



# Stamps.com XML Format Specifications

## Version 1.2

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## 1 Overview

The Stamps.com XML<sup>1</sup> standard is a means to exchange information between any software and the Stamps.com client to print postage or verify addresses. For instance, if you have a database of orders that are to be shipped to your customers you can use the Stamps.com XML format to print postage for all of them. To do so, you would have to export the data from your orders database into the Stamps.com XML format described here. Once your orders are exported in to the format you will be able to process this XML file using the Stamps.com software.

### The Batch Interface

Currently XML files can be imported into the Batch interface of the Stamps.com client. This interface can be used to process an XML file and print shipping labels in batch. For more details on the Batch interface and how to import an XML file into it please refer to the Stamps.com Support Site at [www.stamps.com/support](http://www.stamps.com/support). If you are already a Stamps.com customer but do not have access to the Batch interface in the Stamps.com client, please contact customer support by phone or email at the Support Site listed above.

### Additional Ways to Process a Stamps.com XML file

Stamps.com will soon add additional ways to process an XML file using the client. These include the ability to request that a folder be monitored for XML files or have an XML file processed on demand.

### Functions Supported

The Stamps.com XML format will eventually support two functions –

1. Verifying Addresses
2. Printing Postage

However, only Print Postage is supported right now. This is because the Batch interface will perform any address verification required when an XML file is imported or when the user prints postage. Eventually, Address Verification will be available as a separate option wherein an XML file with just a list of addresses can be passed to the Stamps.com client. This list will be processed and a list of valid addresses (with modifications and corrections as required) or errors (where the address could not be verified at all) will be returned.

---

<sup>1</sup> XML Stands for Extensible Markup Language and is a universal standard for representing any type of information. This enables different software to communicate using a standardized content format. For more details visit <http://www.w3.org/standards/xml/>

## 2 Printing Postage

For the Stamps.com client to recognize an XML file and process its content, the file must follow a specific schema or standard.

### Root Node

The Root element is the primary XML element within which the entire contents of the XML file must be contained. To print postage with the Stamps.com client the Root element must be <Print>.

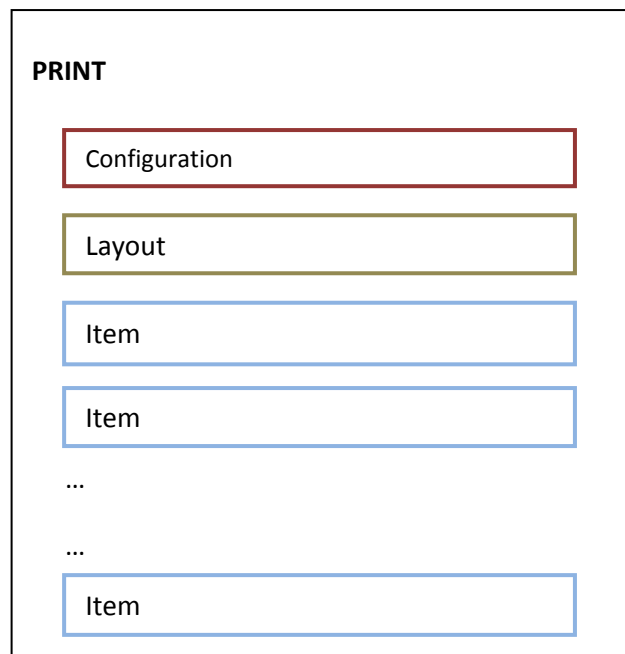
The Print root element can contain three nodes –

1. **Configuration** – This node can be used to specify configuration elements such as the printer to be used and the file name to which the output must be written. This is optional and can be ignored if desired, as most of these elements can be specified from within the Batch interface after the file has been imported.
2. **Layout** – This can be used to specify what label or paper to print on.
3. **Item** – This is the most important node in the XML file. Each separate postage print is considered an “item”. Item nodes allow you to set all the information regarding the type of postage you want printed including the Mail Class, the variety of mailpiece, the weight, and most importantly the address of the recipient.

### Example

The Stamps.com XML file will look as shown below –

```
<Print>
  <Configuration>
  ...
</Configuration>
  <Layout>
  ...
</Layout>
  <Item>
  ...
</Item>
  <Item>
  ...
</Item>
  ...
  ...
  <Item>
  ...
</Item>
```



</Print>

### 3 Configuration

#### Specification

The following table describes the structure of the Configuration node of the Stamps.com XML file.

**NOTE:** All rows below in italics are output fields that you do not have to specify in the input file.

| Name                  |                      | Type                  | Content/<br>Values                   | Description  |
|-----------------------|----------------------|-----------------------|--------------------------------------|--|
| DesiredPrinter        |                      | Node                  | --                                   | The DesiredPrinter is the printer that you would like the Stamps.com client to use. It allows you to set the Printer and the Tray (or bin) to which you would like to print.   |
|                       | Name                 | String                | Full path and name of printer        | You can specify the printer that you would like to use for printing postage.   |
|                       | Bin                  | String                | Printer tray name                    | You can specify the tray to which postage is to be printed   |
| MailingCutoffTime     |                      | time                  | Time                                 | This field specifies a cutoff time. After this cutoff time postage will be dated for the following day if the Rollover element is set to True (see below). Time should be specified in "HH:MM:SS" (24-hour clock) format |
| <i>PrinterUsed</i>    |                      | <i>Node</i>           | <i>---</i>                           | <i>This field specifies which printer was actually used to print postage. This is an output field only and need not be set by you.</i>   |
|                       | <i>Name</i>          | <i>String</i>         | <i>Full path and name of printer</i> | <i>This field will specify the actual printer used</i>   |
|                       | <i>Bin</i>           | <i>String</i>         | <i>Printer tray name</i>             | <i>This field will specify the tray that postage was printed on</i>  |
| RecipientEmailOptions |                      | Node                  | --                                   | This node is used to specify Email options for the recipient of the mailpiece  |
|                       | ShipmentNotification | Boolean               | True or False                        | If this is set to True, then a Shipment notification email will be sent to all recipients (unless overridden for specific recipients)  |
|                       | companyInSubject     | Attribute/<br>Boolean | True or False                        | This is an attribute of the ShipmentNotification element. If this is set to True, if your Company's name has been set in the My Account section, it will be  |

|  |  |                        |                       |   |   |
|--|--|------------------------|-----------------------|---|---|
|  |  |                        |                       | used in the Subject line of the email (“Acme Inc. has sent you a package”). If this is set to false or not set at all, then the user name will be used in the subject line of the email (“John Smith has sent you a package”) |   |
|  |  | fromCompany            | Attribute/<br>Boolean | True or False   | This is an attribute of the ShipmentNotification element. If this is set to True, then the email will come from your company name (From: Acme Inc). If it is set to false, or not set then the email will come from the user’s name (From: John Smith). |
|  |  | ResultFile             | String                | Full or relative path of file and file name   | This element allows you to specify where the output should be written after postage is processed.   |
|  |  | omitDesiredMailingDate | Attribute/<br>Boolean | True or False   | This is an attribute of ResultFile. If this is set to True, then the DesiredMailingDate specified in the input file for each item will not be written to the output file  |
|  |  | Rollover               | Boolean               | True or False   | Indicates whether to automatically roll over mailing dates based on MailingCutoffTime. Default, if unspecified, is "true."  |
|  |  | Sample                 | Boolean               | True or False   | Value indicates whether the contents of the Print node are to be printed as samples (no live postage). Default value, if unspecified, is “false.”   |
|  |  | SenderEmailOptions     | Node                  | ---   | This node allows you to specify whether you wish to receive notifications when postage is printed (Shipment Notification) and when the mailpiece is delivered (Delivery Notification)   |
|  |  | DeliveryNotification   | Boolean               | True or False   | Set this to true if you want to be notified via email when the mailpieces in your file are delivered  |
|  |  | ShipmentNotification   | Boolean               | True or False   | Set this to true if you want an email notification providing information on the cost of postage and tracking number when postage is printed.  |
|  |  | UI                     | Node                  | --  | This node is used to specify which notifications should be provided when an XML file is being   |

|  |  |  |  |
|--|--|--|--|
|  |  |  | processed. This is not being elaborated upon now as the Batch UI handles notifications as requested by the user. This will be available for future products that do not require a UI or manual processing. |
|--|--|--|--|

