



flexEngage™ Integration Guide for sendReceipt Version 4.x

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Disclaimer

flexEngage™ v4.x is a "Feature Release". This new version includes several new features you must familiarize yourself with prior to installation on existing or new systems. Some of the new features improve/change the workflow of the Point of Sale that may impact existing users. Incorrect implementation could have a negative impact on your receipt data. flexEngage strongly advises against upgrading any existing integrations or implementing new integrations unless you have met the following conditions:

- Attended the mandatory onboarding meeting with flexEngage technical team to review implementation and testing plans
- Thoroughly read the "flexEngage Advanced Integration Guide" for this release
- Fully tested this release in a controlled production-like test lab environment
- Reviewed and completed the "flexEngage Integration Test Guide" document for this release specific to this upgrade or installation
- Understand how these changes impact existing flexEngage installations when upgraded

1. Introduction

The primary objective of this integration is to send as much customer, transaction, tender and item information, as possible to flexEngage. flexEngage then digitizes the entire transaction for the end consumer, and provides detailed statistics & analytics for the merchant.

The "flexEngage Integration Guide" provides integrators with detailed descriptions on how to connect with and test the flexEngage web services. This guide does not provide instructions on Point of Sale (POS) specific integration steps.

1.1 Intended Audience

This guide is for an integrator/developer that is looking to integrate a Point of Sale (POS) system with the flexEngage web services. This integration provides digital receipts to consumers as part of the checkout process. This document should be used in conjunction with the "flexEngage Integration Test Guide," which provides steps to test the POS integration and ensure the digital receipt functionality performs as expected.

1.2 Web Services Info

WSDLs

Test: <https://api-test.flexreceipts-lab.com/ws/soap/v4/flexReceipt.wsdl>



Endpoints

Test:

Legacy Environment (supports Latin-1 character sets):

<https://api-test.flexreceipts-lab.com:443/ws/soap/v4/>

Current Environment (supports UTF-8 character sets):

<https://api-test-02.flexreceipts-lab.com/ws/soap/v4/>

flexEngage will also provide you with a Merchant ID that you will need to include in the SOAP request.

Production: The endpoint for the production environment is given at the time of production deployment as coordinated with flexEngage.

The fully-qualified absolute URL of the endpoint/s should be configurable values on the POS to allow flexibility - move from one environment to another (e.g., test environment to production environment).

SSL Certificates

All communication with flexEngage web services are done over an encrypted **TLS connection**. For performance purposes and because of the “Poodle” vulnerability with SSL v3.0, flexEngage is optimized for TLS 1.2. The POS should use the **root certificate** and not sub certificates for api.flexEngage.com or api-test.flexEngage.com.

Note: Due to the “Poodle” vulnerability with SSL v3.0, flexEngage advises the use of TLS v1.2 instead of SSL for encrypted communications.

TLS/SNI Support

You should be using a TLS implementation that supports Server Name Identification (SNI). If you do not, you could encounter certificate issues with one or more of our environments. [Contact flexEngage if your TSL implementation does not support SNI.](#)

Web Service Authentication

flexEngage provides the Merchant with API keys to be used as credentials for all web service requests. Credentials must be transmitted using HTTP Basic Authentication.

Receipt Language

flexEngage allows Receipt Profiles to have language specific versions. The languages supported include English, Spanish, and French. English is the default language. To use this feature, you must:



- Have a Receipt Profile configured with more than 1 language. (**See Receipt Configuration Guide for details**)
- Send the ISO 2 character language abbreviation (en, fr, es) as “Accept-Language” in the http header of the sendReceipt message.

```
POST https://api.flexEngage.com:443/ws/soap/v4/ HTTP/1.1
Accept-Encoding: gzip,deflate
Content-Type: application/soap+xml;charset=UTF-8
Accept-Language: fr
Content-Length: 11195
Host: api.flexEngage.com:443
Connection: Keep-Alive
User-Agent: Apache-HttpClient/4.1.1 (java 1.5)
Authorization: Basic YUdjMGRtdHdiROYzZDFZNEs.....
```

1.3 Configurability

The POS integration with flexEngage (e.g., Web Services, POS UI) should be configurable so that operations can be modified without code changes. See **Appendix 1** for examples of features that should be configurable.

1.4 Testing Info

In order to test with flexEngage you must contact flexEngage Support to setup a test account. flexEngage must be notified in advance of any testing in the flexEngage integration test environment. Contact your flexEngage representative for instructions on how to contact flexEngage Support.

NOTE: Testing in the flexEngage Production environment is strictly prohibited. All production deployments must be coordinated with the flexEngage team ahead of time, and a flexEngage representative must be involved with the deployment.

In the event that post-deployment production troubleshooting (that cannot be satisfied in the flexEngage test environment) is required, the integrator must submit a written request to flexEngage to schedule a limited test against the flexEngage production environment. The following restrictions apply to all testing requests:

- ***No automated or high volume testing.***
- ***Only flexEngage approved versions of integration code can be used to communicate with the flexEngage production environment;***
- ***All code changes must be tested with flexEngage in the test environment prior to being deployed to the production environment.***
- ***Testing scope and timeframe should be documented in writing and should include:***
 - ***Date and time of the test.***



- **Duration of the test.**
- **Number of locations and registers (POS) involved in the test.**
- **Number of transactions by transaction type that will be sent.**
- **A copy of the written test plan that includes the test cases/scenarios that will be run.**

Fake Email Addresses

Intentionally sending fake email addresses when testing is prohibited. flexEngage recommends that you register a test domain name and create a test “catch-all” email account where any email sent to that domain is sent to the “catch-all” email account. This allows you to create an unlimited number of valid test email addresses. Most email providers have this feature. Below is a screenshot of that setting in Godaddy email. For additional information please contact flexEngage Support.

Catch-all setting in Godaddy email

Quota: 1000 0 MB available

Make this a catch-all account

Send copy to: (separate with com)

250 SMTP relays per day

Enable SPAM filter Deliver to Bul

Enable auto reply

Save

Catch-All Accounts
Catch-all accounts receive messages sent to any email addresses that aren't set up for a particular domain. They're commonly used to catch email sent to a misspelled user name. For example, if "kathy@coolexample.com" is a catch-all account, it receives email sent to "cathy@coolexample.com" when "cathy" is not a valid email address for coolexample.com.

1.5 Offline Mode

If the API is not reachable (e.g., store network connectivity is down), then failed API requests should be queued up and sent when access to the API is available again.

This can be accomplished by setting up a folder where failed API requests are stored and reprocessed from when access to the API is restored.



2. sendReceipt Process Flow

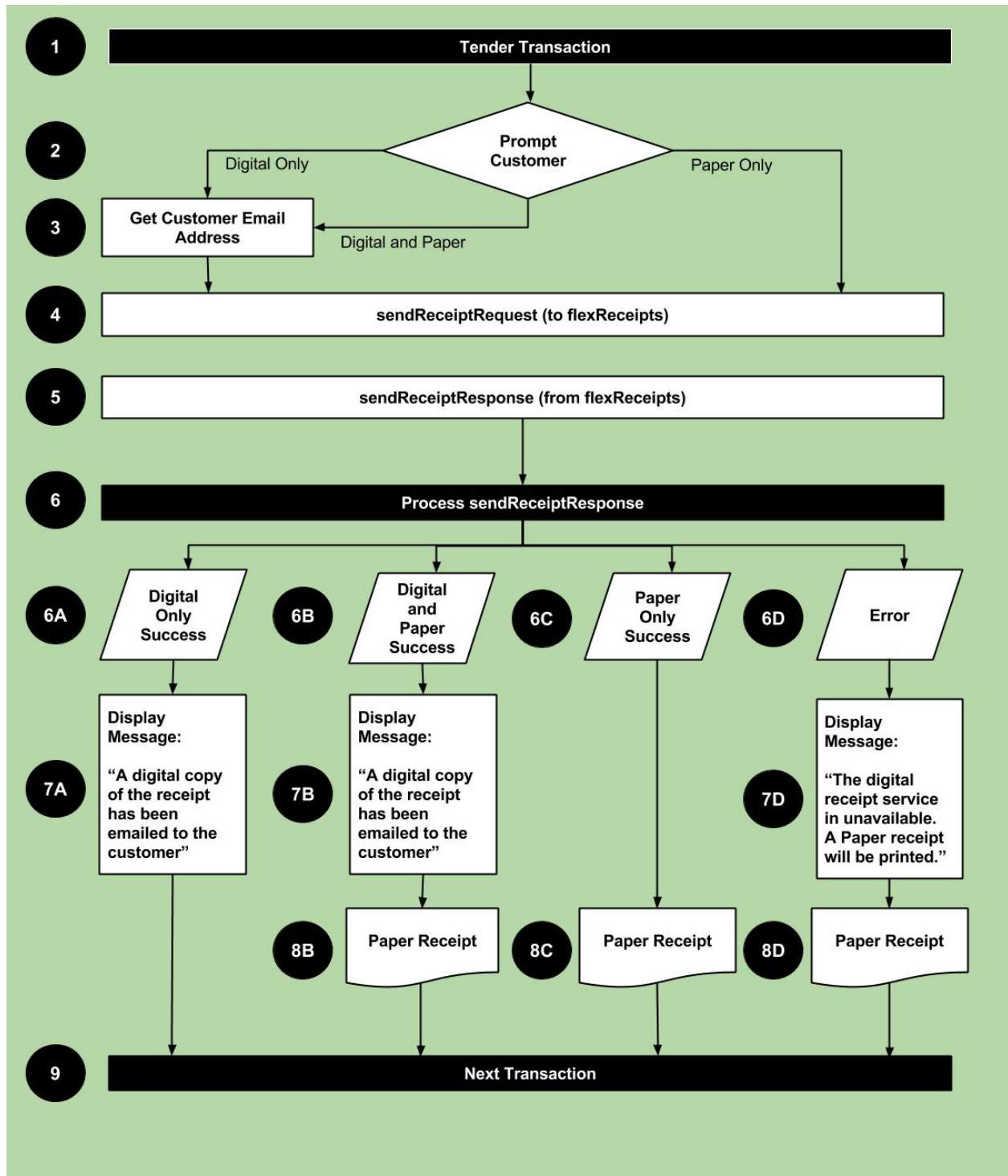
There is one (1) main service that the POS uses to create a digital receipt:

sendReceipt

This service sends as much customer, transaction, tender and item information, as possible to flexEngage. flexEngage then digitizes the entire transaction for the end consumer, and provides detailed statistics & analytics for the merchant.

<i>sendReceiptRequest</i>	POS sends transaction information to flexEngage and determines whether to generate a digital receipt.
<i>sendReceiptResponse</i>	flexEngage returns a message to the POS, providing a digital receipt confirmation or errors/warnings. <i>NOTE:</i> <i>The POS should not close out the transaction until the sendReceiptResponse is received and processed.</i>

The below flow chart gives an overview of how flexEngage expects to interact with the POS during the checkout process.





Process Flow Step Breakdown:

Step 1: The POS tenders the current transaction.

Step 2: The POS prompts the Customer or Cashier for receipt type (i.e., Digital Only, Digital and Paper, or Paper Only).

Step 3: For 'Digital Only' and 'Digital and Paper', either the Customer enters their email address OR the POS automatically populates the Customer's email address from its database.

Step 4: The POS issues a *sendReceiptRequest* web service call to flexEngage.

Step 5: flexEngage replies to the POS with a *sendReceiptResponse*

Step 6: The POS processes the *sendReceiptResponse* in 1 of 4 conditions:

6A: 'Digital Only' Success - A 'Digital Only' request was received and successfully processed.

6B: 'Digital and Paper' Success - A 'Digital and Paper' request was received and successfully processed.

6C: 'Paper Only' Success - A 'Paper Only' request was received and successfully processed.

6D: Error - An error occurred that prevented a digital receipt from being processed.

Steps 7: The POS may need to display a confirmation message.

7A: The POS displays a confirmation message, *"A digital copy of the receipt has been sent to the customer."*

7B: The POS displays a confirmation message, *"A digital copy of the receipt has been sent to the customer."*

7D: An error occurred. The POS displays a notification message, *"The digital receipt service is unavailable. A paper receipt will be printed."*

Step 8: The POS may need to print a paper receipt.

8B: Since the customer requested both a 'Digital and Paper' receipt, the POS must also print a

paper receipt.

8C: Since the customer requested a 'Paper Only' receipt, the POS must print a paper receipt.

8D: Since an error occurred, a digital receipt cannot be created, and the POS must print a paper receipt.

Step 9: The POS proceeds with the next transaction.

NOTE: *The web service call follows a request/response protocol. Your integration is expected to read and process the flexEngage service responses. The responses contain info needed for your POS workflow.*



3. sendReceipt Service (Sending the Digital Receipt)

The purpose of this service is to send customer, transaction, tender and item information to flexEngage. The entire transaction is then digitized for the end consumer. Detailed statistics and analytics are provided to the merchant.

sendReceiptRequest: This is the web service call made by the POS to send transaction information to flexEngage. It determines whether to generate a digital receipt.

sendReceiptResponse: This message is returned by flexEngage to provide the POS with additional instructions for if printing a receipt is required and to communicate a digital receipt confirmation or error/warning message.

NOTE: The POS should not close out the transaction until the sendReceiptResponse is received and processed.

3.1 sendReceiptRequest

You should be familiar with the sendReceiptRequest XSD message. Refer to 'Appendix 2' for a full description of all of the elements.

3.1.1 sendReceiptRequest Message

The sendReceiptRequest Message is an XML web service call and the XSD contains 4 types of data:

- Customer Information
- Receipt Information
- Store Information
- Workstation Information

Customer, Receipt, Store, and Workstation Information varies depending on the transaction. Specific examples on how to send these element are addressed later in this document.

3.1.2. sendReceiptRequest Details

Review the complete XSD listing and sample in 'Appendix 2' for complete information. This section only focuses on areas that require special attention.

Customer Information

Customer Information is required to uniquely identify the customer and associate them to the transaction. Send all types of Customer Information available, as they can be used to uniquely identify the customer.



1) Email Address

If customer requests a digital receipt ('Digital Only' or 'Digital and Paper'), an email address must be sent.

SAMPLE	NOTES
<CustomerEmailAddress>jane.doe@gmail.com</CustomerEmailAddress>	Digital receipt transactions ('Digital Only' & 'Digital and Paper') <u>REQUIRE</u> an email address. 'Paper Only' receipt transactions can leave the <CustomerEmailAddress> tag empty if no email address is on file.

2) Phone Number

If the customer record has a phone number, it should be sent.

SAMPLE	NOTES
<CustomerTelephone TypeCode="Home"> <AreaCode>null</AreaCode> <LocalNumber>+12125551212</LocalNumber> </CustomerTelephone>	Customer phone numbers should be sent in <LocalNumber> as numeric values.

Receipt Information

The <Receipt> section of the sendReceiptRequest XSD contains information about the receipt and transaction. Send as much of this information as possible. See 'Appendix 2' for details about the elements that should be sent.

Receipt Header

flexEngage has a <ReceiptHeader> element in the XSD that allows multi-line text at the top of the receipt in a location determined by the receipt template. This is typically used for dynamic text that needs to appear for special cases, such as employee purchase information or "Customer Receipt Copy". <ReceiptHeader> supports "/n" for a line break and "/t" for a tab.

EXAMPLE	WOULD DISPLAY AS
<ReceiptHeader>Customer Receipt Copy\nEmployee Purchase</ReceiptHeader>	Customer Receipt Copy Employee Discount

Receipt Footer (Dynamic)

flexEngage provides <AdditionalInfo1>, <AdditionalInfo2>, <AdditionalInfo3>, <AdditionalInfo4> and <AdditionalInfo5> multi-line elements for display at locations determined by the receipt template. This can be dynamic text sent by the POS (e.g., ***You Saved \$10.00***)



EXAMPLE	WOULD DISPLAY AS
<code><AdditionalInfo1>We Appreciate Your Business!</AdditionalInfo1></code> <code><AdditionalInfo2>*** You Saved \$10.00 ***</AdditionalInfo2></code> <code><AdditionalInfo3></AdditionalInfo3></code>	We Appreciate Your Business! *** You Saved \$10.00 ***

Transaction Types

Below are specific notes and instructions on how to use the *sendReceiptRequest* for the various types of POS transactions. See 'Appendix 3' for a list of valid transaction types.

TRANSACTION TYPE	EXAMPLE
Sale	<code><TransactionType>SaleTransaction</TransactionType></code>
Return	<code><TransactionType>ReturnTransaction</TransactionType></code> <code><ItemQuantity></code> should be NEGATIVE. <code><ItemTotal></code> should be NEGATIVE. <code><ItemPrice></code> should be NEGATIVE. <code><DiscountAmount></code> should be POSITIVE.
Exchange	<code><TransactionType>ExchangeTransaction</TransactionType></code>
Zero Dollar (Even Exchange)	<code><TransactionType>ExchangeTransaction</TransactionType></code> Do not send a <code><TransactionTender></code> section.
Deposit (e.g., Layaway initial deposit)	<code><TransactionType>DepositTransaction</TransactionType></code> <code><DepositAmount></code> should include the deposit amount. <code><DepositBalanceDue></code> should include the remaining amount due. <code><DepositAccountNumber></code> should only be used if an account is maintained by the merchant.

Multiple Transaction Discounts

flexEngage supports multiple transaction level discounts per receipt and allows for custom labels for each discount (e.g., "AARP Discount")

EXAMPLE	WOULD DISPLAY AS
<code><TransactionDiscount></code> <code> <DiscountAmount>-10.00</DiscountAmount></code> <code> <DiscountName>10% Discount</DiscountName></code>	10% Discount (10.00)



<pre></TransactionDiscount> <TransactionDiscount> <DiscountAmount>-15.00</DiscountAmount/> <DiscountName>AARP Discount</DiscountName/> </TransactionDiscount></pre>	AARP Discount (15.00)
---	-----------------------

Loyalty Information

If a loyalty number is associated with the customer, send as much loyalty information as is available. flexEngage collects the following loyalty information:

SAMPLE	NOTES
<pre><TransactionLoyalty> <LoyaltyNumber>1234</LoyaltyNumber> <LoyaltyCustomerName>Jim Smith</LoyaltyCustomerName> <LoyaltyExpirationDate>12/31/2015</LoyaltyExpirationDate> <LoyaltyBalance>46</LoyaltyBalance> <LoyaltyMisc>Points Earned Today: 20</LoyaltyMisc> </TransactionLoyalty></pre>	<ul style="list-style-type: none"> • Loyalty Number • Loyalty Customer's Name • Loyalty Expiration Date • Loyalty Point Balance • Misc. Loyalty information

Credit Card Information

For credit/debit transactions, send as much info as possible:

SAMPLE	NOTES
<pre><TenderCreditDebit> <CreditDebitFirst6Digits>411111</CreditDebitFirst6Digits> <CreditDebitLast4Digits>2222</CreditDebitLast4Digits> <CreditDebitTypeCode>Visa</CreditDebitTypeCode> <CreditDebitName> <FirstName>JANE</FirstName> <LastName>DOE</LastName> </CreditDebitName> <CreditDebitExpirationDate>1605</CreditDebitExpirationDate> </TenderCreditDebit> <TenderAuthorizationCode>ABC123</TenderAuthorizationCode></pre>	<p>First 6 and Last 4 digits of the credit/debit card.</p> <p><CreditDebitTypeCode> must match the enumeration in the flexEngage WSDL.</p> <p>First Name and Last Name should be sent from the card's track data.</p> <p>Expiration date should be sent in the format YYYYMM.</p>

Signature Images

flexEngage supports sending a BASE64BINARY image to be displayed on receipts.

