

You must structure a Unload Reversal request as shown in the following examples.

```
<unloadReversal id="Unload Reversal Id" reportGroup="iQ Report Group"
customerId="Customer Id">

  <littleTxnId>Little & Co. Transaction Id from Load Response</littleTxnId>

</unloadReversal>
```

Example: Online Unload Reversal Request

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
  </authentication>
  <unloadReversal id="12345" customerId="Customer Id" reportGroup="Unload
Reversals">
    <littleTxnId>12345678</littleTxnId>
  </unloadReversal>
</littleOnlineRequest>
```

3.3.27.2 Unload Reversal Response

An Unload Reversal response has the following structure.

```
<unloadReversalResponse id="Unload Reversal Id" reportGroup="iQ Report
Group" customerId="Customer Id">

  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <orderId>Order Id</orderId>
  <response>Response Code</response>
  <responseTime>Date and Time in GMT</responseTime>
  <postDate>Date transaction posted</postDate>
  <message>Response Message</message>
  <giftCardResponse>
```

```
</unloadReversalResponse>
```

Example: Online Unload Reversal Response

```
<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <unloadReversalResponse id="834262" reportGroup="ABC Division">
    <littleTxnId>9695064321</littleTxnId>
    <orderId>65347567</orderId>
    <response>000</response>
    <responseTime>2013-07-25T15:13:43</responseTime>
    <postDate>2013-07-25</postDate>
    <message>Approved</message>
    <giftCardResponse>
      <availableBalance>5000</availableBalance>
      <beginningBalance>1000</beginningBalance>
      <endingBalance>5000</endingBalance>
    </giftCardResponse>
  </unloadReversalResponse>
</littleOnlineResponse>
```

3.3.28 Update Plan Transactions

You use the Update Plan transaction to activate/deactivate Plans associated with recurring payments. When you deactivate a Plan, by setting the `active` flag to **false**, you can no longer reference that Plan for use with subscriptions. Existing subscriptions already using the deactivated Plan will continue to use the Plan until the subscription is either modified or completed. You can also reactivate a deactivated Plan by updating the Plan and setting the `active` flag to **true**.

3.3.28.1 Update Plan Request

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

```
<updatePlan>
  <planCode>Plan Reference Code</planCode>
  <active>true or false</active>
</updatePlan>
```

Example: Online Update Plan Request

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema">
```

```

    merchantId="100">
      <authentication>
        <user>User Name</user>
        <password>password</password>
      </authentication>
      <updatePlan>
        <planCode>Reference_Code</planCode>
        <active>>false</active>
      </updatePlan>
    </littleOnlineRequest>

```

3.3.28.2 Update Plan Response

An Update Plan response has the following structure. The response message is identical for Online and Batch transactions.

```

<updatePlanResponse>
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <response>Response Code</response>
  <message>Response Message</message>
  <responseTime>Date and Time in GMT</responseTime>
  <planCode>Plan Reference Code</subscriptionId>
</updatePlanResponse>

```

Example: Online Update Plan Response

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <updatePlanResponse>
    <littleTxnId>1100030055</littleTxnId>
    <response>000</response>
    <message>Approved</message>
    <responseTime>2013-07-11T14:48:46</responseTime>
    <planCode>Reference_Code</planCode>
  </updatePlanResponse>
</littleOnlineResponse>

```

3.3.29 Update Subscription Transactions

The Update Subscription transaction allows you to change certain 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 also create, update, or delete a Discount and/or an Add On.

NOTE: You can include multiple create, update, and delete Discounts and Add On operations in a single `updateSubscription` transaction.

3.3.29.1 Update Subscription Request

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

```
<updateSubscription>
  <subscriptionId>Subscription Id</subscriptionId>
  <planCode>Plan Reference Code</subscriptionId>
  <billToAddress>
    [ <card> | <paypage> | <token> ]
  <billingDate>New Billing Date</billingDate>
  <createDiscount>
  <updateDiscount>
  <deleteDiscount>
  <createAddOn>
  <updateAddOn>
  <deleteAddOn>
</updateSubscription>
```

Example: Online Update Subscription Request

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>password</password>
  </authentication>
  <updateSubscription>
    <subscriptionId>1234</subscriptionId>
    <planCode>Gold_Monthly</planCode>
    <billToAddress>
```

```

    <name>John Smith</name>
    <addressLine1>100 Main St</addressLine1>
    <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</number>
    <expDate>1210</expDate>
    <cardValidationNum>555</cardValidationNum>
  </card>
  <deleteDiscount>
    <discountCode>1GBExtra</discountCode>
  </deleteDiscount>
  <createAddOn>
    <addOnCode>1WF</addOnCode>
    <name>One_GB_Extra</name>
    <amount>500</amount>
    <startDate>2013-09-15</startDate>
    <endDate>2013-09-22</endDate>
  </createAddOn>
</updateSubscription>
</littleOnlineRequest>

```

3.3.29.2 Update Subscription Response

An Update Subscription response has the following structure. The response message is identical for Online and Batch transactions.

```

<updateSubscriptionResponse>
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <response>Response Code</response>
  <message>Response Message</message>
  <responseTime>Date and Time in GMT</responseTime>
  <subscriptionId>ID of Subscription Canceled</subscriptionId>
  <tokenResponse> (For Tokenized Merchants submitting Card/Paypage)

```

```
</cancelSubscriptionResponse>
```

Example: Online Update Subscription Response

```
<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <updateSubscriptionResponse>
    <littleTxnId>1100030055</littleTxnId>
    <response>000</response>
    <message>Approved</message>
    <responseTime>2013-07-11T14:48:46</responseTime>
    <subscriptionId>123457</subscriptionId>
  </updateSubscriptionResponse>
</littleOnlineResponse>
```

3.3.30 Update Card Validation Number Transactions

When you submit the CVV2/CVC2/CID in a `registerTokenRequest`, the Little 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.

3.3.30.1 Update Card Validation Number Request

The `updateCardValidationNumOnToken` transaction has the following structure:

```
<updateCardValidationNumOnToken id = "Update Id" customerId="Customer Id"
  reportGroup="iQ Report Group">
  <orderId>Order Id</orderId>
  <littleToken>Little Token</littleToken>
  <cardValidationNum>CVV2/CVC2/CID Value</cardValidationNum>
</updateCardValidationNumOnToken>
```

Example: Online Update Card Validation Number Request

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema">
```



```

    merchantId="100">
    <updateCardValidationNumOnToken id="99999" customerId="444"
    reportGroup="RG1">
        <orderId>F12345</orderId>
        <littleToken>1111000101039449</littleToken>
        <cardValidationNum>987</cardValidationNum>
    </updateCardValidationNumOnToken>
</littleOnlineRequest>

```

3.3.30.2 Update Card Validation Number Response

The updateCardValidationNumOnTokenResponse transaction has the following structure:

```

<updateCardValidationNumOnTokenResponse id="Update Id" reportGroup="iQ Report
Group">
    <littleTxnId>Little & Co. Transaction Id</littleTxnId>
    <orderId>Order Id</orderId>
    <response>Response Code</response>
    <message>Response Message</message>
    <responseTime>Date and Time in GMT</responseTime>
</updateCardValidationNumOnTokenResponse>

```

Example: Online Update Card Validation Number Response

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
response="0" message="Valid Format">
    <updateCardValidationNumOnTokenResponse id="99999" customerId="444"
    reportGroup="RG1">
        <littleTxnId>21122700</littleTxnId>
        <orderId>F12345</orderId>
        <response>803</response>
        <message>Card Validation Number Updated</message>
        <responseTime>2012-08-09T17:21:51</responseTime>
    </updateCardValidationNumOnTokenResponse>
</littleOnlineResponse>

```

3.3.31 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 Little'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 61).

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 186.)

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

3.3.31.1 Void Request

The Void request references the `<littleTxnId>` of the previously approved transaction. You must structure a Void request as follows.

```
<void id = "Void Id" reportGroup="iQ Report Group">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <processingInstructions>
</void>
```

Example: Online Void Request

```
<littleOnlineRequest version="8.24" xmlns="http://www.little.com/schema"
  merchantId="100">
  <authentication>
    <user>User Name</user>
    <password>Password</password>
```

```

</authentication>
<void id="1" reportGroup="Void Division">
  <littleTxnId>345454444</littleTxnId>
</void>
</littleOnlineRequest>

```

3.3.31.2 Void Response

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

```

<voidResponse id="Void Id" reportGroup="iQ Report Group">
  <littleTxnId>Little & Co. Transaction Id</littleTxnId>
  <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.

```

<littleOnlineResponse version="8.24" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <voidResponse id="1" reportGroup="Void Division">
    <littleTxnId>1100026202</littleTxnId>
    <response>000</response>
    <responseTime>2011-07-16T19:43:38</responseTime>
    <postDate>2011-07-16</postDate>
    <message>Approved</message>
  </voidResponse>
</littleOnlineResponse>

```

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 61).

```
<littleOnlineResponse version="8.16" xmlns="http://www.little.com/schema"
  response="0" message="Valid Format">
  <voidResponse id="1" reportGroup="Void Division">
    <littleTxnId>1100026202333456789</littleTxnId>
    <response>000</response>
    <responseTime>2011-07-16T19:43:38</responseTime>
    <postDate>2011-07-16</postDate>
    <message>Approved</message>
    <recycling>
      <creditLittleTxnId>1234567890123456789</message>
    </recycling>
  </voidResponse>
</littleOnlineResponse>
```



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 <code>accNum</code> 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:

None

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. It is also an optional child of the `virtualGiftCardResponse` element, where it defines the account number of the requested Virtual Gift Card.

Type = String; **minLength** = 13; **maxLength** = 25

Parent Elements:

[registerTokenRequest](#), [virtualGiftCardResponse](#)

Attributes:

None

Child Elements:

None

4.4 accountNumberLength

The `accountNumberLength` element is a required child of the `virtualGiftCard` element defining the requested length of the virtual Gift Card number you are requesting.

NOTE: In an early iteration of schema V8.22 issued in September of 2013 this element was defined as an optional child of the `virtualGiftCard` element. If you coded to the earlier version, be aware that this element is now required. If you do not include this element, the transaction will fail XML validation.

Type = Integer; **Allowed Values** between 13 and 25 inclusive.

IMPORTANT: Although the schema defines the allowed values as any integer between 13 and 25 inclusive, at this time you can only use a value of either 16 or 19.

Parent Elements:

[virtualGiftCard](#)

Attributes:

None

Child Elements:

None

4.5 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	Type	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: (all Required)

[orderId](#), [cardOrToken](#) (allows the substitution of either the `card` or `token` elements)

4.6 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

```
<accountUpdateFileRequestData>
  <merchantId>Merchant ID</merchantId>
  <postDay>Post Date</postDay>
</accountUpdateFileRequestData>
```

4.7 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](#), [originalTokenInfo](#)

IMPORTANT: When using Automatic Account Updater (any variation), you must always code to receive the `extendedCardResponse` element and its children. Little 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</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.

```
<accountUpdater>
  <originalCardTokenInfo>
    <littleToken>Old Token</littleToken>
    <type>Card Type</type>
    <expDate>Old Expiration Date</expDate>
    <bin>Old Card BIN</bin>
  </originalCardTokenInfo>
  <newCardTokenInfo>
    <littleToken>New Token</littleToken>
    <type>Card Type</type>
    <expDate>New Expiration Date</expDate>
    <bin>New Card BIN</bin>
  </newCardTokenInfo>
</accountUpdater>
```

Example: accountUpdater Structure - eCheck (for non-Tokenized Merchant)

```
<accountUpdater>
  <originalAccountInfo>
    <accType>Original Account Type</accType>
    <accNum>Original Account Number</accNum>
    <routingNum>Original Routing Number</routingNum>
  </originalAccountInfo>
  <newAccountInfo>
    <accType>New Account Type</accType>
    <accNum>New Account Number</accNum>
    <routingNum>New Routing Number</routingNum>
  </newAccountInfo>
</accountUpdateFileRequestData>
```

Example: accountUpdater Structure - eCheck (for Tokenized Merchant)

```
<accountUpdater>
```

```
<originalTokenInfo>
  <accType>Original Account Type</accType>
  <littleToken>Original Token</littleToken>
  <routingNum>Original Routing Number</routingNum>
</originalTokenInfo>
<newTokenInfo>
  <accType>New Account Type</accType>
  <littleToken>New Token</littleToken>
  <routingNum>New Routing Number</routingNum>
</newTokenInfo>
</accountUpdateFileRequestData>
```

4.8 accountUpdateResponse

The `accountUpdateResponse` 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	Type	Required?	Description
id	String	No	The response returns the same value submitted in the <code>accountUpdate</code> transaction. minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the <code>accountUpdate</code> transaction. minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the <code>accountUpdate</code> transaction. minLength = 1 maxLength = 25

Child Elements: (Required)

[littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Child Elements: (Optional)

[updatedCard](#), [originalCard](#), [originalToken](#), [updatedToken](#)

4.9 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:

None

4.10 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 <code>authReversal</code> 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 <code>credit</code> transaction, the Little system uses the information to track potentially fraudulent transactions for future analysis.

Parent Elements:

[authReversal](#), [credit](#)

Attributes:

None

Child Elements:

None

4.11 activate

The `activate` element is the parent element for the transaction type that activates a Gift Card.

Parent Elements:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

Attribute Name	Type	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: (all Required)

[orderId](#), [amount](#), [orderSource](#), [card](#), [virtualGiftCard](#)

4.12 activateResponse

The `activateResponse` element is the parent element for information returned to you in response to an **activate** transaction. It can be a child of either a `littleOnlineResponse` element or a `batchResponse` element.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	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
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. Note: This attribute applies only to Online transaction responses.

Child Elements:

Required: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [fraudResult](#), [giftCardResponse](#), [virtualGiftCardResponse](#)

4.13 activateReversal

The `activateReversal` element is the parent element for the transaction type that reverses the activation of a Gift Card.

Parent Elements:

[littleOnlineRequest](#)

Attributes:

Attribute Name	Type	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: (all Required)

[littleTxnId](#)

4.14 activateReversalResponse

The `activateReversalResponse` element is the parent element for information returned to you in response to an `activateReversal` transaction. It can be a child of either a `littleOnlineResponse` element or a `batchResponse` element.

Parent Elements:

[littleOnlineResponse](#)

Attributes:

Attribute Name	Type	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: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [giftCardResponse](#)

4.15 active

The `active` element is an optional child of both the `createPlan` and `updatePlan` elements. You use this flag to activate/deactivate a Plan. When you deactivate a Plan, you can no longer reference that Plan for use with subscriptions. Existing subscriptions making use of the deactivated Plan will continue to use the Plan until either modified or completed. You can also reactivate a deactivated Plan by updating the Plan and setting the `active` flag to true.

Type = Boolean; **Valid Values** = true or false

Parent Elements:

[createPlan](#), [updatePlan](#)

Attributes:

None

Child Elements:

None

4.16 addOnCode

The addOnCode element is the identifier of a defined add on charge to a subscription. You use this element when creating, updating, and deleting an Add On applied to a subscription.

Type = String; **minLength** = N/A; **maxLength** = 25

Parent Elements:

[createAddOn](#), [updateAddOn](#), [deleteAddOn](#)

Attributes:

None

Child Elements:

None

4.17 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:

[billMeLaterResponseData](#)

Attributes:

None

Child Elements:

None

4.18 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:

None

4.19 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 643.

NOTE: You must be certified to use LittleXML version 7.3 or above and specifically enabled to use the Advanced AVS feature. Please consult your Little Customer Experience Manager for additional information.

Type = String; minLength = N/A; maxLength = 3

Parent Elements:

[fraudResult](#)

Attributes:

None

Child Elements:

None

4.20 advancedFraudChecks

The `advancedFraudChecks` element is an optional child of both the `authorization` and `sale` elements.

Parent Elements:

[authorization](#), [sale](#), [fraudCheck](#)

Attributes:

None

Child Elements: (Required)

[threatMetrixSessionId](#)

Example: advancedFraudChecks Structure

```
<advancedFraudChecks>
  <threatMetrixSessionId>Session Id from Threat Metrix</threatMetrixSessionId>
</advancedFraudChecks>
```

4.21 advancedFraudResults

The `advancedFraudResults` element is an optional child of both the `fraudResult` and the `fraudCheckResponse` elements. Child elements return the results of advanced fraud checks performed by Threat Metrix, as well as a list of the rules triggered from the ThreatMetrix (merchant) Policy.

Parent Elements:

[fraudResult](#), [fraudCheckResponse](#)

Attributes:

None

Child Elements: (Required)

[deviceReviewStatus](#), [deviceReputationScore](#), [triggeredRule](#)

Example: advancedFraudChecks Structure

```
<advancedFraudResults>
  <deviceReviewStatus>pass, fail, review, or unavailable</deviceReviewStatus>
  <deviceReputationScore>Score Returned from ThreatMetix</deviceReputationScore>
  <triggeredRule>Triggered Rule #1</triggeredRule>
  .
  .
  .
  <triggeredRule>Triggered Rule #N</triggeredRule>
</advancedFraudResults>
```

4.22 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:

None

4.23 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.

4.24 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.

NOTE: When submitting transactions for private label gift cards (card type of GC), the use of partial authorizations is determined by a setting in the Merchant Profile (on or off globally). This flag has no effect.

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.

4.25 amexAggregatorData

The `amexAggregatorData` element defines Amex Aggregator specific information in the Little 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>
```

4.26 amount

The `amount` element is a child of several elements. When used in a payment transaction this element defines the amount of the transaction. When `amount` is a child of the `subscription` element, it defines the amount of the recurring payment. As a child of the `activate`, `load`, or `unload` transactions, `amount` defines the initial value of a newly activated gift Card, the amount loaded onto a reloadable Gift Card, or the amount unloaded from a Gift Card, respectively. 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: [activate](#), [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](#), [load](#), [sale](#), [unload](#)

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, except when a child of the `subscription` element, if you do not specify a value, the system uses the entire amount from the referenced (by `litleTxnId`) transaction. When `amount` is a child of the `subscription` element, if you do not specify a value, the amount defaults to the value defined in the referenced recurring plan (`planCode` element).