## Example

A fully expanded Configuration node will look like this –

```
<Configuration>
  <ResultFile>c:\FolderName\FileName.xml</ResultFile>
  <DesiredPrinter>
    <Name>FinePrint</Name>
    <Bin>Tray 2</Bin>
  </DesiredPrinter>
  <MailingCutoffTime>17:30:00.0</MailingCutoffTime>
  <Rollover>false</Rollover>
  <SenderEmailOptions>
    <DeliveryNotification />
    <ShipmentNotification />
  </SenderEmailOptions>
  <RecipientEmailOptions>
    <ShipmentNotification companyInSubject="true"
      fromCompany="true" />
  </RecipientEmailOptions>
</Configuration>
```



## 4 Layout

### Specification

The following table describes the structure of the Layout Node.

**NOTE:** All rows below in italics are output fields that you do not have to specify in the input file.

| Name            | Type                    | Content/<br>Values  | Description  |
|-----------------|-------------------------|---|--|
| <i>Actual</i>   | <i>Node</i>             | --  | <i>This is an output only field that specifies information regarding the actual media used to print postage.</i>   |
| <i>Media</i>    | <i>Variable</i>         | One of the following - <ul style="list-style-type: none"> <li>• <i>MediaID (int)</i></li> <li>• <i>MediaName (string)</i></li> <li>• <i>PaperID (int)</i></li> <li>• <i>PaperName (String)</i></li> </ul> | <i>This specifies the type of media you would like to print on. The Stamps.com client has a unique ID and name for every type of media that it can print on. The actual media used will be specified in one of the four types of inputs that the client recognizes in an XML file. For a full list of papers and media supported, refer to Appendices A and B.</i> |
| <i>StartCol</i> | <i>Positive Integer</i> | <i>X-Coordinate on sheet where printing started</i>   | <i>This field will inform you of the column in which printing started on the sheet. (Most label sheets and layouts have an array of labels that appear in rows and columns on the sheet).</i>  |
| <i>StartRow</i> | <i>Positive Integer</i> | <i>Y-Coordinate on sheet where printing started</i>   | <i>This field will inform you of the row in which printing started on the sheet. (Most label sheets and layouts have an array of labels that appear in rows and columns on the sheet).</i>   |
| <i>Desired</i>  | <i>Node</i>             | --  | <i>This is the input field that you can use to specify information regarding the media that you want used to print postage.</i>  |
| <i>Media</i>    | <i>Variable</i>         | One of the following - <ul style="list-style-type: none"> <li>• <i>MediaID (int)</i></li> <li>• <i>MediaName (string)</i></li> <li>• <i>PaperID (int)</i></li> <li>• <i>PaperName (String)</i></li> </ul> | <i>This specifies the type of media you would like to print on. The Stamps.com client has a unique ID and name for every type of media that it can print on. Specify the desired media you want to print on in one of the four types of inputs that the client recognizes in an XML</i>  |

|  |                          |                  |  |  |
|--|--------------------------|------------------|--|--|
|  |                          |                  |  | file. The Batch interface only supports Paper types, so use a PaperID or PaperName in this case. For a full list of papers and media supported, refer to Appendices A and B.                                     |
|  | StartCol                 | Positive Integer | X-Coordinate on sheet where printing started | You can set the column in which you want to start printing on the sheet. (Most label sheets and layouts have an array of labels that appear in rows and columns on the sheet).                                   |
|  | StartRow                 | Positive Integer | Y-Coordinate on sheet where printing started | You can set the row in which you want to start printing on the sheet. (Most label sheets and layouts have an array of labels that appear in rows and columns on the sheet).                                      |
|  | Style                    | Node             | --   | This node can be used to customize your postage prints   |
|  | RecipientAddressFontName | String           | Font Name                                    | Specify the type of font you want the recipient address formatted in (e.g. Verdana, Helvetica, Times New Roman etc.). You can set any font installed on the machine where you are running the Stamps.com client. |
|  | RecipientAddressFontSize | integer          | Font Size in 99 format (specified as pt)     | Set the size of the font for the Recipient Address. If this is not specified then the client will auto-size for the best possible font size.   |
|  | ReturnAddressFontName    | String           | Font Name                                    | Specify the type of font you want the return address formatted in (e.g. Verdana, Helvetica, Times New Roman etc.). You can set any font installed on the machine where you are running the Stamps.com client.    |
|  | ReturnAddressFontSize    | Integer          | Font Size in 99 format (specified as pt)     | Set the size of the font for the Return Address. If this is not specified then the client will auto-size for the best possible font size.  |
|  | ReturnAddressGraphic     | string           | File name with full or relative path         | You can use this to specify if you want a graphic associated with a return address. The file has to be a bitmap.   |
|  | PrintReceipt             | Boolean          | True or False                                | Specify whether you want to print a receipt for the labels you are printing. By default this is set to   |

|  |  |  |          |
|--|--|--|----------|
|  |  |  | "false." |
|--|--|--|----------|

## Example

```

<Layout>
  <Desired>
    <MediaName>Stamps.com SDC-1200 Standard 4x6
label 2 per sheet</MediaName>
    <StartCol>1</StartCol>
    <StartRow>1</StartRow>
    <Style>
      <IndicumGraphic>XYZ</IndicumGraphic>
      <RecipientAddressFontName>Helvetica</RecipientA
ddressFontName>
      <RecipientAddressFontSize>10</RecipientAddressFont
Size>
      <ReturnAddressFontName>Arial</ReturnAddressFont
Name>
      <ReturnAddressFontSize>11</ReturnAddressFontSize
>
      <ReturnAddressGraphic>..\Folder\FileName.gif</
ReturnAddressGraphic>
    </Style>
  </Desired>
  <PrintReceipt>true</PrintReceipt>
</Layout>

```

## 5 Item

### Specification

The following table describes the structure of the Item node. You can place as many item nodes with the <Print> root node as you need. Each Item node represents a separate postage print.