EXAMPLE	NOTES
<pre><TenderSignature> <SignatureImage>..base64binary..</SignatureImage></pre>	Signatures are available for: <TransactionTender>



<pre><SignatureMimeType>image/jpeg</SignatureMimeType> <SignatureDate>2014-09-16T14:30:33-0800 </SignatureDate> <SignatureText>I agree to pay.....</SignatureText> </TenderSignature></pre>	<p><TransactionTerms>, and <TransactionSignature></p> <p><SignatureImage> should contain the base64binary code for the image file.</p> <p><SignatureText> can contain multi-line terms that are being signed.</p>
---	---

Terms with Signatures (and without)

flexEngage supports multiple multi-line text blocks for various types of terms and conditions. The terms can be sent with or without a BASE64BINARY signature image and date to be displayed on receipts.

EXAMPLE	NOTES
<pre><TransactionTerms> <TermSignature> <SignatureImage>..base64binary..</SignatureImage> <SignatureMimeType>image/jpeg</SignatureMimeType> <SignatureDate>2014-09-16T14:30:33-0800</SignatureDate> <SignatureText>I agree to pay.....</SignatureText> </TermSignature> <TermDescription></TermDescription> </TransactionTerms></pre>	<p>Terms can contain an optional signature and date.</p> <p><SignatureText> can be used for terms being signed if a signature is required.</p> <p><TermDescription> can be used for terms if no signature is required.</p> <p><TermSignature> is optional and can be omitted if a signature is not required.</p>

Multiple Tender Types

flexEngage supports multiple tender types per receipt (i.e., Cash, Visa, Check). Each tender type now has the following structure:

SAMPLE	NOTES
<pre><TransactionTender> <TenderTypeCode>Cash</TenderTypeCode> <TenderAmount Currency="USD" >10.00</TenderAmount> </TransactionTender> <TransactionTender> <TenderTypeCode>CreditDebit</TenderTypeCode> <TenderAmount Currency="USD" >10.00</TenderAmount> <TenderCreditDebit> <CreditDebitFirst6Digits>410000</CreditDebitFirst6Digits></pre>	<p>See 'Appendix 2' for complete information on tender types.</p> <p>See 'Appendix 3' for list of valid tender types.</p> <p>Only send <TenderCreditDebit> section</p>



<pre> <CreditDebitLast4Digits>2222</CreditDebitLast4Digits> <CreditDebitTypeCode>Visa</CreditDebitTypeCode> <CreditDebitName> <FirstName>JANE</FirstName> <LastName>DOE</LastName> </CreditDebitName> <CreditDebitExpirationDate>1605</CreditDebitExpirationDate> </TenderCreditDebit> <TenderAuthorizationCode>1234</TenderAuthorizationCode> <TenderTypeMisc></TenderTypeMisc> <TenderSignature> <SignatureImage>...base64binary data...</SignatureImage> <SignatureMimeType>image/jpeg</SignatureMimeType> <SignatureDate>2014-09-16T14:30:33-0800 </SignatureDate> <SignatureText>I agree to pay.....multi-line text</SignatureText> </TenderSignature> </TransactionTender> </pre>	<p>if it is a credit/debit tender.</p> <p><TenderSignature> is optional.</p>
---	---

Multiple Taxes

flexEngage supports multiple taxes (e.g., Local, VAT) per receipt. Each tax has the following structure:

EXAMPLE	WOULD DISPLAY AS / NOTES
<pre> <TransactionTaxes> </TaxDescription> <TaxPercent>0.065</TaxPercent> <TaxableAmount Currency="USD">10.00</TaxableAmount> <TaxAmount Currency="USD">0.65</TaxAmount> <TaxTypeCode></TaxTypeCode> </TransactionTaxes> <TransactionTaxes> <TaxDescription>Sales Tax</TaxDescription> <TaxPercent>0.07</TaxPercent> </TaxableAmount> <TaxAmount Currency="USD">23.52</TaxAmount> <TaxTypeCode></TaxTypeCode> </TransactionTaxes> </pre>	<p>Tax: 6.5% on \$10.00 \$0.65 Sales Tax: 7% \$23.52</p> <p>Not sending <TaxDescription> results in "Tax:" being printed.</p> <p><TaxAmount> is the only required amount. It is only required if any of the other elements are sent.</p>

Multiple Fees

flexEngage supports multiple fees per receipt. It has the following structure:

EXAMPLE	WOULD DISPLAY AS / NOTES
<pre> <TransactionFees> <FeeAmount Currency="USD">10.00</FeeAmount> <FeeDescription>Delivery Fee</FeeDescription> </TransactionFees> </pre>	<p>Delivery Fee: \$10.00 Service Charge: \$5.00 Fee: \$8.00</p>



<pre><TransactionFees> <FeeAmount Currency="USD">5.00</FeeAmount> <FeeDescription>Service Charge</FeeDescription> </TransactionFees> <TransactionFees> <FeeAmount Currency="USD">8.00</FeeAmount> </FeeDescription> </TransactionFees></pre>	<p>Not sending <FeeDescription> results in "Fee:" being printed.</p> <p><FeeAmount> is required for fee to display on receipt.</p>
--	--

Item Information

Send as much of this information as possible for each item on the receipt. Limiting information only to what is displayed on the paper receipt limits the type of data that can be used by head office reporting. See 'Appendix 2' for details about the elements to be sent.

ItemPrice and ItemTotal

Use **<ItemPrice>** for the Unit Price if it is available. Use **<ItemTotal>** for the Total Amount the customer is paying for the quantity purchased.

SAMPLE	NOTES
<pre><TransactionItem> <ItemName></ItemName> ... <ItemPrice></ItemPrice> <ItemTotal></ItemTotal> <PriceNotation></PriceNotation> <ItemQuantity></ItemQuantity> ... </TransactionItem></pre>	<p><ItemPrice> is for the Unit Price, including Discounts. Do not sent tag empty.</p> <p><ItemTotal> is the Total Amount the customer paid for the Item, including quantity and discounts. Do not sent tag empty:</p> <p>ItemTotal = (Unit Price - Discount) * Quantity</p> <p>If <ItemPrice> is sent and <ItemTotal> is not sent, the receipt will calculate <ItemTotal> as <ItemPrice> * <ItemQuantity></p>

Non-taxable and Other Price Notations

Use the **<PriceNotation>** element for any codes added to the final price on the printed receipt (e.g., "N" for non-taxable).

EXAMPLE	WOULD DISPLAY AS			
<pre><TransactionItem> <ItemName>Candy</ItemName> ... <ItemSKUNumber>0002</ItemSKUNumber> <ItemTotal>2.00</ItemTotal> <ItemPriceNotation>N</ItemPriceNotation></pre>	Item Candy	SKU 0002	Qty 1	Total \$2.00(N)



<ItemQuantity>1</ItemQuantity> ... </TransactionItem>	
---	--

Multiple Item Discounts

flexEngage supports **multiple** item level discounts per receipt and allows for custom labels for each discount (e.g., "Member Discount")

EXAMPLE	WOULD DISPLAY AS
<ItemDiscount> <DiscountAmount>-1.00</DiscountAmount/> <DiscountName>Coupon</DiscountName/> </ItemDiscount>	Coupon (1.00)
<ItemDiscount> <DiscountAmount>-2.00</DiscountAmount/> <DiscountName>Member Discount</DiscountName/> </ItemDiscount>	Member Discount (2.00)

Multi-line elements (line breaks)

Several elements in the flexEngage XSD support multi-line text with line breaks and tabs using a 'n' newline symbol and 't' tab symbol:

EXAMPLE	WOULD DISPLAY AS
<AdditionalInfo1>Thanks for shopping!\nHave A Great Day\tBye</AdditionalInfo1>	Thanks for Shopping! Have A Great Day Bye

Elements that support 'n' and 't'

<ReceiptHeader>	<SignatureText>	<AdditionalInfo2>
<ItemDescription>	<DeliveryPickupInstructions>	<AdditionalInfo3>
<MiscInfo>	<TermDescription>	<AdditionalInfo4>
<LoyaltyMisc>	<AdditionalInfo1>	<AdditionalInfo5>

Special Symbols & Characters

XML has a specific set of symbols that cannot be used in normal XML strings. In order to use these symbols, they must be sent as a special set of characters acceptable by XML. See the below table for some examples of these symbols and corresponding characters.

&	&	"	"	'	'	<	<	>	>
---	-------	---	--------	---	-------	---	------	---	------

Below is an example of how a Store Name with the '&' symbol must be sent in the XML string in



order for flexEngage to accept it. Note that '&' in the Invalid XML string has been replaced with '&' in the Valid XML string.

INVALID	<StoreName> Bed Bath & Beyond </StoreName>
VALID	<StoreName> Bed Bath &amp; Beyond </StoreName>

A good reference to learn more about XML entities and can be found at: http://en.wikipedia.org/wiki/List_of_XML_and_HTML_character_entity_references

Custom Fields

flexEngage supports the use of custom fields on items, taxes, and receipt objects. The name of a custom field should be alphanumeric (i.e. no special characters, spaces, etc). The value of the custom field must be a string.

NOTE: When adding custom fields to the payload that need to appear on the receipt, you must let the flexEngage representative know so the representative can coordinate with the appropriate flexEngage teams to ensure the fields are added on the receipt.

Below is an example of a payload with custom properties in bold. The names are illustrative of the type of value but this is not necessary (Note: you should name the fields based on their business purpose).

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:v4="http://www.flexreceipts.com/WS/v4">
  <soap:Header/>
  <soap:Body>
    <v4:sendReceiptRequest>
      <CustomerEmailAddress>kiran.kshatriya@flexengage.com</CustomerEmailAddress>
      <Receipt>
        <MyCustomField>XYZ</MyCustomField>
        <ReceiptType>DigitalOnly</ReceiptType>
        <ReceiptBarcodeType>Code128</ReceiptBarcodeType>
        <ReceiptBarcodeNumber>12345</ReceiptBarcodeNumber>
        <ReceiptDateTime>2021-12-13T00:00:00-05:00</ReceiptDateTime>
        <TransactionType>SaleTransdddaction</TransactionType>
        <TransactionNumber>123456789</TransactionNumber>
        <TransactionItem>
          <ItemName>Hat</ItemName>
          <ItemSKUNumber>123</ItemSKUNumber>
          <ItemUPCNumber>123</ItemUPCNumber>
          <ItemPrice>0</ItemPrice>
        </TransactionItem>
      </Receipt>
    </v4:sendReceiptRequest>
  </soap:Body>
</soap:Envelope>
```



```
<ItemTotal>0</ItemTotal>
<ItemQuantity UnitOfMeasureCode="UNIT">1</ItemQuantity>
  <MyCustomItemField>XYZ</MyCustomItemField>
</TransactionItem>
<TransactionGrossAmount>0</TransactionGrossAmount>
<TransactionNetAmount>0</TransactionNetAmount>
<TransactionTaxes>
  <TaxDescription>US State Tax</TaxDescription>
  <TaxPercent>0.0625</TaxPercent>
  <TaxableAmount>9256.01</TaxableAmount>
  <TaxAmount>578.74</TaxAmount>
  <TaxTypeCode>Sales</TaxTypeCode>
  <MyCustomTaxField>XYZ</MyCustomTaxField>
</TransactionTaxes>
<TransactionGrandAmount>0</TransactionGrandAmount>
<TransactionTenderApplied>0</TransactionTenderApplied>
</Receipt>
<Workstation>
  <WorkstationID>1</WorkstationID>
  <WorkstationOperator>Joe</WorkstationOperator>
  <WorkstationAssociate>Jane</WorkstationAssociate>
  <WorkstationStore>
    <Merchant>
      <MerchantID>POS-REST-1x</MerchantID>
    </Merchant>
    <StoreID>SOAPV4</StoreID>
    <StoreName>SOAPV4</StoreName>
    <StoreAddress>
      <v4:TypeCode>RetailStore</v4:TypeCode>
      <AddressLine1>1 Mills Circle</AddressLine1>
      <AddressLine2>912A</AddressLine2>
      <AddressLine3/>
      <v4:City>Ontario</v4:City>
      <v4:Territory>CA</v4:Territory>
      <v4:PostalCode>91764</v4:PostalCode>
      <v4:Country Code="US">USA</v4:Country>
    </StoreAddress>
    <StoreTelephone TypeCode="Work">
      <v4:LocalNumber>909-980-2900</v4:LocalNumber>
    </StoreTelephone>
  </WorkstationStore>
</Workstation>
</v4:sendReceiptRequest>
```