Attributes:

None

Child Elements:

None

4.27 approvedAmount

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. It can also appear as the child of a `deactivateResponse` message where it specifies the value of the Gift Card prior to deactivation.

Type = Integer; **totalDigits** = 8

Parent Elements:

[authorizationResponse](#), [saleResponse](#), [deactivateResponse](#)

Attributes:

None

Child Elements:

None

4.28 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:

None

4.29 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:

None

4.30 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:

None

4.31 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.

Type = Boolean; **Valid Values** = true or false

Parent Elements:

[cardholderAuthentication](#)

Attributes:

None

Child Elements:

None

4.32 authentication

The `authentication` element is a required element of both the `littleOnlineRequest` and the `batchRequest` elements. It contains child elements used to authenticate that the XML message is from a valid user.

NOTE: The `authentication` element and its child elements, `user` and `password`, are used to identify the merchant submitting transactions. They do not provide other access to Litle platform or to the Litle iQ reporting system.

Parent Elements:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

None

Child Elements:

Required: [user](#), [password](#)

Example: authentication Structure

```
<authentication>
  <user>User Name</user>
  <password>Password</password>
</authentication>
```


4.33 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 640.

Type = String; **minLength** = N/A; **maxLength** = 1

Parent Elements:

[fraudResult](#)

Attributes:

None

Child Elements:

None

4.34 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:

None

4.35 authenticationValue

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

Parent Elements:

[cardholderAuthentication](#)

Attributes:

None

Child Elements:

None

4.36 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

```
<authInformation>
  <authDate>Auth Date</authDate>
  <authCode>Approval Code</authCode>
  <fraudResult>
    <avsResult>AVS Verification Result Code</avsResult>
    <cardValidationResult>Validation Result Code</cardValidationResult>
    <authenticationResult>Verified by Visa Result Code</authenticationResult>
  </fraudResult>
  <authAmount>Amount of Authorization</authAmount>
</authInformation>
```

4.37 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:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

Attribute Name	Type	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](#), [shipToAddress](#), [billMeLaterRequest](#), [processingInstructions](#), [pos](#), [customBilling](#), [taxType](#), [enhancedData](#), [amexAggregatorData](#), [allowPartialAuth](#), [healthcareIIAS](#), [merchantData](#), [recyclingRequest](#), [fraudFilterOverride](#), [surchargeAmount](#), [debtRepayment](#), [recurringRequest](#), [advancedFraudChecks](#)

NOTE: The `enhancedData` element and two of its child elements, `deliveryType` and `shippingAmount`, are required for Bill Me Later Authorizations.

4.38 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	Type	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](#), [giftCardResponse](#),

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.

4.39 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
A	application processing
B	batch capture, recurring or mail order
C	call center
F	fulfillment/order management
K	kiosk
M	mobile device gateway
P	processor or gateway reauthorization
R	retail POS

Parent Elements:

[billMeLaterRequest](#)

Attributes:

None

Child Elements:

None

4.40 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 54. 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	Type	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.

4.41 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 `littleOnlineResponse` element or a `batchResponse` element.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	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: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [giftCardResponse](#)

NOTE: The `postDate` child element is returned only in responses to Online transactions.

4.42 availableBalance

The `availableBalance` element is a required child element of the `fundingSource` element and an optional child of the `giftCardResponse` element. It defines the outstanding available balance on the submitted prepaid or Gift Card. If the balance can not be determined, the element returns, "Not Available."

Type = String; **minLength** = N/A; **maxLength** = 20

Parent Elements:

[fundingSource](#), [giftCardResponse](#)

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 26.)

Please consult your Customer Experience Manager for additional information.

4.43 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 642.

Type = String; **minLength** = N/A; **maxLength** = 2

Parent Elements:

[fraudResult](#)

Attributes:

None

Child Elements:

None

4.44 balanceInquiry

The `balanceInquiry` element is the parent element for the transaction type that queries the available balance of a Gift Card.

Parent Elements:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

Attribute Name	Type	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: (all Required)

[orderId](#), [orderSource](#), [card](#)

4.45 balanceInquiryResponse

The `balanceInquiryResponse` element is the parent element for information returned to you in response to a **balanceInquiry** transaction. It can be a child of either a `littleOnlineResponse` element or a `batchResponse` element.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	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: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [fraudResult](#), [giftCardResponse](#)

4.46 batchRequest

This is the root element for all LittleXML Batch requests.

Parent Elements:

[littleRequest](#)

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	Type	Required?	Description
id	String	No	A unique string to identify this batchRequest within the Little 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 maxLength = N/A

Attribute Name	Type	Required?	Description
captureAmount	Integer	No	Defines the total dollar amount of Capture transactions in the <code>batchRequest</code> . 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 <code>batchRequest</code> . minLength = N/A maxLength = N/A
creditAmount	Integer	No	Defines the total dollar amount of Credit transactions in the <code>batchRequest</code> . 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 <code>batchRequest</code> . minLength = N/A maxLength = N/A
forceCaptureAmount	Integer	No	Defines the total dollar amount of Force Capture transactions in the <code>batchRequest</code> . 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 <code>batchRequest</code> . minLength = N/A maxLength = N/A
saleAmount	Integer	No	Defines the total dollar amount of Sale transactions in the <code>batchRequest</code> . The decimal point is implied. For example, you enter \$25.00 as 2500. totalDigits = 10
numCaptureGivenAuths	Integer	No	Defines the total count of Capture Given Auth transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A
captureGivenAuthAmount	Integer	No	Defines the total dollar amount of Capture Given Auth transactions in the <code>batchRequest</code> . The decimal point is implied. For example, you enter \$25.00 as 2500. totalDigits = 10

Attribute Name	Type	Required?	Description
numEcheckSales	Integer	No	Defines the total count of eCheck Sale transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A
echeckSaleAmount	Integer	No	Defines the total dollar amount of eCheck Sale transactions in the <code>batchRequest</code> . 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 <code>batchRequest</code> . minLength = N/A maxLength = N/A
echeckCreditAmount	Integer	No	Defines the total dollar amount of eCheck Credit transactions in the <code>batchRequest</code> . 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 <code>batchRequest</code> . minLength = N/A maxLength = N/A
echeckVerificationAmount	Integer	No	Defines the total dollar amount of eCheck Verification transactions in the <code>batchRequest</code> . 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 <code>batchRequest</code> . minLength = N/A maxLength = N/A
numAccountUpdates	Integer	No	Defines the total count of Account Update transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A
numTokenRegistrations	Integer	No	Defines the total count of Token Registration transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A
numUpdateCardValidation nNumOnTokens	Integer	No	Defines the total count of Update Card Validation Number request transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A

Attribute Name	Type	Required?	Description
numCancelSubscriptions	Integer	No	Defines the total count of Cancel Subscription transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A
numUpdateSubscriptions	Integer	No	Defines the total count of Update Subscription transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A
numCreatePlans	Integer	No	Defines the total count of Create Plan transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A
numUpdatePlans	Integer	No	Defines the total count of Update Plan transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A
numActivates	Integer	No	Defines the total count of (Gift Card) Activate transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A
numDeactivates	Integer	No	Defines the total count of (Gift Card) Deactivate transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A
activateAmount	Integer	No	Defines the total dollar amount of (Gift Card) Activate transactions in the <code>batchRequest</code> . The decimal point is implied. For example, you enter \$25.00 as 2500. totalDigits = 10
numLoads	Integer	No	Defines the total count of (Gift Card) Load transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A
loadAmount	Integer	No	Defines the total dollar amount of (Gift Card) Load transactions in the <code>batchRequest</code> . The decimal point is implied. For example, you enter \$25.00 as 2500. totalDigits = 10
numUnloads	Integer	No	Defines the total count of (Gift Card) Unload transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A

Attribute Name	Type	Required?	Description
unloadAmount	Integer	No	Defines the total dollar amount of (Gift Card) Unload transactions in the <code>batchRequest</code> . The decimal point is implied. For example, you enter \$25.00 as 2500. totalDigits = 10
numBalanceInquirys	Integer	No	Defines the total count of (Gift Card) Balance Inquiry transactions in the <code>batchRequest</code> . minLength = N/A maxLength = N/A
merchantId	String	Yes	A unique string to identify the merchant within the Little system. minLength = N/A maxLength = 50 Note: International currencies are supported on a per merchantId basis.

Child Elements:

At least one of the following required: [activate](#), [authorization](#), [authReversal](#), [balanceInquiry](#), [cancelSubscription](#), [capture](#), [captureGivenAuth](#), [createPlan](#), [credit](#), [deactivate](#), [echeckCredit](#), [echeckRedeposit](#), [echeckSale](#), [echeckVerification](#), [forceCapture](#), [load](#), [registerTokenRequest](#), [sale](#), [unload](#), [updateCardValidationNumOnToken](#), [updatePlan](#), [updateSubscription](#)

4.47 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 `littleResponse` element.

Parent Elements:

[littleResponse](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	The response returns the same value submitted in the authorization transaction. minLength = N/A maxLength = 25
littleBatchId	Long	Yes	A unique value assigned by Little 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: [activateResponse](#), [authorizationResponse](#), [authReversalResponse](#), [captureResponse](#), [captureGivenAuthResponse](#), [createPlanResponse](#), [creditResponse](#), [deactivateResponse](#), [echeckCreditResponse](#), [echeckRedepositResponse](#), [echeckSalesResponse](#), [echeckVerificationResponse](#), [forceCaptureResponse](#), [loadResponse](#), [registerTokenResponse](#), [saleResponse](#), [unloadResponse](#), [updateCardValidationNumOnTokenResponse](#), [cancelSubscriptionResponse](#), [updatePlanResponse](#), [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.

4.48 beginningBalance

The beginningBalance element is an optional child of the giftCardResponse element. It defines the available balance on the submitted Gift Card prior to the requested operation.

NOTE: Although included in the schema, the beginningBalance, endingBalance, and cashBackAmonut elements are not currently supported.

Type = String; minLength = N/A; maxLength = 20

Parent Elements:

[giftCardResponse](#)

Attributes:

None

Child Elements:

None

4.49 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.

Type = Date; **Format** = YYYY-MM-DD

Parent Elements:

[updateSubscription](#)

Attributes:

None

Child Elements:

None

4.50 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 Little & 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>
  <bmlMerchantId>bmlMerchantId</bmlMerchantId>
  <bmlProductType>bmlProductType</bmlProductType>
  <termsAndConditions>termsAndConditions</termsAndConditions>
  <preapprovalNumber>preapprovalNumber</preapprovalNumber>
  <virtualAuthenticationKeyPresenceIndicator> Indicator
</virtualAuthenticationKeyPresenceIndicator>
  <virtualAuthenticationKeyData> virtualAuthenticationKeyData
</virtualAuthenticationKeyData>
```

```
<itemCategoryCode>itemCategoryCode</itemCategoryCode>  
<authorizationSourcePlatform>platformType</authorizationSourcePlatform>  
</billMeLaterRequest>
```

4.51 billMeLaterResponseData

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</creditLine>
  <addressIndicator>addressIndicator</addressIndicator>
</billMeLaterResponseData>
```


4.52 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 Little & 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, Little 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>
  <name>Customer's Full Name</name>
  <firstName>Customer's First Name</firstName>
  <middleInitial>Customer's Middle Initial</middleInitial>
  <lastName>Customer's Last Name</lastName>
  <companyName>Company's Name</companyName> (include for echeckVerification of
corporate account)
  <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</email>
<phone>Telephone Number</phone>
</billToAddress>
```

4.53 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:

None

4.54 bmlMerchantId

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.

[billMeLaterRequest](#), [billMeLaterResponseData](#)

Attributes:

None

Child Elements:

None

4.55 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.

[billMeLaterRequest](#), [billMeLaterResponseData](#)

NOTE: At this time, the only valid value for this element is BL.

Attributes:

None

Child Elements:

None

4.56 **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:

[processingInstructions](#)

Attributes:

None

Child Elements:

None

4.57 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:

None

4.58 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.

Parent Elements:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

None

Child Elements:

Required: [subscriptionId](#)

4.59 cancelSubscriptionResponse

The `cancelSubscriptionresponse` element is the parent element for the response to a `cancelSubscription` transaction.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

None

Child Elements:

Required: [subscriptionId](#), [littleTxnId](#), [response](#), [message](#), [responseTime](#)

4.60 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

Parent Elements:

[pos](#)

Attributes:

None

Child Elements:

None

Enumerations:

Enumeration	Description
notused	terminal not used
magstripe	magnetic stripe reader capability
keyedonly	keyed entry only capability

NOTE: For CAT (Cardholder Activated Terminal) transactions, the `capability` element must be set to `magstripe`, the `cardholderId` element must be set to `nopin`, and the `catLevel` element must be set to `self service`.

4.61 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:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	<p>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 (<code>id=""</code>), disables Duplicate Detection for the transaction.</p> <p>Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.</p> <p>minLength = N/A maxLength = 25</p>
customerId	String	No	<p>A value assigned by the merchant to identify the consumer.</p> <p>minLength = N/A maxLength = 50</p>
reportGroup	String	Yes	<p>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.</p> <p>minLength = 1 maxLength = 25</p>
partial	Boolean	No	<p>If there is more than one capture that references the same <code><littleTxnId></code>, set this attribute to “true” for each of those partial captures. The default value is false.</p> <p>Valid Values = true or false</p>

Child Elements:

Required: [littleTxnId](#), [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.

4.62 captureGivenAuth

The `captureGivenAuth` element is the parent element for all Capture Given Auth transactions. These are specialized Capture transactions used when the `littleTxnId` for the associated Authorization is unknown or when the Authorization occurred outside the Little & Co. system. You can use this element in either Online or Batch transactions.

Parent Elements:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	<p>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 (<code>id=""</code>), disables Duplicate Detection for the transaction.</p> <p>Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.</p> <p>minLength = N/A maxLength = 25</p>
customerId	String	No	<p>A value assigned by the merchant to identify the consumer.</p> <p>minLength = N/A maxLength = 50</p>
reportGroup	String	Yes	<p>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.</p> <p>minLength = 1 maxLength = 25</p>

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.

4.63 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 `littleOnlineResponse` element or a `batchResponse` element.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	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. Note: This attribute applies only to Online transaction responses.

Child Elements:

Required: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [tokenResponse](#), [giftCardResponse](#)

NOTE: The `postDate` child element is returned only in responses to Online transactions.

4.64 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 `littleOnlineResponse` element or a `batchResponse` element.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	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. Note: This attribute applies only to Online transaction responses.

Child Elements:

Required: [littleTxnId](#), [orderId](#) (required for Batch), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [accountUpdater](#), [giftCardResponse](#)

NOTE: The `postDate` child element is returned only in responses to Online transactions.

4.65 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:

[activate](#), [accountUpdate](#), [authorization](#), [balanceInquiry](#), [captureGivenAuth](#), [credit](#), [deactivate](#), [forceCapture](#), [load](#), [sale](#), [unload](#), [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>
```

4.66 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.

Type = String; **minLength** = 1; **maxLength** = 20

Parent Elements:

[detailTax](#)

Attributes:

None

Child Elements:

None

4.67 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 `customerIpAddress` 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>BwABBJQ1AgAAAAAgJDUCAAAAAA= </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.

4.68 cardholderId

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

Parent Elements:

[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

NOTE: For CAT (Cardholder Activated Terminal) transactions, the `capability` element must be set to `magstripe`, the `cardholderId` element must be set to `nopin`, and the `catLevel` element must be set to `self service`.

4.69 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](#)

4.70 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:

[enhancedAuthResponse](#)

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.

4.71 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 Little 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.

The `cardValidationNum` element is an optional child of the `virtualGiftCardResponse` element, where it defines the value of the validation Number associated with the Virtual Gift Card requested.

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](#), [virtualGiftCardResponse](#)

Attributes:

None

Child Elements:

None

4.72 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 646.

Type = String; **minLength** = N/A; **maxLength** = 2

Parent Elements:

[fraudResult](#)

Attributes:

None

Child Elements:

None

4.73 cashBackAmount

The `cashBackAmount` element is an optional child of the `giftCardResponse` element. It defines the Cash Back amount provided to the Gift Card holder.

NOTE: Although included in the schema, the `beginningBalance`, `endingBalance`, and `cashBackAmonut` elements are not currently supported.