**NOTE:** All rows below in italics are output fields that you do not have to specify in the input file.

| Name                     | Type        | Content/<br>Values                             | Description   |
|--------------------------|-------------|--|---|
| <i>ActualMailingDate</i> | <i>date</i> | <i>Date</i>                                    | <i>This is the mailing date on the postage printed. This can vary from today if you requested a future mailing date or if the MailingCutoffTime was reached when this item was processed.</i>                         |
| CustomsInfo              | Node        | --   | This node can be used to specify customs information for mailpieces you are shipping to international locations.  |
| CommercialSampleInfo     | Node        | --   | This element can only appear when the ContentsType value (see below) is "commercial sample." It must be absent in all other cases.  |
| Certificate              | token       | Alphanumeric.<br>Max. Length: 26               | The certificate number on your export license if you have one   |
| Invoice                  | token       | Alphanumeric.<br>Max. Length: 22               | Invoice number on any invoices you include with the mailpiece   |
| License                  | token       | Alphanumeric.<br>Max. Length: 26               | The license number for items that have export restrictions  |
| Contents                 | Node        | --   | This node should be used to specify details of the items included in the mailpiece.   |
| Item                     | Node        | --   | Include 1 item node for each item included in the mailpiece.  |
| CountryOfOrigin          | token       | Name of<br>Country                             | This is the country from which the item being mailed was sourced from. This element is required when the customs ContentsType (see below) for the hosting Item contains "commercial sample". It is ignored otherwise. |
| Description              | string      | Alphanumeric.<br>Max length: 31<br>characters. | A short description of the item.  |
| HarmonizedTariffCode     | string      | Alphanumeric.                                  | The Harmonized System tariff  |

|  |  |                   |         |  |  |
|--|--|-------------------|---------|--|--|
|  |  |                   |         | Max length: 6 characters.  | number is used to quantify total US exports, and is used by the destination country to assign a tariff rate. Providing this number allows the customs officials to assign a tariff without having to interpret the item description to determine the duty. This speeds customs clearance. This number is optional. |
|  |  | Quantity          | integer | Number.<br>Minimum: 1  | Specify the number of items of the same type   |
|  |  | Value             | decimal | Number in 999.99 format.<br>Minimum amount is 0.01   | Specify the total value of the item (or items if multiple of the same item are being shipped).   |
|  |  | WeightLb          | decimal | Non-negative number in 999.99 format.<br>Minimum: 0.   | Weight of item in pounds   |
|  |  | WeightOz          | decimal | Non-negative number in 999.99 format.<br>Minimum: 0.   | Weight of item in ounces. This can be combined with WeightLb.  |
|  |  | ContentsType      | string  | One of the following: <ul style="list-style-type: none"> <li>• commercial sample</li> <li>• document</li> <li>• gift</li> <li>• other</li> <li>• return</li> </ul> | This specifies the type of contents being sent. All items in the mailpiece must have the same type of content.   |
|  |  | DeclaredValue     | decimal | Number in 99999.99.<br>Min: 0  | Total value of all items in the mailpiece. The individual values must add up to this value. This is a required value.  |
|  |  | OtherContentsInfo | token   | Alphanumeric.<br>If ContentsType = "Other,"<br>Max. length = 15 characters.<br>Else<br>Max. length = 60 characters   | This field is associated with ContentsType and is a This element is ignored when the ContentsType value is "commercial sample."  |
|  |  | UserAcknowledged  | boolean | True or False  | Set this value to "true" to acknowledge acceptance of the USPS Privacy Act Statement and also the Content Restrictions and   |

|                    |                 |                |  |   |
|--------------------|-----------------|----------------|--|---|
|                    |                 |                |  | Prohibitions for the country you are sending the mailpiece to. If this is set to “false,” the label will not be printed. This is a required field.  |
| DesiredMailingDate |                 | date or number | date in yyyy-mm-dd format or a number between 0 and 7  | If present, must contain either a specific date greater than or equal to the current date (formatted yyyy-mm-dd) or an integer value greater than zero representing a positive number of business days to be added to the current date.   |
| DeviceID           |                 | token          |  | <i>This field is automatically generated in print result output, this element contains the USPS ID of the meter that printed the mailpiece. This will be ignored, if present, on input</i>  |
| GlobalMailService  |                 | string         | One of the following values – <ul style="list-style-type: none"> <li>• express</li> <li>• express flat rate envelope</li> <li>• first class flat</li> <li>• first class parcel</li> <li>• priority</li> <li>• priority flat rate box</li> <li>• priority flat rate envelope</li> <li>• priority large flat rate box</li> <li>• priority small flat rate box</li> </ul> | The Stamps.com XML specification provides two means to specify the mail class and mailpiece types for international mailpieces. For international mail you can set the mailpiece and mail class combination in this field or you can set them separately in the mail class and mailpiece fields (see below). If both are set the GlobalMailService overrides the mail class and mailpiece values. |
| HidePostageAmount  |                 | boolean        | True or False<br>Default: False  | You can specify whether you want the postage amount hidden.   |
| Identity           |                 | string         | Internal Use Only  | This is an INTERNAL field Stamps.com uses for its own Item identification purposes.   |
| ItemOrigin         |                 | Node           | --   | <i>This node specifies what data source the item is from. This is an output-only field generated when exporting an XML file from the Batch interface of the client.</i>   |
|                    | ShippingProfile | Node           | --   |   |
|                    | DisplayName     | string         | Alphanumeric   | Name of the profile that the item is  |

|             |                          |               |  |  |
|-------------|--------------------------|---------------|--|--|
|             |                          |               |  | <i>from</i>  |
|             | <i>Identity</i>          | <i>string</i> | <i>Alphanumeric</i>  | <i>This is an internal identifier for the profile</i>  |
| LayoutStyle |                          | Node          | --   | This node can be used to override the layout style set in the Layout section described above. This is useful if you are printing a combination of mailpieces that may require different layouts, e.g. when you are printing postage for domestic and international mailpieces you may not be able to use the same layout for both. |
|             | RecipientAddressFontName | string        | Font Name  | Specify the type of font you want the recipient address formatted in (e.g. Verdana, Helvetica, Times New Roman etc.). You can set any font installed on the machine where you are running the Stamps.com client.   |
|             | RecipientAddressFontSize | integer       | Font Size in 99 format (specified as pt)                       | Set the size of the font for the Recipient Address. If this is not specified then the client will auto-size for the best possible font size. This overrides the value set in the Layout Node.  |
|             | ReturnAddressFontName    | string        | Font Name  | Specify the type of font you want the return address formatted in (e.g. Verdana, Helvetica, Times New Roman etc.). You can set any font installed on the machine where you are running the Stamps.com client.  |
|             | ReturnAddressFontSize    | integer       | Font Size in 99 format (specified as pt)                       | Set the size of the font for the Return Address. If this is not specified then the client will auto-size for the best possible font size. This overrides the value set in the Layout Node.   |
|             | ReturnAddressGraphic     | string        | File name with full or relative path                           | You can use this to specify if you want a graphic associated with a return address. The graphic has to be bitmap file.   |
| MailClass   |                          | string        | One of the following values<br>-<br>• express<br>• first class | This the Mail Class of the mailpiece. This is required for all domestic mailpieces, and for any international mailpieces where GlobalMailService is absent.  |

|                   |                |  |   |
|-------------------|----------------|--|---|
|                   |                | <ul style="list-style-type: none"> <li>• media mail</li> <li>• parcel post</li> <li>• priority</li> <li>• international first class</li> <li>• international priority</li> <li>• international express</li> </ul>  |   |
| MailingCutoffTime | time           | Time in “HH:MM:SS” format (24-hour clock)  | This field specifies a cutoff time. After this cutoff time postage will be dated for the following day if the Rollover element is set to “true” (see below). This field overrides the value set in the Configuration section described above. |
| Mailpiece         | string         | One of the following values – <ul style="list-style-type: none"> <li>• flat rate envelope</li> <li>• flat rate priority box</li> <li>• large flat rate priority box</li> <li>• large package</li> <li>• non-standard envelope</li> <li>• oversized package</li> <li>• package</li> <li>• postcard</li> <li>• small flat rate priority box</li> <li>• thick envelope</li> </ul> | This is the mailpiece type This is required for all domestic mailpieces, and for any international mailpieces where GlobalMailService is absent. (Use non-standard envelopes if you are shipping Flats).                                      |
| NonDeliveryOption | string         | one of the following – <ul style="list-style-type: none"> <li>• abandon</li> <li>• return to sender</li> </ul>   | This is for international mail. It specifies what to do if the mailpiece cannot be delivered.   |
| Nonmachinable     | boolean        | True or False<br>Default: False  | Use this to specify if the package is oddly shaped and cannot be processed by automated equipment   |
| OrderDate         | date or string | Either a date field or “today”   | This element provides a place to store the date of the order for  |