```
</soap:Body>
</soap:Envelope>
```

3.2 sendReceiptResponse

3.2.1 sendReceiptResponse Message

The *sendReceiptResponse* Message is an XML message that flexEngage sends in response to your *sendReceiptRequest*. The values returned in two specific elements/attributes of the *sendReceiptResponse* determine what the POS needs to do before closing the transaction:

1. **<DigitalReceiptProcessed>** - This element contains either a **"true"** or **"false"**. A value of **"false"** indicates that a digital receipt could not be created and the POS should print a paper receipt.
2. **errorStatus** - This attribute is only included in the *sendReceiptResponse* if there is an error condition. If sent, it is set to **"true"** and accompanied by at least one **<ExceptionCode>** and **<ExceptionDescription>** element with additional information.

SUCCESS for 'Digital Only' and 'Digital and Paper'

SAMPLE MESSAGE	NOTES
<pre><env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope"> <env:Header/> <env:Body> <ns2:sendReceiptResponse xmlns:ns2="http://www.flexEngage.com/WS/v4" xmlns:ns4="http://www.flexEngage.com/WS/v2.0"> <CustomerEmailAddress>JaneDoe@email.com</CustomerEmailAddresses> <DigitalReceiptProcessed>true</DigitalReceiptProcessed> <ReceiptID>ca82c9b7-6f9c-4611-a38c-36083f9ee84f</ReceiptID> </ns2:sendReceiptResponse> </env:Body> </env:Envelope></pre>	<p>This response is received if a 'Digital Only' or 'Digital and Paper' transaction is successfully received by flexEngage.</p> <p>A unique ReceiptID is returned that can be used with the flexEngage PDF retrieval web service to get a PDF version of the receipt for printing.</p> <p>Display a POS confirmation message stating: <i>"A digital copy of the receipt has been sent to the customer."</i></p>

SUCCESS for 'Paper Only'

SAMPLE MESSAGE	NOTES
<pre><env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope"></pre>	<p>This response is received if a 'PaperOnly' transaction is</p>



<pre><env:Header/> <env:Body> <ns2:sendReceiptResponse xmlns:ns2="http://www.flexEngage.com/WS/v4" xmlns:ns4="http://www.flexEngage.com/WS/v2.0"> <DigitalReceiptProcessed>true</DigitalReceiptProcessed> <ReceiptID>c13963bb-9faa-4290-8f6b-0305d0986936</ReceiptID> </ns2:sendReceiptResponse> </env:Body> </env:Envelope></pre>	<p>successfully received by flexEngage.</p> <p>A unique ReceiptID is returned that can be used with the flexEngage PDF retrieval web service to get a PDF version of the receipt for printing.</p> <p>A digital receipt will not be emailed and a paper receipt must be printed for the customer.</p> <p>Do <u>NOT</u> display a POS confirmation message stating that the digital receipt has been sent to flexEngage.</p>
---	---

ERROR

SAMPLE MESSAGE	NOTES
<pre><env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope"> <env:Header/> <env:Body> <ns2:sendReceiptResponse errorStatus="true" xmlns:ns2="http://www.flexEngage.com/WS/v4" xmlns:ns4="http://www.flexEngage.com/WS/v2.0"> <DigitalReceiptProcessed>false</DigitalReceiptProcessed> <Exceptions> <ExceptionDescription>receipt.receiptDateTime: must follow format yyyy-MM-dd'T'HH:mm:ss[Z (+ -)hh:mm]</ExceptionDescription> </Exceptions> </ns2:sendReceiptResponse> </env:Body> </env:Envelope></pre>	<p>This response is received if there is a problem with the data in the <i>sendReceiptRequest</i> and flexEngage cannot process it.</p> <p>Display a POS error message stating: <i>"The Digital Receipt service is currently not available. A paper receipt will be printed."</i></p> <p>A paper receipt must be printed for the customer.</p>



Appendix 1 - POS User Interface Requirements

The checkout process at the Point of Sale (POS) triggers an interaction with the cashier in order to gather customer information and determine if the customer wants a digital receipt. This section has example screenshots and explanations of what is required and the expected behavior of the POS UI.

Configurability

The following information should be configurable, either stored and changeable as part of the POS setup in a configuration file, or via a setup screen:

- Ability to independently turn the POS screen prompts ON/OFF per register.
 - This allows the Merchant to disable prompting for Customer Information. For example, the Merchant may not have time to obtain email address from each customer at a high velocity location such as a concession stand. The POS should still send all captured Customer Information in the web service requests.
- Ability to independently turn the flexEngage integration ON/OFF per register.
 - This allows the Merchant to disable the integration for individual registers. For example, the Merchant may be experiencing issues at only one specific register at a store, and would not want to disable the integration at the other working registers.
- URL for web services.
 - Should allow for fully qualified URL (including https://).
 - Can have editable presets for Production, Test, and Custom.
- Merchant ID (provided by flexEngage).
- API Keys used for HTTP Basic Authentication.
- Store Information (including address if not available directly from the POS).
- Timeout setting (in seconds).
- Email domain preset buttons to speed email address entry (e.g., @gmail.com, @yahoo.com, etc).

Setup Screens

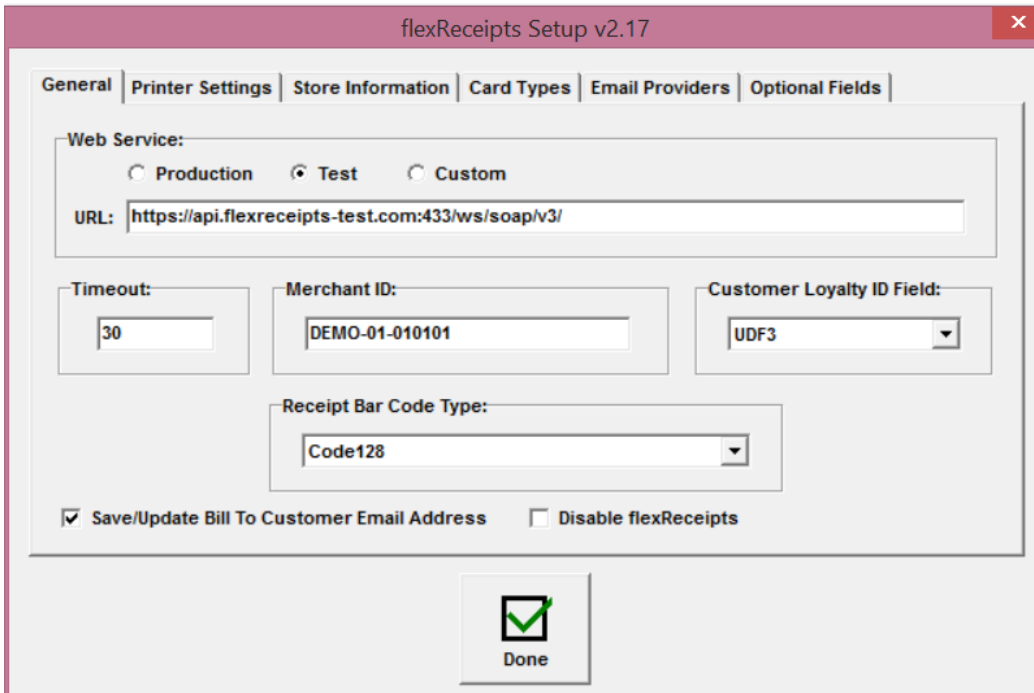
In order to make the integration configurable (per merchant, per store, per register), one or more setup screens should be created like the below examples:

General Settings

The following information is provided by flexEngage and should be configurable without modifying source code (i.e. changes in a setup screen or in a properties file):

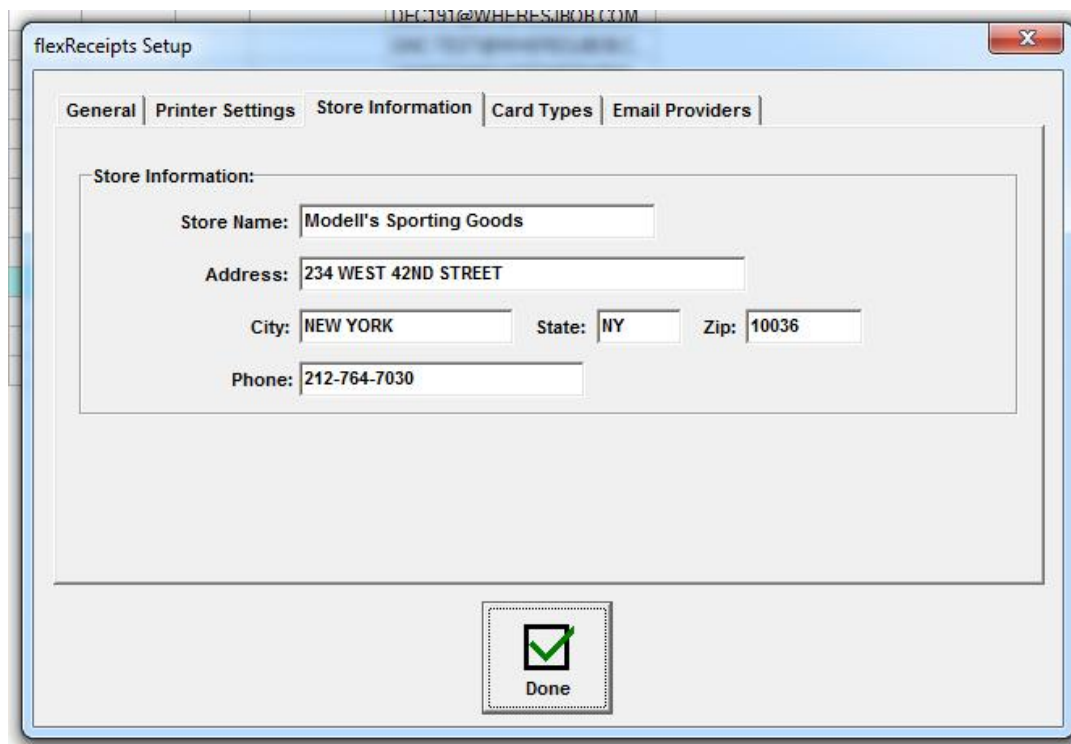
- **Merchant ID:** This is a flexEngage Merchant ID that is provided by flexEngage and allows the merchant to send digital receipts.
- **Web Service URLs:** These are the URLs needed for different flexEngage environments:
 - Production - This is the URL for normal operation once a Merchant is live in production.
 - Test - This is the URL for testing purposes or troubleshooting.
 - Custom - This provides future flexibility to point to alternate environments if needed.

- All values should be written to a properties file for persistence. Updating the values on this screen should also update the properties file.
- URLs should be fully qualified (e.g., <http://flexEngage.com/>, <https://flexEngage.com/>).



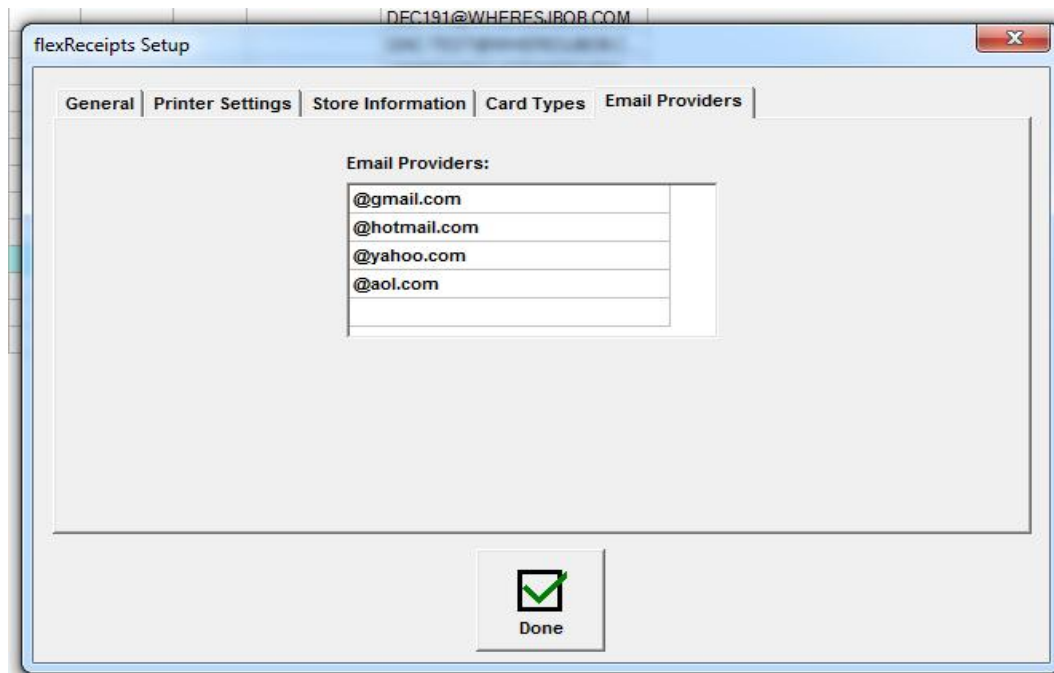
Store Information

If the POS does not already store the Store Name and Store Address information in a compatible format, you may need to setup a Store Information configuration screen.



Email Providers

The email domain presets should be configurable and allow the store to add additional common domain names that are appended when pressed (e.g., @gmail.com, @hotmail.com, @yahoo.com, @aol.com, etc). Up to five configurable email domain presets should be available to speed email address entry.



Receipt Selection:

When the customer is offered a digital receipt, a dialog box (such as the example below) should be presented at the POS to collect their email address and receipt option.



flexReceipts

"We are now emailing our receipts, what email address would you like it sent to?"

Email:

Opt-in to email marketing

SEND
email only - email address required

Version: 1.18.4.278

Note: You will get a higher adoption rate if customers are told that you now email your receipts rather than just asking if they would like an email receipt.

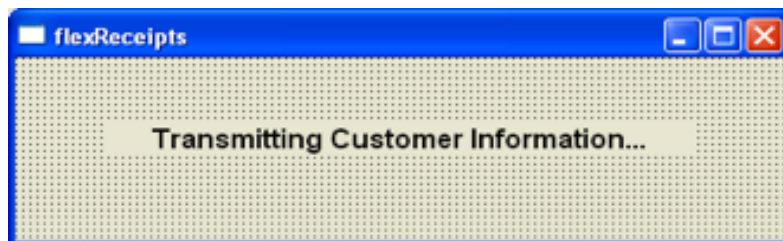
Populate the email field if the POS has the customer's email address on file for verification by the customer. **If the customer changes the pre-populated email address, you should update the POS customer record (if applicable) and send the updated email with the sendReceiptRequest web service message.**

The email address structure should be validated before accepting the email in this form:

- The 'Email' field cannot be blank for 'Digital Receipt Only' and 'Digital Receipt + Printed Receipt'.
- The email address should not contain any illegal characters for email addresses.
- The email address should be complete with the format xxx@xxx.yyy where 'xxx' is at least 1 legal character and 'yyy' is a valid domain extension.

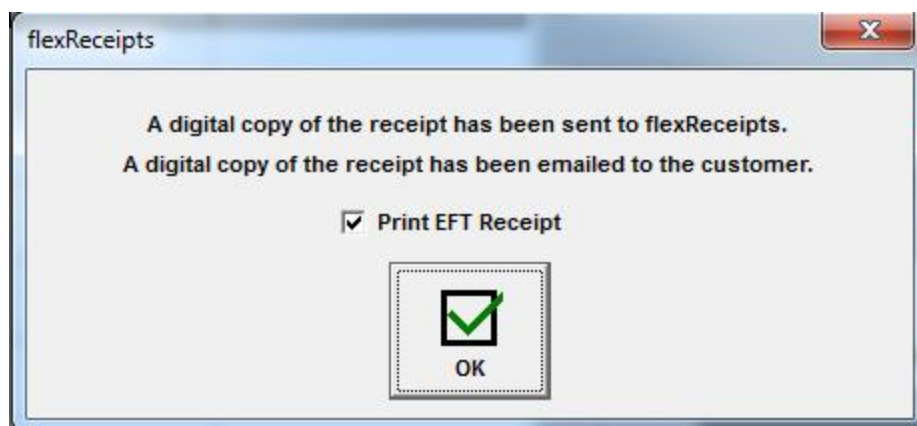
Transmission message

When transmitting information to flexEngage an information box should be presented at the POS:



Confirmation Message

Upon a successful response from **sendReceiptResponse** web service message (i.e., the digital receipt was successfully sent), a confirmation box should be presented at the POS to notify the cashier or customer:

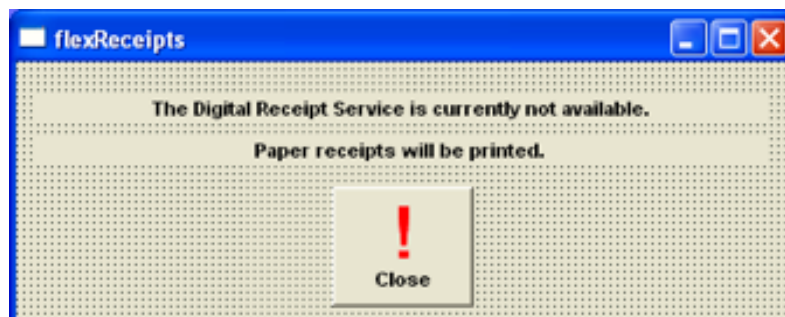


Note: Paper Only transactions should NOT display a confirmation message about the receipt being sent to flexEngage.



Error Message

In the event that the flexEngage service is unavailable (e.g., network connection issues, power outage) or the digital receipt cannot be processed, an error message is displayed at the POS to notify the cashier or customer:



NOTE: flexEngage sends detailed error codes and error messages that will greatly reduce troubleshooting time. Descriptive exception codes and error messages should be included in the error dialog box. flexEngage will require the exception code and exception message returned by `getCustomerResponse` and `sendReceiptResponse` in order to troubleshoot issues in a timely manner.



Appendix 2: sendReceipt Data Elements

sendReceiptRequest Message

All the XSD elements referenced below are expected unless otherwise indicated below or a written waiver is obtained from flexEngage. DO NOT send empty element that you do not use.

Data Types (DATA): <ul style="list-style-type: none"> • S - String • DEC - Decimal • I - Integer • E - Enumeration • DT - DateTime • D - Date • B64 - Base64Binary 	Validation Codes (VAL): <ul style="list-style-type: none"> • RQ - Required (Not Null). Tag must be present and not empty. • CRQ - Conditionally Required. Required in some scenarios. • LN(X) - Validated for max Length (X = max length) • EN - Validated for Enumeration • DF - Validated for Data Format • V - Only specific values accepted (non-enumeration)
--	--

MAKE SURE THAT EVERYTHING THAT APPEARS ON THE PAPER RECEIPT IS SENT.

ELEMENT / ATTRIBUTE	DATA	VAL	DESCRIPTION
CustomerEmailAddress	S	CRQ LN(151)	Customer's Email Address. Required for 'DigitalOnly' and 'DigitalAndPaper' receipts.
CustomerTelephone			Encapsulates telephone number.
AreaCode (CustomerTelephone)	S	LN(3)	3 digit Area code. Digits only. Do not use this field if your package includes SMS. Do not split customer phone number if using SMS. See LocalNumber description.
LocalNumber (CustomerTelephone)	S	CRQ LN (16)	*Must include "+" + "country code" + full phone number for SMS. I.e. "+14077708662" *Required if CustomerTelephone is present.
TypeCode	E	EN	Attribute of CustomerTelephone.



(CustomerTelephone)			Type of telephone number. (See TelephoneTypeCodeEnumeration in 'Appendix 3' for valid values).
Receipt		RQ	Encapsulates Receipt and Item information.
Mode	S	V	Valid Values are 'Production', 'Test', or 'Training'
ReceiptHeader	S	LN(1500)	Information to print at top of receipt based on the receipt template. Supports multi-line text with '\n' linebreak, and '\t' tab spacing. Place text inside <TextArea> tags.
ReceiptRevision			Encapsulates receipt revision information.
RevisionNumber	S	LN(255)	The current revision number of the receipt.
RevisionDateTime	DT	DF	Transaction revision date & time with UTC offset: 2014-09-16T14:30:33-08:00 Note: Send local time/date with UTC offset.
ReceiptType	E	RQ EN	Type of receipt requested. (See ReceiptTypeEnumeration in 'Appendix 3' for valid values).
ReceiptBarcodeType	E	EN	Barcode topology for receipt number used by the POS (leave blank to suppress barcode from printing on digital receipt). (See BarcodeTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "Code128"
ReceiptBarcodeNumber	S	LN(50)	The number used to generate the receipt barcode.
ReceiptDateTime	DT	RQ DF	Transaction date & time with UTC offset: 2014-09-16T14:30:33-08:00 Note: Send local time/date with UTC offset.
TransactionLoyalty			Encapsulates customer loyalty information.
LoyaltyNumber	S	CRQ	Customer loyalty number.



		LN(155)	*Required if TransactionLoyalty is present.
LoyaltyCustomerName	S	LN(50)	Loyalty customer's full name.
LoyaltyExpirationDate	D	DF	Format: YYYY-MM-DD
LoyaltyBalance	S		Current loyalty balance (points or amount).
LoyaltyMisc	S	LN(1500)	Additional loyalty details (e.g., "Points earned today: 10").
TransactionType	E	RQ EN LN(50)	Type of transaction. (See TransactionTypeCodeEnumeration in 'Appendix 3' for valid values).
RelatedTransactionReference			Encapsulates related transaction reference information.
Store	S		Store Number for related transaction
Register	S		POS ID for related transaction
TransactionNumber	S		Transaction Number for related transaction
ReasonCode	S		Reason Code for relating transactions
Reason	S		Reason Explanation for Reason Code
TransactionNumber	S	RQ LN(50)	Transaction number.
TransactionItem			Encapsulates item information.
ItemName	S	RQ* LN(50)	The name of the item. *Required with every <TransactionItem> or <Item> that is present.
ItemDescription	S	LN(1500)	Description of the item. Supports multi-line text with '\n' linebreak, and '\t' tab spacing. Place text inside <TextArea> tags.



ItemClassCode	S	EN LN(20)	Type of item. (See ItemClassEnumeration in 'Appendix 3' for valid values).
ItemSKUNumber	S	LN(50)	SKU number of the item.
ItemUPCNumber	S	LN(50)	UPC number of the item.
ItemSerialNumber	S	LN(50)	Serial Number of the item.
ItemModelNumber	S	LN(50)	Model number of the item.
ItemBrand	S	LN(25)	Brand of the item.
ItemIndustry	S	LN(15)	Industry of the item.
ItemManufacturer	S	LN(20)	Manufacturer of the item.
ItemPrice	DEC		The non-discounted unit price of the item.
Currency	E	EN	Attribute of ItemPrice. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of ItemPrice.
ItemTotal	DEC		Total amount paid for the item, including discounts and quantity.
Currency	E		Attribute of ItemTotal. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of ItemTotal.
ItemPriceNotation	S	LN(255)	A string placed after <ItemTotal> to annotate the price (e.g., "TX" for taxable, "N" for non-taxable.)
ItemQuantity	DEC		Quantity of Unit of the Item based on UnitOfMeasure. For example, two 6 packs of soda: <ul style="list-style-type: none">• ItemQuantity = 2



			<ul style="list-style-type: none"> Units = 6 UnitOfMeasureCode = 6pk <p>Default: "0.00" Note: To suppress quantity from displaying on receipt, do not send the <ItemQuantity> tag. Sending an empty <ItemQuantity> tag will result in "0.00" appearing on the receipt.</p>
Units	DEC		<p>Attribute of ItemQuantity. The number of individual items that make up a collection/grouping based on how item is sold.</p> <p>Default: "1"</p>
UnitOfMeasureCode	S		<p>Attribute of ItemQuantity. The unit of measure of how item is packaged (e.g., "Ga", "Ea", "Lbs", "6pk").</p> <p>Default: "unit"</p>
ItemDiscount			Encapsulates item-level discount information.
DiscountAmount	DEC	RQ*	<p>Amount of item discount (negative for normal sales and positive for returns).</p> <p>*Required if ItemDiscount is present.</p>
Currency	E	EN	<p>Attribute of DiscountAmount. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values).</p> <p>Default: "USD"</p>
ForeignAmount	DEC		Optional attribute of DiscountAmount.
DiscountName	S	LN(75)	<p>A label for the item discount (e.g., "50% off discount").</p> <p>Default: "Discount"</p>
ItemMisc	S	LN(1500)	<p>Additional information about the item. Supports multi-line text with '\n' linebreak, and '\t' tab spacing.</p>
ItemCategory	S	LN(100)	Optional category for the item



ItemCustomCategory1	S	LN(100)	Optional category for the item
ItemCustomCategory2	S	LN(100)	Optional category for the item
TransactionReturn			Encapsulates a return on a multiple transaction receipt.
OriginalStoreNumber	S		Store number that original purchase was made at.
OriginalRegister	S		POS ID that original purchase was made at.
OriginalTransactionNumber	S		Transaction Number of original. Required with every <TransactionReturn>
Item			Encapsulates a single returned item. <ul style="list-style-type: none">• <TransactionReturn> can contain 1 or more <Item> sections.• <Item> section contains the same elements as <TransactionItem>.• <Item> section can contain multiple <Item> sections.• Up to 3 levels of Items will display on receipt
MiscText	S	LN(1500)	Additional information about the item. Supports multi-line text with '\n' linebreak, and '\t' tab spacing. Note: This not appear on the default receipt template. If you plan on using this, you will need a custom template.
TransactionOrder			Encapsulates an order on a multiple transaction receipt.
OrderNumber			
OrderAction	S	V	Value must be 'Create', 'Cancel', 'Modify', 'Other', 'Payment', 'Pickup', 'Return', or 'Shipment'
BarcodeNumber	S		The number used to generate the TransactionOrder barcode.
BarcodeType	E	EN	Barcode topology for receipt number used



			by the POS (leave blank to suppress barcode from printing on digital receipt). (See BarcodeTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "Code128"
TotalAmount			
currency	E	EN	Attribute of TotalAmount. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of TotalAmount.
Description	S		Additional information about the TransactionOrder. Supports multi-line text with '\n' linebreak, and '\t' tab spacing
SoldTo			Encapulates Sold To information for the order. It contains the same elements as <TransactionSoldTo>
DeliveryPickup			Encapulates Delivery & Pickup information for the order. It contains the same elements as <TransactionDeliveryPickup>
Taxes			Encapulates tax information for the order. It contains the same elements as <TransactionTaxes>
Fees			Encapulates fee information for the order. It contains the same elements as <TransactionFees>
Deposit			Encapulates deposit information for the order. It contains the same elements as <TransactionDeposit>
TenderHistory			Encapsulates the tender history information for the order. It contains the same elements as <TransactionTenderHistory>



PaymentSchedule			Encapsulates the payment schedule information for the order.
Description	S		Payment description
AmountDue	DEC		The payment amount due
currency	E	EN	Attribute of AmountDue. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of AmountDue.
DueDate	D		Must follow format of yyyy-MM-dd'T'HH:mm:ss[Z](+ -)hh:mm
Item			Encapsulates fee information for the order. It contains the same elements as <TransactionFees>
MiscText	S	LN(1500)	Additional information about the item. Supports multi-line text with '\n' linebreak, and '\t' tab spacing Note: This not appear on the default receipt template. If you plan on using this, you will need a custom template.
TransactionGrossAmount	DEC		The total amount of all of the items before fees and taxes.
TransactionDiscount			Encapsulates receipt-level discounts (1 or more).
DiscountAmount	DEC	RQ*	Amount of discount (negative for normal sales, positive for returns). *Required if TransactionDiscount is present.
Currency	E	EN	Attribute of TransactionNetAmount. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of DiscountAmount.



DiscountName	S	LN(75)	A label for the transaction discount (e.g., "AARP discount", "\$50 off purchase"). Default: "Discount"
TransactionNetAmount	DEC		Sub-total amount before taxes.
Currency	E	EN	Attribute of TransactionNetAmount. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of TransactionNetAmount.
TransactionTaxes			Encapsulates tax information (1 or more).
TaxDescription	S	LN(100)	Description of tax (e.g., "FL State Tax") Default: "Tax"
TaxPercent	DEC		Tax Percentage (e.g., "0.06500" for 6.500%)
TaxableAmount	DEC		Amount being taxed by.
Currency	E	EN	Attribute of TaxableAmount. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of TaxableAmount.
TaxAmount	DEC	RQ*	Amount of the tax being levied. *Required if TransactionTaxes is present
Currency	E	EN	Attribute of TaxAmount. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of TaxAmount.
TaxTypeCode	S		Optional element (e.g., "Sales").
TransactionGrandAmount	DEC	RQ	Total amount of the transaction.
Currency	E	EN	Attribute of TransactionGrandAmount.



			(See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of TransactionGrandAmount.
TransactionTenderApplied	DEC		The sum of all of the tenders.
Currency	E		Attribute of TransactionTenderApplied. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of TransactionTenderApplied.
TransactionBalanceDue	DEC		Balance remaining to be paid by customer. NOTE: This will not display if you are using TransactionDeposit. If sending TransactionDeposit, use DepositBalanceDue.
Currency	E	EN	Attribute of TransactionBalanceDue. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of TransactionBalanceDue.
TransactionChangeDue	DEC		Amount of change returned for cash transactions. Do not send if no change due (i.e., DO NOT SEND "0" (zero)).
Currency	E	EN	Attribute of TransactionChangeDue. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of TransactionChangeDue.
TransactionTip	DEC		Tip amount added to receipt.



Currency	E	EN	Attribute of TransactionTip. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of TransactionTip.
TransactionServiceCharge	DEC		Service charge amount added to receipt. Note: Use TransactionFee if there are multiple charges.
Currency	E	EN	Attribute of TransactionServiceCharge. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	S		Optional attribute of TransactionServiceCharge.
TransactionTender			Encapsulates tender information (1 or more).
TenderTypeCode	E	RQ* EN LN(30)	Type of tender used. (See TenderTypeCodeEnumeration in 'Appendix 3' for valid values) Required if TransactionTender is present.
TenderDateTime	DT		Date and Time of previous or payment with UTC offset: 2014-09-16T14:30:33-08:00 Note: Send local time/date with UTC offset.
TenderAmount	DEC		Amount of payment.
Currency	E	EN	Attribute of TenderAmount. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of TenderAmount.
TenderCreditDebit			Encapsulates Credit/Debit payment information. Exclude all credit/debit related tags here for non-credit/debit tenders.



CreditDebitFirst6Digits	S	LN(6)	First 6 digits of Credit/Debit card.
CreditDebitLast4Digits	S	RQ* LN(4)	Last 4 digits of Credit/Debit card. *Required for printing on receipt if TenderTypeCode is "CreditDebit".
CreditDebitTypeCode	E	RQ* EN LN(20)	Type of Credit/Debit card. (See SubTenderTypeCodesEnumeration in 'Appendix 3' for valid values). *Required for printing on receipt if TenderTypeCode is "CreditDebit" and CreditDebitFirst6Digits NOT present.
CreditDebitName	S		Encapsulates name on Credit/Debit card.
FirstName	S	LN(50)	First Name on Credit/Debit card. Send from card track data.
LastName	S	LN(50)	Last Name on Credit/Debit card. Send from card track data.
CreditDebitExpirationDate	S	LN(4)	Credit/Debit card expiration date. Format: YYMM
TenderAuthorizationCode	S	LN(45)	Credit approval authorization code.
TenderTypeMisc	S	LN(1500)	Additional information about the tender (e.g., Gift card number, check number, etc.) Supports multi-line text with '\n' linebreak, and '\t' tab spacing
TenderSignature			Encapsulates tender signature information.
SignatureImage	B64	RQ* LN(4,294, 967,295)	Base64Binary signature image. *Required if TenderSignature is present.
SignatureMimeType	S	RQ* LN(50)	Supported values are: "image/bmp" "image/tiff" "image/jpeg" "image/png" *Required if TenderSignature is present.
SignatureDate	D		Format: YYYY-MM-DD



SignatureText	S	LN(1500)	Text block that accompanies signature. Can be used for payment terms. Supports multi-line text with '\n' linebreak, and '\t' tab spacing. Place text inside <TextArea> tags.
TenderEMV			Encapsulates EMV Data
AID	S		EMV Application ID
AppLabel	S		EMV Application Label
AppPreferenceName	S		EMV Application Preferred Name
AdditionalAtributes			Encapulates additional EMV elements needed for receipt Note: These do not appear on the default receipt template. If you plan on using these, you will need a custom template.
key	S		The label to be used on the receipt for the EMV data element.
value	S		The value to be used next to the label on the receipt for the additional EMV data element.
TransactionTenderHistory			Encapsulates tender history (1 or more). Use for listing payment history or payment schedule. Each payment uses its own TransactionTenderHistory section.
TenderTypeCode	E	RQ* EN LN(30)	Type of tender used. (See TenderTypeCodeEnumeration in 'Appendix 3' for valid values). *Required if TransactionTenderHistory is present.
TenderDateTime	DT		Date and Time of previous or future payment with UTC offset: 2014-09-16T14:30:33-08:00 Note: Send local time/date with UTC offset.



TenderAmount	DEC	RQ*	Amount of payment. *Required if TransactionTenderHistory is present.
Currency	E	EN	Attribute of TenderAmount. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	S		Optional attribute of TenderAmount.
TenderCreditDebit			Encapsulates Credit/Debit payment information Exclude all credit/debit related tags here if non-credit/debit tenders.
CreditDebitFirst6Digits	S	LN(6)	First 6 digits of Credit/Debit card.
CreditDebitLast4Digits	S	RQ* LN(4)	Last 4 digits of Credit/Debit card. *Required for printing on receipt if TenderTypeCode is "CreditDebit".
CreditDebitTypeCode	E	RQ* EN LN(20)	Type of Credit/Debit card. (See SubTenderTypeCodesEnumeration in 'Appendix 3' for valid values). *Required for printing on receipt if TenderTypeCode is "CreditDebit".
CreditDebitName			Encapsulates name on Credit/Debit card.
FirstName	S	LN(50)	First Name on Credit/Debit card. Send from card track data.
LastName	S	LN(50)	Last Name on Credit/Debit card. Send from card track data.
CreditDebitExpirationDate	S	LN(4)	Credit/Debit card expiration date. Format: YYMM
TransactionDeposit			Encapsulates deposit information.
DepositAccountNumber	S	LN(45)	Deposit account number.
DepositAmount	DEC	RQ*	Amount of deposit. *Required if TransactionDeposit is



			present.
Currency	E	EN	Attribute of DepositAmount. (See 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	DEC		Optional attribute of DepositAmount.
DepositBalanceDue	DEC		Amount remaining to be paid.
Currency	E	EN	Attribute of DepositBalanceDue. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"
ForeignAmount	S		Optional attribute of DepositBalanceDue.
TransactionSoldTo			Encapsulates sold to information.
SoldToAddress			Encapsulates sold to address.
TypeCode	E	EN	Attribute of SoldToAddress. Type of sold to address. (See AddressTypeCodeEnumeration in 'Appendix 3' for valid values).
AddressLine1	S	LN(100)	Sold to address line 1.
AddressLine2	S	LN(100)	Sold to address line 2.
AddressLine3	S	LN(100)	Sold To address line 3.
City	S	LN(50)	Sold to city.
Territory	S	LN(50)	Sold to state.
PostalCode	S	LN(25)	Sold to 5 digit zip code.
Country	S	LN(50)	Sold to country abbreviation (e.g. "USA").
Code	E	EN	Sold to country code. (See CountryCodeEnumeration in 'Appendix 3' for valid values).
PostalCodeExtension	S		Sold to 4 digit zip code extension.



SoldToCustomerName	S	RQ* LN(180)	Sold to customer full name. *Required if TransactionSoldTo is present.
SoldToCustomerNumber	S		Note: This is only available in the SoldTo section of <TransactionOrder>
SoldToTelephone1			Encapsulates sold to customer telephone number.
AreaCode	S	LN(3)	Sold to 3 digit Area code. Digits only.
LocalNumber	S	RQ* LN(16)	US: 7 digit telephone phone number. *Required if StoreTelephone is present.
TypeCode	E	EN	Attribute of SoldToTelephone. Type of sold to telephone number. (See TelephoneTypeCodeEnumeration in 'Appendix 3' for valid values).
SoldToTelephone2			Encapsulates sold to customer telephone number.
AreaCode	S	LN(3)	Sold to 3 digit Area code. Digits only.
LocalNumber	S	RQ* LN(16)	US: 7 digit telephone phone number. *Required if StoreTelephone is present.
TypeCode	E	EN	Attribute of SoldToTelephone. Type of sold to telephone number. (See TelephoneTypeCodeEnumeration in 'Appendix 3' for valid values).
TransactionFees			Encapsulates transaction fee information (1 or more).
FeeAmount	DEC	RQ*	Amount of the fee. *Required if TransactionFees is present.
Currency	E	EN	Attribute of FeeAmount. (See CurrencyTypeCodeEnumeration in 'Appendix 3' for valid values). Default: "USD"



ForeignAmount	DEC		Optional attribute of FeeAmount.
FeeDescription	S	LN(75)	Label for the fee (e.g., "Setup fee"). Default: "Fee"
TransactionDeliveryPickup			Encapsulates delivery/pickup information.
DeliveryPickupAddress			Encapsulates delivery/pickup address information.
TypeCode	E	EN	Attribute of DeliveryPickupAddress Type of delivery/pickup address. (See AddressTypeCodeEnumeration in 'Appendix 3' for valid values).
AddressLine1	S	RQ* LN(100)	Delivery/Pickup address line 1. *Required if DeliveryPickupAddress is present.
AddressLine2	S	LN(100)	Delivery/Pickup address line 2.
AddressLine3	S	LN(100)	Delivery/Pickup address line 3.
City	S	LN(50)	Delivery/Pickup city.
Territory	S	LN(50)	Delivery/Pickup state.
PostalCode	S	LN(25)	Delivery/Pickup 5 digit zip code.
Country	S	LN(50)	Delivery/Pickup country abbreviation (e.g. "USA").
Code	E	EN	Delivery/Pickup country code. (See CountryCodeEnumeration in 'Appendix 3' for valid values).
PostalCodeExtension	S	LN(25)	Delivery/Pickup 4 digit zip code extension.
DeliveryPickupInstructions	S	LN(1500)	Delivery/Pickup instructions or notes. Supports multi-line text with '\n' linebreak, and '\t' tab spacing. Place text inside <TextArea> tags.
DeliveryPickupDate	D		Delivery/Pickup date. Format: YYYY-MM-DD



TransactionSignature			Encapsulates the transaction signature.
SignatureImage	B64	RQ* LN(4,294, 967,295)	Base64Binary signature image. *Required if TransactionSignature is present.
SignatureMimeType	S	RQ* LN(50)	Supported values are: <ul style="list-style-type: none">• "image/bmp"• "image/tiff"• "image/jpeg" *Required if TransactionSignature is present.
SignatureDate	D		Format: YYYY-MM-DD
SignatureText	S	LN(1500)	Text block that accompanies signature. Can be used for final transaction terms. Supports multi-line text with '\n' linebreak and '\t' tab spacing.
TransactionTerms			Encapsulates terms and conditions information associated with the transaction that may or may not require a signature (1 or more). Can be used for Export, Financing terms, etc.
TermSignature			Encapsulates the signature information for the transaction terms.
SignatureImage	B64	RQ* LN(4,294, 967,296)	Base64Binary signature image. *Required if TermSignature is present.
SignatureMimeType	S	RQ* LN(50)	Supported values are: <ul style="list-style-type: none">• "image/bmp"• "image/tiff"• "image/jpeg" *Required if TermSignature is present.
SignatureDate	D		Format: YYYY-MM-DD
SignatureText	S	LN(1500)	Text block that accompanies signature.



			Can be used for terms being signed. Supports multi-line with '\n' linebreak and '\t' tab spacing. If no signature is required, use TermDescription for terms text.
TermDescription	S	RQ* LN(1500)	Text block for terms text. Supports multi-line with '\n' linebreak and '\t' tab spacing. *Required if TransactionTerms is present.
TransactionTrackingPixel	S	LN (2083)	URL for 1px by 1px tracking . The "src=" URL.
AdditionalInfo1 AdditionalInfo2 AdditionalInfo3 AdditionalInfo4 AdditionalInfo5	S S S S S	LN(1500) LN(1500) LN(1500) LN(1500) LN(1500)	Open text blocks for additional information that needs to be displayed on receipts. Each supports multi-line with '\n' linebreak and '\t' tab spacing.
<RawPOSReceipt>	S		Open text block for sending the raw receipt that is printed on paper at the store. Supports multi-line with '\n' linebreak and '\t' tab spacing.
Workstation		RQ	Encapsulates workstation (POS) information.
WorkstationID	S	RQ LN(20)	Unique ID of workstation.
WorkstationOperator	S	LN(50)	Cashier full name and/or number.
WorkstationAssociate	S	LN(50)	Associate full name and/or number.
WorkstationStore		RQ	Encapsulates store information.
Merchant		RQ	Encapsulates merchant information
MerchantID	S	RQ	Unique Merchant ID associated with



			merchant (provided by flexEngage).
StoreID	S	RQ LN(75)	Unique ID associated with store.
StoreName	S	RQ LN(100)	Name of the store.
StoreAddress		RQ	Encapsulates store address information
TypeCode	E	EN	Attribute of StoreAddress. Type of address. (See 'Appendix 3' for valid values).
AddressLine1	S	RQ LN(100)	Store address line 1.
AddressLine2	S	LN(100)	Store address line 2.
AddressLine3	S	LN(100)	Store address line 3.
City	S	RQ LN(50)	Store city.
Territory	S	LN(50)	Store state.
PostalCode	S	LN(25)	Store 5 digit zip code.
Country	S	RQ LN(50)	Store country
Code	E	EN	Store country code. (See CountryCodeEnumeration in 'Appendix 3' for valid values).
PostalCodeExtension	S	LN(25)	Store 4 digit zip code extension.
StoreTelephone			Encapsulates store telephone information.
AreaCode	S	LN(3)	Store 3 digit Area code (Digits only).
LocalNumber	S	RQ* LN(16)	US: 7 digit telephone phone number. *Required if StoreTelephone is present.
TypeCode	E	EN	Attribute of StoreTelephone.



			Type of telephone number. (See TelephoneTypeCodeEnumeration in 'Appendix 3' for valid values).
--	--	--	--

sendReceiptRequest Sample