Type = String; **minLength** = N/A; **maxLength** = 20

Parent Elements:

[giftCardResponse](#)

Attributes:

None

Child Elements:

None

4.74 catLevel

The `catLevel` element is an optional child of the `pos` element, which describes the capability of the Cardholder Activated Terminal. Although optional in the schema, it is required for all CAT transactions.

Type = String (Enum); **minLength** = N/A; **maxLength** = N/A

Parent Elements:

[pos](#)

Attributes:

None

Child Elements:

None

Enumerations:

Enumeration	Description
self service	Cardholder Activated Terminal level

4.75 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 447). Please consult your Little Relationship Manager for additional information.

Parent Elements:

[filtering](#)

Attributes:

None

Child Elements:

None

4.76 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:

None

4.77 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:

None

4.78 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; **totalDigits** = 8

Parent Elements:

Optional: [healthcareAmounts](#)

Attributes:

None

Child Elements:

None

4.79 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:

[extendedCardResponse](#)

Attributes:

None

Child Elements:

None

4.80 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”.

4.81 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:

None

4.82 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 LittleXML 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:

None

4.83 createAddOn

The `createAddOn` element is the parent of several child elements used to define an additional charge added to a new or existing subscription.

Parent Elements:

[subscription](#), [updateSubscription](#)

Attributes:

None

Child Elements (all Required):

[addOnCode](#), [name](#), [amount](#), [startDate](#), [endDate](#)

Example: customerInfo Structure

```
<createAddOn>
  <addOnCode>Add On Reference Code</addOnCode>
  <name>Name of Add On</name>
  <amount>Amount of Add On</amount>
  <startDate>Start Date of Add On Charge</startDate>
  <endDate>End Date of Add On Charge</endDate>
</createAddOn>
```

4.84 createDiscount

The `createDiscount` element is the parent of several child elements used to define a discount to be applied to a new or existing subscription.

Parent Elements:

[subscription](#), [updateSubscription](#)

Attributes:

None

Child Elements (all Required):

[discountCode](#), [name](#), [amount](#), [startDate](#), [endDate](#)

Example: customerInfo Structure

```
<createDiscount>
  <discountCode>Discount Reference Code</discountCode>
  <name>Name of Discount</name>
  <amount>Amount of Discount</amount>
  <startDate>Start Date of Discount</startDate>
  <endDate>End Date of Discount</endDate>
</createDiscount>
```

4.85 createPlan

The `createPlan` element is the parent of several child element that define the attributes of a recurring payment plan. You associate Plans with subscriptions to define the billing behavior for the recurring payment.

Parent Elements:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

None

Child Elements:

[planCode](#), [name](#), [description](#), [intervalType](#), [amount](#), [numberOfPayments](#), [trialNumberOfIntervals](#), [trialIntervalType](#), [active](#)

Example: createPlan Structure

```
<createPlan>
  <planCode>Plan Reference Code</planCode>
  <name>Name of Plan</name>
  <description>Description of Plan</description>
  <intervalType>The Type of Interval</intervalType>
  <amount>Amount of Recurring Payment</amount>
  <numberOfPayments>1 to 99</numberOfRemianingPayments>
  <trialNumberOfIntervals>Number of Trial Period
Intervals</trialNumberOfIntervals>
  <trialIntervalType>Type of Trial Period Interval</trialIntervalType>
  <active>true or false</active>
</createPlan>
```

4.86 createPlanResponse

The `createPlanResponse` element is the parent element for the response to a `createPlan` transaction.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

None

Child Elements:

[planCode](#), [littleTxnId](#), [response](#), [message](#), [responseTime](#)

4.87 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	Type	Required?	Description
id	String	No	<p>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 (<code>id=""</code>), disables Duplicate Detection for the transaction.</p> <p>Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.</p> <p>minLength = N/A maxLength = 25</p>
customerId	String	No	<p>A value assigned by the merchant to identify the consumer.</p> <p>minLength = N/A maxLength = 50</p>
reportGroup	String	Yes	<p>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.</p> <p>minLength = 1 maxLength = 25</p>

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](#)

4.88 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:

[billMeLaterResponseData](#)

Attributes:

None

Child Elements:

None

4.89 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

Parent Elements:

[recycling](#)

Attributes:

None

Child Elements:

None

4.90 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 `littleOnlineResponse` element or a `batchResponse` element.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	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. Note: This attribute applies only to Online transaction responses.

Child Elements:

Required: [littleTxnId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [orderId](#), [tokenResponse](#), [giftCardResponse](#)

NOTE: The `postDate` child element is returned only in responses to Online transactions.

4.91 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 56), 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>
```

4.92 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

```
<customerInfo>
  <ssn>ssn</ssn>
  <dob>dob</dob>
  <customerRegistrationDate>customerRegistrationDate</customerRegistrationDate>
  <customerType>customerType</customerType>
  <incomeAmount>incomeAmount</incomeAmount>
  <incomeCurrency>incomeCurrency</incomeCurrency>
  <employerName>employerName</employerName>
  <customerWorkTelephone>customerWorkTelephone</customerWorkTelephone>
  <residenceStatus>residenceStatus</residenceStatus>
  <yearsAtResidence>yearsAtResidence</yearsAtResidence>
  <yearsAtEmployer>yearsAtEmployer</yearsAtEmployer>
</customerInfo>
```

4.93 customerIpAddress

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.nnn

NOTE: This element is required for BML ecommerce transactions to succeed.

Parent Elements:

[cardholderAuthentication](#)

Attributes:

None

Child Elements:

None

4.94 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.

Type = String; **minLength** = 1; **maxLength** = 17

Parent Elements:

[enhancedData](#)

Attributes:

None

Child Elements:

None

4.95 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:

None

4.96 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:

None

4.97 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.

Type = String; **minLength** = N/A; **maxLength** = 20

Parent Elements:

[customerInfo](#)

Attributes:

None

Child Elements:

None

4.98 deactivate

The `deactivate` element is the parent element for the transaction type that deactivate a Gift Card.

Parent Elements:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

Attribute Name	Type	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: (all Required)

[orderId](#), [orderSource](#), [card](#)

4.99 deactivateResponse

The `deactivateResponse` element is the parent element for information returned to you in response to a **deactivate** transaction. It can be a child of either a `littleOnlineResponse` element or a `batchResponse` element.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	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: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [fraudResult](#), [giftCardResponse](#)

4.100 deactivateReversal

The `deactivateReversal` element is the parent element for the transaction type that reverses the deactivation of a Gift Card.

Parent Elements:

[littleOnlineRequest](#)

Attributes:

Attribute Name	Type	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: (all Required)

[littleTxnId](#)

4.101 deactivateReversalResponse

The deactivateReversalResponse element is the parent element for information returned to you in response to an deactivateReversal transaction.

Parent Elements:

[littleOnlineResponse](#)

Attributes:

Attribute Name	Type	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: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [giftCardResponse](#)

4.102 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:

None

4.103 deleteAddOn

The `deleteAddOn` element is the parent element used to define an Add On to be removed from an existing subscription.

Parent Elements:

[updateSubscription](#)

Attributes:

None

Child Elements (all Required):

[addOnCode](#)

Example: deleteAddOn Structure

```
<deleteAddOn>
  <addOnCode>Add On Reference Code</addOnCode>
</deleteAddOn>
```

4.104 deleteDiscount

The deleteDiscount element is the parent element used to define a discount to be removed from an existing subscription.

Parent Elements:

[updateSubscription](#)

Attributes:

None

Child Elements (all Required):

[discountCode](#)

Example: deleteDiscount Structure

```
<deleteDiscount>
  <discountCode>Discount Reference Code</discountCode>
</deleteDiscount>
```


4.105 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.

4.106 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; **totalDigits** = 8

Parent Elements:

Optional: [healthcareAmounts](#)

Attributes:

None

Child Elements:

None

4.107 depositReversal

The `depositReversal` element is the parent element for a Gift Card specific transaction type that reverses a `capture` or `sale` transaction.

Parent Elements:

[litleOnlineRequest](#)

Attributes:

Attribute Name	Type	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: (all Required)

[litleTxnId](#)

4.108 depositReversalResponse

The `depositReversalResponse` element is the parent element for information returned to you in response to an `depositReversal` transaction.

Parent Elements:

[litleOnlineResponse](#)

Attributes:

Attribute Name	Type	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](#), [giftCardResponse](#)

4.109 description

The `description` element is an optional child of the `createPlan` element and provides a text description of the `Plan` element.

Type = String; **minLength** = N/A; **maxLength** = 100

Parent Elements:

[createPlan](#)

Attributes:

None

Child Elements:

None

4.110 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.
-

Parent Elements:

[customBilling](#)

Attributes:

None

Child Elements:

None

4.111 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 LittleXML 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:

None

4.112 destinationPostalCode

The `destinationPostalCode` element defines the postal code of the destination in the `enhancedData` element.

Type = String; **minLength** = N/A; **maxLength** = 20

NOTE: Although the schema specifies the **maxLength** of the `<destinationPostalCode>` element as 20 characters, in practice you should never exceed 10 characters in your submissions.

Parent Elements:

[enhancedData](#)

Attributes:

None

Child Elements:

None

4.113 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>
```

4.114 deviceReputationScore

The `deviceReputationScore` element is a required child of the `advancedFraudResults` element and specifies score resulting from the ThreatMetrix analysis of the customer device.

Type = Integer; **totalDigits** = 8

Parent Elements:

[advancedFraudResults](#)

Attributes:

None

Child Elements:

None

4.115 deviceReviewStatus

The `deviceReviewStatus` element is a required child of the `advancedFraudResults` element and specifies the results of the comparison of the `deviceReputationScore` against the threshold levels configured for the merchant. Typical values are: `pass`, `fail`, `review`, `unavailable`, `invalid_session`, and `unknown_session`.

NOTE:	The system returns <i>unknown_session</i> if you submitted a session Id for which do not have an associated record.
	The system returns <i>invalid_session</i> if you submitted a session Id using an invalid prefix.

Type = String; minLength = N/A; maxLength =

Parent Elements:

[advancedFraudResults](#)

Attributes:

None

Child Elements:

None

4.116 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.

Type = Integer; **totalDigits** = 8

Parent Elements:

[enhancedData](#)

Attributes:

None

Child Elements:

None

4.117 discountCode

The `discountCode` element is the identifier of a defined discount. You use this element when creating, updating, and deleting a discount applied to a subscription.

Type = String; **minLength** = N/A; **maxLength** = 25

Parent Elements:

[createDiscount](#), [updateDiscount](#), [deleteDiscount](#)

Attributes:

None

Child Elements:

None

4.118 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.

Parent Elements:

[customerInfo](#)

Attributes:

None

Child Elements:

None

4.119 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.

Type = Integer; **totalDigits** = 8

Parent Elements:

[enhancedData](#)

Attributes:

None

Child Elements:

None

4.120 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 Little & 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>
```


4.121 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:

None

4.122 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	Type	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 (<code>id=""</code>), 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](#)

4.123 echeckCreditResponse

The `echeckCreditResponse` element is the parent element for information returned to you in response to an `echeckCredit` transaction.

Parent Elements:

[batchResponse](#), [littleOnlineResponse](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	The response returns the same value submitted in the <code>echeckCredit</code> transaction. minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the <code>echeckCredit</code> transaction. minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the <code>echeckCredit</code> 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. Note: This attribute applies only to Online transaction responses.

Child Elements: (all Required)

[littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [accountUpdater](#)

NOTE: The `postDate` child element is returned only in responses to Online transactions.

4.124 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:

[registerTokenRequest](#)

Attributes:

None

Child Elements:

Required: [accNum](#), [routingNum](#)

Example: echeck Structure

```
<echeckForToken>
  <accNum>Account Number</accNum>
  <routingNum>Routing Number</routingNum>
</echeckForToken>
```

4.125 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](#)

4.126 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](#), [littleOnlineRequest](#)

Attributes:

Attribute Name	Type	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: [littleTxnId](#)

Optional: [echeckOrEcheckToken](#) (allows the substitution of either the `echeck` or `echeckToken` elements), [merchantData](#)

4.127 echeckRedepositResponse

The `echeckRedepositResponse` element is the parent element for information returned to you in response to an `echeckRedeposit` transaction.

Parent Elements:

[batchResponse](#), [littleOnlineResponse](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	The response returns the same value submitted in the <code>echeckSale</code> transaction. minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the <code>echeckSale</code> transaction. minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the <code>echeckSale</code> transaction. minLength = 1 maxLength = 25

Child Elements:

Required: [littleTxnId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [accountUpdater](#)

NOTE: The `postDate` child element is returned only in responses to Online transactions.

4.128 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	Type	Required?	Description
id	String	No	<p>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.</p> <p>Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.</p> <p>minLength = N/A maxLength = 25</p>
customerId	String	No	<p>A value assigned by the merchant to identify the consumer.</p> <p>minLength = N/A maxLength = 50</p>
reportGroup	String	Yes	<p>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.</p> <p>minLength = 1 maxLength = 25</p>

Child Elements:

Required: [orderId](#), [amount](#), [orderSource](#), [billToAddress](#), [echeckOrEcheckToken](#) (allows the substitution of either the echeck or echeckToken elements)

Optional: [shipToAddress](#), [verify](#), [customBilling](#), [merchantData](#)

4.129 echeckSalesResponse

The `echeckSalesResponse` element is the parent element for information returned to you in response to an `echeckSale` transaction.

Parent Elements:

[batchResponse](#), [littleOnlineResponse](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	The response returns the same value submitted in the <code>echeckSale</code> transaction. minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the <code>echeckSale</code> transaction. minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the <code>echeckSale</code> 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. Note: This attribute applies only to Online transaction responses.

Child Elements:

Required: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [accountUpdater](#), [tokenResponse](#)

NOTE: The `postDate` child element is returned only in responses to Online transactions.

4.130 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>Little Token</litleToken>
  <routingNum>Routing Number</routingNum>
  <accType>Account Type Abbreviation</accType>
  <checkNum>Check Number</checkNum>
</echeckToken>
```

4.131 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](#), [littleOnlineRequest](#)

Attributes:

Attribute Name	Type	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: [littleTxnId](#), [merchantData](#)

4.132 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	Type	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.

4.133 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:

[littleOnlineRequest](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	<p>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 (<code>id=""</code>), disables Duplicate Detection for the transaction.</p> <p>Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.</p> <p>minLength = N/A maxLength = 25</p>
customerId	String	No	<p>A value assigned by the merchant to identify the consumer.</p> <p>minLength = N/A maxLength = 50</p>
reportGroup	String	Yes	<p>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.</p> <p>minLength = 1 maxLength = 25</p>

Child Elements:

Required: [littleTxnId](#)

4.134 echeckVoidResponse

The `echeckVoidResponse` element is the parent element for information returned to you in response to an eCheck Void transaction.

Parent Elements:

[littleOnlineResponse](#)

Attributes:

Attribute Name	Type	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. Note: This attribute applies only to Online transaction responses.

Child Elements: (all Required)

[littleTxnId](#), [response](#), [responseTime](#), [message](#), [postDate](#)

4.135 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:

None

4.136 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

4.137 endDate

The `endDate` element is an optional child of both the `createAddOn` and `createDiscount` element, where it specifies either the ending date of the Add On charge or the ending date of the discount.

Type = Date; **Format** = YYYY-MM-DD

Parent Elements:

[createAddOn](#), [createDiscount](#)

Attributes:

None

Child Elements:

None

4.138 endingBalance

The endingBalance element is an optional child of the giftCardResponse element. It defines the available balance on the submitted Gift Card after the requested operation.

NOTE: Although included in the schema, the beginningBalance, endingBalance, and cashBackAmonut elements are not currently supported.

Type = String; minLength = N/A; maxLength = 20

Parent Elements:

[giftCardResponse](#)

Attributes:

None

Child Elements:

None

4.139 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, reloadability and whether or not it is a virtual account number.

Parent Elements:

[authorizationResponse](#), [saleResponse](#)

Attributes:

None

Child Elements: (all Optional)

[fundingSource](#), [affluence](#), [issuerCountry](#), [cardProductType](#), [virtualAccountNumber](#)

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>
```

Example: enhancedAuthResponse - with virtualAccountNumber

```
<enhancedAuthResponse>  
  <virtualAccountNumber>true or false</virtualAccountNumber>  
</enhancedAuthResponse>
```

4.140 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 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 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 4-1 MasterCard Level 2/Level 3 Data Requirements

MasterCard Level 2 Data	MasterCard Level 3 Data	LittleXML 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 <code>lineItemData</code>)
	Item Description	itemDescription (child of <code>lineItemData</code>)
	Item Quantity	quantity (child of <code>lineItemData</code>)
	Item Unit of Measure	unitOfMeasure (child of <code>lineItemData</code>)

TABLE 4-1 MasterCard Level 2/Level 3 Data Requirements

MasterCard Level 2 Data	MasterCard Level 3 Data	LittleXML Element (child of enhancedData unless noted)
	Extended Item Amount	lineItemTotal (child of lineItemData) or lineItemTotalWithTax (child of lineItemData)

TABLE 4-2 Visa Level 2/Level 3 Data Requirements

Visa Level 2 Data	Visa Level 3 Data	LittleXML 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: Little & 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, Little 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>
    <productCode>Product Code of Item</productCode>
```

```
<quantity>Quantity of Item</quantity>
<unitOfMeasure>Unit of Measurement Code</unitOfMeasure>
<taxAmount>Sales Tax or VAT of Item</taxAmount>
<lineItemTotal>Total Amount of Line Item</lineItemTotal>
<lineItemTotalWithTax>taxAmount + lineItemTotal</lineItemTotalWithTax>
<itemDiscountAmount>Discount Amount</itemDiscountAmount>
<commodityCode>Card Acceptor Commodity Code for Item</commodityCode>
<unitCost>Price for One Unit of Item</unitCost>
</lineItemData>
</enhancedData>
```


4.141 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

Parent Elements:

[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

4.142 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.
Little & Co. recommends all merchant with recurring and/or installment payments participate in the Automatic Account Updater program.