|                        |  |         |   |   |
|------------------------|--|---------|---|---|
|                        |  |         | to represent today's date                       | which the item is being printed. Special value "today" means date of Print document execution.  |
| OrderID                |  | token   | Alphanumeric                                    | A user-provided foreign key that associates the mailpiece with a record in the user's shipping database. It is copied into print results when printing a batch.   |
| PackageDimensionsValue |  | Node    | --  | This field can be used to set the dimensions of the mailpiece. The dimensions can be specified either as a dimension set stored in the client (this is a combination of L, W and H) or as separate values for length, width and height. Only one or the other is required not both. |
|                        | PackageDimensionSet  | string  | Name of Dimension Set                           | If you have saved any dimension sets in the Stamps.com client, you can simply specify the name of the dimension set.  |
|                        | PackageDimensions  | Node    | ---   | You can also specify the dimension details individually. You do not have to specify both a PackageDimensionSet and PackageDimensions  |
|                        | <div> <div>BoxLike</div> <div>Height</div> <div>Length</div> <div>Width</div> </div> | boolean | True or False<br>Default: True                  | Set this to "false" if the package is not rectangular   |
|                        |  | integer | Number<br>Min Value: 1                          | Height of the mailpiece   |
|                        |  | integer | Number<br>Min Value: 1                          | Length of the mailpiece   |
|                        |  | integer | Number<br>Min Value: 1                          | Width of the mailpiece  |
|                        | PostageCost  | Node    | --  | <i>This is an output field that specifies the cost of postage printed. NOTE: Actual total cost you have incurred will include the amount specified in SDCCost (in addition to PostageCost)</i>  |
|                        | MailClass  | decimal | Number in 999.99 format. Minimum amount is 0.01 | <i>This is the base amount paid for the Item's postage based on its mail class and mailpiece type. This does not include cost of special services and insurance.</i>  |
|                        | Services   | Node    | --  | <i>This node contains the cost of individual Special Services. This node will have values only for Special Services you have requested</i>  |

|  |                                    |                |  |  |
|--|------------------------------------|----------------|--|--|
|  |                                    |                |  | <i>and any services required by the particular mail class.</i>   |
|  | <i>CertifiedMail</i>               | <i>decimal</i> | <i>Number in 999.99 format. Minimum amount is 0.01</i> | <i>This is the cost of Certified Mail.</i>   |
|  | <i>COD</i>                         | <i>decimal</i> | <i>Number in 999.99 format. Minimum amount is 0.01</i> | <i>This is the cost of Collect On Demand (C.O.D).</i>  |
|  | <i>DeliveryConfirmation</i>        | <i>decimal</i> | <i>Number in 999.99 format. Minimum amount is 0.01</i> | <i>This is the cost of Delivery Confirmation.</i>  |
|  | <i>Nonmachinable</i>               | <i>decimal</i> | <i>Number in 999.99 format. Minimum amount is 0.01</i> | <i>This is the additional cost required if your mailpiece is oddly-shaped or otherwise non-machinable.</i>   |
|  | <i>NoticeOfNonDelivery</i>         | <i>decimal</i> | <i>Number in 999.99 format. Minimum amount is 0.01</i> | <i>This is a sub-service to Collect On Delivery. This is optionally available only when you choose Collect On Delivery.</i>  |
|  | <i>RegisteredMail</i>              | <i>decimal</i> | <i>Number in 999.99 format. Minimum amount is 0.01</i> | <i>This is the cost of Registered Mail.</i>  |
|  | <i>RestrictedDelivery</i>          | <i>decimal</i> | <i>Number in 999.99 format. Minimum amount is 0.01</i> | <i>This is the cost of Restricted Delivery. Restricted Delivery service ensures that only a specified person will receive the particular mailpiece. This service is only available if you also purchase Certified Mail, Insured Mail, COD, or Registered Mail.</i> |
|  | <i>ReturnReceipt</i>               | <i>decimal</i> | <i>Number in 999.99 format. Minimum amount is 0.01</i> | <i>This is the cost of requesting a return receipt.</i>  |
|  | <i>ReturnReceiptForMerchandise</i> | <i>decimal</i> | <i>Number in 999.99 format. Minimum amount is 0.01</i> | <i>This is the cost of requesting a return receipt for merchandise.</i>  |
|  | <i>SignatureConfirmation</i>       | <i>decimal</i> | <i>Number in 999.99 format. Minimum amount is 0.01</i> | <i>This is the cost of Signature Confirmation.</i>   |
|  | <i>SundayHolidayDelivery</i>       | <i>decimal</i> | <i>Number in 999.99 format.</i>                        | <i>This is the cost of requesting delivery on Sundays and Holidays</i>   |

|                      |                      |                       |   |   |
|----------------------|----------------------|-----------------------|---|---|
|                      |                      |                       | <i>Minimum amount is 0.01</i>   | <i>(only available with Express Mail)</i>   |
|                      |                      | <i>USPSInsurance</i>  | <i>decimal</i>  | <i>Number in 999.99 format. Minimum amount is 0.01</i>  |
|                      |                      | <i>Total</i>          | <i>decimal</i>  | <i>Number in 999.99 format. Minimum amount is 0.01</i>  |
| <i>PrintDateTime</i> |                      | <i>dateTime</i>       | <i>Date and Time</i>  | <i>This is the time and date at which postage was printed.</i>  |
| <i>PrintedMemo</i>   |                      | <i>token</i>          | <i>Alphanumeric</i>   | <i>You can use this field to request that a reference number of other memo be printed on to the label.</i>  |
| <i>PrintID</i>       |                      | <i>unsigned Long</i>  | <i>Numeric</i>  | <i>This is an identifier field automatically generated when postage is printed.</i>   |
| <i>PrintResult</i>   |                      | <i>string</i>         | <i>One of the following –</i> <ul style="list-style-type: none"> <li><i>• printed</i></li> <li><i>• printed sample</i></li> <li><i>• failed to print</i></li> <li><i>• canceled</i></li> <li><i>• service not supported</i></li> <li><i>• issued but not printed</i></li> </ul> | <i>This field specifies whether postage was successfully printed or not for the item. To account for the unlikely scenario that postage was deducted from your account but no label was printed, we have a “issued but not printed” status. However, since postage is deducted just before the print is fired, this would not occur under most circumstances.</i> |
| <i>Recipient</i>     |                      | <i>Node</i>           | --  | <i>This field should be used to specify the address of the recipient for the mailpiece.</i>   |
|                      | <i>AddressFields</i> |                       | <i>Node</i>   | --  |
|                      |                      | <i>Address1</i>       | <i>token</i>  | <i>Alphanumeric</i>   |
|                      |                      | <i>Address2</i>       | <i>token</i>  | <i>Alphanumeric</i>   |
|                      |                      | <i>Address3</i>       | <i>token</i>  | <i>Alphanumeric</i>   |
|                      |                      | <i>Address4</i>       | <i>token</i>  | <i>Alphanumeric</i>   |
|                      |                      | <i>Address5</i>       | <i>token</i>  | <i>Alphanumeric</i>   |
|                      |                      | <i>Address6</i>       | <i>token</i>  | <i>Alphanumeric</i>   |
|                      |                      | <i>Address7</i>       | <i>token</i>  | <i>Alphanumeric</i>   |
|                      |                      | <i>City</i>           | <i>token</i>  | <i>Alphanumeric</i>   |
|                      |                      | <i>Company</i>        | <i>token</i>  | <i>Alphanumeric</i>   |
|                      |                      | <i>Country</i>        | <i>token</i>  | <i>Alphanumeric</i>   |
|                      |                      | <i>Department</i>     | <i>token</i>  | <i>Alphanumeric</i>   |
|                      |                      | <i>EmailAddresses</i> | <i>Node</i>   | --  |