```
<v4:sendReceiptRequest>
  <CustomerEmailAddress>jane@doe.com</CustomerEmailAddress>
  <CustomerTelephone TypeCode="Home">
    <v4:AreaCode>212</v4:AreaCode>
    <v4:LocalNumber>5551212</v4:LocalNumber>
  </CustomerTelephone>
  <Receipt>
    <Mode>Production</Mode>
    <ReceiptHeader>Customer Copy\nALL SALES FINAL</ReceiptHeader>
    <ReceiptRevision>
      <RevisionNumber>1</RevisionNumber>
      <RevisionDateTime>2014-09-16T14:30:33-0800</RevisionDateTime>
    </ReceiptRevision>
    <ReceiptType>DigitalOnly</ReceiptType>
    <ReceiptBarcodeType>Code128</ReceiptBarcodeType>
    <ReceiptBarcodeNumber>123456</ReceiptBarcodeNumber>
    <ReceiptDateTime>2014-09-16T14:30:33-0800</ReceiptDateTime>
    <TransactionLoyalty>
      <LoyaltyNumber>123456</LoyaltyNumber>
      <LoyaltyCustomerName>Jane Doe</LoyaltyCustomerName>
      <LoyaltyExpirationDate>2015-12-31</LoyaltyExpirationDate>
      <LoyaltyBalance>25</LoyaltyBalance>
      <LoyaltyMisc>Points Earned This Visit: 9</LoyaltyMisc>
    </TransactionLoyalty>
    <TransactionType>SaleTransaction</TransactionType>
    <TransactionNumber>8743267</TransactionNumber>
    <TransactionItem>
      <ItemName>First Item</ItemName>
      <ItemDescription>This is Item Description</ItemDescription>
      <ItemClassCode>Furniture</ItemClassCode>
      <ItemSKUNumber>0001</ItemSKUNumber>
      <ItemUPCNumber>491245693</ItemUPCNumber>
      <ItemSerialNumber>sn213546s566w</ItemSerialNumber>
      <ItemModelNumber>1398-01</ItemModelNumber>
      <ItemBrand>MyBrand</ItemBrand>
      <ItemIndustry>Houseware</ItemIndustry>
      <ItemManufacturer>Chairs R Us</ItemManufacturer>
      <ItemPrice Currency="USD">150.00</ItemPrice>
      <ItemTotal Currency="USD">300.00</ItemTotal>
      <ItemPriceNotation>TX</ItemPriceNotation>
      <ItemQuantity Units="1" UnitOfMeasureCode="unit">2</ItemQuantity>
      <ItemDiscount>
```



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```
<DiscountAmount Currency="USD">-100.00</DiscountAmount>
  <DiscountName>100.00 OFF</DiscountName>
</ItemDiscount>
<ItemMisc>Customer assembly required</ItemMisc>
<ItemCategory>Housewares</ItemCategory>
<ItemCustomCategory1>Dining</ItemCustomCategory1>
<ItemCustomCategory2>Contemporary</ItemCustomCategory2>
</Item/>
</TransactionItem>
<TransactionReturn>
  <OriginalStoreNumber>77777</OriginalStoreNumber>
  <OriginalRegister>030</OriginalRegister>
  <OriginalTransactionNumber>54321</OriginalTransactionNumber>
  <Item>
    <ItemName>Bad Item</ItemName>
    <ItemDescription>Bad Item Description</ItemDescription>
    <ItemClassCode>002</ItemClassCode>
    <ItemSKUNumber>777777</ItemSKUNumber>
    <ItemUPCNumber>333333333333</ItemUPCNumber>
    <ItemSerialNumber></ItemSerialNumber>
    <ItemModelNumber></ItemModelNumber>
    <ItemBrand></ItemBrand>
    <ItemIndustry></ItemIndustry>
    <ItemManufacturer></ItemManufacturer>
    <ItemPrice Currency="USD" ForeignAmount="">-5</ItemPrice>
    <ItemTotal Currency="USD" ForeignAmount="">-12</ItemTotal>
    <ItemPriceNotation>T</ItemPriceNotation>
    <ItemQuantity Units="1" UnitOfMeasureCode="unit">3</ItemQuantity>
    <ItemDiscount>
      <DiscountAmount Currency="USD" ForeignAmount="">3</DiscountAmount>
      <DiscountName>$3 Dollars Off</DiscountName>
    </ItemDiscount>
    <ItemMisc></ItemMisc>
    <ItemCategory></ItemCategory>
    <ItemCustomCategory1></ItemCustomCategory1>
    <ItemCustomCategory2></ItemCustomCategory2>
    </Item>
    <MiscText>Additional text for return here\nCan be multiple lines.</MiscText>
  </TransactionReturn>
</TransactionGrossAmount Currency="USD">200.00</TransactionGrossAmount>
<TransactionDiscount>
  <DiscountAmount Currency="USD">-100.00</DiscountAmount>
  <DiscountName>Another 100.00 Off Promo</DiscountName>
</TransactionDiscount>
<TransactionNetAmount Currency="USD">100.00</TransactionNetAmount>
<TransactionTaxes>
  <TaxDescription>Sales Tax</TaxDescription>
  <TaxPercent>0.07</TaxPercent>
  <TaxableAmount Currency="USD">100.00</TaxableAmount>
  <TaxAmount Currency="USD">7.00</TaxAmount>
  <TaxTypeCode>Sales</TaxTypeCode>
</TransactionTaxes>
```



```
<TransactionGrandAmount Currency="USD">107.00</TransactionGrandAmount>
<TransactionTenderApplied Currency="USD">200.00</TransactionTenderApplied>
<TransactionBalanceDue Currency="USD"></TransactionBalanceDue>
<TransactionChangeDue Currency="USD">93.00</TransactionChangeDue>
<TransactionTip Currency="USD"></TransactionTip>
<TransactionServiceCharge Currency="USD"></TransactionServiceCharge>
<TransactionTender>
  <TenderTypeCode>CreditDebit</TenderTypeCode>
  <TenderDateTime>2014-09-16T14:30:33-08:00</TenderDateTime>
  <TenderAmount Currency="USD">200.00</TenderAmount>
  <TenderCreditDebit>
    <CreditDebitFirst6Digits>410000</CreditDebitFirst6Digits>
    <CreditDebitLast4Digits>0317</CreditDebitLast4Digits>
    <CreditDebitTypeCode>Visa</CreditDebitTypeCode>
    <CreditDebitName>
      <FirstName>Jane</FirstName>
      <LastName>Doe</LastName>
    </CreditDebitName>
    <CreditDebitExpirationDate>1605</CreditDebitExpirationDate>
  </TenderCreditDebit>
  <TenderAuthorizationCode>0123</TenderAuthorizationCode>
  <TenderTypeMisc>Card present</TenderTypeMisc>
  <TenderSignature>
    <SignatureImage>...some base64binary code...</SignatureImage>
    <SignatureMimeType>image/png</SignatureMimeType>
    <SignatureDate>2014-10-20</SignatureDate>
    <SignatureText>I agree to pay for all of this...</SignatureText>
  </TenderSignature>
  <TenderEMV>
    <AID>A0000000031010</AID>
    <AppLabel>VISA CREDIT</AppLabel>
    <AppPreferredName>CAPITAL ONE VISA</AppPreferredName>
    <AdditionalAttributes>
      <key>EXP DATE</key>
      <value>04/19</value>
    </AdditionalAttributes>
    <AdditionalAttributes>
      <key>LAST 4</key>
      <value>*****5882</value>
    </AdditionalAttributes>
  </TenderEMV>
</TransactionTender>
<TransactionTenderHistory>
  <TenderTypeCode>CreditDebit</TenderTypeCode>
  <TenderDateTime>2014-10-20T14:30:33-08:00</TenderDateTime>
  <TenderAmount Currency="USD">107.00</TenderAmount>
  <TenderCreditDebit>
    <CreditDebitFirst6Digits></CreditDebitFirst6Digits>
    <CreditDebitLast4Digits>0317</CreditDebitLast4Digits>
    <CreditDebitTypeCode>Visa</CreditDebitTypeCode>
    <CreditDebitName>
      <FirstName></FirstName>
```