4.143 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. Little 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>
```

4.144 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 447). Please consult your Litle Relationship Manager for additional information.

Example: filtering Structure

```
<filtering>
  <prepaid>true or false</prepaid>
  <international>false</international>
  <chargeback>false</chargeback>
</filtering>
```

4.145 finalPayment

The finalPayment element is a required child of the littleInternalRecurringRequestType. A value of **true** indicates that this is the final payment of the subscription. Since this element is used only in internally generated transaction, you do not need to code for its use.

Type = Boolean; **Valid Values** = true or false

Parent Elements:

[littleInternalRecurringRequest](#)

Attributes:

None

Child Elements:

None

4.146 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 <code>firstName</code> and <code>lastName</code> 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:

None

4.147 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	Type	Required?	Description
id	String	No	<p>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 (<code>id=""</code>), disables Duplicate Detection for the transaction.</p> <p>Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.</p> <p>minLength = N/A maxLength = 25</p>
customerId	String	No	<p>A value assigned by the merchant to identify the consumer.</p> <p>minLength = N/A maxLength = 50</p>
reportGroup	String	Yes	<p>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.</p> <p>minLength = 1 maxLength = 25</p>

Child Elements:

Required: [orderId](#), [amount](#), [orderSource](#), choice of [card](#), [token](#), or [paypage](#)

Optional: [billToAddress](#), [customBilling](#), [taxType](#), [enhancedData](#), [processingInstructions](#), [pos](#), [amexAggregatorData](#), [merchantData](#), [surchargeAmount](#), [debtRepayment](#)

4.148 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 `littleOnlineResponse` element or a `batchResponse` element.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	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. Note: This attribute applies only to Online transaction responses.

Child Elements:

Required: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [tokenResponse](#), [accountUpdater](#), [giftCardResponse](#)

NOTE: The `postDate` child element is returned only in responses to Online transactions.

4.149 fraudCheck

The `fraudCheck` element is the parent element for the standalone Advanced Fraud Check transaction. You use this transaction type to retrieve the results of the Advanced Fraud Check tool without submitting an Authorization or Sale transaction. You can use this element only in Online transactions.

Parent Elements:

[littleOnlineRequest](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	<p>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 (<code>id=""</code>), disables Duplicate Detection for the transaction.</p> <p>Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.</p> <p>minLength = N/A maxLength = 25</p>
customerId	String	No	<p>A value assigned by the merchant to identify the consumer.</p> <p>minLength = N/A maxLength = 50</p>
reportGroup	String	Yes	<p>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.</p> <p>minLength = 1 maxLength = 25</p>

Child Elements:

Required: [advancedFraudChecks](#)

4.150 fraudCheckResponse

The `fraudCheckResponse` element is the parent element for information returned to you in response to a standalone Fraud Check transaction.

Parent Elements:

[littleOnlineResponse](#)

Attributes:

Attribute Name	Type	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

Child Elements:

Required: [littleTxnId](#), [response](#), [responseTime](#), [message](#)

Optional: [advancedFraudResults](#)

4.151 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.

Type = Boolean; **Valid Values** = true or false

Parent Elements:

[authorization](#), [sale](#)

Attributes:

None

Child Elements:

None

4.152 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:

[activateResponse](#), [authorizationResponse](#), [deactivateResponse](#), [loadResponse](#), [saleResponse](#), [unloadResponse](#), [authInformation](#)

Attributes:

None

Child Elements: (All Optional)

[authenticationResult](#), [avsResult](#), [cardValidationResult](#), [advancedAVSResult](#), [advancedFraudResults](#)

Example: fraudResult Structure

```
<fraudResult>
  <avsResult>00</avsResult>
  <cardValidationResult>N</cardValidationResult>
  <authenticationResult>2</authenticationResult>
  <advancedAVSResult>011</advancedAVSResult>
  <advancedFraudResults>
    <deviceReviewStatus>pass, fail, review, or unavailable</deviceReviewStatus>
    <deviceReputationScore>Score from ThreatMetix</deviceReputationScore>
    <triggeredRule>Triggered Rule_may occur multiple times</triggeredRule>
  </advancedFraudResults>
</fraudResult>
```

NOTE: The `<advancedAVSResults>` element applies only to American Express transactions. Also, you must be certified to use LittleXML version 7.3 or above and be enabled specifically to use the Advanced AVS feature. Please consult your Little Customer Experience Manager for additional information.

4.153 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 26.)

Please consult your Customer Experience Manager for additional information.

4.154 giftCardBin

The `giftCardBin` element is a required child of the `virtualGiftCard` element defining the requested BIN of the virtual Gift Card number you are requesting.

NOTE: In an early iteration of schema V8.22 issued in September of 2013 this element was defined as an optional child of the `virtualGiftCard` element. If you coded to the earlier version, be aware that this element is now required. If you do not include this element, the transaction will fail XML validation.

Type = String; **minLength** = N/A; **maxLength** = 10

Parent Elements:

[virtualGiftCard](#)

Attributes:

None

Child Elements:

None

4.155 giftCardResponse

The `giftCardResponse` element is an optional child of several transaction types. Through its child elements, it provides details about the beginning, ending, and available balance on a Gift Card, as well as the cash back amount, if applicable.

Parent Elements:

[activateResponse](#), [activateReversalResponse](#), [authorizationResponse](#), [authReversalResponse](#), [balanceInquiryResponse](#), [captureGivenAuthResponse](#), [captureResponse](#), [creditResponse](#), [deactivateResponse](#), [deactivateReversalResponse](#), [depositReversalResponse](#), [forceCaptureResponse](#), [loadResponse](#), [loadReversalResponse](#), [refundReversalResponse](#), [saleResponse](#), [unloadResponse](#), [unloadReversalResponse](#)

Attributes:

None

Child Elements (All Optional, but must contain at least one child):

Optional: [availableBalance](#), [beginningBalance](#), [endingBalance](#), [cashBackAmount](#)

NOTE:	Although included in the schema, the <code>beginningBalance</code>, <code>endingBalance</code>, and <code>cashBackAmonut</code> elements are not currently supported.
--------------	--

Example: giftCardResponse Structure

```
<giftCardResponse>
  <availableBalance>Balance Available on Gift Card</availableBalance>
</giftCardResponse>
```

4.156 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>
```


4.157 healthcareIIAS

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>
```

4.158 IIASFlag

The `IIASFlag` element is a required child of the `healthcareIIAS` element. This element only supports a value of **Y**.

Type = String (enum); **minLength** = N/A; **maxLength** = 1; **Valid Value** = Y

Parent Elements:

[healthcareIIAS](#)

Child Elements:

None

4.159 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

4.160 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

4.161 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**.

Type = Boolean; **Valid Value** = false

Parent Elements:

[filtering](#)

Attributes:

None

Child Elements:

None

4.162 intervalType

The `intervalType` element is a required child of the `createPlan` element and defines the billing period associated with the Plan.

Type = String (enum); **minLength** = N/A; **maxLength** = N/A

Parent Elements:

[createPlan](#)

Attributes:

None

Child Elements:

None

Enumerations:

Enumeration	Description
ANNUAL	The billing period is once per year.
SEMIANNUAL	The billing period is twice per year.
QUARTERLY	The billing period is every three months.
MONTHLY	The billing period is every month.
WEEKLY	The billing period is every week.

4.163 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.

Type = String; **minLength** = 1; **maxLength** = 15

Parent Elements:

[enhancedData](#)

Attributes:

None

Child Elements:

None

4.164 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** = 3

Parent Elements:

[enhancedAuthResponse](#)

Attributes:

None

Child Elements:

None

4.165 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:

None

4.166 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:

None

4.167 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.

Type = Integer; **totalDigits** = 8

Parent Elements:

[lineItemData](#)

Attributes:

None

Child Elements:

None

4.168 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:

None

4.169 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:

None

4.170 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

```
<lineItemData>
  <itemSequenceNumber>Line Item Number within Order</itemSequenceNumber>
  <itemDescription>Description of Item</itemDescription>
  <productCode>Product Code of Item</productCode>
  <quantity>Quantity of Item</quantity>
  <unitOfMeasure>Unit of Measurement Code</unitOfMeasure>
  <taxAmount>Sales Tax or VAT of Item</taxAmount>
```

```
<lineItemTotal>Total Amount of Line Item</lineItemTotal>
<lineItemTotalWithTax>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>
</lineItemData>
```

4.171 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:

None

4.172 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:

[lineItemData](#)

Attributes:

None

Child Elements:

None

4.173 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.

Parent Elements:

[sale](#)

Attributes:

None

Child Elements:

[subscriptionId](#), [recurringTxnId](#), [finalPayment](#)

4.174 littleOnlineRequest

This is the root element for all LittleXML Online requests.

Parent Elements:

None

Attributes:

Attribute Name	Type	Required?	Description
version	String	Yes	Defines the LittleXML 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.little.com/schema. minLength = N/A maxLength = 38
merchantId	String	Yes	A unique string used to identify the merchant within the Little system. minLength = N/A maxLength = 50 Note: International currencies are supported on a per merchantId basis.
loggedInUser	String	No	Internal Use Only

Child Elements:

Required: [authentication](#)

One of the following required: [activate](#), [activateReversal](#), [authorization](#), [authReversal](#), [balanceInquiry](#), [cancelSubscription](#), [capture](#), [captureGivenAuth](#), [createPlan](#), [credit](#), [deactivate](#), [deactivateReversal](#), [depositReversal](#), [echeckCredit](#), [echeckRedeposit](#), [echeckSale](#), [echeckVerification](#), [echeckVoid](#), [forceCapture](#), [fraudCheck](#), [load](#), [loadReversal](#), [registerTokenRequest](#), [refundReversal](#), [sale](#), [unload](#), [updateCardValidationNumOnToken](#), [updatePlan](#), [updateSubscription](#), [unloadReversal](#), [void](#)

4.175 litleOnlineResponse

This is the root element for all LitleXML Online responses.

Parent Elements:

None

Attributes:

Attribute Name	Type	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	Type	Required?	Description
message	String	Yes	<p>XML validation error message. Expected values are as follows:</p> <ul style="list-style-type: none"> 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 647 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." <p>minLength = N/A maxLength = 512</p>

Child Elements:

One of the following required: [activateResponse](#), [activateReversalResponse](#), [authorizationResponse](#), [authReversalResponse](#), [balanceInquiryResponse](#), [cancelSubscriptionResponse](#), [captureGivenAuthResponse](#), [captureResponse](#), [createPlanResponse](#), [deactivateResponse](#), [deactivateReversalResponse](#), [depositReversalResponse](#), [creditResponse](#), [echeckCreditResponse](#), [echeckRedepositResponse](#), [echeckSalesResponse](#), [echeckVerificationResponse](#), [forceCaptureResponse](#), [loadResponse](#), [loadReversalResponse](#), [refundReversalResponse](#), [registerTokenResponse](#), [saleResponse](#), [unloadResponse](#), [unloadReversalResponse](#), [updateCardValidationNumOnTokenResponse](#), [voidResponse](#), [updatePlanResponse](#), [updateSubscriptionResponse](#)

4.176 littleRequest

This is the root element for all LittleXML Batch requests.

Parent Elements:

None

Attributes:

Attribute Name	Type	Required?	Description
version	String	Yes	Defines the LittleXML 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.little.com/schema. minLength = N/A maxLength = 38
id	String	No	A unique string to identify the session within the Little system. minLength = N/A maxLength = 25
numBatchRequests	Integer	Yes	Defines the total number of batchRequest children included in the littleRequest. If the littleRequest contains only an RFRRequest, then set this attribute to "0".

Child Elements:

Required: [authentication](#)

One of the following required: [batchRequest](#), [RFRRequest](#)

4.177 littleResponse

This is the root element for all LittleXML Batch responses.

Parent Elements:

None

Attributes:

Attribute Name	Type	Required?	Description
version	String	Yes	Defines the LittleXML 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.little.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 Little systems may have detected message content that violates certain restrictions. minLength = N/A maxLength = 3

Attribute Name	Type	Required?	Description
message	String	Yes	<p>XML validation error message. Expected values are as follows:</p> <ul style="list-style-type: none">• 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 647 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." <p>minLength = N/A maxLength = 512</p>
litleSessionId	Long	Yes	<p>A unique value assigned by Litle to identify the session.</p> <p>minLength = N/A maxLength = 19</p>

Child Elements:

One of the following required: [batchResponse](#), [RFRResponse](#)

4.178 littleSessionId

The `littleSessionId` element is a child of the `RFRRequest` element used to request the response from a previously submitted Batch. The value of the `littleSessionId` must be the same as the value returned in the corresponding attribute of the `littleResponse`.

Type = Long; **minLength** = N/A; **maxLength** = 19

Parent Elements:

[RFRRequest](#)

Attributes:

None

Child Elements:

None

4.179 littleToken

The `littleToken` 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 `littleToken` element is an optional child of each listed parent element.

[registerTokenResponse](#), [tokenResponse](#), [newCardTokenInfo](#), [originalCardTokenInfo](#), [originalToken](#), [originalTokenInfo](#), [newTokenInfo](#), [updatedToken](#), [token](#), [echeckToken](#)

Attributes:

None

Child Elements:

None

4.180 littleTxnId

The `littleTxnId` element is used to identify transactions in the Little 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 `littleTxnId` for the associated Authorization.

Type = Long; **minLength** = N/A; **maxLength** = 19

Parent Elements:

This element is a required child of the following: [accountUpdateResponse](#), [activateResponse](#), [activateReversal](#), [activateReversalResponse](#), [authorizationResponse](#), [authReversalResponse](#), [capture](#), [captureResponse](#), [credit](#), [creditResponse](#), [captureGivenAuthResponse](#), [deactivateResponse](#), [deactivateReversal](#), [deactivateReversalResponse](#), [depositReversal](#), [depositReversalResponse](#), [echeckCredit](#), [echeckCreditResponse](#), [echeckRedeposit](#), [echeckRedepositResponse](#), [echeckSalesResponse](#), [echeckVerificationResponse](#), [echeckVoid](#), [echeckVoidResponse](#), [forceCapture](#), [forceCaptureResponse](#), [fraudCheckResponse](#), [loadResponse](#), [loadReversal](#), [loadReversalResponse](#), [refundReversal](#), [refundReversalResponse](#), [saleResponse](#), [unloadResponse](#), [void](#), [voidResponse](#), [cancelSubscriptionResponse](#), [updatePlanResponse](#), [updateSubscriptionResponse](#), [unloadReversal](#), [unloadReversalResponse](#)

NOTE: Although the schema shows the `littleTxnId` element as an optional child of the `authorization`, `echeckSale`, `echeckVerification`, and `sale` transactions, under normal circumstances, merchants would never use this option.

Attributes:

None

Child Elements:

None

4.181 load

The `load` element is the parent element for the transaction type that adds funds to a reloadable Gift Card.

Parent Elements:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

Attribute Name	Type	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: (all Required)

[orderId](#), [amount](#), [orderSource](#), [card](#)

4.182 loadResponse

The `loadResponse` element is the parent element for information returned to you in response to a **load** transaction. It can be a child of either a `littleOnlineResponse` element or a `batchResponse` element.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	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
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. Note: This attribute applies only to Online transaction responses.

Child Elements:

Required: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [fraudResult](#), [giftCardResponse](#)

4.183 loadReversal

The `loadReversal` element is the parent element for the transaction type that reverses the loading of a Gift Card.

Parent Elements:

[littleOnlineRequest](#)

Attributes:

Attribute Name	Type	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: (all Required)

[littleTxnId](#)

4.184 loadReversalResponse

The `loadReversalResponse` element is the parent element for information returned to you in response to an `loadReversal` transaction.

Parent Elements:

[littleOnlineResponse](#)

Attributes:

Attribute Name	Type	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: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [giftCardResponse](#)

4.185 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](#)

4.186 merchantGroupingId

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:

[merchantData](#)

Attributes:

None

Child Elements:

None

4.187 merchantId

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 Little system.

Type = String; **minLength** = N/A; **maxLength** = 50

Parent Elements:

[accountUpdateFileRequestData](#)

Attributes:

None

Child Elements:

None

NOTE:	Several elements use merchantId as an attribute, including batchRequest, batchResponse, and littleOnlineRequest.
--------------	---

4.188 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 Little & Co. response codes and associated messages, please refer to [Appendix A](#).

Type = String; **minLength** = N/A; **maxLength** = 512

Parent Elements:

[activateResponse](#), [activateReversalResponse](#), [authorizationResponse](#), [captureResponse](#), [captureGivenAuthResponse](#), [creditResponse](#), [deactivateResponse](#), [deactivateReversalResponse](#), [depositReversalResponse](#), [echeckCreditResponse](#), [echeckRedepositResponse](#), [echeckSalesResponse](#), [echeckVerificationResponse](#), [echeckVoidResponse](#), [extendedCardResponse](#), [forceCaptureResponse](#), [fraudCheckResponse](#), [loadResponse](#), [loadReversalResponse](#), [refundReversalResponse](#), [saleResponse](#), [unloadResponse](#), [unloadReversalResponse](#), [voidResponse](#), [cancelSubscriptionResponse](#), [updatePlanResponse](#), [updateSubscriptionResponse](#)

Attributes:

None

Child Elements:

None

4.189 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.

Type = String; **minLength** = N/A; **maxLength** = 1

Parent Elements:

[billToAddress](#)

Attributes:

None

Child Elements:

None

4.190 name

The name element defines the customer name in both the `billToAddress` and `shipToAddress` elements. When used as a child of one of the Recurring Engine associated parents (i.e., `createAddOn`, `updateAddOn`, `createDiscount`, `updateDiscount`, or `createPlan`), the name element specifies the name of the parent item being created/updated.

Type = String; **minLength** = N/A; **maxLength** = 100

Parent Elements:

[billToAddress](#), [shipToAddress](#), [createAddOn](#), [updateAddOn](#), [createDiscount](#), [updateDiscount](#), [createPlan](#)

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:

None

4.191 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>
```

4.192 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>
```

4.193 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:

[littleToken](#), [type](#), [expDate](#), [bin](#)

Example: newCardInfo Structure

```
<newCardTokenInfo>
  <littleToken>New Token</littleToken>
  <type>Card Type</type>
  <expDate>New Expiration Date</expDate>
  <bin>New Card BIN</bin>
</newCardTokenInfo>
```


4.194 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>
  <litleToken>New Token Number</litleToken>
  <routingNum>New Routing Number</routingNum>
</newTokenInfo>
```

4.195 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:

None

4.196 number

The `number` element 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:

None

4.197 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 element is an optional child of both the `subscription`, and `createPlan` elements. When submitted as a child of the `subscription` element, the value overrides the default value defined in the Plan.