You can specify up to six email addresses. NOTE: Only one of these email addresses is currently used

|  |                       |       |              |  |
|--|-----------------------|-------|--------------|--|
|  |                       |       |              | by the Stamps.com client.  |
|  | OrderedEmailAddresses | Node  | --           | Use this field if you wish to specify a list of unnamed email addresses. You can specify up to six.  |
|  | Address               | token | Alphanumeric | Email address of your choice for this recipient.   |
|  | FirstName             | token | Alphanumeric | First name of the recipient.   |
|  | FullName              | token | Alphanumeric | You can use this instead of specifying first, middle and last names.   |
|  | LastName              | token | Alphanumeric | Last Name of the recipient   |
|  | MiddleName            | token | Alphanumeric | Middle Name of the recipient   |
|  | MultilineAddress      | Node  | --           | If you prefer, you can simply use this field to specify each line of the address. If you do this you need not fill in any of the address fields above except email address and phone number. |
|  | Line                  | token | Alphanumeric | Specify each line of the address in a <Line> element.  |
|  | NamePrefix            | token | Alphanumeric | This is the prefix for the user's name such as "Ms.", "Mr." or "Mrs."  |
|  | NameSuffix            | token | Alphanumeric | This is the suffix for the user's name such as "Jr.", "Sr.", "IV" etc.   |
|  | PhoneNumbers          | Node  | --           | You can specify either four named phone numbers or six unnamed phone numbers for the recipient.  |
|  | OrderedPhoneNumbers   | Node  | --           | Use this section to specify up to six unnamed phone numbers. NOTE: Only one phone number is currently processed by the Stamps.com client.  |
|  | Number                | token | Alphanumeric | Specify each phone number within a <Number> element.   |
|  | PostalCodeValue       | Node  | --           | Use this section to provide either the international postal code or the US ZIP code  |
|  | PostalCode            | token | Alphanumeric | Postal code for International addresses  |
|  | ZIP                   | token | Alphanumeric | ZIP code for domestic addresses  |
|  | RegionValue           | Node  | --           | Use this section to specify either the province (international) or state (domestic)  |
|  | Province              | token | Alphanumeric | Province (or other national subdivision such as department, county, prefecture, state) for   |

|                       |                      |                  |                       |                         |  |
|-----------------------|----------------------|------------------|-----------------------|-------------------------|--|
|                       |                      |                  |                       | international addresses |  |
|                       |                      | State            | token                 | Alphanumeric            | State for domestic addresses   |
|                       |                      | Title            | token                 | Alphanumeric            | Title of the recipient (“CEO”, “Vice President” etc.)  |
|                       |                      | Urbanization     | token                 | Alphanumeric            | This is an additional address specification unique to Puerto Rico  |
|                       |                      | ZIPAddOn         | token                 | Alphanumeric            | This is the four digit add-on to the ZIP code. This is appended to the ZIP code with a ‘-’.  |
| RecipientEmailOptions |                      |                  | Node                  | --                      | This node is used to specify Email options for the recipient of the mailpiece.   |
|                       | ShipmentNotification |                  | Boolean               | True or False           | If this is set to “true”, then a Shipment notification email will be sent to all recipients (unless overridden for specific recipients)  |
|                       |                      | companyInSubject | Attribute/<br>Boolean | True or False           | This is an attribute of the ShipmentNotification element. If this is set to “true”, then if your Company’s name has been set in the My Account section, it will be used in the Subject line of the email (“Acme Inc. has sent you a package”). If this is set to “false” or not set at all, then the user name will be used in the subject line of the email (“John Smith has sent you a package”) |
|                       |                      | fromCompany      | Attribute/<br>Boolean | True or False           | This is an attribute of the ShipmentNotification element. If this is set to “true” then the email will come from your company name (From: Acme Inc). If it is set to “false” or not set, then the email will come from the user’s name (From: John Smith).   |
| RefCode               |                      |                  | token                 | Alphanumeric            | This is the Cost Code that you wish to associate with the mailpiece in your Stamps.com history   |
| RefundType            |                      |                  | string                | e-Refund or Mail-in     | <i>This is an output field that specifies whether you can request a refund online or will have to mail in refund forms.</i>  |
| Rollover              |                      |                  | boolean               | True or False           | You can specify whether you want to change the mailing date on the mailpiece if the mailing cutoff time has been reached. If you set this value, it overrides the Rollover flag  |

|                       |                |  |   |
|-----------------------|----------------|--|---|
|                       |                |  | in the configuration section  |
| <i>SDCCost</i>        | <i>Node</i>    | --   | <i>This output node specifies the cost charged by Stamps.com for any special services provided by us.</i>   |
| <i>SDCInsurance</i>   | <i>decimal</i> | <i>Non-negative, non-zero number in 99.99 format</i> | <i>This is the cost of insuring the mailpiece using Stamps.com insurance.</i>   |
| Sender                | Node           | --   | This is the contact information for the sender of the mailpiece. The sender contact information has almost exactly the same structure as the recipient's address. The only difference is that the "AddressFields" sub-node that wraps the contact information is not required here. |
| Address1              |                |  | Refer to Recipient Address Information for all Contact Information.   |
| Address2              |                |  | Same as above   |
| Address3              |                |  | Same as above   |
| Address4              |                |  | Same as above   |
| Address5              |                |  | Same as above   |
| Address6              |                |  | Same as above   |
| Address7              |                |  | Same as above   |
| City                  |                |  | Same as above   |
| Company               |                |  | Same as above   |
| Country               |                |  | Same as above   |
| Department            |                |  | Same as above   |
| DisplayName           |                |  | Same as above   |
| EmailAddresses        |                |  | Same as above   |
| OrderedEmailAddresses |                |  | Same as above   |
| Address               |                |  | Same as above   |
| FirstName             |                |  | Same as above   |
| FullName              |                |  | Same as above   |
| LastName              |                |  | Same as above   |
| MiddleName            |                |  | Same as above   |
| MultilineAddress      |                |  | Same as above   |
| Line                  |                |  | Same as above   |
| NamePrefix            |                |  | Same as above   |
| NameSuffix            |                |  | Same as above   |
| PhoneNumbers          |                |  | Same as above   |