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```
<LastName></LastName>
</CreditDebitName>
  <CreditDebitExpirationDate></CreditDebitExpirationDate>
</TenderCreditDebit>
</TransactionTenderHistory>
<TransactionDeposit>
  <DepositAccountNumber></DepositAccountNumber>
  <DepositAmount Currency="USD"></DepositAmount>
  <DepositBalanceDue Currency="USD"></DepositBalanceDue>
</TransactionDeposit>
<TransactionSoldTo>
<SoldToAddress>
  <v4:TypeCode>Home</v4:TypeCode>
  <AddressLine1>123 Main Street</AddressLine1>
  <AddressLine2></AddressLine2>
  <AddressLine3></AddressLine3>
  <v4:City>Mytown</v4:City>
  <v4:Territory>FL</v4:Territory>
  <v4:PostalCode>34734</v4:PostalCode>
  <v4:Country Code="US">USA</v4:Country>
  <v4:PostalCodeExtension>3433</v4:PostalCodeExtension>
</SoldToAddress>
<SoldToCustomerName>Jane Doe</SoldToCustomerName>
<SoldToTelephone1 TypeCode="Mobile">
  <v4:AreaCode>321</v4:AreaCode>
  <v4:LocalNumber>5551212</v4:LocalNumber>
</SoldToTelephone1>
</TransactionSoldTo>
<TransactionFees>
  <FeeAmount Currency="USD" ForeignAmount="?">15.00</FeeAmount>
  <FeeDescription>Service Charge</FeeDescription>
</TransactionFees>
<TransactionDeliveryPickup>
<DeliveryPickupAddress>
  <v4:TypeCode>Home</v4:TypeCode>
  <AddressLine1>123 Smith Street</AddressLine1>
  <AddressLine2>Apt #2</AddressLine2>
  <AddressLine3></AddressLine3>
  <v4:City>Summerhome</v4:City>
  <v4:Territory>NY</v4:Territory>
  <v4:PostalCode>10019</v4:PostalCode>
  <v4:Country Code="US"></v4:Country>
  <v4:PostalCodeExtension>1212</v4:PostalCodeExtension>
</DeliveryPickupAddress>
<DeliveryPickupInstructions>Delivery between 9am-2pm. 2nd floor apartment.
</DeliveryPickupInstructions>
<DeliveryPickupDate>2014-11-15</DeliveryPickupDate>
</TransactionDeliveryPickup>
<TransactionSignature>
  <SignatureImage>cid:305576757180</SignatureImage>
  <SignatureMimeType>image/jpeg</SignatureMimeType>
  <SignatureDate>2014-10-20</SignatureDate>
```



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```
<SignatureText>I agree to the terms and conditions on this Sales Order....</SignatureText>
</TransactionSignature>
<TransactionTerms>
  <TermSignature>
    <SignatureImage>cid:246379747968</SignatureImage>
    <SignatureMimeType>image/jpeg</SignatureMimeType>
    <SignatureDate>2014-10-20</SignatureDate>
    <SignatureText>I agree to the above financing terms.</SignatureText>
  </TermSignature>
  <TermDescription>Promotion Type:\tEqual Payment No Interest\n
    Promotion Period:\tuntil 01/2017\n
    Promotion APR:\t0.00%\n
    Purchase APR:\t0.00%\n
    Account #:\txxxxxxxxxx103\n
    Auth 029671
  </TermDescription>
</TransactionTerms>

<TransactionTrackingPixel>http://url.trackingpixel.com/this/purchase.html</TransactionTrackingPixel>
  <AdditionalInfo1>This is a general\n
    multi-line text block.
  </AdditionalInfo1>
  <AdditionalInfo2>This is a general\n
    multi-line text block
  </AdditionalInfo2>
  <AdditionalInfo3>This is a general\n
    multi-line text block.
  </AdditionalInfo3>
  <AdditionalInfo4>This is a general\n
    multi-line text block.
  </AdditionalInfo4>
  <AdditionalInfo5>This is a general\n
    multi-line text block.
  </AdditionalInfo5>
</Receipt>
<Workstation>
  <WorkstationID>001</WorkstationID>
  <WorkstationOperator>Jim Cashier 00023</WorkstationOperator>
  <WorkstationAssociate>Sally Sales 1234</WorkstationAssociate>
  <WorkstationStore>
    <Merchant>
      <MerchantID>DEMO-01-010101</MerchantID>
    </Merchant>
    <StoreID>317</StoreID>
    <StoreName>Your Store Name</StoreName>
    <StoreAddress>
      <v4:TypeCode>RetailStore</v4:TypeCode>
      <AddressLine1>Main Street Mall</AddressLine1>
      <AddressLine2>10932 Main Street</AddressLine2>
      <AddressLine3>Suite 105</AddressLine3>
      <v4:City>Promotown</v4:City>
      <v4:Territory>FL</v4:Territory>
```