NOTE:	For an open-ended Plan, please omit the optional <code>numberOfPayments</code> element in <code>createPlan</code>.
	For an open-ended subscription, please omit the optional <code>numberOfPayments</code> element in <code>subscription</code> and reference an open-ended Plan.

Type = Integer; **minLength** = 1; **maxLength** = 99

Parent Elements:

[subscription](#), [createPlan](#)

Attributes:

None

Child Elements:

None

4.198 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.

Type = Date; **Format** = YYYY-MM-DD

Parent Elements:

[enhancedData](#)

Attributes:

None

Child Elements:

None

4.199 orderId

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](#), [activate](#), [activateResponse](#), [activateReversalResponse](#), [authorization](#), [authorizationResponse](#), [balanceInquiry](#), [captureResponse](#) (Batch only), [credit](#), [creditResponse](#), [captureGivenAuth](#), [captureGivenAuthResponse](#), [deactivate](#), [deactivateResponse](#), [deactivateReversalResponse](#), [depositReversalResponse](#), [echeckCredit](#), [echeckCreditResponse](#), [echeckSale](#), [echeckSalesResponse](#), [echeckVerification](#), [echeckVerificationResponse](#), [forceCapture](#), [forceCaptureResponse](#), [load](#), [loadResponse](#), [loadReversalResponse](#), [refundReversalResponse](#), [registerTokenRequest](#), [sale](#), [saleResponse](#), [unload](#), [unloadResponse](#), [unloadReversalResponse](#)

Attributes:

None

Child Elements:

None

4.200 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:

[activate](#), [authorization](#), [balanceInquiry](#), [captureGivenAuth](#), [credit](#), [deactivate](#), [echeckCredit](#), [echeckSale](#), [echeckVerification](#) [forceCapture](#), [load](#), [sale](#), [unload](#)

Attributes:

None

Child Elements:

None

Enumerations:

NOTE: If you submit the wrong `orderSource` value, Little returns the response code 370 - Internal System Error - Contact Little.

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 Verified By Visa and MasterCard SecureCode. This value applies to Visa and MasterCard transactions only. NOTE: Your Little 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 Little 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

4.201 originalAccountInfo

The `originalAccountInfo` element is an optional child of the `accountUpdater` 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>
  <littleToken>Original Token Number</littleToken>
  <routingNum>Original Routing Number</routingNum>
</originalAccountInfo>
```

4.202 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:

[accountUpdateResponse](#)

Attributes:

None

Child Elements:

[type](#), [number](#), [expDate](#)

Example: originalCard Structure

```
<originalCard>
  <type>Card Type</type>
  <number>Old Account Number</number>
  <expDate>Old Expiration Date</expDate>
</originalCard>
```

4.203 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:

[accountUpdater](#)

Attributes:

None

Child Elements:

[type](#), [number](#), [expDate](#)

Example: originalCard Structure

```
<originalCardInfo>
  <type>Card Type</type>
  <number>Old Account Number</number>
  <expDate>Old Expiration Date</expDate>
</originalCardInfo>
```

4.204 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:

[littleToken](#), [type](#), [expDate](#), [bin](#)

Example: originalCard Structure

```
<originalCardTokenInfo>
  <littleToken>Old Token</littleToken>
  <type>Card Type</type>
  <expDate>Old Expiration Date</expDate>
  <bin>Old Card BIN</bin>
</originalCardTokenInfo>
```

4.205 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](#)

Example: originalCard Structure

```
<originalToken>
  <littleToken>Old Token Number</littleToken>
  <expDate>Old Expiration Date</expDate>
  <type>Card Type</type>
  <bin>Card BIN</bin>
</originalToken>
```

4.206 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](#), [littleToken](#), [routingNum](#)

Example: originalAccountInfo Structure

```
<originalTokenInfo>
  <accType>Account Type</accType>
  <littletoken>Old Account Number</littletoken>
  <routingNum>Old Routing Number</routingNum>
</originalTokenInfo>
```

4.207 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:

None

4.208 payerId

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 Little & 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:

None

4.209 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 Little Vault solution. When you submit the paypage element in a request, response messages will include token information.

Parent Elements:

[authorization](#), [captureGivenAuth](#), [credit](#), [forceCapture](#), [sale](#), [updateSubscription](#)

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>
```

4.210 paypageRegistrationId

The `paypageRegistrationId` element is a required child of the `paypage` element, and specifies the Pay Page Registration ID generated by `securepaypage.little.com` (Little 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.

Type = String; **minLength** = N/A; **maxLength** = 512

Parent Elements:

[paypage](#), [registerTokenRequest](#)

Attributes:

None

Child Elements:

None

4.211 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>
  <payerId>PayPal Customer Identifier</payerId>
  <token>Token Value Returned</token>
  <transactionId>PayPal Transaction ID</transactionId>
</paypal>
```

4.212 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.

Type = Boolean; **Valid values** = true or false

Parent Elements:

[capture](#), [sale](#)

Attributes:

None

Child Elements:

None

4.213 phone

The phone element has two different uses in LittleXML 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.

4.213.0.1 phone as a child of billToAddress and shipToAddress

The phone element defines the customer's phone number in both the `billToAddress` and `shipToAddress` elements.

NOTE: When submitting an eCheck Verification , the string can only contain numbers (0 through 9). Letters and special characters are not allowed.

Type = String; **minLength** = N/A; **maxLength** = 20

Parent Elements:

[billToAddress](#), [shipFromPostalCode](#)

Attributes:

None

Child Elements:

None

4.213.0.2 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: None

4.214 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 Little 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 `numberOfPayments` element. This element is a required child of the `subscription` element.

Type = String; **minLength** = N/A; **maxLength** = 25

Parent Elements:

[subscription](#), [updateSubscription](#), [createPlan](#), [updatePlan](#), [updatePlanResponse](#)

Attributes:

None

Child Elements:

None

4.215 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](#), [catLevel](#)

Example: pos Structure

```
<pos>
  <capability>Capabilty Enumeration</capability>
  <entryMode>Entry Mode Enumeration</entryMode>
  <cardholderId>Cardholder ID Enumeration</cardholderId>
  <terminalId>1234567890</terminalId>
  <catLevel>Capabilty of CAT Terminal</catLevel>
</pos>
```

NOTE: For CAT (Cardholder Activated Terminal) transactions, the `capability` element must be set to `magstripe`, the `cardholderId` element must be set to `nopin`, and the `catLevel` element must be set to `self service`.

4.216 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:

[activateResponse](#), [activateReversalResponse](#), [authorizationResponse](#), [authReversalResponse](#), [captureResponse](#), [captureGivenAuthResponse](#), [creditResponse](#), [deactivateResponse](#), [deactivateReversalResponse](#), [depositReversalResponse](#), [echeckCreditResponse](#), [echeckSalesResponse](#), [echeckVerificationResponse](#), [forceCaptureResponse](#), [loadResponse](#), [loadReversalResponse](#), [refundReversalResponse](#), [saleResponse](#), [unloadResponse](#), [unloadReversalResponse](#), [voidResponse](#)

Attributes:

None

Child Elements:

None

4.217 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:

[accountUpdateFileRequestData](#)

Attributes:

None

Child Elements:

None

4.218 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:

None

4.219 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 **false**. 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 **true**.

Type = Boolean; **Valid Values** = true or false

Parent Elements:

[filtering](#)

Attributes:

None

Child Elements:

None

4.220 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

Type = String; **minLength** = N/A; **maxLength** = 50

Parent Elements:

[fundingSource](#)

Attributes:

None

Child Elements:

None

4.221 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: processingInstructions Structure

```
<processingInstructions>
  <bypassVelocityCheck>true or false</bypassVelocityCheck>
</processingInstructions>
```

4.222 productCode

The `productCode` element is an optional child of the `lineItemData` element, which specifies the product code of the purchased item. This value is a merchant defined description code of the product/service. This could be an inventory number, UPC, catalog number, or some other value that the merchant uses to define the specific product. 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

4.223 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:

None

4.224 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 Little Recurring Engine. It is an optional child of the Authorization and Sale transactions.

Parent Elements:

[authorization](#), [sale](#)

Attributes:

None

Child Elements:

[subscription](#)

Example: recurringRequest Structure

```
<recurringRequest>
  <subscription>
    <planCode>Plan Reference Code</planCode>
    <numberOfPayments>1 to 99</numberOfRemianingPayments>
    <startDate>Start Date of Recurring Cycle</startDate>
    <amount>Amount of Recurring Payment</amount>
  </subscription>
</recurringRequest>
```


4.225 recurringResponse

The recurringResponse 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.

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>
</recurringResponse>
```

4.226 recurringTxnId

The recurringTxnId element is an optional child of the **recurringResponse** element used to identify the record of recurring, scheduled transactions.

Type = Long; **minLength** = N/A; **maxLength** = 19

Parent Elements:

[recurringResponse](#), [littleInternalRecurringRequest](#)

NOTE:	Although the element is an optional child of the recurringResponse element, it will never be returned in the response to a merchant initiated transaction.
--------------	--

Attributes:

None

Child Elements:

None

4.227 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>
```

4.228 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:

None

4.229 recycleBy

The `recycleBy` element is an optional child of the `recyclingRequest` element and determines the use of the Little Recycling Engine/Recycling Advice. The default setting is `Little`, so omitting this element is the same as submitting a value of `Little`.

NOTE: Also, if your Little Merchant Profile includes a preset percentage split of transactions between merchant and Little controlled, then settings of `Merchant` and `Little` are ignored; you can still use a setting of `None` to exclude the transaction.

Also, although the default setting is normally `Little`, 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.
Little	This setting indicates either that the Little 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 Little 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 Little controlled.

4.230 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 Little Recycling Engine.

Type = Boolean; **Valid values** = true or false

Parent Elements:

[recycling](#)

Attributes:

None

Child Elements:

None

4.231 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.

Type = String; **minLength** = N/A; **maxLength** = 25

Parent Elements:

[recyclingRequest](#)

Attributes:

None

Child Elements:

None

4.232 recycling

The `recycling` element has two uses in LittleXML 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 Little 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 61).

4.232.1 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>
```

4.232.2 recycling Element as a Child of voidResponse

The recycling element is an optional child of the voidResponse element and contains a child providing the Little 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 61):

- 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 Little system has successfully submitted a Credit transaction on your behalf.

Parent Elements:

[voidResponse](#)

Attributes:

None

Child Elements:

[creditLittleTxnId](#)

Example: recycling Structure - child of voidResponse

```
<recycling>
  <creditLittleTxnId>1234567890123456789</creditLittleTxnId>
</recycling>
```

4.233 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 Little Recycling Engine or Recycling Advice.

Parent Elements:

[authorization](#), [sale](#)

Attributes:

None

Child Elements:

[recycleBy](#), [recycleId](#)

Example: recyclingRequest Structure

```
<recyclingRequest>
  <recycleBy>Merchant or Little or None</recycleBy>
  <recycleId>abcdef1234567890</recycleId>
</recyclingRequest>
```

4.234 refundReversal

The `refundReversal` element is the parent element for a Gift Card specific transaction type that reverses the a refund associated with a Gift Card.

Parent Elements:

[littleOnlineRequest](#)

Attributes:

Attribute Name	Type	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: (all Required)

[littleTxnId](#)

4.235 refundReversalResponse

The `refundReversalResponse` element is the parent element for information returned to you in response to an `refundReversal` transaction.

Parent Elements:

[litleOnlineResponse](#)

Attributes:

Attribute Name	Type	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](#), [giftCardResponse](#)

4.236 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:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

Attribute Name	Type	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 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

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.

4.237 registerTokenResponse

The `registerTokenResponse` element is the parent element for the Little 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:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	The response returns the same value submitted in the <code>registerTokenRequest</code> transaction. minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the <code>registerTokenRequest</code> transaction. minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the <code>registerTokenRequest</code> transaction. minLength = 1 maxLength = 25

Child Elements:

Required: [littleTxnId](#), [response](#), [message](#), [responseTime](#)

Optional: [eCheckAccountSuffix](#), [orderId](#), [littleToken](#), [bin](#), [type](#)

4.238 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:

None

4.239 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

Parent Elements:

[customerInfo](#)

Attributes:

None

Child Elements:

None

4.240 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:

[activateResponse](#), [activateReversalResponse](#), [authorizationResponse](#), [authReversalResponse](#), [captureResponse](#), [captureGivenAuthResponse](#), [creditResponse](#), [deactivateResponse](#), [deactivateReversalResponse](#), [depositReversalResponse](#), [echeckCreditResponse](#), [echeckRedepositResponse](#), [echeckSalesResponse](#), [echeckVerificationResponse](#), [echeckVoidResponse](#), [forceCaptureResponse](#), [fraudCheckResponse](#), [loadResponse](#), [loadReversalResponse](#), [registerTokenResponse](#), [refundReversalResponse](#), [saleResponse](#), [voidResponse](#), [cancelSubscriptionResponse](#), [unloadResponse](#), [updatePlanResponse](#), [updateSubscriptionResponse](#), [unloadReversalResponse](#)

Attributes:

None

Child Elements:

None

4.241 responseCode

The `responseCode` element contains a three digit numeric code which along with the **responseMessage** element specifies either acceptance by the Little Recurring Engine or the reason the recurring Engine was unable to schedule subsequent payments.

Type = String; **minLength** = N/A; **maxLength** = 3

Parent Elements:

[recurringResponse](#)

Attributes:

None

Child Elements:

None

4.242 responseMessage

The `responseMessage` element contains a brief definition of the **responseCode** returned for the recurring transaction.

Type = String; **minLength** = N/A; **maxLength** = 512

Parent Elements:

[recurringResponse](#)

Attributes:

None

Child Elements:

None

4.243 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:

[activateResponse](#), [activateReversalResponse](#), [authorizationResponse](#), [authReversalResponse](#), [captureResponse](#), [captureGivenAuthResponse](#), [creditResponse](#), [deactivateResponse](#), [deactivateReversalResponse](#), [depositReversalResponse](#), [echeckCreditResponse](#), [echeckRedepositResponse](#), [echeckSalesResponse](#), [echeckVerificationResponse](#), [echeckVoidResponse](#), [forceCaptureResponse](#), [fraudCheckResponse](#), [loadResponse](#), [loadReversalResponse](#), [registerTokenResponse](#), [refundReversalResponse](#), [saleResponse](#), [voidResponse](#), [cancelSubscriptionResponse](#), [unloadResponse](#), [unloadReversalResponse](#), [updatePlanResponse](#), [updateSubscriptionResponse](#)

Attributes:

None

Child Elements:

None

4.244 RFRRequest

The `RFRRequest` element is an optional child of a `littleRequest` element. You can use this type of request in one of two ways.

- To request a session response from a previously processed `littleRequest`, include the `littleSessionId` child. The resulting RFR response will duplicate the original session response (Authorization, Credit, Capture, or Sale response) associated with the `littleSessionId`. 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:

[littleRequest](#)

Attributes:

None

Child Elements: (Choice of)

[littleSessionId](#) or [accountUpdateFileRequestData](#)

Example: RFRRequest Structure - Batch

```
<RFRRequest>
  <littleSessionId>Session ID</littleSessionId>
</RFRRequest>
```

Example: RFRRequest Structure - Account Updater

```
<RFRRequest>
  <accountUpdateFileRequestData>
    <merchantId>Merchant ID</merchantId>
    <postDay>Post Date</postDay>
  </accountUpdateFileRequestData>
</RFRRequest>
```

4.245 RFRResponse

The `RFRResponse` element is an optional child of a `littleResponse` element returned in response to a `RFRRequest`.