|  |                      |            |         |               |   |
|--|----------------------|------------|---------|---------------|---|
|  | OrderedPhoneNumbers  |            |         |               | Same as above   |
|  |                      | Number     |         |               | Same as above   |
|  | PostalCodeValue      |            |         |               | Same as above   |
|  |                      | PostalCode |         |               | Same as above   |
|  |                      | ZIP        |         |               | Same as above   |
|  | RegionValue          |            |         |               | Same as above   |
|  |                      | Province   |         |               | Same as above   |
|  |                      | State      |         |               | Same as above   |
|  | Title                |            |         |               | Same as above   |
|  | Urbanization         |            |         |               | Same as above   |
|  | ZIPAddOn             |            |         |               | Same as above   |
|  | SenderEmailOptions   |            | Node    | --            | If the Item/SenderEmailOptions element is present, its contents supersede those of the Configuration/SenderEmailOptions element in their entirety. This includes the scenarios where you add the SenderEmailOptions node here but do not add a DeliveryNotification element to it. In this case, even if the Configuration/SenderEmailOptions has a DeliveryNotification element it will be ignored and the default value used. |
|  | DeliveryNotification |            | Boolean | True or False | Set this to “true” if you want to be notified via email when this mailpiece is delivered.   |
|  | ShipmentNotification |            | Boolean | True or False | Set this to “true” if you want an email notification providing information on the cost of postage and tracking number when postage is printed for this mailpiece.   |
|  | Services             |            | Node    | --            | Use this node to specify what special services you require.   |
|  | CertifiedMail        |            | Boolean | True or False | Set this to “true” if you want to use the Certified Mail special service with the mailpiece.  |

|                     |                       |                    |  |  |
|---------------------|-----------------------|--------------------|--|--|
| COD                 |                       | Boolean or decimal | False or Number in 999.99 format. Default: False               | If this value is set to “false” or not set, the mailpiece will not be subject to Collect on Delivery. Set the amount to be collected to request Collect on Delivery.   |
| ConfirmationService |                       | Node               | --   | Specifies the type of tracking you require.  |
|                     | DeliveryConfirmation  | Boolean            | True or False. Default: true                                   | If this value is set to “false”, then the mailpiece will not come with Delivery Confirmation. Note that many mail classes come with free Delivery Confirmation already included, unless Signature Confirmation is selected, overriding the choice. Also note that if you set Signature Confirmation to “true”, this entry will not appear in the XML file. |
|                     | SignatureConfirmation | boolean            | True or False Default: True                                    | If this value is set to “false”, then the mailpiece will not come with Signature Confirmation. Note that if you set Delivery Confirmation to “true”, this entry will not appear in the XML file.   |
| InsuranceService    |                       | Node               |  | The two sub-elements are substitution elements: only one or the other can be present in any particular item at one time. Note that any mail services that automatically include insurance are not included in this element.  |
|                     | SDCInsurance          | Boolean or decimal | False or numeric value in 9999.99 format. Minimum value: 0.01. | If this value is set to “false”, the order will not include SDC Insurance. Otherwise, the value will be the declared value of the package being insured. The maximum value permissible is \$2,500.   |
|                     | USPSInsurance         | Boolean            | False or numeric value in 999.99 format. Minimum value: 0.01   | If this value is set to “false”, the order will not include USPS Insurance. Otherwise, the value will be the declared value of the package being insured. The maximum value permissible is \$5,000.  |
| NoSaturdayDelivery  |                       | boolean            | True or False. Default: False                                  | If this is set to “true”, then you are requesting that the mailpiece not be delivered on a Saturday. This is   |



|                             |                          |  |  |   |
|-----------------------------|--------------------------|--|--|---|
|                             |                          |  |  | only available with Express Mail Classes.   |
| NoticeOfNonDelivery         | boolean                  | True or False.<br>Default: False                             |  | This is only available with Collect on Delivery. If this is set to “true”, then you will be notified if the mailpiece could not be delivered.   |
| RegisteredMail              | Boolean or Numeric Value | False or numeric value in 99999.99 format.<br>Default: False |  | Registered Mail is the most secure Special Service available. Registered articles are shipped under tight security from the point of mailing to the point of delivery. Insurance coverage of up to \$25,000 is included. Articles with no declared value are not insured. Set this to “false” or ignore it if you do not want registered mail. Otherwise, set the declared value of the registered article. |
| RestrictedDelivery          | boolean                  | True or False.<br>Default: False                             |  | Restricted Delivery service ensures that only a specified person will receive the mailpiece. This service is only available if you also purchase Certified Mail, Insured Mail, Collect on Delivery, or Registered Mail. Set this field to “true” if you want Restricted Delivery.   |
| ReturnReceipt               | boolean                  | True or False.<br>Default: False                             |  | This provides a mailer with evidence of delivery (to whom the mail was delivered and date of delivery), along with information about the recipient's actual delivery address. Set this to “true” if you want to receive a Return Receipt.   |
| ReturnReceiptForMerchandise | boolean                  | True or False.<br>Default: False                             |  | This is a return receipt for merchandise. Set the value to “true” if you want to receive a Return Receipt for Merchandise.  |
| SundayHolidayDelivery       | boolean                  | True or False.<br>Default: False                             |  | If you are choosing Express Mail you can request delivery on Sundays and holidays at extra cost. Set this field to “true” if you would like your mailpiece to be delivered on Sundays and holidays.   |
| WaiveDeliverySignature      | boolean                  | True or False.<br>Default: False                             |  | Set this to true if you do not require a signature when the mailpiece is delivered for domestic   |

|                |         |                                     |   |
|----------------|---------|-------------------------------------|---|
|                |         |                                     | Express Mail service.   |
| TrackingNumber | token   | Numeric                             | <i>This is an output field that provides the tracking number of the mailpiece after postage has been printed.</i> |
| WeightLb       | decimal | Non-negative number in 99.99 format | Use this field to specify the weight of the mailpiece in pounds.  |
| WeightOz       | decimal | Non-negative number in 99.99 format | Use this field to specify the weight of the mailpiece in ounces.  |

## Example

The following sections show examples of the item node for domestic and international mailpieces -

### Domestic

```

<Item>
  <OrderDate>today</OrderDate>
  <OrderID>0000015</OrderID>
  <PrintedMemo>Date 2009-07-
12T20:49:07Z</PrintedMemo>
  <Services>
    <CertifiedMail />
    <DeliveryConfirmation />
  </Services>
  <Recipient>
    <AddressFields>
      <NamePrefix>Mr.</NamePrefix>
      <FirstName>Joseph</FirstName>
      <LastName>Smith</LastName>
      <MultilineAddress>
        <Line>Smith Co.</Line>
        <Line>413 BUTTERMILK
PIKE</Line>
      </MultilineAddress>
      <City>Crescent Springs</City>
      <State>KY</State>
      <ZIP>41017-1638</ZIP>
      <Country>United States of
America</Country>
      <OrderedEmailAddresses>
        <Address>xyz@abc.com</Address>
      >
    </OrderedEmailAddresses>
    <OrderedPhoneNumbers>
      <Number>(818) 840-
3614</Number>
    </OrderedPhoneNumbers>
  </Recipient>
</Item>

```

```
        </AddressFields>
    </Recipient>
    <MailClass>media mail</MailClass>
    <Mailpiece>package</Mailpiece>
    <WeightOz>1</WeightOz>
    <PackageDimensionSet>A-type Widget
Box</PackageDimensionSet>
    <Sender>
        <Company>Acme Widgets, Inc.</Company>
        <Address1>12959 Coral Tree Pl</Address1>
        <City>Los Angeles</City>
        <State>CA</State>
        <ZIP>90066</ZIP>
        <ZIPAddOn>7020</ZIPAddOn>
        <DisplayName>Acme Widgets</DisplayName>
    </Sender>
</Item>
```