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```
<v4:PostalCode>34001</v4:PostalCode>
<v4:Country Code="US">USA</v4:Country>
<v4:PostalCodeExtension>1557</v4:PostalCodeExtension>
</StoreAddress>
  <StoreTelephone TypeCode="Work">
    <v4:AreaCode>407</v4:AreaCode>
    <v4:LocalNumber>5551212</v4:LocalNumber>
  </StoreTelephone>
</WorkstationStore>
</Workstation>
</v4:sendReceiptRequest>
```



Appendix 3: Enumerations

This table lists all of the elements that are enumerations, their type, and possible values.

Enumerations are CASE SENSITIVE

ENUMERATED ELEMENT	TYPE	VALID VALUES
ReceiptTypeEnumeration	String	"DigitalOnly" "PaperOnly" "DigitalAndPaper" "NoReceipt"
SubTenderTypeCodesEnumeration	String	"Visa" "MasterCard" "Amex" "DinersClub" "DiscoverCard" "Fleet" "JCB"
TenderTypeCodeEnumeration	String	"AccountsReivable" "AirmilesConversion" "CapitalBond" "Cash" "Check" "CheckCard" "EBTCash" "EBTFoodstamps" "ECheck" "ElectronicTollCollection" "GiftCard" "GiftCertificate" "CoPay" "Coupon" "CreditDebit" "CustomerAccount" "FoodStamps" "HouseAccount" "InternationalMaestro" "Loyalty" "ManufacturerCoupon" "Mobile" "PurchaseOrder" "StaffDressAllowance"



		"StoreCredit" "StoredValue" "TravelersCheck" "UKMaestro" "Voucher" "WICCheck" "EvenExchange"
TransactionTypeCodeEnumeration	String	"SaleTransaction" "ReturnTransaction" "ExchangeTransaction" "DepositTransaction" "OrderTransaction" "GiftReceiptTransaction" "PostVoidTransaction" "ReprintTransaction" "Other"
AddressTypeCodeEnumeration	String	"Home" "Work" "Delivery" "Pickup" "Billing" "RetailStore" "Warehouse" "Administration" "ExportSale"
TelephoneTypeCodeEnumeration	String	"Home" "Mobile" "Work"
TaxTypeCodeEnumeration	String	"Sales" "VAT" "GST" "PST" "HST" "Excise" "UseTax"
ItemClassEnumeration	String	"ElectronicsAndAppliance" "Grocery"



		"Health" "HomeGoods" "Restaurant" "Furniture" "Apparel" "DrugStore" "WholesaleClub" "DepartmentStore" "Auto" "ConvenienceStore" "Supermarket" "Beauty" "DepartmentStore" "MassMerchant" "HomeImprovement" "SportingGoods"
BarcodeTypeEnumeration	String	"GTIN" "EAN-128" "Code39" "Code128" (DEFAULT)
CurrencyTypeCodeEnumeration	String	"ADP" - Andorran Peseta "AED" - UAE Dirham "AFA" - Afghani "ALL" - Leck "AMD" - Armenian Dram "ANG" - Netherlands Antillan Guilder "AOA" - Kwanza "ARS" - Argentine Peso "ATS" - Schilling "AUD" - Australian Dollar "AWG" - Aruban Guilder "AZM" - Azerbaijanian Manat "BAM" - Convertible Marks "BBD" - Barbados Dollar "BDT" - Taka "BEF" - Belgian Franc "BGL" - Lev "BGN" - Bulgarian Lev "BHD" - Bahraini Dinar "BIF" - Burundi Franc "BMD" - Bermudian Dollar "BND" - Brunei Dollar



	<p>"BOB" - Boliviano "BOV" - Mvdol "BRL" - Brazilian Real "BSD" - Bahamian Dollar "BTN" - Ngultrum "BWP" - Pula "BYR" - Belarussian Ruble "BZD" - Belize Dollar "CAD" - Canadian Dollar "CDF" - Franc Congolais "CHF" - Swiss Franc "CLF" - Unidades de fomento "CLP" - Chilean Peso "CNY" - Yuan Renminbi "COP" - Colombian Peso "CRC" - Costa Rican Colon "CUP" - Cuban Peso "CVE" - Cape Verde Escudo "CYP" - Cyprus Pound "CZK" - Czech Koruna "DEM" - Deutsche Mark "DJF" - Djibouti Franc "DKK" - Danish Krone "DOP" - Dominican Peso "DZD" - Algerian Dinar "ECS" - Sucre "ECV" - Unidad de Valor Constante (UVC) "EEK" - Kroon "EGP" - Egyptian Pound "ERN" - Nakfa "ESP" - Spanish Peseta "ETB" - Ethiopian Birr "EUR" - euro "FIM" - Markka "FJD" - Fiji Dollar "FKP" - Falkland Islands Pound "FRF" - French Franc "GBP" - Pound Sterling "GEL" - Lari "GHC" - Cedi "GIP" - Gibraltar Pound "GMD" - Dalasi "GNF" - Guinea Franc "GRD" - Drachma</p>
--	--



	<p>"GTQ" - Quetzal "GWP" - Guinea-Bissau Peso "GYD" - Guyana Dollar "HKD" - Hong Kong Dollar "HNL" - Lempira "HRK" - Croatian kuna "HTG" - Gourde "HUF" - Forint "IDR" - Rupiah "IEP" - Irish Pound "ILS" - New Israeli Sheqel "INR" - Indian Rupee "IQD" - Iraqi Dinar "IRR" - Iranian Rial "ISK" - Iceland Krona "ITL" - Italian Lira "JMD" - Jamaican Dollar "JOD" - Jordanian Dinar "JPY" - Yen "KES" - Kenyan Shilling "KGS" - Som "KHR" - Riel "KMF" - Comoro Franc "KPW" - North Korean Won "KRW" - Won "KWD" - Kuwaiti Dinar "KYD" - Cayman Islands Dollar "KZT" - Tenge "LAK" - Kip "LBP" - Lebanese Pound "LKR" - Sri Lanka Rupee "LRD" - Liberian Dollar "LSL" - Loti "LTL" - Lithuanian Litus "LUF" - Luxembourg Franc "LVL" - Latvian Lats "LYD" - Lybian Dinar "MAD" - Moroccan Dirham "MDL" - Moldovan Leu "MGF" - Malagasy Franc "MKD" - Denar "MMK" - Kyat "MNT" - Tugrik "MOP" - Pataca</p>
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	<p>"MRO" - Ouguiya "MTL" - Maltese Lira "MUR" - Mauritius Rupee "MVR" - Rufiyaa "MWK" - Kwacha "MXN" - Mexican Peso "MXV" - Mexican Unidad de Inversion (UDI) "MYR" - Malaysian Ringgit "MZM" - Metical "NAD" - Namibia Dollar "NGN" - Naira "NIO" - Cordoba Oro "NLG" - Netherlands Guilder "NOK" - Norwegian Krone "NPR" - Nepalese Rupee "NZD" - New Zealand Dollar "OMR" - Rial Omani "PAB" - Balboa "PEN" - Nuevo Sol "PGK" - Kina "PHP" - Philippine Peso "PKR" - Pakistan Rupee "PLN" - Zloty "PTE" - Portuguese Escudo "PYG" - Guarani "QAR" - Qatari Rial "ROL" - Leu "RUB" - Russian Ruble "RUR" - Russian Ruble "RWF" - Rwanda Franc "SAR" - Saudi Riyal "SBD" - Solomon Islands Dollar "SCR" - Seychelles Rupee "SDD" - Sudanese Dinar "SEK" - Swedish Krona "SGD" - Singapore Dollar "SHP" - Saint Helena Pound "SIT" - Tolar "SKK" - Slovak Koruna "SLL" - Leone "SOS" - Somali Shilling "SRG" - Suriname Guilder "STD" - Dobra "SVC" - El Salvador Colon</p>
--	---



	<p>"SYP" - Syrian Pound "SZL" - Lilangeni "THB" - Baht "TJS" - Somoni "TMM" - Manat "TND" - Tunisian Dinar "TOP" - Pa'anga "TPE" - Timor Escudo "TRL" - Turkish Lira "TTD" - Trinidad and Tobago Dollar "TWD" - New Taiwan Dollar "TZS" - Tanzanian Shilling "UAH" - Hryvnia "UGX" - Uganda Shilling "USD" - US Dollar "USN" - US Dollar (Next day) "USS" - US Dollar (Same day) "UYU" - Peso Uruguayo "UZS" - Uzbekistan Sum "VEB" - Bolivar "VND" - Dong "VUV" - Vatu "WST" - Tala "XAF" - CFA Franc BEAC "XAG" - Silver "XAU" - Gold "XBA" - European Composite Unit (EURCO) "XBB" - European Unit of Account 9 (E.U.A.-9) "XBC" - European Unit of Account 17 (E.U.A.-17) "XCD" - East Caribbean Dollar "XDR" - SDR "XFO" - Gold-Franc "XFU" - UIC-Franc "XOF" - CFA Franc BCEAO "XPD" - Palladium "XPF" - CFP Franc "XPT" - Platinum "XTS" - Codes Specifically reserved for testing purposes "YER" - Yemeni Rial "YUM" - Yugoslavian Dinar "ZAR" - South Africa Rand "ZMK" - Kwacha "ZWD" - Zimbabwe Dollar</p>
--	---



CountryCodeEnumeration	String
	"AF" - Afghanistan
	"AL" - Albania
	"DZ" - Algeria
	"AS" - American Samoa
	"AD" - Andorra
	"AO" - Angola
	"AI" - Anguilla
	"AQ" - Antarctica
	"AG" - Antigua And Barbuda
	"AR" - Argentina
	"AM" - Armenia
	"AW" - Aruba
	"AU" - Australia
	"AT" - Austria
	"AZ" - Azerbaijan
	"BS" - Bahamas
	"BH" - Bahrain
	"BD" - Bangladesh
	"BB" - Barbados
	"BY" - Belarus
	"BE" - Belgium
	"BZ" - Belize
	"BJ" - Benin
	"BM" - Bermuda
	"BT" - Bhutan
	"BO" - Bolivia
	"BA" - Bosnia And Herzegovina
	"BW" - Botswana
	"BV" - Bouvet Island
	"BR" - Brazil
	"IO" - British Indian Ocean Territory
	"BN" - Brunei Darussalam
	"BG" - Bulgaria
	"BF" - Burkina Faso
	"BI" - Burundi
	"KH" - Cambodia
	"CM" - Cameroon
	"CA" - Canada
	"CV" - Cape Verde
	"KY" - Cayman Islands
	"CF" - Central African Republic
	"TD" - Chad
	"CL" - Chile
	"CN" - China



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	<p>"CX" - Christmas Island "CC" - Cocos (Keeling) Islands "CO" - Colombia "KM" - Comoros "CG" - Congo "CD" - Congo, The Democratic Republic Of The "CK" - Cook Islands "CR" - Costa Rica "CI" - Cote D'Ivoire "HR" - Croatia "CU" - Cuba "CY" - Cyprus "CZ" - Czech Republic "DK" - Denmark "DJ" - Djibouti "DM" - Dominica "DO" - Dominican Republic "TP" - East Timor "EC" - Ecuador "EG" - Egypt "SV" - El Salvador "GQ" - Equatorial Guinea "ER" - Eritrea "EE" - Estonia "ET" - Ethiopia "FK" - Falkland Islands (Malvinas) "FO" - Faroe Islands "FJ" - Fiji "FI" - Finland "FR" - France "GF" - French Guiana "PF" - French Polynesia "TF" - French Southern Territories "GA" - Gabon "GM" - Gambia "GE" - Georgia "DE" - Germany "GH" - Ghana "GI" - Gibraltar "GR" - Greece "GL" - Greenland "GD" - Grenada "GG" - Guernsey "GP" - Guadeloupe</p>
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	<p>"GU" - Guam "GT" - Guatemala "GN" - Guinea "GW" - Guinea-Bissau "GY" - Guyana "HT" - Haiti "HM" - Heard Island And Mcdonald Islands "VA" - Holy See (Vatican City State) "HN" - Honduras "HK" - Hong Kong "HU" - Hungary "IS" - Iceland "IN" - India "ID" - Indonesia "IR" - Iran, Islamic Republic Of "IQ" - Iraq "IE" - Ireland "IL" - Israel "IM" - Isle of Mann "IT" - Italy "JE" - Jersey "JM" - Jamaica "JP" - Japan "JO" - Jordan "KZ" - Kazakstan "KE" - Kenya "KI" - Kiribati "KP" - Korea, Democratic People'S Republic Of "KR" - Korea, Republic Of "KW" - Kuwait "KG" - Kyrgyzstan "LA" - Lao People'S Democratic Republic "LV" - Latvia "LB" - Lebanon "LS" - Lesotho "LR" - Liberia "LY" - Libyan Arab Jamahiriya "LI" - Liechtenstein "LT" - Lithuania "LU" - Luxembourg "MO" - Macau "MK" - Macedonia, The Former Yugoslav Republic Of "MG" - Madagascar</p>
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	<p>"MW" - Malawi "MY" - Malaysia "MV" - Maldives "ML" - Mali "MT" - Malta "MH" - Marshall Islands "MQ" - Martinique "MR" - Mauritania "MU" - Mauritius "YT" - Mayotte "MX" - Mexico "FM" - Micronesia, Federated States Of "MD" - Moldova, Republic Of "MC" - Monaco "MN" - Mongolia "MS" - Montserrat "MA" - Morocco "MZ" - Mozambique "MM" - Myanmar "NA" - Namibia "NR" - Nauru "NP" - Nepal "NL" - Netherlands "AN" - Netherlands Antilles "NC" - New Caledonia "NZ" - New Zealand "NI" - Nicaragua "NE" - Niger "NG" - Nigeria "NU" - Niue "NF" - Norfolk Island "MP" - Northern Mariana Islands "NO" - Norway "OM" - Oman "PK" - Pakistan "PW" - Palau "PS" - Palestinian Territory, Occupied "PA" - Panama "PG" - Papua New Guinea "PY" - Paraguay "PE" - Peru "PH" - Philippines "PN" - Pitcairn "PL" - Poland</p>
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	<p>"PT" - Portugal "PR" - Puerto Rico "QA" - Qatar "RE" - Reunion "RO" - Romania "RU" - Russian Federation "RW" - Rwanda "SH" - Saint Helena "KN" - Saint Kitts And Nevis "LC" - Saint Lucia "PM" - Saint Pierre And Miquelon "VC" - Saint Vincent And The Grenadines "WS" - Samoa "SM" - San Marino "ST" - Sao Tome And Principe "SA" - Saudi Arabia "SN" - Senegal "SC" - Seychelles "SL" - Sierra Leone "SG" - Singapore "SK" - Slovakia "SI" - Slovenia "SB" - Solomon Islands "SO" - Somalia "ZA" - South Africa "GS" - South Georgia And The South Sandwich Islands "ES" - Spain "LK" - Sri Lanka "SD" - Sudan "SR" - Suriname "SJ" - Svalbard And Jan Mayen "SZ" - Swaziland "SE" - Sweden "CH" - Switzerland "SY" - Syrian Arab Republic "TW" - Taiwan, Province Of China "TJ" - Tajikistan "TZ" - Tanzania, United Republic Of "TH" - Thailand "TG" - Togo "TK" - Tokelau "TO" - Tonga "TT" - Trinidad And Tobago</p>
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	<ul style="list-style-type: none">"TN" - Tunisia"TR" - Turkey"TM" - Turkmenistan"TC" - Turks And Caicos Islands"TV" - Tuvalu"UG" - Uganda"UA" - Ukraine"AE" - United Arab Emirates"GB" - United Kingdom"US" - United States"UM" - United States Minor Outlying Islands"UY" - Uruguay"UZ" - Uzbekistan"VU" - Vanuatu"VE" - Venezuela"VN" - Viet Nam"VG" - Virgin Islands, British"VI" - Virgin Islands, U.S."WF" - Wallis And Futuna"EH" - Western Sahara"YE" - Yemen"YU" - Yugoslavia"ZM" - Zambia"ZW" - Zimbabwe
--	--



Appendix 4 - Anatomy of a flexReceipt

flexEngage will work with the merchant to create a suitable receipt template based on their requirements. Below is a sample email receipt that has been annotated followed by a table that identifies the WSDL elements used for the annotated data. There are also expanded views of specific sections following this high level sample.

Figure 1: Sample Email Receipt Template



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Receipt by flexReceipts 1 Inbox x

flexReceipts <receipt@test.flexreceipts-lab.com> 2 9:23 AM (9 minutes ago) ☆

to me ▾

Hi John!

3 DEMO E-RECEIPTS MARKETING OFFERS ROI REPORTS

Go Beyond the Sale

How was your experience?

4

5

6 FLEXRECEIPTS RETAIL STORE
14 E Washington Street
STE 370
Orlando, FL 32584
40760FLEX8

7 This is the Receipt Header
It can have multiple lines.

SalesTransaction

Trans #: 88888 (05/13/2016) Revision: 999 (05/13/2016)

Store #: 333 Register #: 090 Associate: Sam Cashier: Jbob

Related Trans #: 98765 Store #: 111 Register #: 020 Reason Code: R555
Reason: Detailed Reason Here

Loyalty #: 12345 (Joe Customer) Exp Date: 05/13/2017 Balance: 9999.0
Point Earned this Purchase: 500

Your Purchase

	<p>8 Digital Receipt \$15.00T</p> <p>201605230001 2 × \$10.00</p> <p><i>My Item Description</i></p> <p><i>This Item Requires Assembly</i></p> <p>\$5 off: \$5.00</p>	
--	---	--

9

Sample

Email


Receipt

Template

(cont)



12




[Gift Card Purchase](#)
201605230002
\$50 Gift Card
No. *****2365
Auth No. 120098
Balance: \$50.00

[f](#) [t](#) [p](#)

\$50.00T
1 x \$50.00

Order Number: 00443 (Create)

Description of Order


 12376

Backordered Product \$200.00
2 x \$200.00

Prod description text
This is a cool product
BOGO Free: (\$200.00)

Fees		
Fee		\$1.00
Taxes		
Sale Tax: 10% on \$200.00		\$20.00
Total Amount		\$221.00

Deposits

Acct. #34562	Deposit Amount	\$10.00
	Balance	\$211.00

Payment Schedules

2nd payment	05/17/2016	\$100.00
3rd payment	06/17/2016	\$111.00

Sold To

Joe Customer (12643)
55 Main Street
Floor 2
My City, FL 33333
Phone 1: [\(212\) 333-4444](#)
Phone 2: [\(555\) 222-4444](#)

Delivery/Pickup

Date: 05/20/2016
500 Elm Street
Othertown, FL 44444
Delivery/Pickup Instructions: These are the Delivery Pickup instructions.
They can be multi-line

Returns

Store: 77777
Register: 030
Transaction Number: 54321

Bad Item		(\$12.00)T
777777		3 x (\$5.00)
<i>Bad Item Description</i>		
\$3 Dollars Off: \$3.00		

15

	Sub-Total	\$63.00
	Additional Discounts	
	Transaction Promo	(\$10.00)
	Fees	
	Transaction Fee	\$8.00
	Tip	\$5.00
	Service Charge	\$4.00
	Net Amount	\$70.00
	Taxes	
	Sales Tax: 10% on \$63.00	\$6.30
	Total	\$76.30



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Sample Email Receipt Template (cont)



Payment Information

16 Visa *****0000
Auth Num: 123456
AID: A000000031010
App Label: VISA CREDIT
App Preferred Name: CAPITAL ONE VISA

I HAVE READ AND AGREE TO THE TERMS AND CONDITIONS ON THIS SALES ORDER
John Smith
05/13/2016 Joe Customer

\$30.00

GiftCard
No. *****1724
Auth No. 43210
Balance: \$40.00

\$10.00

Total Paid \$40.00
Change Due \$3.70

Deposit Information

17 Acct. #555555

Deposit \$36.30
Balance Due \$40.00

Payment History

18

05/13/2016	GiftCard	\$10.00
05/13/2016	Visa	\$26.30

Sold To

19 Joe
22 Main Street
Orlando, FL 34734
Phone 1: (321) 000-0000

Delivery/Pickup

20 Date: 06/01/2016
22 Elm Street
New York, NY 10009
Delivery/Pickup Instructions: These are the delivery pickup instructions

Terms and Conditions

21 These are the terms you just agreed to I have read and agree...

John Smith
05/13/2016

22 This is the transaction signature

John Smith
05/13/2016

Stay Connected

23

This is additional Info1

This is additional Info2

24 This is additional Info3

This is additional Info4

RETURN POLICY

25 Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean lacinia, diam id malesuada faucibus, odio dolor tincidunt quam, et condimentum purus ex nec mauris. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos. Ut a dolor massa. In justo erat, rutrum et erat a, rutrum aliquam turpis. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur ipsum sapien, tincidunt id faucibus et, pellentesque nec lorem. Duis consectetur lobortis risus ac euismod. Phasellus molestie laoreet metus sit amet fringilla. Fusce gravida mollis bibendum. Praesent pulvinar, mi at aliquet porttitor, neque lectus venenatis massa, in semper ligula nibh sit amet nunc. Suspendisse ac convallis augue. Ut eros mauris, porttitor a consequat vitae, consectetur ac neque. Aliquam a tristique dui, at ornare arcu.

26

12345678

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Sample Email Receipt Template (cont)

27

COUPONS

28

Send a *Smarter* Receipt



29

Valuable *Features* and Insights

 <p>Supports Omnichannel Branding Ensures consistent messaging and quality across online and in-store receipts.</p>	 <p>Get Insights from Every Sale A rich analytics dashboard reveals sales trends, consumer behaviors, market basket analysis and more.</p>	 <p>Convenient User Portals Helps retailers and consumers manage their receipts in one central location.</p>
 <p>Simple POS Intergration Our digital receipt technology is easy to integrate. It works with any retailer or POS company.</p>	 <p>Quick and Easy Checkout Save time with instant customer recognition via email, phone, loyalty or credit card.</p>	 <p>Robust Technology Does not infringe on PCI compliance. Utilizes the ARTS digital receipts schema.</p>

This digital receipt has been sent using flexReceipts, a free service that allows you to easily store and organize all of your receipts in one central place. Never lose another receipt again! [Sign up now.](#)

To make sure our emails reach your inbox, please add receipt@test.flexreceipts-lab.com to your address book.

powered by 



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Sample Email Receipt Annotation Key


The table below identifies the WSDL elements used in the annotated email receipt sample (above) and the PDF receipt sample (below).

1	Email Subject Line from Merchant Portal	2	Email Sender Name and Sender Email Address from Merchant Portal
3	Email Header from Merchant Portal	4	Survey from Merchant Portal
5	Logo from Merchant Portal	6	See "Store Information" below
7	ReceiptHeader	8	See "Receipt Transaction Header" - below
9	See "Item Information" below	13	See "Order Information" below
14	See "Return Information" - below	15	See "Receipt Summary Information" below
16	See "Tender Information" below	17	See "Deposit Information" below
18	See "Payment History" below	19	See "Sold To Information" below
20	See "Delivery Pickup Information" below	21	See "Terms and Conditions" below
22	See "Transaction Signature" below	23	Corporate Social Media Links from Merchant Portal
24	AdditionalInfo1 AdditionalInfo2 AdditionalInfo3 AdditionalInfo4 AdditionalInfo5	25	Receipt Footer from Merchant Portal
26	Barcode Graphic generated based on: ReceiptBarcodeType ReceiptBarcodeNumber	27	Marketing Campaign Content from Merchant Portal
28	Email Footer from Merchant Portal	29	Static content provided by flexEngage








Store Information

Below is the Store Information on the email receipt.

 FLEXRECEIPTS RETAIL STORE 14 E Washington Street STE 370 Orlando, FL 32584 40760FLEX8	<pre> <StoreName>flexEngage Retail Store</StoreName> <StoreAddress> <v4:TypeCode>work</v4:TypeCode> <AddressLine1>14 E Washington Street</AddressLine1> <AddressLine2>STE 370</AddressLine2> <AddressLine3></AddressLine3> <v4:City>Orlando</v4:City> <v4:Territory>FL</v4:Territory> <v4:PostalCode>32584</v4:PostalCode> <v4:Country Code="">USA</v4:Country> <v4:PostalCodeExtension></v4:PostalCodeExtension> </StoreAddress> <StoreTelephone TypeCode="work"> <v4:AreaCode>407</v4:AreaCode> <v4:LocalNumber>60FLEX8</v4:LocalNumber> </StoreTelephone> </pre>
--	---

Receipt Transaction Header

Below the Receipt Transaction Header on the email receipt.

	Trans #: 88888 (05/13/2016) Revision: 999 (05/13/2016)	
	Store #: 333 Register #: 090 Associate: Sam Cashier: Jbob	
	Related Trans #: 98765 Store #: 111 Register #: 020 Reason Code: R555 Reason: Detailed Reason Here	
	Loyalty #: 12345 (Joe Customer) Exp Date: 05/13/2017 Balance: 9999.0 Point Earned this Purchase: 500	

8A	<pre> <TransactionNumber>88888</TransactionNumber> <ReceiptDateTime>2016-05-13T11:40:16-07:00</ReceiptDateTime> </pre>
8B	<pre> <ReceiptRevision> <RevisionNumber>999</RevisionNumber> <RevisionDateTime>2016-05-13T11:40:16-07:00</RevisionDateTime> </ReceiptRevision> </pre>
8C	<pre> <StoreID>333</StoreID> <WorkstationID>090</WorkstationID> <WorkstationOperator>Jbob</WorkstationOperator> <WorkstationAssociate>Sam</WorkstationAssociate> </pre>
8D	<pre> <RelatedTransactionReference> <Store>111</Store> </pre>




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8E	<pre> <Register>020</Register> <TransactionNumber>98765</TransactionNumber> <ReasonCode>R555</ReasonCode> <Reason>Detailed Reason Here</Reason> </RelatedTransactionReference> </pre>
8E	<pre> <TransactionLoyalty> <LoyaltyNumber>12345</LoyaltyNumber> <LoyaltyCustomerName>Joe Customer</LoyaltyCustomerName> <LoyaltyExpirationDate>2017-05-13</LoyaltyExpirationDate> <LoyaltyBalance>9999</LoyaltyBalance> <LoyaltyMisc>Point Earned this Purchase: 500</LoyaltyMisc> </TransactionLoyalty> </pre>

Item Information

Below the Item Information on the email receipt.

		<p>Digital Receipt 201605230001 <i>My Item Description</i> <i>This Item Requires Assembly</i> \$5 off: \$5.00</p>	<p>\$15.00T 2 x \$10.00</p>
			
<pre> <TransactionItem> <ItemName>Digital Receipt</ItemName> <ItemDescription>My Item Description</ItemDescription> <ItemClassCode>001</ItemClassCode> <ItemSKUNumber>201605230001</ItemSKUNumber> <ItemUPCNumber>1234567890123</ItemUPCNumber> <ItemSerialNumber>99999</ItemSerialNumber> <ItemModelNumber>88888</ItemModelNumber> <ItemBrand>My Brand</ItemBrand> <ItemIndustry>Stuff</ItemIndustry> <ItemManufacturer>Manufacturer Name</ItemManufacturer> <ItemPrice Currency="USD" ForeignAmount="">10</ItemPrice> <ItemTotal Currency="USD" ForeignAmount="">15</ItemTotal> <ItemPriceNotation>T</ItemPriceNotation> <ItemQuantity Units="1" UnitOfMeasureCode="unit">2</ItemQuantity> <ItemDiscount> <DiscountAmount Currency="USD" ForeignAmount="">5</DiscountAmount> <DiscountName>\$5 off</DiscountName> </ItemDiscount> <ItemMisc>This Item Requires Assembly</ItemMisc> </pre>			




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```
<ItemCategory></ItemCategory>  
<ItemCustomCategory1></ItemCustomCategory1>  
<ItemCustomCategory2></ItemCustomCategory2>  
</Item>  
</TransactionItem>
```




Order Information

Below is the Order Information on the email receipt.