Parent Elements:

[littleResponse](#)

Attributes:

Attribute Name	Type	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:

None

4.246 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, Little returns the XML Response Code 900 - Invalid Bank Routing Number.
--------------	--

4.247 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:

None

4.248 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:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	<p>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 (<code>id=""</code>), disables Duplicate Detection for the transaction.</p> <p>Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.</p> <p>minLength = N/A maxLength = 25</p>
customerId	String	No	<p>A value assigned by the merchant to identify the consumer.</p> <p>minLength = N/A maxLength = 50</p>
reportGroup	String	Yes	<p>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.</p> <p>minLength = 1 maxLength = 25</p>

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: [littleTxnId](#), [customerInfo](#), [billToAddress](#), [shipToAddress](#), [billMeLaterRequest](#), [cardholderAuthentication](#), [customBilling](#), [taxType](#), [enhancedData](#), [processingInstructions](#), [pos](#), [paypalOrderComplete](#), [amexAggregatorData](#), [allowPartialAuth](#), [healthcareIIAS](#), [merchantData](#),

[recyclingRequest](#), [fraudFilterOverride](#), [surchargeAmount](#), [recurringRequest](#),
[littleInternalRecurringRequest](#), [debtRepayment](#), [advancedFraudChecks](#)

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.

4.249 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 `littleOnlineResponse` element or a `batchResponse` element.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	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. Note: This attribute applies only to Online transaction responses.

Child Elements:

Required: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [cardProductId](#) (see Note below), [authCode](#), [authorizationResponseSubCode](#) (see Note below), [approvedAmount](#), [accountInformation](#), [fraudResult](#), [billMeLaterResponseData](#), [tokenResponse](#), [enhancedAuthResponse](#), [accountUpdater](#), [recycling](#), [recurringResponse](#), [giftCardResponse](#)

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.

4.250 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:

None

4.251 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:

None

4.252 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:

None

4.253 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

4.254 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 Elements:

[enhancedData](#)

Attributes:

None

Child Elements:

None

4.255 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>
```

4.256 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.

Parent Elements:

[customerInfo](#)

Attributes:

None

Child Elements:

None

4.257 startDate

The `startDate` element is a optional child of the `subscription` element, which specifies the date the recurring billing should begin. It is also an optional child of both the `createAddOn` and `createDiscount` element, where it specifies either the starting date of the Add On charge or the starting date of the discount.

Type = Date; **Format** = YYYY-MM-DD

Parent Elements:

[subscription](#), [createAddOn](#), [createDiscount](#), [updateAddOn](#), [updateDiscount](#)

Attributes:

None

Child Elements:

None

4.258 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:

None

4.259 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.

Parent Elements:

[recurringRequest](#)

Attributes:

None

Child Elements (required):

[planCode](#)

Child Elements (optional):

[numberOfPayments](#), [startDate](#), [amount](#), [createDiscount](#), [createAddOn](#)

NOTE: If you include the `numberOfPayments` child element, the value submitted overrides the default value defined in the Plan.

Example: subscription Structure

```
<subscription>
  <planCode>Plan Reference Code</planCode>
  <numberOfPayments>1 to 99</numberOfRemianingPayments>
  <startDate>Start Date of recurring Cycle</startDate>
  <amount>Amount of Recurring Payment</amount>
  <createDiscount>
    <discountCode>Discount Reference Code</addOnCode>
    <name>Name of Discount</name>
    <amount>Amount of Discount</amount>
    <startDate>Start Date of Discount</startDate>
    <endDate>End Date of Discount</endDate>
  </createDiscount>
  <createAddOn>
    <addOnCode>Add On Reference Code</addOnCode>
```

```
<name>Name of Add On</name>
<amount>Amount of Add On</amount>
<startDate>Start Date of Add On Charge</startDate>
<endDate>End Date of Add On Charge</endDate>
</createAddOn>
</subscription>
```

4.260 subscriptionId

The `subscriptionId` element is a required child of the `recurringResponse` element and defines the Little 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.

Type = Long; **minLength** = N/A; **maxLength** = 19

Parent Elements:

[recurringResponse](#), [littleInternalRecurringRequest](#), [cancelSubscription](#), [updateSubscription](#), [updateSubscriptionResponse](#), [cancelSubscriptionResponse](#)

Attributes:

None

Child Elements:

None

4.261 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 Little & Co. of your intent to applying surcharges at least 30 days prior to implementing the surcharges. Please consult your Little Customer Experience Manager if you have additional questions.

Although included in the LittleXML 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:

None

4.262 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:

None

4.263 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:

None

4.264 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:

None

4.265 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:

None

4.266 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:

None

4.267 taxTypeIdentifier

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

4.268 terminalId

The `terminalId` element is an optional child of the `pos` element and defines the identifier of the terminal used at the point of sale.

NOTE: The `terminalId` element is required for MasterCard POS transactions.

Type = String; **minLength** = N/A; **maxLength** = 10

Parent Elements:

[pos](#)

Attributes:

None

Child Elements:

None

4.269 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:

None

4.270 threatMetrixSessionId

The `threatMetrixSessionId` element is a required child of the `advancedFraudChecks` element.

Type = String; **Allowed Characters** = a-z, A-Z, 0-9, -, _ ; **minLength** = 1; **maxLength** = 128

NOTE:	While generated by you at the time the consumer accesses your page, each <code>threatMetrixSessionId</code> must include a 5-character prefix, supplied by your Little Implementation Consultant, followed by a dash ("-"). The remainder of the Id must be unique for each instance of the customer accessing your page.
--------------	--

Parent Elements:

[advancedFraudChecks](#)

Attributes:

None

Child Elements:

None

4.271 token

The `token` element has two uses depending upon whether the element concerns a Little generated token (for tokenized merchants) or a PayPal generated token.

4.271.1 token (Little 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](#), [updateSubscription](#)

Attributes:

None

Child Elements:

Required: [littleToken](#)

Optional: [expDate](#), [cardValidationNum](#), [routingNum](#), [accType](#)

4.271.2 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:

None

4.272 tokenMessage

The tokenMessage element provides a short, human-readable explanation of the tokenResponseCode (see [Table 4-3](#)).

Type = String; **minLength** = N/A; **maxLength** = N/A

Parent Elements:

[tokenResponse](#)

Attributes:

None

Child Elements:

None

4.273 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](#), [updateSubscriptionResponse](#)

Attributes:

None

Child Elements:

Required: [tokenResponseCode](#), [tokenMessage](#)

Optional: [littleToken](#), [type](#), [bin](#), [eCheckAccountSuffix](#)

Example: tokenResponse Structure

```
<tokenResponse>
  <littleToken>Little Token</littleToken>
  <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>
```

4.274 tokenResponseCode

The `tokenResponseCode` element provides a 3-digit code (see [Table 4-3](#)) 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:

None

TABLE 4-3 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

4.275 totalHealthcareAmount

The `totalHealthcareAmount` 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:

None

4.276 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:

None

4.277 transactionId

The `transactionId` element is a required child of the `paypal` element, specifying the transaction Id returned from PayPal.

NOTE: The value of the Little & 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:

None

4.278 trialIntervalType

The `trialIntervalType` element is an optional child of the `createPlan` element and defines the interval period of a trial associated with the Plan. The overall length of a trial period is defined by the `trialIntervalType` combined with the `trialNumberOfIntervals` element.

Type = String (enum); **minLength** = N/A; **maxLength** = N/A

Parent Elements:

[createPlan](#)

Attributes:

None

Child Elements:

None

Enumerations:

Enumeration	Description
MONTH	The trial interval one month.
DAY	The trial interval one day.

4.279 trialNumberOfIntervals

The `trialNumberOfIntervals` element is an optional child of the `createPlan` element and defines the number of trial intervals (`trialIntervalType`) associated with the Plan. The overall length of a trial period is defined by the `trialIntervalType` combined with the `trialNumberOfIntervals` element.

Type = Integer; **minLength** = 1; **maxLength** = 99

Parent Elements:

[createPlan](#)

Attributes:

None

Child Elements:

None

4.280 triggeredRule

The `triggeredRule` element is an optional child of the `advancedFraudResult` element. It can appear multiple times in the response, once for each triggered rule from the ThreatMetrix policy. A triggered rule is one where the threshold is exceeded.

Type = String; **minLength** = N/A; **maxLength** = 64

Parent Elements:

[advancedFraudResults](#)

Attributes:

None

Child Elements:

None

4.281 type

The `type` element has two uses in LittleXML 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.

4.281.1 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

4.281.2 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 26.)

Please consult your Customer Experience Manager for additional information.

4.282 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:

None

4.283 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.

Type = String; **minLength** = 1; **maxLength** = 12

Parent Elements:

[lineItemData](#)

Attributes:

None

Child Elements:

None

4.284 unload

The `unload` element is the parent element for the transaction type that removes funds from a Gift Card.

Parent Elements:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

Attribute Name	Type	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: (all Required)

[orderId](#), [amount](#), [orderSource](#), [card](#)

4.285 unloadResponse

The `unloadResponse` element is the parent element for information returned to you in response to an **unload** transaction. It can be a child of either a `littleOnlineResponse` element or a `batchResponse` element.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	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
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. Note: This attribute applies only to Online transaction responses.

Child Elements:

Required: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [fraudResult](#), [giftCardResponse](#)

4.286 unloadReversal

The `unloadReversal` element is the parent element for the transaction type that reverses the unloading of a Gift Card.

Parent Elements:

[littleOnlineRequest](#)

Attributes:

Attribute Name	Type	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: (all Required)

[littleTxnId](#)

4.287 unloadReversalResponse

The `unloadReversalResponse` element is the parent element for information returned to you in response to an `unloadReversal` transaction.

Parent Elements:

[littleOnlineResponse](#)

Attributes:

Attribute Name	Type	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: [littleTxnId](#), [orderId](#), [response](#), [responseTime](#), [message](#)

Optional: [postDate](#), [giftCardResponse](#)

4.288 updateAddOn

The `updateAddOn` element is the parent of several child elements used to modify an additional charge added to an existing subscription.

Parent Elements:

[updateSubscription](#)

Attributes:

None

Child Elements (all Required):

[addOnCode](#), [name](#), [amount](#), [startDate](#), [endDate](#)

Example: updateAddOn Structure

```
<updateAddOn>
  <addOnCode>Add On Reference Code</addOnCode>
  <name>Name of Add On</name>
  <amount>Amount of Add On</amount>
  <startDate>Start Date of Add On Charge</startDate>
  <endDate>End Date of Add On Charge</endDate>
</updateAddOn>
```

4.289 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:

[accountUpdateResponse](#)

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>
```

4.290 updateCardValidationNumOnToken

The `updateCardValidationNumOnToken` element is the parent element for the transaction type used to update a CVV2/CVC2/CID code stored temporarily on the Little 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:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	<p>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 (<code>id=""</code>), disables Duplicate Detection for the transaction.</p> <p>Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.</p> <p>minLength = N/A maxLength = 25</p>
customerId	String	No	<p>A value assigned by the merchant to identify the consumer.</p> <p>minLength = N/A maxLength = 50</p>
reportGroup	String	Yes	<p>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.</p> <p>minLength = 1 maxLength = 25</p>

Child Elements:

Required: [littleToken](#), [cardValidationNum](#)

Optional: [orderId](#)

4.291 updateCardValidationNumOnTokenResponse

The `updateCardValidationOnTokenResponse` element is the parent element for the Little response to `updateCardValidationNumOnToken` transactions.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	The response returns the same value submitted in the <code>updateCardValidationOnToken</code> transaction. minLength = N/A maxLength = 25
customerId	String	No	The response returns the same value submitted in the <code>updateCardValidationOnToken</code> transaction. minLength = N/A maxLength = 50
reportGroup	String	Yes	The response returns the same value submitted in the <code>updateCardValidationOnToken</code> transaction. minLength = 1 maxLength = 25

Child Elements:

Required: [littleTxnId](#), [response](#), [message](#), [responseTime](#)

Optional: [orderId](#)

4.292 updateDiscount

The `updateDiscount` element is the parent of several child elements used to define updates to a discount applied to an existing subscription.

Parent Elements:

[updateSubscription](#)

Attributes:

None

Child Elements (all Required):

[discountCode](#), [name](#), [amount](#), [startDate](#), [endDate](#)

Example: customerInfo Structure

```
<updateDiscount>
  <discountCode>Discount Reference Code</discountCode>
  <name>Name of Discount</name>
  <amount>Amount of Discount</amount>
  <startDate>Start Date of Discount</startDate>
  <endDate>End Date of Discount</endDate>
</updateDiscount>
```

4.293 updatePlan

The `updatePlan` element is the parent of the transaction used to activate/deactivate Plans associated with recurring payments. When you deactivate a Plan, you can no longer reference that Plan for use with subscriptions. Existing subscriptions making use of the deactivated Plan will continue to use the Plan until either modified or completed. You can also reactivate a deactivated Plan by updating the Plan and setting the `active` flag to true.

Parent Elements:

[littleOnlineRequest](#), [littleRequest](#)

Attributes:

None

Child Elements:

[planCode](#), [active](#)

Example: createPlan Structure

```
<updatePlan>
  <planCode>Plan Reference Code</planCode>
  <active>true or false</active>
</updatePlan>
```

4.294 updatePlanResponse

The `updatePlanResponse` element is the parent of the response message to the `updatePlan` transaction used to deactivate Plans associated with recurring payments.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

None

Child Elements:

[littleTxnId](#), [response](#), [message](#), [responseTime](#), [planCode](#)

Example: updatePlan Structure

```
<updatePlan>
  <littleTxnId>Transaction ID</littleTxnId>
  <response>Response Reason Code</response>
  <message>Response Message</message>
  <responseTime>Date and Time in GMT</responseTime>
  <planCode>Plan Reference Code</planCode>
</updatePlan>
```

4.295 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 also create, update, or delete a Discount and/or an Add On.

Parent Elements:

[littleOnlineRequest](#), [batchRequest](#)

Attributes:

None

Child Elements:

Required: [subscriptionId](#)

Optional: [planCode](#), [billToAddress](#), (choice of) [card](#), [paypage](#), or [token](#), [billingDate](#), [createDiscount](#), [deleteDiscount](#), [updateDiscount](#), [createAddOn](#), [updateAddOn](#), [deleteAddOn](#)

Example: updateSubscription - Change Plan

```
<updatedSubscription>
  <subscriptionId>Subscription Id</subscriptionId>
  <planCode>New Plan Code</planCode>
</updatedSubscription>
```

Example: updateSubscription - Change Card

```
<updatedSubscription>
  <subscriptionId>Subscription Id</subscriptionId>
  <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>
```

Example: updateSubscription - Change Billing Info

```
<updatedSubscription>
  <subscriptionId>Subscription Id</subscriptionId>
  <billToAddress>
    <name>Customer's Full Name</name>
    <companyName>Company's Name</companyName>
    <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</email>
    <phone>Telephone Number</phone>
  </billToAddress>
</updatedSubscription>
```

Example: updateSubscription - Create Discount

```
<updatedSubscription>
  <subscriptionId>Subscription Id</subscriptionId>
  <createDiscount>
    <discountCode>Discount Reference Code</discountCode>
    <name>Name of Discount</name>
    <amount>Amount of Discount</amount>
    <startDate>Start Date of Discount</startDate>
    <endDate>End Date of Discount</endDate>
  </createDiscount>
</updatedSubscription>
```

Example: updateSubscription - Create Add On

```
<updatedSubscription>
  <subscriptionId>Subscription Id</subscriptionId>
```

```
<createAddOn>
  <addOnCode>Add On Reference Code</addOnCode>
  <name>Name of Add On</name>
  <amount>Amount of Add On</amount>
  <startDate>Start Date of Add On Charge</startDate>
  <endDate>End Date of Add On Charge</endDate>
</createAddOn>
</updatedSubscription>
```

Example: updateSubscription - Update Discount

```
<updatedSubscription>
  <subscriptionId>Subscription Id</subscriptionId>
  <updateDiscount>
    <discountCode>Discount Reference Code</discountCode>
    <name>Name of Discount</name>
    <amount>Amount of Discount</amount>
    <startDate>Start Date of Discount</startDate>
    <endDate>End Date of Discount</endDate>
  </updateDiscount>
</updatedSubscription>
```

Example: updateSubscription - Update Add On

```
<updatedSubscription>
  <subscriptionId>Subscription Id</subscriptionId>
  <updateAddOn>
    <addOnCode>Add On Reference Code</addOnCode>
    <name>Name of Add On</name>
    <amount>Amount of Add On</amount>
    <startDate>Start Date of Add On Charge</startDate>
    <endDate>End Date of Add On Charge</endDate>
  </updateAddOn>
</updatedSubscription>
```

Example: updateSubscription - Delete Discount

```
<updatedSubscription>
  <subscriptionId>Subscription Id</subscriptionId>
```

```
<deleteDiscount>
  <discountCode>Discount Reference Code</discountCode>
</deleteDiscount>
</updatedSubscription>
```

Example: updateSubscription - Delete Add On

```
<updatedSubscription>
  <subscriptionId>Subscription Id</subscriptionId>
  <deleteAddOn>
    <addOnCode>Add On Reference Code</addOnCode>
  </deleteAddOn>
</updatedSubscription>
```

4.296 updateSubscriptionResponse

The `updateSubscriptionresponse` element is the parent element for the response to an `updateSubscription` transaction.