---

## International

```
<Item>
    <OrderDate>today</OrderDate>
    <OrderID>I000001</OrderID>
    <Recipient>
        <AddressFields>
            <FullName>Joe Smith</FullName>
            <Address1>209 Gardiner
House</Address1>
            <Address2>Broomhill Road</Address2>
            <City>London</City>
            <PostalCode>SW18 4JQ</PostalCode>
            <Country>United Kingdom (Great
Britain)</Country>
            <OrderedPhoneNumbers>
                <Number>12-34567</Number>
            </OrderedPhoneNumbers>
            <OrderedEmailAddresses>
                <Address>xyz@abc.com</Address>
            >
            </OrderedEmailAddresses>
        </AddressFields>
    </Recipient>
    <GlobalMailService>priority flat rate box</GlobalMailService>
    <WeightOz>320</WeightOz>
    <NonDeliveryOption>return to sender</NonDeliveryOption>
    <CustomsInfo>
        <Contents>
            <Item>
                <Description>Tank
tops</Description>
```

```
<Quantity>10</Quantity>
<Value>50.00</Value>
<WeightOz>32</WeightOz>
<HarmonizedTariffCode>610510</H
armonizedTariffCode>
<CountryOfOrigin>Kwajalein,
Marshall
Islands</CountryOfOrigin>
</Item>
</Contents>
<ContentsType>commercial
sample</ContentsType>
<CommercialSampleInfo>
  <Certificate>C4321</Certificate>
  <Invoice>I2345</Invoice>
  <License>L987</License>
</CommercialSampleInfo>
<DeclaredValue>50.00</DeclaredValue>
<UserAcknowledged />
</CustomsInfo>
<Sender>
  <FullName>Jane Smith</FullName>
  <Company>Acme Widgets, Inc.</Company>
  <Address1>12959 Coral Tree Pl</Address1>
  <City>Los Angeles</City>
  <State>CA</State>
  <ZIP>90066</ZIP>
  <ZIPAddOn>7020</ZIPAddOn>
  <DisplayName>Acme Widgets</DisplayName>
  <OrderedPhoneNumbers>
    <Number>3105551212</Number>
  </OrderedPhoneNumbers>
</Sender>
<RefCode>test1</RefCode>
<RecipientEmailOptions>
  <ShipmentNotification>false</ShipmentNotification>
</RecipientEmailOptions>
</Item>
```

## 6 Full Example

The following is a full, functional example of a Stamps.com XML file for printing postage –

```
<?xml version="1.0" ?>
<Print
xmlns="http://stamps.com/xml/namespace/2009/8/Client/BatchProcessing
V1">
  <Configuration>
    <ResultFile>c:\MailClassResults\printed-a-shipping-
batch.xml</ResultFile>
    <DesiredPrinter>
      <Name>FinePrint</Name>
      <Bin>Tray 2</Bin>
    </DesiredPrinter>
    <MailingCutoffTime>17:30:00.0</MailingCutoffTime>
    <Rollover>false</Rollover>
    <SenderEmailOptions>
      <DeliveryNotification />
      <ShipmentNotification />
    </SenderEmailOptions>
    <RecipientEmailOptions>
      <ShipmentNotification companyInSubject="true"
fromCompany="true" />
    </RecipientEmailOptions>
  </Configuration>
  <Layout>
    <Desired>
      <MediaName>Stamps.com SDC-1200 Standard
4x6 label 2 per sheet</MediaName>
      <StartCol>1</StartCol>
      <StartRow>1</StartRow>
      <Style>
        <IndiciumGraphic>XYZ</IndiciumGraphic>
        <RecipientAddressFontName>Helvetica</Reci
ipientAddressFontName>
        <RecipientAddressFontSize>10</RecipientAddr
essFontSize>
        <ReturnAddressFontName>Arial</ReturnAddr
essFontName>
        <ReturnAddressFontSize>11</ReturnAddressF
ontSize>
        <ReturnAddressGraphic>..\Folder\FileNam
e.gif</ReturnAddressGraphic>
      </Style>
    </Desired>
    <PrintReceipt>true</PrintReceipt>
  </Layout>
  <Item>
    <OrderDate>today</OrderDate>
```

```
<OrderID>0000015</OrderID>
<PrintedMemo>Date 2009-07-
12T20:49:07Z</PrintedMemo>
<Services>
  <CertifiedMail />
  <DeliveryConfirmation />
</Services>
<Recipient>
  <AddressFields>
    <NamePrefix>Mr.</NamePrefix>
    <FirstName>Joseph</FirstName>
    <LastName>Smith</LastName>
    <MultilineAddress>
      <Line>Smith Co.</Line>
      <Line>413 BUTTERMILK
      PIKE</Line>
    </MultilineAddress>
    <City>Crescent Springs</City>
    <State>KY</State>
    <ZIP>41017-1638</ZIP>
    <Country>United States of
    America</Country>
    <OrderedEmailAddresses>
      <Address>xyz@abc.com</Address>
    >
    </OrderedEmailAddresses>
    <OrderedPhoneNumbers>
      <Number>(818) 840-
      3614</Number>
    </OrderedPhoneNumbers>
  </AddressFields>
</Recipient>
<MailClass>media mail</MailClass>
<Mailpiece>package</Mailpiece>
<WeightOz>1</WeightOz>
<PackageDimensionSet>A-type Widget
Box</PackageDimensionSet>
<Sender>
  <Company>Acme Widgets, Inc.</Company>
  <Address1>12959 Coral Tree Pl</Address1>
  <City>Los Angeles</City>
  <State>CA</State>
  <ZIP>90066</ZIP>
  <ZIPAddOn>7020</ZIPAddOn>
  <DisplayName>Acme Widgets</DisplayName>
</Sender>
</Item>
<Item>
  <OrderDate>today</OrderDate>
  <OrderID>I000001</OrderID>
```

```
<Recipient>
  <AddressFields>
    <FullName>Joe Smith</FullName>
    <Address1>209 Gardiner
House</Address1>
    <Address2>Broomhill Road</Address2>
    <City>London</City>
    <PostalCode>SW18 4JQ</PostalCode>
    <Country>United Kingdom (Great
Britain)</Country>
    <OrderedPhoneNumbers>
      <Number>12-34567</Number>
    </OrderedPhoneNumbers>
    <OrderedEmailAddresses>
      <Address>xyz@abc.com</Address>
    >
    </OrderedEmailAddresses>
  </AddressFields>
</Recipient>
<GlobalMailService>priority flat rate box</GlobalMailService>
<WeightOz>320</WeightOz>
<NonDeliveryOption>return to sender</NonDeliveryOption>
<CustomsInfo>
  <Contents>
    <Item>
      <Description>Tank
tops</Description>
      <Quantity>10</Quantity>
      <Value>50.00</Value>
      <WeightOz>32</WeightOz>
      <HarmonizedTariffCode>610510</H
armonizedTariffCode>
      <CountryOfOrigin>Kwajalein,
Marshall
Islands</CountryOfOrigin>
    </Item>
  </Contents>
  <ContentsType>commercial
sample</ContentsType>
  <CommercialSampleInfo>
    <Certificate>C4321</Certificate>
    <Invoice>I2345</Invoice>
    <License>L987</License>
  </CommercialSampleInfo>
  <DeclaredValue>50.00</DeclaredValue>
  <UserAcknowledged />
</CustomsInfo>
<Sender>
  <FullName>Jane Smith</FullName>
  <Company>Acme Widgets, Inc.</Company>
```

```
<Address1>12959 Coral Tree Pl</Address1>
<City>Los Angeles</City>
<State>CA</State>
<ZIP>90066</ZIP>
<ZIPAddOn>7020</ZIPAddOn>
<DisplayName>Acme Widgets</DisplayName>
<OrderedPhoneNumbers>
  <Number>3105551212</Number>
</OrderedPhoneNumbers>
</Sender>
<RefCode>test1</RefCode>
<RecipientEmailOptions>
  <ShipmentNotification>false</ShipmentNotification>
</RecipientEmailOptions>
</Item>
</Print>
```



## 7 XML Pre-Processing

The Stamps.com client helps simplify the process of generating XML files through its pre-processor capabilities. Let's say you mail a lot of Priority Mail two-pound boxes. You do not have to specify the mailclass and mailpiece in every single item. You can provide this information once and then refer to it in various sections of the order's XML file. For instance, you can in essence tell the Stamps.com client, "if I refer to 'PMFRB', then my mail class is 'Priority Mail' and my mailpiece is 'flat rate Priority box'." Thereafter, any time you refer to "PMFRB" the client will automatically replace all instances of the reference to "PMFRB" with the correct mail class and mail piece before processing the orders in the file.