Order Number: 00443 (Create)		13A
Description of Order		
		
12376		
Backordered Product		\$200.00
<i>Prod description text</i>	13B	2 × \$200.00
<i>This is a cool product</i>		
<i>BOGO Free: (\$200.00)</i>		
	13C	Fees Fee \$1.00
		Taxes Sale Tax: 10% on \$200.00 \$20.00
		Total Amount \$221.00
Deposits		
Acct. #:34562	13D	Deposit Amount \$10.00 Balance \$211.00
Payment Schedules		
2nd payment	13E	05/17/2016 \$100.00
3rd payment		06/17/2016 \$111.00
Sold To		
Joe Customer (12643) 55 Main Street Floor 2 My City, FL 33333		13F
Phone 1: (212) 333-4444 Phone 2: (555) 222-4444		
Delivery/Pickup		
Date: 05/20/2016 500 Elm Street Othertown, FL 44444		13G
Delivery/Pickup Instructions: These are the Delivery Pickup instructions. They can be multi-line		

13A	<pre> <TransactionOrder> <OrderNumber>00443</OrderNumber> <OrderAction>Create</OrderAction> <BarcodeNumber>12376</BarcodeNumber> <BarcodeType>Code128</BarcodeType> </pre>
------------	--



	<Description> Description of Order </Description>
13B	<Item> <ItemName> Backordered Item </ItemName> <ItemDescription> Prod description text </ItemDescription> <ItemClassCode></ItemClassCode> <ItemSKUNumber>201605230004</ItemSKUNumber> <ItemUPCNumber></ItemUPCNumber> <ItemSerialNumber></ItemSerialNumber> <ItemModelNumber></ItemModelNumber> <ItemBrand></ItemBrand> <ItemIndustry></ItemIndustry> <ItemManufacturer></ItemManufacturer> <ItemPrice Currency="USD" ForeignAmount=""> 200 </ItemPrice> <ItemTotal Currency="USD" ForeignAmount=""> 200 </ItemTotal> <ItemPriceNotation></ItemPriceNotation> <ItemQuantity Units="1" UnitOfMeasureCode="unit"> 2 </ItemQuantity> <ItemDiscount> <DiscountAmount Currency="USD" ForeignAmount=""> -200 </DiscountAmount> <DiscountName> BOGO Free </DiscountName> </ItemDiscount> <ItemMisc> This is a cool product </ItemMisc> <ItemCategory></ItemCategory> <ItemCustomCategory1></ItemCustomCategory1> <ItemCustomCategory2></ItemCustomCategory2> </Item>
13C	<Taxes> <TaxDescription> Sale Tax </TaxDescription> <TaxPercent> .1 </TaxPercent> <TaxableAmount Currency="USD" ForeignAmount=""> 200 </TaxableAmount> <TaxAmount Currency="USD" ForeignAmount=""> 20 </TaxAmount> <TaxTypeCode>Sales</TaxTypeCode> </Taxes> <Fees> <FeeAmount Currency="USD" ForeignAmount=""> 1 </FeeAmount> <FeeDescription> Fee </FeeDescription> </Fees> <TotalAmount Currency="USD" ForeignAmount=""> 221 </TotalAmount>
13D	<Deposit> <DepositAccountNumber> 34562 </DepositAccountNumber> <DepositAmount Currency="USD" ForeignAmount=""> 10 </DepositAmount> <DepositBalanceDue Currency="USD" ForeignAmount=""> 211 </DepositBalanceDue> </Deposit>
13E	<PaymentSchedule> <Description> 2nd payment </Description> <AmountDue Currency="USD" ForeignAmount=""> 100 </AmountDue> <DueDate> 2016-05-17T11:40:16-07:00 </DueDate>



	<pre></PaymentSchedule> <PaymentSchedule> <Description>3rd payment</Description> <AmountDue Currency="USD" ForeignAmount="">111</AmountDue> <DueDate>2016-06-17T11:40:16-07:00</DueDate> </PaymentSchedule></pre>
13F	<pre><SoldTo> <SoldToAddress> <v4:TypeCode>Home</v4:TypeCode> <AddressLine1>55 Main Street</AddressLine1> <AddressLine2>Floor 2</AddressLine2> <AddressLine3></AddressLine3> <v4:City>My City</v4:City> <v4:Territory>FL</v4:Territory> <v4:PostalCode>33333</v4:PostalCode> <v4:Country Code="">USA</v4:Country> <v4:PostalCodeExtension></v4:PostalCodeExtension> </SoldToAddress> <SoldToCustomerName>Joe Customer</SoldToCustomerName> <SoldToCustomerNumber>12643</SoldToCustomerNumber> <SoldToTelephone1 TypeCode="Home"> <v4:AreaCode>212</v4:AreaCode> <v4:LocalNumber>3334444</v4:LocalNumber> </SoldToTelephone1> <SoldToTelephone2 TypeCode="Work"> <v4:AreaCode>555</v4:AreaCode> <v4:LocalNumber>2224444</v4:LocalNumber> </SoldToTelephone2> </SoldTo></pre>
13G	<pre><DeliveryPickup> <DeliveryPickupAddress> <v4:TypeCode>Home</v4:TypeCode> <AddressLine1>500 Elm Street</AddressLine1> <AddressLine2></AddressLine2> <AddressLine3></AddressLine3> <v4:City>Othertown</v4:City> <v4:Territory>FL</v4:Territory> <v4:PostalCode>44444</v4:PostalCode> <v4:Country Code="">USA</v4:Country> <v4:PostalCodeExtension></v4:PostalCodeExtension> </DeliveryPickupAddress> <DeliveryPickupInstructions>These are the Delivery Pickup instructions.\nThey can be multi-line</DeliveryPickupInstructions> <DeliveryPickupDate>2016-05-20</DeliveryPickupDate> </DeliveryPickup></pre>

Return Information



Below is the Return Information on the email receipt.

14	Returns	
	Store: 77777 Register: 030 Transaction Number: 54321	14A
	Bad Item 777777 Bad Item Description \$3 Dollars Off: \$3.00	14B
		(\$12.00)T 3 x (\$5.00)

14A	<TransactionReturn> <OriginalStoreNumber>77777</OriginalStoreNumber> <OriginalRegister>030</OriginalRegister> <OriginalTransactionNumber>54321</OriginalTransactionNumber>
14B	***Same XML Elements for TransactionItem. See Item Information above ***



Receipt Summary Information

Below is the Receipt Summary Information on the email receipt.

Sub-Total	\$63.00	<TransactionGrossAmount Currency="USD" ForeignAmount=""> 63 </TransactionGrossAmount>
Additional Discounts		
Transaction Promo	(\$10.00)	<TransactionDiscount> <DiscountAmount Currency="USD" ForeignAmount=""> -10 </DiscountAmount> <DiscountName> Transaction Promo </DiscountName> </TransactionDiscount>
Fees		
Transaction Fee	\$8.00	<TransactionFees> <FeeAmount Currency="USD" ForeignAmount=""> 8 </FeeAmount> <FeeDescription> Transaction Fee </FeeDescription> </TransactionFees>
Tip	\$5.00	<TransactionTip Currency="USD" ForeignAmount=""> 5 </TransactionTip>
Service Charge	\$4.00	<TransactionServiceCharge Currency="USD" ForeignAmount=""> 4 </TransactionServiceCharge>
Net Amount	\$70.00	<TransactionNetAmount Currency="USD" ForeignAmount=""> 70 </TransactionNetAmount>
Taxes		
Sales Tax: 10% on \$63.00	\$6.30	<TransactionTaxes> <TaxDescription> Sales Tax </TaxDescription> <TaxPercent> .1 </TaxPercent> <TaxableAmount Currency="USD" ForeignAmount=""> 63 </TaxableAmount> <TaxAmount Currency="USD" ForeignAmount=""> 6.3 </TaxAmount> <TaxTypeCode>Sales</TaxTypeCode> </TransactionTaxes>
Total	\$76.30	<TransactionGrandAmount Currency="USD" ForeignAmount=""> 76.30 </TransactionGrandAmount>

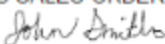


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Tender Information

Below is the Tender Information on the email receipt.

Payment Information		
16	Visa *****0000 Auth Num: 123456 AID: A0000000031010 App Label: VISA CREDIT App Preferred Name: CAPITAL ONE VISA	\$30.00
16A	I HAVE READ AND AGREE TO THE TERMS AND CONDITIONS ON THIS SALES ORDER  05/13/2016 Joe Customer	
	GiftCard No. *****1724 Auth No. 43210 Balance: \$40.00	\$10.00
16B		
16C	Total Paid Change Due	\$40.00 \$3.70

16A	<pre> <TransactionTender> <TenderTypeCode>CreditDebit</TenderTypeCode> <TenderDateTime>2016-05-13T11:40:16-08:00</TenderDateTime> <TenderAmount Currency="USD" ForeignAmount="">30</TenderAmount> <TenderCreditDebit> <CreditDebitFirst6Digits>410000</CreditDebitFirst6Digits> <CreditDebitLast4Digits>0000</CreditDebitLast4Digits> <CreditDebitTypeCode>Visa</CreditDebitTypeCode> <CreditDebitName> <FirstName>Joe</FirstName> <LastName>Customer</LastName> </CreditDebitName> <CreditDebitExpirationDate>2003</CreditDebitExpirationDate> </TenderCreditDebit> <TenderAuthorizationCode>123456</TenderAuthorizationCode> <TenderTypeMisc></TenderTypeMisc> <TenderSignature> <SignatureImage>*** BASE64 IMAGE CODE ***</SignatureImage> <SignatureMimeType>image/png</SignatureMimeType> <SignatureDate>2016-05-13</SignatureDate> <SignatureText>I HAVE READ AND AGREE TO THE TERMS AND CONDITIONS ON THIS SALES ORDER</SignatureText> </TenderSignature> <TenderEMV> <AID>A0000000031010</AID> <AppLabel>VISA CREDIT</AppLabel> <AppPreferredName>CAPITAL ONE VISA</AppPreferredName> </TenderEMV> </TransactionTender> </pre>
16B	<pre> <TransactionTender> </pre>



16C	<pre> <TenderTypeCode>GiftCard</TenderTypeCode> <TenderDateTime>2016-05-13T11:40:16-08:00</TenderDateTime> <TenderAmount Currency="USD" ForeignAmount="">10</TenderAmount> <TenderGiftCard> <GiftCardAccountNumber>9821724</GiftCardAccountNumber> <GiftCardAuthNumber>43210</GiftCardAuthNumber> <GiftCardBalance Currency="USD" ForeignAmount="">40</GiftCardBalance> </TenderGiftCard> <TenderAuthorizationCode></TenderAuthorizationCode> <TenderTypeMisc></TenderTypeMisc> </TransactionTender> </pre>
	<pre> <TransactionTenderApplied Currency="USD" ForeignAmount="">40</TransactionTenderApplied> <TransactionChangeDue Currency="USD" ForeignAmount="">3.7</TransactionChangeDue> </pre>

Deposit Information

Below is the Deposit Information on the email receipt.

17	Deposit Information		
	Acct. # 555555	Deposit	\$36.30
		Balance Due	\$40.00

<pre> <TransactionDeposit> <DepositAccountNumber>555555</DepositAccountNumber> <DepositAmount Currency="USD" ForeignAmount="">36.30</DepositAmount> <DepositBalanceDue Currency="USD" ForeignAmount="">40</DepositBalanceDue> </TransactionDeposit> </pre>

Payment History

Below is the Payment History on the email receipt.

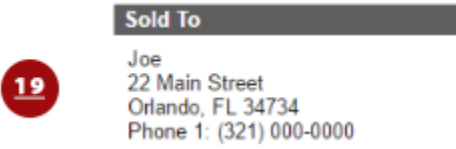
18	Payment History			
		05/13/2016	GiftCard	\$10.00
		05/13/2016	Visa	\$26.30

<pre> <TransactionTenderHistory> <TenderTypeCode>GiftCard</TenderTypeCode> <TenderDateTime>2016-05-13T11:40:16-08:00</TenderDateTime> <TenderAmount Currency="USD" ForeignAmount="">10</TenderAmount> </TransactionTenderHistory> <TransactionTenderHistory> <TenderTypeCode>Visa</TenderTypeCode> <TenderDateTime>2016-05-13T11:40:16-08:00</TenderDateTime> <TenderAmount Currency="USD" ForeignAmount="">26.30</TenderAmount> </TransactionTenderHistory> </pre>



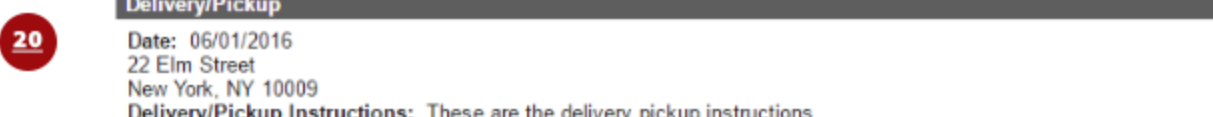
Sold To Information

Below is the Sold To Information on the email receipt.

 <p>Sold To Joe 22 Main Street Orlando, FL 34734 Phone 1: (321) 000-0000</p>	<pre> <SoldTo> <SoldToAddress> <v4:TypeCode>Home</v4:TypeCode> <AddressLine1>22 Main Street</AddressLine1> <AddressLine2></AddressLine2> <AddressLine3></AddressLine3> <v4:City>Orlando</v4:City> <v4:Territory>FL</v4:Territory> <v4:PostalCode>34734</v4:PostalCode> <v4:Country Code="">USA</v4:Country> </SoldToAddress> <SoldToCustomerName>Joe</SoldToCustomerName> <SoldToCustomerNumber>12643</SoldToCustomerNumber> <SoldToTelephone1 TypeCode="Home"> <v4:AreaCode>321</v4:AreaCode> <v4:LocalNumber>0000000</v4:LocalNumber> </SoldToTelephone1> </SoldTo> </pre>
--	---

Delivery Pick-up Information

Below is the Delivery Pick-up Information on the email receipt.

 <p>Delivery/Pickup Date: 06/01/2016 22 Elm Street New York, NY 10009 Delivery/Pickup Instructions: These are the delivery pickup instructions</p>

<pre> <DeliveryPickup> <DeliveryPickupAddress> <v4:TypeCode>Home</v4:TypeCode> <AddressLine1>22 Elm Street</AddressLine1> <AddressLine2></AddressLine2> <AddressLine3></AddressLine3> <v4:City>New York</v4:City> <v4:Territory>NY</v4:Territory> <v4:PostalCode>10009</v4:PostalCode> <v4:Country Code="">USA</v4:Country> <v4:PostalCodeExtension></v4:PostalCodeExtension> </DeliveryPickupAddress> <DeliveryPickupInstructions>These are the delivery pickup instructions</DeliveryPickupInstructions> <DeliveryPickupDate>2016-05-20</DeliveryPickupDate> </DeliveryPickup> </pre>



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Terms and Conditions

Below is the Terms and Conditions on the email receipt.

21	Terms and Conditions	
	These are the terms you just agreed to I have read and agree...	 05/13/2016

```
<TransactionTerms>  
<TermSignature>  
  <SignatureImage>iVBORw0KGgoAAAANSUgAAQ.....</SignatureImage>  
  <SignatureMimeType>image/png</SignatureMimeType>  
  <SignatureDate>2016-05-13</SignatureDate>  
  <SignatureText>I have read and agree...</SignatureText>  
</TermSignature>  
<TermDescription>These are the terms you just agreed to</TermDescription>  
</TransactionTerms>
```



Transaction Signature

Below is the Transaction Signature on the email receipt.

	This is the transaction signature	 05/13/2016
--	-----------------------------------	----------------

```
<TransactionSignature>  
  <SignatureImage>iVBORw0KGgoAAAANSUhEU.....</SignatureImage>  
  <SignatureMimeType>image/png</SignatureMimeType>  
  <SignatureDate>2016-05-13</SignatureDate>  
  <SignatureText>This is the transaction signature</SignatureText>  
</TransactionSignature>
```



Appendix 5: Common Mistakes To Avoid

This document makes some assumptions that the integrator should be aware of and conform to. You can greatly reduce your effort by reading this section as it contains steps to avoid the most common reasons for re-work and troubleshooting:

- **Special characters should be sent as XML Entity References.** XML rules apply when it comes to reserved characters.
See: http://en.wikipedia.org/wiki/List_of_XML_and_HTML_character_entity_references.
- **Do Not Send unused elements that are blank.** Do not return empty elements or elements with filler data (e.g., "0.00"). This helps keep the messages lean and efficient.
- **Strip out comments in XML messages.** Do not include comments in XML that you send to flexEngage (i.e., <!-- Optional-->). flexEngage includes comments in the WSDL for your convenience, but they should not be included in the actual XML messages.
- **Enumerations Matter.** When sending data as elements defined as enumerations, you must send the data EXACTLY as defined in the enumeration (case sensitive).
- **<FirstName> and <LastName> are for Credit/Debit Card authentication only.** They are for the name on the Credit card and must be track data. Do not populate them from customer records in the POS.
- **<ReceiptBarcodeType> is for the receipt barcode, not item SKU.** If you print barcodes on the bottom of your receipt, you need to specify which enumeration matches the barcode type you use.
- **<TransactionNumber> is the unique number of the receipt (or transaction).**
- **<ReceiptBarcodeNumber> is for the number used to generate the receipt Barcode. It is not the Transaction number.**
- **<ReceiptBarcodeNumber> must be compatible with <ReceiptBarcodeType>.** If you are using a barcode that require 12 digits, you must pad your receipt number to fill 12 digits. If <ReceiptBarcodeType> does not matter to you, use a variable length type like Code128. If <ReceiptBarcodeType> is blank, flexEngage defaults to "Code128".