Parent Elements:

[littleOnlineResponse](#), [batchResponse](#)

Attributes:

None

Child Elements:

[subscriptionId](#), [littleTxnId](#), [response](#), [message](#), [responseTime](#), [tokenResponse](#)

4.297 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:

[accountUpdateResponse](#)

Attributes:

None

Child Elements:

[type](#), [number](#), [expDate](#), [bin](#)

Example: originalCard Structure

```
<updatedToken>
  <littleToken>New Token Number</littleToken>
  <expDate>New Expiration Date</expDate>
  <type>Card Type</type>
  <bin>Card BIN</bin>
</updatedToken>
```

4.298 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:

None

4.299 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:

None

4.300 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:

None

4.301 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:

[echeckSale](#)

Attributes:

None

Child Elements:

None

4.302 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:

None

4.303 virtualAccountNumber

The `virtualAccountNumber` element is an optional child of the `enhancedAuthResponse` element and indicates if the card number used for the transaction corresponds to a virtual account number.

Type = Boolean; **Valid Values** = true or false

Parent Elements:

[enhancedAuthResponse](#)

Attributes:

None

Child Elements:

None

4.304 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:

None

4.305 virtualAuthenticationKeyPresenceIndicator

The virtualAuthenticationKeyPresenceIndicator is an optional child of the billMeLaterRequest element.

Type = String; **minLength** = N/A; **maxLength** = 1

Parent Elements:

[batchRequest](#)

Attributes:

None

Child Elements:

None

4.306 virtualGiftCard

The `virtualGiftCard` element is an optional child of the `activate` transaction. You include this element when you are requesting a Virtual Gift Card.

NOTE: In an early iteration of schema V8.22 issued in September of 2013 the `accountNumberLength` and `giftCardBin` child elements were defined as optional. If you coded to the earlier version, be aware that these elements are now required children of `virtualGiftCard`. If you do not include these elements, the transaction will fail XML validation.

Parent Elements:

[activate](#)

Attributes:

None

Child Elements (all required):

[accountNumberLength](#), [giftCardBin](#)

Example: virtualGiftCard Structure

```
<virtualGiftCard>
  <accountNumberLength>Length of Virtual Card Number</accountNumberLength>
  <giftCardBin>Requested BIN of Virtual Gift Card</giftCardBin>
</virtualGiftCard>
```

4.307 virtualGiftCardResponse

The virtualGiftCardResponse element is an optional child of the activateResponse transaction. This element is returned when you request a Virtual Gift Card number via an activate transaction and through its children, defines the virtual gift Card number, as well as the Card Validation number.

Parent Elements:

[activateResponse](#)

Attributes:

None

Child Elements (all optional):

[accountNumber](#), [cardValidationNum](#)

Example: virtualGiftCard Structure

```
<virtualGiftCardResponse>
  <accountNumber>Virtual Card Number</accountNumber>
  <cardValidationNum>Validation Number</cardValidationNum>
</virtualGiftCardResponse>
```

4.308 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 Little Recycling Engine, you can use the `void` transaction to halt the recycling of a `sale` transaction.

Parent Elements:

[littleOnlineRequest](#)

Attributes:

Attribute Name	Type	Required?	Description
id	String	No	<p>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 (<code>id=""</code>), disables Duplicate Detection for the transaction.</p> <p>Please refer to Duplicate Transaction Detection on page 7 for additional information about the operation of Duplicate checking.</p> <p>minLength = N/A maxLength = 25</p>
customerId	String	No	<p>A value assigned by the merchant to identify the consumer.</p> <p>minLength = N/A maxLength = 50</p>
reportGroup	String	Yes	<p>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.</p> <p>minLength = 1 maxLength = 25</p>

Child Elements:

Required: [littleTxnId](#)

Optional: [processingInstructions](#)

4.309 voidResponse

The `voidResponse` element is the parent element for information returned to you in response to a Void transaction.

Parent Elements:

[littleOnlineResponse](#)

Attributes:

Attribute Name	Type	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. Note: This attribute applies only to Online transaction responses.

Child Elements: (Required)

[littleTxnId](#), [response](#), [responseTime](#), [message](#), [postDate](#)

Child Elements: (Optional)

[recycling](#)

4.310 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.

Type = Integer; **totalDigits** = 2

Parent Elements:

[customerInfo](#)

Attributes:

None

Child Elements:

None

4.311 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.

Type = Integer; **totalDigits** = 2

Parent Elements:

[customerInfo](#)

Attributes:

None

Child Elements:

None

4.312 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 `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:

None



PAYMENT TRANSACTION RESPONSE CODES

This appendix provides reference material regarding the codes that are returned in a LittleXML 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.
206	Issuer Generated Error	Soft Decline	An unspecified error was returned by the issuer. Please retry the transaction and if the problem persist, contact the issuing bank.
207	Pickup card - Other than Lost/Stolen	Hard Decline	The issuer indicated that the gift card should be removed from use.
209	Invalid Amount	Hard Decline	The specified amount is invalid for this transaction.
211	Reversal Unsuccessful	Hard Decline	The reversal transaction was unsuccessful.

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
212	Missing Data	Hard Decline	Contact Little.
213	Pickup Card - Lost Card	Hard Decline	The submitted card was reported as lost and should be removed from use.
214	Pickup Card - Stolen Card	Hard Decline	The submitted card was reported as stolen and should be removed from use.
215	Restricted Card	Hard Decline	The specified Gift Card is not available for use.
216	Invalid Deactivate	Hard Decline	The Deactivate transaction is invalid for the specified card.
217	Card Already Active	Hard Decline	The submitted card is already active.
218	Card Not Active	Hard Decline	The submitted card has not been activated.
219	Card Already Deactivate	Hard Decline	The submitted card has already been deactivated.
221	Over Max Balance	Hard Decline	The activate or load amount exceeds the maximum allowed for the specified gift Card.
222	Invalid Activate	Hard Decline	The activate transaction is not valid or can no longer be reversed.
223	No transaction Found for Reversal	Hard Decline	The transaction referenced in the reversal transaction does not exist.
226	Incorrect CVV	Hard Decline	The transaction was declined because it was submitted with the incorrect security code.
229	Illegal Transaction	Hard Decline	The transaction would violate the law.
251	Duplicate Transaction	Hard Decline	The transaction is a duplicate of a previously submitted transaction.
252	System Error	Hard Decline	Contact Little.

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
253	Deconverted BIN	Hard Decline	The BIN is no longer valid.
254	Merchant Depleted	Hard Decline	No balance remains on gift Card.
255	Gift Card Escheated	Hard Decline	The Gift Card has been seized by the government while resolving an estate.
257	System Error (message format error)	Hard Decline	Issuer reported message format is incorrect. Contact Little.
258	System Error (cannot process)	Hard Decline	Issuer reported transaction could not be processed. Contact Little.
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.
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.

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
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.
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).

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
318	Restricted Card - Auth Fraud Advice Filtering Service	Hard Decline	This transaction is being declined due the operation of the Little Auth Fraud Advice Filtering Service.
319	Restricted Card - Fraud AVS Filtering Service	Hard Decline	This transaction is being declined due the operation of the Little 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.
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.

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
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.
331	Invalid POS Capability for Cardholder Authorized Terminal Transaction	Hard Decline	For a Cardholder Authorized Terminal Transaction the POS capability must be set to magstripe.
332	Invalid POS Cardholder ID for Cardholder Authorized Terminal Transaction	Hard Decline	For a Cardholder Authorized Terminal Transaction the POS Cardholder ID must be set to nopin.
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 healthcareIIAS tag for an FSA transaction	Hard Decline	The FSA Transactions submitted does not contain the <healthcareIIAS> data element.
358	Restricted by Little 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 littleTxnId	Hard Decline	There were no transactions found with the specified littleTxnId.
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 Subscription Created	Approved	The recurring request was processed successfully.
471	Parent Transaction Declined - Recurring Subscription Not Created	Hard Decline	The original payment transaction was declined, so the recurring payments have not been scheduled.
472	Invalid Plan Code	Hard Decline	The plan specified in the recurring request was invalid.
473	Scheduled Recurring Payment Processed	Approved	The scheduled recurring payment has been processed successfully.
475	Invalid Subscription Id	Hard Decline	The referenced subscription Id does not exist.
476	Add On Code Already Exists	Hard Decline	The specified Add On code already exists.

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
477	Duplicate Add On Codes in Requests	Hard Decline	Multiple createAddOn requests submitted with the same Add On Code.
478	No Matching Add On Code for the Subscription	Hard Decline	The Add On code specified does not exist.
480	No Matching Discount Code for the Subscription	Hard Decline	The Discount Code supplied in the updateDiscount or deleteDiscount transaction does not exist.
481	Duplicate Discount Codes in Request	Hard Decline	Multiple createDiscount requests submitted with the same Discount Code.
482	Invalid Start Date	Hard Decline	The supplied Start Date is invalid.
483	Merchant Not Registered for Recurring Engine	Hard Decline	You are not registered for the use of the Recurring Engine.
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.
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	N/A	An Account Updater response indicating the issuing bank does not participate in the update program
504	Contact the cardholder for updated information	N/A	An Account Updater response indicating you should contact the cardholder directly for updated information.
505	No match found	N/A	An Account Updater response indicating no match was found in the updated information.

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
506	No changes found	N/A	An Account Updater response indicating there have been no changes to the account information.
550	Restricted Device or IP - ThreatMetrix Fraud Score Below Threshold	Hard Decline	The transaction was declined because the resulting ThreatMetrix Fraud Score was below the acceptable threshold set in the merchant's policy.
601	Soft Decline - Primary Funding Source Failed	Soft Decline	A PayPal response indicating the transaction failed due to an issue with primary funding source (e.g. expired Card, insufficient funds, etc.).
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	Hard Decline - Primary Funding Source Failed	Hard Decline	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.
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.

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
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.
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.

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
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.
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.

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
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.
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.

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
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	MCC 9311 requires taxType element	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.
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.

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
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.
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.

TABLE A-1 Valid Values for the Response and Message Elements (Continued)

Response Code	Response Message	Response Type	Description
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 - Ecommerce	
Blank	Standard ecommerce or non-ecommerce transactions, not an authentication or attempted authentication. CAVV not present
Order Source - any	
B	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 - 3DSAuthenticated 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 - 3DSAuthenticated	
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 - 3DSAttempted	
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.
A	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
B	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)
C	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 Little & 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
M	Match
N	No Match
P	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 `littleResponse` or `littleOnlineResponse`, 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 649.

TABLE A-6 Response Header Error Message Examples

Example Message (message attribute of <code>littleOnlineResponse</code>)	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 <code><expDate></code> element, which has a <code>minLength</code> of 4, the system returns this error message.
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 <code><expDate></code> element, which has a <code>maxLength</code> of 4, the system returns this error message.
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 <code><type></code> 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.
Error validating xml data against the schema on line 8. Content of element <code><amount></code> is incomplete.	The <code><amount></code> element does not contains a valid value. For example, if you submitted a <code>captureGivenAuth</code> request and included the <code>amount</code> element without specifying a value, the system returns this error message.
Error validating xml data against the schema on line 6 tag name <code><echeckSale></code> is not allowed. Possible tag names are: <code><authorization></code> , <code><capture></code> , <code><credit></code> , <code><sale></code> , <code><void></code> ;	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 (<code><echeckSale></code> in the example), as well as the possible valid elements.

TABLE A-6 Response Header Error Message Examples (Continued)

Example Message (message attribute of <code>littleOnlineResponse</code>)	Description (line numbers will vary according to the location of the error)
System Error - Call Little & Co.	<p>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.</p> <p>The problem may also be due to the use of single quotes around the attribute (<code>merchantId</code>) value.</p>
Error validating xml data against the schema on line 1. Probably namespace URI of tag <code><littleOnlineRequest></code> is wrong (correct one is <code><http://www.little.com/schema></code> ;))	<p>The URI named in the <code>xmlns=</code> attribute is incorrect. The problem may also be due to the use of single quotes around the attribute value.</p> <p>Note: The URI may differ based upon the version of Little XML you are using.</p>
Error validating xml data against the schema on line 12786. The entity name must immediately follow the <code>& amp;</code> in the entity reference.	<p>The <code>&</code> symbol is used in XML to designate certain special characters. The error indicates that the symbol was submitted without an entity name (for example, <code>&quot;</code>; or <code>& amp;</code>;)).</p> <p>Typically, the error occurs when the name or one of the address lines of the <code>billToAddress</code> element includes the symbol instead of the entity reference. For example, "John & Mary Smith" should be sent as "John & amp; Mary Smith" or "John and Mary Smith").</p>
Error validating xml data against the schema on line 1. Content is not allowed in prolog.	<p>This error is usually an indication of extraneous characters appearing in front of the first XML element. For example, the <code>"?"</code> before the <code>"<"</code> symbol in the following line would cause this error to be returned:</p> <pre>?<?xml version="1.0" encoding="utf-8"></pre>
Duplicate Batch (Little ID: 28292109643, session sequence: 1, unique ID:) not processed - 29 duplicate transactions (57 total) in a row found. Duplicate Batch (Little ID: 23829210964, session sequence: 1, unique ID:) not processed - 96.49% of the transactions (57 total) in the batch are duplicates.	<p>(Batch file only) The system has determined that the Batch file is a duplicate and therefore not processed.</p> <p>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).</p> <p>The limits are more than 10 consecutive duplicate transactions detected and/or more than 25% of all transaction in the batch detected as duplicates.</p>

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.
N/A	N/A	417 Expectation Failed	An HTTP Expect header was included in the HTTP POST, which is not allowed.

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 for 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 purposes 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 309500-309600 352800-359000 36 38 39 64 65 6011 622126-622925 624000-262999 628200-628899	14 digits or 16 digits	3 digits	Account Numbers starting with 36 may be submitted as either Discover (recommended) or Diners Club.
JCB	35 (except 352800-358999)	16 digits	3 digits	Account numbers 352800-358999 are processed through the Discover network
MasterCard	51-55	16 digits or 19 digits	3 digits	
Visa	4	16 digits or 19 digits	3 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.



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
4457010100000008	Visa	992
4457010140000141	Visa	N/A
4457010200000247	Visa	N/A
4100200300011001	Visa	463
4100200300012009	Visa	N/A
4100200300013007	Visa	N/A
4100200310000002	Visa	N/A
4024720001231239	Visa	N/A
4457012400000001	Visa	N/A
4457013200000001	Visa	N/A
4457119922390123	Visa	N/A

TABLE C-1 Test Card Numbers

Account Number	Card Type	CVV2/CID
4457000300000007	Visa	N/A
4457000100000009	Visa	N/A
4457003100000003	Visa	N/A
4457000400000006	Visa	N/A
4457000200000008	Visa	N/A
4457000800000002	Visa	N/A
4457000900000001	Visa	N/A
4457001000000008	Visa	N/A
4005550000081019	Visa	N/A
4000000000000001	Visa	555
5112000100000003	MasterCard	N/A
5112002100000009	MasterCard	N/A
5112002200000008	MasterCard	N/A
5112000200000002	MasterCard	N/A
5112000300000001	MasterCard	N/A
5112000400000000	MasterCard	N/A
5112010400000009	MasterCard	N/A
5112000600000008	MasterCard	N/A
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

TABLE C-1 Test Card Numbers

Account Number	Card Type	CVV2/CID
5194560012341234	MasterCard	N/A
5435101234510196	MasterCard	987
5112000900000005	MasterCard	N/A
6011010000000003	Discover	758
6011010100000002	Discover	184
6011010140000004	Discover	N/A
375000026600004	American Express	N/A
375001000000005	American Express	N/A
375001010000003	American Express	0421
375001014000009	American Express	N/A
341234567890127	American Express	N/A

Index

Numerics

3DS response certification testing, 114

A

AAVS Response Codes, 643
accNum, 282
accountInformation, 283
accountNumber, 284
accountNumberLength, 285
accountUpdate, 286
accountUpdateFileRequestData, 287
accountUpdater, 288
accountUpdateResponse, 292
accType, 293
actionReason, 294
activate, 295
activateResponse, 296
activateReversal, 297
activateReversalResponse, 298
active, 299
addOnCode, 300
address response certification testing, 108
addressIndicator, 301
addressLine1, 302
Advanced AVS Response Codes, 643
advancedAVSResult, 303
advancedFraudChecks, 304
advancedFraudResult, 305
affiliate, 306
affluence, 307
Affluence Indicator Feature, 27
allowPartialAuth, 308
American Express
 Authorization lifespan, 174
amexAggregatorData, 309
amount, 310
approvedAmount, 311
authAmount, 312
authCode, 313
authDate, 314
authenticatedByMerchant, 315
authentication, 316
authenticationResult, 317

authenticationTransactionId, 318
authenticationValue, 319
authInformation, 320
Authorization
 lifespan, 174
authorization, 321
Authorization lifespan
 American Express, 52
 Bill Me Later, 52
 Discover, 52
 MasterCard, 52
 PayPal, 52
 Visa, 52
Authorization Reversal transactions
 certification testing, 91
authorizationResponse, 322
authorizationSourcePlatform, 323
authReversal, 324
authReversalResponse, 325
Automatic Account Updater, 14
availableBalance, 326
AVS response code testing, 106
AVS Response Codes, 642
avsResult, 327