### Pre-Processing Attributes

You can use the following four attributes to provide pre-processing instructions to the Stamps.com client –

1. **abstract** – This attribute informs the Stamps.com client that the information contained in an element is a pre-processing instruction.
2. **xml:id** – This attribute specifies the name of the pre-processing instruction. In the above example this would be set to "PMFRB". This name should be referred to in the document when you want the values specified under it to be used.
3. **ref** – This attribute will be used to refer to a particular xml:id. The values from the referred xml:id will automatically be used when processing orders.
4. **path** – This attribute is useful when the pre-processing instructions are in a different file.

### Inline Pre-processing

Consider the following example –

```
<Print>
  <Item abstract="yes" xml:id="PMFRB">
    <MailClass>priority</MailClass>
    <MailPiece>flat rate priority box </MailPiece>
  </Item>
  <Item ref=" PMFRB">
    <Recipient>
      <!--
      ...
      -->
    </Recipient>
  </Item>
</Print>
```

This would be converted to

```
<Print>
  <Item>
    <MailClass>priority</MailClass>
    <MailPiece>flat rate priority box </MailPiece>
    <Recipient>
      <!--
      ...
      -->
  </Item>
```

```

        </Recipient>
    </Item>
</Print>

```

Notice how the abstract Item was removed and its elements placed into the actual Item. By specifying “abstract”, you can ensure that the item is not processed as a real Item but purely as a pre-processing reference for all the real Items (or orders) in your XML file

## Using an External File for Pre-processing

Consider the following example –

File **globals.xml** contains the following –

```

<Globals>
    <Configuration xml:id="global config">
        <DesiredPrinter>
            <Name>\\folder\PrinterName</Name>
        </DesiredPrinter>
    </Configuration>
    <Layout xml:id="global layout">
        <Desired>
            <MediaID>1000</MediaID>
        </Desired>
    </Layout>
</Globals>

```

Your **orders** file contains the following

```

<Print>
    <Configuration ref="global config" path="globals.xml" />
    <Layout ref="global layout" path="globals.xml" />
    <Item>
        <MailClass>priority</MailClass>
        <MailPiece>flat rate priority box </MailPiece>
        <Recipient>
            <!--
            ...
            -->
        </Recipient>
    </Item>
</Print>

```

This would be converted to -

```

<Print>
    <Configuration xml:id="global config">
        <DesiredPrinter>
            <Name>\\folder\PrinterName</Name>
        </DesiredPrinter>
    </Configuration>
    <Layout xml:id="global layout">
        <Desired>
            <MediaID>1000</MediaID>
        </Desired>
    </Layout>

```

```

    <Item>
      <MailClass>priority</MailClass>
      <MailPiece>flat rate priority box </MailPiece>
      <Recipient>
        <!--
          * * *
        -->
      </Recipient>
    </Item>
  </Print>

```

Notice how “global config” and “global layout” elements in globals.xml were inserted into your order’s xml file.

You can also do the same thing without using the “ref” attribute if you want all the contents of your external file inserted. Consider the following example

If **globals.xml** contained the following

```

<Item>
  <MailClass>priority</MailClass>
</Item>

```

And your order’s XML file contained the following -

```

<Print>
  <Item path="globals.xml">
    <Recipient>
      <!--
        * * *
      -->
    </Recipient>
  </Item>
</Print>

```

After pre-processing by the Stamps.com client, your order’s XML file will be converted to –

```

<Print>
  <Item>
    <MailClass>priority</MailClass>
    <Recipient>
      <!--
        * * *
      -->
    </Recipient>
  </Item>
</Print>

```

Using the pre-processing capabilities of the Stamps.com XML format has many advantages. Configuration and Layout information can be set up in separate files so that when you have to change them, you do not have to rewrite your software to generate the new configuration information. All you have to do is edit your “config” and “layout” file(s) and you can quickly switch the printer or layout you wish to use. Using references makes your XML files easier to read and scan visually.

## 8 Appendix

### A – Paper IDs and Paper Names Supported

| Paper ID | Display Name                                   | Size       |
|----------|--|------------|
| 1        | Plain Paper (letter) – 1 per page              | 8 ½" X 11" |
| 2        | Generic – Standard 4x6 label – 2 per sheet     | 8 ½" x 11" |
| 3        | Zebra/Eltron Type – Standard 4x6 label -- roll | 4" x 6"    |

#### NOTE:

1. If you are not sure of what Paper ID you need to use Appendix B shows the corresponding Paper Name for various types of Media.
2. When printing international labels that use the CN22/2976 integrated customs form you will not be able to print on PaperID 3 (Zebra/Eltron Thermal Label Rolls).
3. If you are printing international labels that use the CP72/2976-A multi-page form you can only print to PaperID 1 (Plain Paper).

### B – Media IDs and Media Names Supported

| Media ID | Type of Media  | Paper Type Supported                                   |
|----------|--|--|
| 38       | 4" x 6" Zebra/Eltron Printers  | Zebra/Eltron Type – Standard 4x6 label – roll (Label)  |
| 77       | 4" x 6" for Zebra/EltronPrinters                                     | Zebra/Eltron Type – Standard 4x6 label – roll (label)  |
| 402      | Avery 32402 - Standard 4x6 label - 2 per sheet                       | Generic Standard 4x6 label – 2 per sheet (DoubleLabel) |
| 1000     | Plain Paper (letter) - Standard 4x6 label - 2 per page               | Plain Paper (letter) – 1 per page (PlainPaper)         |
| 1001     | Generic - Standard 4x6 label - 2 per sheet                           | Generic Standard 4x6 label – 2 per sheet (DoubleLabel) |
| 1002     | Avery 5265 / 8165 / 8255 (1-part) - Standard 4x6 label - 2 per sheet | Generic Standard 4x6 label – 2 per sheet (DoubleLabel) |
| 1005     | NCR 909143 - Standard 4x6 label - 2 per sheet                        | Generic Standard 4x6 label – 2 per sheet (DoubleLabel) |
| 1006     | Plain 8x11 paper 1 per page  | Plain Paper (letter) – 1 per page (PlainPaper)         |
| 1008     | Stamps.com SDC-1200 - Standard 4x6 label - 2 per sheet               | Generic Standard 4x6 label – 2 per sheet (DoubleLabel) |
| 1009     | Stamps.com SDC-4600 - Standard 4x6 label - 4 per sheet               | Generic Standard 4x6 label – 2 per sheet (DoubleLabel) |

|      |  |  |
|------|--|--|
| 1010 | Stamps.com SDC-4610 - Standard 4x6 label - 4 per sheet | Generic Standard 4x6 label – 2 per sheet (DoubleLabel) |
| 3000 | International Label – Plain Paper – 1 per page         | Plain Paper (letter) – 1 per page (PlainPaper)         |
| 3001 | International Label – SDC-1200 – Standard 4 x 6 label  | Generic - Standard 4x6 label - 2 per sheet             |