Appendix 6: Common Error Responses

Below are some example response messages for common error conditions. The integrations' ability to log or respond to these can greatly speed up troubleshooting.

```

HTTP Authentication Error
<html><head><title>JBoss      Web/7.2.0.Final-redhat-1      -      JBWEB000064:      Error
report</title><style><!--H1
{font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:22px;}      H2
{font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:16px;}      H3
{font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:14px;} BODY
{font-family:Tahoma,Arial,sans-serif;color:black;background-color:white;}      B
{font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;}      P
{font-family:Tahoma,Arial,sans-serif;background:white;color:black;font-size:12px;}A      {color      :
black;}A.name {color : black;}HR {color : #525D76;}--></style> </head><body><h1>JBWEB000065:
HTTP Status 401 - Invalid User Id/Password Combination Specified</h1><HR size="1"
noshade="noshade"><p><b>JBWEB000309:      type</b>      JBWEB000067:      Status
report</p><p><b>JBWEB000068: message</b> <u>Invalid User Id/Password Combination
Specified</u></p><p><b>JBWEB000069: description</b> <u>JBWEB000121: This request
requires HTTP authentication.</u></p><HR size="1" noshade="noshade"><h3>JBoss
Web/7.2.0.Final-redhat-1</h3></body></html>

```

```

Merchant ID Inactive
<html><head><title>JBoss      Web/7.2.0.Final-redhat-1      -      JBWEB000064:      Error
report</title><style><!--H1
{font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:22px;}      H2
{font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:16px;}      H3
{font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:14px;} BODY
{font-family:Tahoma,Arial,sans-serif;color:black;background-color:white;}      B
{font-family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;}      P
{font-family:Tahoma,Arial,sans-serif;background:white;color:black;font-size:12px;}A      {color      :
black;}A.name {color : black;}HR {color : #525D76;}--></style> </head><body><h1>JBWEB000065:
HTTP Status 401 - User is Inactive</h1><HR size="1" noshade="noshade"><p><b>JBWEB000309:
type</b> JBWEB000067: Status report</p><p><b>JBWEB000068: message</b> <u>User is
Inactive</u></p><p><b>JBWEB000069: description</b> <u>JBWEB000121: This request requires
HTTP authentication.</u></p><HR size="1" noshade="noshade"><h3>JBoss
Web/7.2.0.Final-redhat-1</h3></body></html>

```



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No Merchant ID or Bad Merchant ID

```
<env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope">
  <env:Header/>
  <env:Body>
    <env:Fault>
      <env:Code>
        <env:Value>env:Receiver</env:Value>
      </env:Code>
      <env:Reason>
        <env:Text xml:lang="en">Access is denied</env:Text>
      </env:Reason>
    </env:Fault>
  </env:Body>
</env:Envelope>
```

Missing Required Element (Item Name Example)

```
<env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope">
  <env:Header/>
  <env:Body>
    <ns3:sendReceiptResponse errorStatus="true"
      xmlns:ns3="http://www.flexEngage.com/WS/v3"
      xmlns:ns4="http://www.flexEngage.com/WS/v2.0">
      <DigitalReceiptProcessed>false</DigitalReceiptProcessed>
      <Exceptions>
        <ExceptionDescription>receipt.transactionItem[0].itemName: may not be
        null</ExceptionDescription>
      </Exceptions>
    </ns3:sendReceiptResponse>
  </env:Body>
</env:Envelope>
```

Required Element Blank (Item Name Example)

```
<env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope">
  <env:Header/>
  <env:Body>
    <ns3:sendReceiptResponse errorStatus="true"
      xmlns:ns3="http://www.flexEngage.com/WS/v3">
```



```
xmlns:ns4="http://www.flexEngage.com/WS/v2.0">
  <DigitalReceiptProcessed>false</DigitalReceiptProcessed>
  <Exceptions>
    <ExceptionDescription>receipt.transactionItem[0].itemName: size must be between 1
and 100</ExceptionDescription>
  </Exceptions>
</ns3:sendReceiptResponse>
</env:Body>
</env:Envelope>
```

Max Length Exceeded (Item Description Example)

```
<env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope">
  <env:Header/>
  <env:Body>
    <ns3:sendReceiptResponse errorStatus="true" xmlns:ns3="http://www.flexEngage.com/WS/v3"
xmlns:ns4="http://www.flexEngage.com/WS/v2.0">
      <DigitalReceiptProcessed>false</DigitalReceiptProcessed>
      <Exceptions>
        <ExceptionDescription>receipt.transactionItem[0].itemDescription.value: size must be
between 0 and 1500</ExceptionDescription>
      </Exceptions>
    </ns3:sendReceiptResponse>
  </env:Body>
</env:Envelope>
```

Invalid Format (Receipt Date & Revision Date Example)

```
<env:Envelope xmlns:env="http://www.w3.org/2003/05/soap-envelope">
  <env:Header/>
  <env:Body>
    <ns3:sendReceiptResponse errorStatus="true" xmlns:ns3="http://www.flexEngage.com/WS/v3"
xmlns:ns4="http://www.flexEngage.com/WS/v2.0">
      <DigitalReceiptProcessed>false</DigitalReceiptProcessed>
      <Exceptions>
        <ExceptionDescription>receipt.receiptDateTime: must follow format
yyyy-MM-dd'T'HH:mm:ss[Z|(+|-)hh:mm]</ExceptionDescription>
      </Exceptions>
    </ns3:sendReceiptResponse>
  </env:Body>
</env:Envelope>
```




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```
<ExceptionDescription>receipt.receiptRevision.revisionDateTime: must follow format  
yyyy-MM-dd'T'HH:mm:ss[Z](+|-)hh:mm]</ExceptionDescription>  
</Exceptions>  
</ns3:sendReceiptResponse>  
</env:Body>  
</env:Envelope>
```

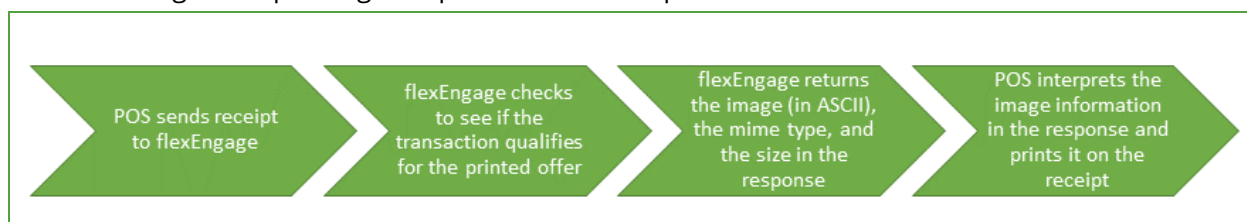


Appendix 7: Printed Offers

This section is relevant to you if your flexEngage receipt services package includes support for printed offers.

Introduction

Below is a diagram explaining how printed offers are processed:



Sending the Request and Receiving the Responses

Sending the request to the flexEngage API works the same way as it does for digital receipts. If you are already sending receipts to the flexEngage API for digital receipts, no further coding is required *except if you are not currently sending the printed receipt transactions to flexEngage*. If you are not sending the printed receipts to flexEngage, you will need to make a modification to send printed receipts to the flexEngage API.

The API will then check the transaction and see if it qualifies for a configured printed offer. If the transaction qualifies for a printed offer, the response will contain additional information about the image that needs to print on the receipt, including:

- The ASCII representation of the image OR the HTML text OR the plain text
- The image MIME type (ex: image/jpg, image/png)
- The image width

You will need to add logic to check the response for image information, render the information into an image, and include the image on the printed receipt. You can decide whether the image appears at the top or bottom of the receipt. Based on what other merchants do and the responses that they receive from the offers, we recommend putting the offer at the bottom of the receipt.

Below is an example of the SOAP response returned by flexEngage for a receipt that qualifies for a printed offer.



```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <ns3:sendDigitalReceiptResponse xmlns:ns3="http://www.flexreceipts.com/WS/v2.0">
      <CustomerID TemporaryID="true" defaultFlexReceipt="false">fBWh2VWr</CustomerID>
      <ns3:DigitalReceiptProcessed>true</ns3:DigitalReceiptProcessed>
      <ns3:Offers>
        <Image>
          <Data>iVBORw0KGgoAAAANSUHEUGAAAMgAAABvCAIAAAAMxiFAADjULEQVR42u3dy5ajIBRA0fz/T9uDWqsHFYX7wKiVfYY
          JQZEjXJDgawNO4OUSgFggFogFEAvEArEAYoFYIBZALBALxAKIBWKBWACxQCwQCyAW/rpYrzfevx3/MJtn5GSmGf5K9hoyPcPa
          xYmkf/9t/FSz3xYu+Clijasw6NY0z1RRpyocpRyccORWOfowkuzoJ4PTGJQxfvR4kT8q1rQpC1Z2JM+gWD9pUpn8/7Bzo0elj
          txLC8Uqm3cXsQp33vSenvYpQbGyjUq8XU1VZ7NDSULcvhXL6S8T66gheW+iFpbthmK1bv2MWJ344dliHYVfq8o27XxTHXRfrK
          PoeKFY45xTR3+2WkmQuSPWeBAwvdCrxFoywq21WNmjP0CscbP0K8EqseKjy07p+pFNYYs70INCI32vFms6xBjMJDURbDpT9TG
          x+k40L8jaot10uif495SH6PGJq/NqND7d8Bmx1oaP10+QxidFgiOy5t1ZGP8X4tzgvO55MdZ0nHRG33qWWJHwcBozTjNxsxg2d
          hyrxUpfHboXTCD6KyQ5WVrn1ITROgVggFogFYgHEArFARccXID9JM53uOvrq6Ij9445/S6wLLJrWRH8B1jZbNPGx4xLrAqsGV
          Z7ysiDW+4eF4xYeJxLrQ1b9qozairy+WJ2VgMS6r1jxZPcRawss2ibW14mVXUBxtO5jujqSWF8hVnkt4XTJ/3SdILG+qCtcIt
          Z2vGibWFeKleyS7iDWtnppFLHWTDCUFFwrlrbirzXEupFbJ/0ZtbD5wtbb3CHV4xPrLLdWrSE+Csw7/VT8UVKkpSQWvhligVg
          gFogFEAvEArEAYoFYIBZALBALxAKIBWKBWACxQCwQCyAWiAViAcQCsUCsS88p9vqh3cTx3MqnMU6czSRS2HIRiLVfT7ufj9Os
          ekndbrLaP+WnmDQKe3O3HiZWJEFns5Cyp1t+o5HUKxTLRSBW4pIt2fhquVj1RpRYV4rV3IvxWWL1N4gnViJwXijWwhgr+yaB2
          ktQxVj3bbEKQ6pplUcMmL7XONJiGRXeOsbKzjiME/SblkKnfH+3vjR4X7vv8tqOuzPUJdaDpxsi808fEEvufopYW3sr2yVijz
          uxp1hLBrbE2u9fsvf1Krf4qwan9kT6x2xnuvtIj1UEYuGvQSwQC8QC8QsQBivGgFkAsEAveAogFYoFYALFALBALIBaIBWIBxAK
          x8FX8AzhkmstBu87dAAAAAE1FTkSuQmCC</Data>
          <ContentType>image/png</ContentType>
          <Width>200</Width>
        </Image>
      </ns3:Offers>
    </ns3:sendDigitalReceiptResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Configuring the Offers

Once a merchant is set up to provide printed offers, configuring the images and campaigns happens in the merchant portal. The POS does not need to send images to the API; all the configuration happens in the merchant portal.

Setting up the campaigns in the merchant portal is similar to setting up campaigns for digital offers, but there are a few changes:

1. In the **Marketing Content** section under **Marketing Management**, there is a section to add the information to print on the receipts. It can be an image, text or both.



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2. In the **Campaigns** section under **Marketing Management**, there is an option to select **Paper Receipt**. While the example illustrates a campaign that applies to both a digital and printed offer, you can configure the campaign to be strictly a printed offer by selecting Paper Receipt only.



Appendix 8: SMS Receipts

This section is relevant to you if your flexEngage receipt services package includes support for sending receipts via SMS.

Configuring for SMS Support

The [flexEngage team](#) performs the following tasks in order for the merchant to be able to use SMS:

- The flexEngage team sets up the merchant account to support SMS receipts.
- The flexEngage team works directly with the merchant on provisioning the phone number to use (including short codes) as the “from” address for SMS receipt messages.
- The flexEngage team works directly with the merchant on setting up the content for the SMS messages.

Sending the API Request for SMS

You would continue to call the Receipts API as you would for the other receipts. In order to send an SMS receipt request, you will need to make the following changes to the values in the payload:

- **Do not** send the email address in the email address field (*customer* > *emailAddress* in REST v1, *CustomerEmailAddress* in SOAP v4.x). You can either send a blank or null value, or you can remove the field from the payload.
 - If the customer email address is included in <CustomerEmailAddress>, the receipt will be emailed to the customer AND sent via SMS
- **Do not** send the area code in the area code field (*customer* > *areaCode* in REST v1, *CustomerTelephone* > *v4:AreaCode* in SOAP v4.x). You can either send a blank or null value, or you can remove the field from the payload.
- Add the mobile number in the local number field (*customer* > *localNumber* in REST v1, *CustomerTelephone* > *v4:LocalNumber*) in the following format: a plus sign, the country code and the area code and local number. Do not include dashes. A few example formats:
 - US and Canada number: +12121234567
 - UK number: +447911123456
 - Ireland number: +353831234567
 - Mexico number: +521234567890
- Send the value *DigitalOnly* in the receipt type field (*receiptType* in REST v1.x, *ReceiptType* in SOAP v4.x)

Below is an example SOAP Request for sending an SMS transaction. The affected fields are in **bold**.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"
xmlns:v4="http://www.flexreceipts.com/WS/v4">
  <soap:Header/>
```



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```
<soap:Body>
  <v4:sendReceiptRequest>
    <CustomerEmailAddress></CustomerEmailAddress>
    <CustomerTelephone TypeCode="Mobile">
      <v4:AreaCode></v4:AreaCode>
      <v4:LocalNumber>+12021234567</v4:LocalNumber>
    </CustomerTelephone>
    <Receipt>
      <Mode>Production</Mode>
      <ReceiptRevision>
        <RevisionNumber>1</RevisionNumber>
        <RevisionDateTime>2021-01-11T14:22:12.396Z</RevisionDateTime>
      </ReceiptRevision>
      <ReceiptType>DigitalOnly</ReceiptType>
      <ReceiptBarcodeType>Code128</ReceiptBarcodeType>
      <ReceiptBarcodeNumber>999201004964051117</ReceiptBarcodeNumber>
      <ReceiptDateTime>2021-01-11T14:22:12.396Z</ReceiptDateTime>
      <TransactionLoyalty>
        <LoyaltyNumber>888101598651A</LoyaltyNumber>
        <LoyaltyCustomerName>John Bobowicz</LoyaltyCustomerName>
      </TransactionLoyalty>
      <TransactionType>SaleTransaction</TransactionType>
      <TransactionNumber>4964</TransactionNumber>
      <TransactionItem>
        <ItemName>97338</ItemName>
        <ItemDescription>OHPLTPANTS/Khaki/4630/NODIM</ItemDescription>
        <ItemSKUNumber>593802</ItemSKUNumber>
        <ItemUPCNumber>717151576864</ItemUPCNumber>
        <ItemBrand>A00402825174</ItemBrand>
        <ItemPrice>68</ItemPrice>
        <ItemTotal>68</ItemTotal>
        <ItemPriceNotation>TX</ItemPriceNotation>
        <ItemQuantity UnitOfMeasureCode="UNIT">1</ItemQuantity>
      </TransactionItem>
      <TransactionGrossAmount>68.00</TransactionGrossAmount>
      <TransactionNetAmount>68.00</TransactionNetAmount>
      <TransactionTaxes>
        <TaxDescription>Sales Tax 10%</TaxDescription>
        <TaxPercent>0.1</TaxPercent>
        <TaxableAmount>68</TaxableAmount>
        <TaxAmount>6.8</TaxAmount>
        <TaxTypeCode>Sales</TaxTypeCode>
      </TransactionTaxes>
      <TransactionTaxes>
        <TaxDescription>USER FEE .5%</TaxDescription>
        <TaxPercent>0.005</TaxPercent>
        <TaxableAmount>74.8</TaxableAmount>
        <TaxAmount>0.37</TaxAmount>
      </TransactionTaxes>
    </Receipt>
  </v4:sendReceiptRequest>
</soap:Body>
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<TaxTypeCode>GST</TaxTypeCode>
</TransactionTaxes>
<TransactionGrandAmount>75.17</TransactionGrandAmount>
<TransactionTenderApplied>80</TransactionTenderApplied>
<TransactionChangeDue>4.83</TransactionChangeDue>
<TransactionTender>
  <TenderTypeCode>Cash</TenderTypeCode>
  <TenderDateTime>2021-01-11T14:22:12.396Z</TenderDateTime>
  <TenderAmount>80</TenderAmount>
</TransactionTender>
<TransactionSoldTo>
  <SoldToAddress>
    <v4:TypeCode>Home</v4:TypeCode>
    <AddressLine1>555 Turnpike St</AddressLine1>
    <v4:City>Canton</v4:City>
    <v4:Territory>MA</v4:Territory>
    <v4:PostalCode>02021</v4:PostalCode>
    <v4:Country Code="US">USA</v4:Country>
  </SoldToAddress>
  <SoldToCustomerName>mark gardnertest</SoldToCustomerName>
  <SoldToCustomerNumber>888101598651</SoldToCustomerNumber>
  <SoldToTelephone2 TypeCode="Home">
    <v4:LocalNumber>7818285544</v4:LocalNumber>
  </SoldToTelephone2>
</TransactionSoldTo>
<RawPosReceipt>&lt;![CDATA[ BOGUS STORE IMAGING 555 TURNPIKE ST. CANTON,
MA 02021 7818289300 ----- Guest Name: mark
gardnertest Guest Number: 888101598651 Loyalty Type: Enrolled in XL Rewards Current Points
Balance: 12372 ----- Salesperson: Store No. 601113
717151576864 OHPLTPANTS/Khaki/4 $68.00T Subtotal $68.00 Sales Tax 10% $6.80 USER FEE .5% $0.37
Total $75.17 Cash $80.00 Cash Change $4.83 Store: 09992 Reg: 01 Tran: 004964 Date: 5/11/2017
10:22:21 AM Assoc: 601113 Item(s) Sold: 1 Item(s) Returned: 0 Thank you for shopping at BOGUS
STORE IMAGING Please retain this receipt as proof of purchase. ***** We
would like Your feedback! Please help us serve you better by visiting TELLDESTINATIONXL.COM
and providing us feedback on this purchase. You will receive a coupon for $15 off your next
purchase of $100 or more. ***** When a purchase involves a coupon
discount taken on the entire transaction, the value of such coupon will be proportionally
distributed to all items purchased. If you return one of the items, the final price refunded
is the original as-sold price shown on the receipt less the prorated coupon discount. When
cash or checks are used and original receipt is present the refund may be delivered in the
form of a check mailed from our Home Office within 7 - 10 business days of the return. All
returns and exchanges must be conducted in the country in which the item was purchased.
DATA=999201004964051117 ]]&gt;</RawPosReceipt>
</Receipt>
<Workstation>
  <WorkstationID>1</WorkstationID>
  <WorkstationOperator>601113</WorkstationOperator>
  <WorkstationAssociate>601113</WorkstationAssociate>
```



flexEngage
GO BEYOND THE SALE

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<WorkstationStore>
  <Merchant>
    <MerchantID>POS-REST-1x</MerchantID>
  </Merchant>
  <StoreID>12345</StoreID>
  <StoreName>Bogus Store</StoreName>
  <StoreAddress>
    <v4:TypeCode>work</v4:TypeCode>
    <AddressLine1>5443 International Drive</AddressLine1>
    <AddressLine2>Orlando Crossing</AddressLine2>
    <v4:City>Orlando</v4:City>
    <v4:Territory>FL</v4:Territory>
    <v4:PostalCode>32819</v4:PostalCode>
    <v4:Country Code="US">USA</v4:Country>
  </StoreAddress>
  <StoreTelephone TypeCode="work">
    <v4:AreaCode>407</v4:AreaCode>
    <v4:LocalNumber>3635570</v4:LocalNumber>
  </StoreTelephone>
</WorkstationStore>
</Workstation>
</v4:sendReceiptRequest>
</soap:Body>
</soap:Envelope>
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Revision History

Rev. No	Rev. Date	Contributor	Notes
v4.6	05/19/2021	JA	Updated Appendix 8: SMS receipts <ul style="list-style-type: none">API behavior when request contains customer email and customer phone number
v4.5	05/04/2021	JA	<ul style="list-style-type: none">Added clarification to customer.telephone.localNumber fieldsModified max number of characters in *.localNumber fields.
v4.4	8/11/2020	JL	<ul style="list-style-type: none">Rebranded documentationAdded Appendix sections for printed offers and SMSUpdated endpoint to include the UTF-8 environment
v4.3	2/1/2019	JL	Updated branding - "flexReceipts" to "flexEngage"
v4.2	10/11/2018	SG	Added Section 1.5 for Offline Scenario
v4.1	12/20/2017	SG	Updated Section 1.2 to add details about Receipt Language
v4.0.4	7/13/2016	JB	Updated sample Receipt Type screen with new prompt text.
v.4.0.3	07/01/2016	JB	Updates for new template, WSDL enhancements, Receipt anatomy, and common error messages.
v4.0.0	04/25/2016	JB	Initial version of 4.x sendReceipt Service. getCustomer is now a seperate documents. Added new WSDL elements for 4.x