B

balanceInquiry, 328
balanceInquiryResponse, 329
batchRequest, 330
batchResponse, 335
beginningBalance, 336
Bill Me Later
 Authorization lifespan, 174
billingDate, 337
billMeLaterRequest, 338
billMeLaterResponseData, 340
billToAddress, 341
bin, 343
bmlMerchantId, 344
bmlProductType, 345
bypassVelocityCheck, 346

C

campaign, 347
cancelSubscription, 348
cancelSubscriptionResponse, 348, 349
capability, 350
capture, 351
captureGivenAuth, 352
captureGivenAuthResponse, 353
captureResponse, 354
card, 355
cardAcceptorTaxId, 356
Cardholder Type Indicator Feature, 27
cardholderAuthentication, 357
cardholderId, 358
cardOrToken, 359
cardProductType, 360
cardValidationNum, 361
cardValidationResult, 362
cashBackAmount, 363
catLevel, 364
certification testing
 3DS responses, 114
 address responses, 108
 Authorization Reversal transactions, 91
 AVS response codes, 106
 response codes and messages, 111
 volume testing, 161
chargeback, 365
checkNum, 366
city, 367
clinicOtherAmount, 368
code, 369
commodityCode, 370
companyName, 371
country, 372
createAddOn, 373
createDiscount, 374
createPlan, 375
createPlanResponse, 376
credit, 377
creditLine, 379
creditLittleTxnId, 380
creditResponse, 381
customBilling, 382
Customer Insight Features, 26
customerInfo, 384
customerIpAddress, 385

customerReference, 386
customerRegistrationDate, 387
customerType, 388
customerWorkTelephone, 389

D

deactivate, 390
deactivateResponse, 391
deactivateReversal, 392
deactivateReversalResponse, 393
debtRepayment, 394
Decline Notice
 eCheck Verification, 46
deleteAddOn, 395
deleteDiscount, 396
deliveryType, 397
dentalAmount, 398
depositReversal, 399
depositReversalResponse, 400
description, 401
descriptor, 402
destinationCountryCode, 403
destinationPostalCode, 404
detailTax, 405
deviceReputationScore, 406
deviceReviewStatus, 407
discountAmount, 408
discountCode, 409
Discover
 Authorization lifespan, 174
dob, 410
Duplicate Transaction Detection Feature, 7
dutyAmount, 411

E

echeck, 412
eCheck Auto Redeposit Feature, 48
eCheck NoC Update Feature, 48
eCheck Processing Feature, 46
eCheck Validation Feature, 46
eCheck Verification
 Decline Notice, 46
eCheck Verification Feature, 46
eCheckAccountSuffix, 413
echeckCredit, 414
echeckCreditResponse, 415

echeckForToken, 416
echeckOrEcheckToken, 417
echeckRedeposit, 418
echeckRedepositResponse, 419
echeckSale, 420
echeckSalesResponse, 421
echeckToken, 422
echeckVerification, 423
echeckVerificationResponse, 424
echeckVoid, 425
echeckVoidResponse, 426
email, 427
employerName, 428
endDate, 429
endingBalance, 430
enhancedAuthResponse, 431
enhancedData, 433
entryMode, 437
error messages
 response Header, 649
 XML validation, 647
expDate, 438
extendedCardResponse, 439

F

Features

Affluence Indicator, 27
Automatic Account Updater, 14
Cardholder Type Indicator, 27
Customer Insight, 26
Duplicate Transaction Detection, 7
eCheck Auto Redeposit, 48
eCheck NoC Update, 48
eCheck Processing, 46
eCheck Validation, 46
eCheck Verification, 46
Healthcare Card, 49
Issuer Country Indicator, 27
Prepaid Indicator, 26
Report Groups, 10
Tokenization, 40
filtering, 440
Filtering Rules, 32
finalPayment, 441
firstName, 442
forceCapture, 443
forceCaptureResponse, 444

Fraud Filtering
 Filtering Rules, 32
 Fraud Velocity Filtering, 31
 Prepaid Card Filtering, 29
 Prior Chargeback Filtering, 30
 Prior Fraud Filtering, 31
 Security Code No-match Filtering, 31
Fraud Filters
 International Card Filtering, 30
Fraud Velocity Filtering, 31
fraudCheck, 445, 550
fraudCheckResponse, 446
fraudFilterOverride, 447
fraudResult, 448
fundingSource, 449

G

giftCardBin, 450
giftCardResponse, 451

H

Healthcare Card Feature, 49
healthcareIIAS, 453

I

idle time timeout, 73
IIASFlag, 454
incomeAmount, 455
incomeCurrency, 456
international, 457
International Card Filtering, 30
intervalType, 458
invoiceReferenceNumber, 459
Issuer Country Indicator Feature, 27
issuerCountry, 460
itemCategoryCode, 461
itemDescription, 462
itemDiscountAmount, 463
itemSequenceNumber, 464

L

lastName, 465
lineItemData, 466
lineItemTotal, 468

lineItemTotalWithTax, 469
litleInternalRecurringRequest, 470
litleOnlineRequest, 471
litleOnlineResponse, 472
litleRequest, 474
litleResponse, 475
litleSessionId, 477
litleToken, 478
litleTxnId, 479
load, 480
loadResponse, 481
loadReversal, 482
loadReversalResponse, 483

M

MasterCard
 Authorization lifespan, 174
merchantData, 484
merchantGroupingId, 485
merchantId, 486
message, 487
middleInitial, 488

N

name, 489
newAccountInfo, 490
newCardInfo, 491
newCardTokenInfo, 492
newTokenInfo, 493
nextRecycleTime, 494
number, 495
numberOfPayments, 496

O

optional certification tests
 3DS responses, 114
 address responses, 108
 AVS response codes, 106
 response codes and messages, 111
 volume testing, 161
orderDate, 497
orderId, 498
orderSource, 499
originalAccountInfo, 501
originalCard, 502

originalCardInfo, 503
originalCardTokenInfo, 504
originalToken, 505
originalTokenInfo, 506

P

password, 507
payerId, 508
paypage, 509
paypageRegistrationId, 510
PayPal
 Authorization lifespan, 174
paypal, 511
paypalOrderComplete, 512
persistent connection timeout, 73
phone, 513
planCode, 514
pos, 515
postDate, 516
postDay, 517
preapprovalNumber, 518
prepaid, 519
Prepaid Card Filtering, 29
Prepaid Indicator Feature, 26
prepaidCardType, 520
Prior Chargeback Filtering, 30
Prior Fraud Filtering, 31
processingInstructions, 521
productCode, 522

Q

quantity, 523

R

recurringRequest, 524
recurringResponse, 524, 525
recurringTxnId, 526
recycleAdvice, 527
recycleAdviceEnd, 528
recycleBy, 529
recycleEngineActive, 530
recycleId, 531
recycling, 532
Recycling Engine, 12
Recycling Engine and Auth Reversal, 55, 61

recyclingRequest, 534
refundReversal, 535
refundReversalResponse, 536
registerTokenRequest, 537
registerTokenResponse, 538
reloadable, 539
Report Group Feature, 10
residenceStatus, 540
response, 541
response codes and messages testing, 111
Response Header error messages, 649
responseCode, 542
responseMessage, 543
responseTime, 544
RFRRequest, 545
RFRResponse, 546
routingNum, 547
RxAmount, 548

S

sale, 549
saleResponse, 551
salesTax, 553
Security Code No-match Filtering, 31
sellerId, 554
sellerMerchantCategoryCode, 555
shipFromPostalCode, 556
shippingAmount, 557
shipToAddress, 558
ssn, 559
startDate, 560
state, 561
stopping auto-recycling, 55, 61
subscription, 562
subscriptionId, 564
surchargeAmount, 565

T

Tagging Transactions, 11
taxAmount, 566
taxExempt, 567
taxIncludedInTotal, 568
taxRate, 569
taxType, 570
taxTypeIdentifier, 571
terminalId, 572

termsAndConditions, 573
testing
 Authorization Reversal transactions, 91
 optional certification tests
 3DS responses, 114
 address responses, 108
 AVS response codes, 106
 response codes and messages, 111
 volume testing, 161
threatMetrixSessionId, 574
timeout
 persistent connection, 73
Timeout settings, 73
token, 575
Tokenization Feature, 40
tokenMessage, 576
tokenResponse, 577
tokenResponseCode, 578
totalHealthcareAmount, 579
track, 580
transactionId, 581
trialIntervalType, 582
trialNumberOfIntervals, 583
triggeredRule, 584
type, 585

U

unitCost, 587
unitOfMeasure, 588
unload, 589
unloadResponse, 590
unloadReversal, 591
unloadReversalResponse, 592
updateAddOn, 593
updateCardValidationNumOnToken, 595
updateCardValidationNumOnTokenResponse, 596
updatedCard, 594
updateDiscount, 597
updatedToken, 605
updatePlan, 598
updatePlanResponse, 599
updateSubscription, 600
updateSubscriptionResponse, 604
url, 606
user, 607

V

verificationCode, 608
 verify, 609
 virtualAccountNumber, 611
 virtualAuthenticationKeyData, 612
 virtualAuthenticationKeyPresenceIndicator, 613
 virtualGiftCard, 614
 virtualGiftCardResponse, 615
 Visa
 Authorization lifespan, 174
 visionAmount, 610
 void, 616
 voidResponse, 617
 volume certification testing, 161

X

XML elements

accNum, 282
 accountInformation, 283
 accountNumber, 284
 accountNumberLength, 285
 accountUpdate, 286
 accountUpdateFileRequestData, 287
 accountUpdater, 288
 accountUpdateResponse, 292
 accType, 293
 actionReason, 294
 activate, 295
 activateResponse, 296
 activateReversal, 297
 activateReversalResponse, 298
 active, 299
 addOnCode, 300
 addressIndicator, 301
 addressLine1, 302
 advancedAVSResult, 303
 advancedFraudChecks, 304
 advancedFraudResult, 305
 affiliate, 306
 affluence, 307
 allowPartialAuth, 308
 amexAggregatorData, 309
 amount, 310
 approvedAmount, 311
 authAmount, 312
 authCode, 313
 authDate, 314
 authenticatedByMerchant, 315
 authentication, 316
 authenticationResult, 317
 authenticationTransactionId, 318
 authenticationValue, 319
 authInformation, 320
 authorization, 321
 authorizationResponse, 322
 authorizationSourcePlatform, 323
 authReversal, 324
 authReversalResponse, 325
 availableBalance, 326
 avsResult, 327
 balanceInquiry, 328
 balanceInquiryResponse, 329
 batchRequest, 330
 batchResponse, 335
 beginningBalance, 336
 billingDate, 337
 billMeLaterRequest, 338
 billMeLaterResponseData, 340
 billToAddress, 341
 bin, 343
 bmlMerchantId, 344
 bmlProductType, 345
 bypassVelocityCheck, 346
 campaign, 347
 cancelSubscription, 348
 cancelSubscriptionResponse, 348, 349
 capability, 350
 capture, 351
 captureGivenAuth, 352
 captureGivenAuthResponse, 353
 captureResponse, 354
 card, 355
 cardAcceptorTaxId, 356
 cardholderAuthentication, 357
 cardholderId, 358
 cardOrToken, 359
 cardProductType, 360
 cardValidationNum, 361
 cardValidationResult, 362
 cashBackAmount, 363
 catLevel, 364
 chargeback, 365
 checkNum, 366
 city, 367

clinicOtherAmount, 368
code, 369
commodityCode, 370
companyName, 371
country, 372
createAddOn, 373
createDiscount, 374
createPlan, 375
createPlanResponse, 376
credit, 377
creditLine, 379
creditLittleTxnId, 380
creditResponse, 381
customBilling, 382
customerInfo, 384
customerIpAddress, 385
customerReference, 386
customerRegistrationDate, 387
customerType, 388
customerWorkTelephone, 389
deactivate, 390
deactivateResponse, 391
deactivateReversal, 392
deactivateReversalResponse, 393
debtRepayment, 394
deleteAddOn, 395
deleteDiscount, 396
deliveryType, 397
dentalAmount, 398
depositReversal, 399
depositReversalResponse, 400
description, 401
descriptor, 402
destinationCountryCode, 403
destinationPostalCode, 404
detailTax, 405
deviceReputationScore, 406
deviceReviewStatus, 407
discountAmount, 408
discountCode, 409
dob, 410
dutyAmount, 411
echeck, 412
eCheckAccountSuffix, 413
echeckCredit, 414
echeckCreditResponse, 415
echeckForToken, 416
echeckOrEcheckToken, 417
echeckRedeposit, 418
echeckRedepositResponse, 419
echeckSale, 420
echeckSalesResponse, 421
echeckToken, 422
echeckVerification, 423
echeckVerificationResponse, 424
echeckVoid, 425
echeckVoidResponse, 426
email, 427
employerName, 428
endDate, 429
endingBalance, 430
enhancedAuthResponse, 431
enhancedData, 433
entryMode, 437
expDate, 438
extendedCardResponse, 439
filtering, 440
finalPayment, 441
firstName, 442
forceCapture, 443
forceCaptureResponse, 444
fraudCheck, 445, 550
fraudCheckResponse, 446
fraudFilterOverride, 447
fraudResult, 448
fundingSource, 449
giftCardBin, 450
giftCardResponse, 451
healthcareIIAS, 453
IIASFlag, 454
incomeAmount, 455
incomeCurrency, 456
international, 457
intervalType, 458
invoiceReferenceNumber, 459
issuerCountry, 460
itemCategoryCode, 461
itemDescription, 462
itemDiscountAmount, 463
itemSequenceNumber, 464
lastName, 465
lineItemData, 466
lineItemTotal, 468
lineItemTotalWithTax, 469

littleInternalRecurringRequest, 470
littleOnlineRequest, 471
littleOnlineResponse, 472
littleRequest, 474
littleResponse, 475
littleSessionId, 477
littleToken, 478
littleTxnId, 479
load, 480
loadResponse, 481
loadReversal, 482
loadReversalResponse, 483
merchantData, 484
merchantGroupId, 485
merchantId, 486
message, 487
middleInitial, 488
name, 489
newAccountInfo, 490
newCardInfo, 491
newCardTokenInfo, 492
newTokenInfo, 493
nextRecycleTime, 494
number, 495
numberOfPayments, 496
orderDate, 497
orderId, 498
orderSource, 499
originalAccountInfo, 501
originalCard, 502
originalCardInfo, 503
originalCardTokenInfo, 504
originalToken, 505
originalTokenInfo, 506
password, 507
payerId, 508
paypage, 509
paypageRegistrationId, 510
paypal, 511
paypalOrderComplete, 512
phone, 513
planCode, 514
pos, 515
postDate, 516
postDay, 517
preapprovalNumber, 518
prepaid, 519
prepaidCardType, 520
processingInstructions, 521
productCode, 522
quantity, 523
recurringRequest, 524
recurringResponse, 524, 525
recurringTxnId, 526
recycleAdvice, 527
recycleAdviceEnd, 528
recycleBy, 529
recycleEngineActive, 530
recycleId, 531
recycling, 532
recyclingRequest, 534
refundReversal, 535
refundReversalResponse, 536
registerTokenRequest, 537
registerTokenResponse, 538
reloadable, 539
residenceStatus, 540
response, 541
responseCode, 542
responseMessage, 543
responseTime, 544
RFRRequest, 545
RFRResponse, 546
routingNum, 547
RxAmount, 548
sale, 549
saleResponse, 551
salesTax, 553
sellerId, 554
sellerMerchantCategoryCode, 555
shipFromPostalCode, 556
shippingAmount, 557
shipToAddress, 558
ssn, 559
startDate, 560
state, 561
subscription, 562
subscriptionId, 564
surchargeAmount, 565
taxAmount, 566
taxExempt, 567
taxIncludedInTotal, 568
taxRate, 569
taxType, 570
taxTypeIdentifier, 571
terminalId, 572

termsAndConditions, 573
threatMetrixSessionId, 574
token, 575
tokenMessage, 576
tokenResponse, 577
tokenResponseCode, 578
totalHealthcareAmount, 579
track, 580
transactionId, 581
trialIntervalType, 582
trialNumberOfIntervals, 583
triggeredRule, 584
type, 585
unitCost, 587
unitOfMeasure, 588
unload, 589
unloadResponse, 590
unloadReversal, 591
unloadReversalResponse, 592
updateAddOn, 593
updateCardValidationNumOnToken, 595
updateCardValidationNumOnTokenResponse,
596
updatedCard, 594
updateDiscount, 597
updatedToken, 605
updatePlan, 598
updatePlanResponse, 599
updateSubscription, 600
updateSubscriptionResponse, 604
url, 606
user, 607
verificationCode, 608
verify, 609
virtualAccountNumber, 611
virtualAuthenticationKeyData, 612
virtualAuthenticationKeyPresenceIndicator, 6
13
virtualGiftCard, 614
virtualGiftCardResponse, 615
visionAmount, 610
void, 616
voidResponse, 617
yearsAtEmployer, 618
yearsAtResidence, 619
zip, 620

Y

yearsAtEmployer, 618
yearsAtResidence, 619

Z

zip, 620