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Tobacco Electronic Filing Guide

Cigarette2017V1.0

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Tobacco2017V1.0

Updated: April 2017

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# Section 1 – General Information

## Chapter 1 – Introduction

### Technology Sub-committee

The Federation of Tax Administrators (FTA) has adopted a “10 Point Plan” to curb tobacco tax evasion. Point 6 is, “Utilize uniform electronic reporting standards for tobacco information”.

The Technology Sub-committee facilitates and encourages all tax authorities: federal, state/provincial and local, and taxpayers alike, to comply with this point.

Electronic data interchange (EDI) is the structured transmission of data between organizations by electronic means, which is used to transfer electronic documents or business data from one computer system to another computer system, i.e. from one trading partner to another trading partner without human intervention.

EDI is made up of many different methods of sharing data electronically between parties. The FTA has developed standards for the tax authority to follow when implementing electronic data interchange (EDI).

The committee has adopted XML as the standard for such reporting. The XML schema standard is included in this guide. It has also incorporated into such standards the various codes adopted for reporting product type, entity identification, as well as specific tobacco tax information.

The Technology Sub-committee is the custodian of the codes and the chair is the contact person for anyone wishing to add to the list of approved codes.

Currently, a number of states have plans for mandatory or voluntary electronic reporting programs for tobacco taxes. Obviously, the more uniform the methods employed in such reporting, the better it is for all taxpayers and tax authorities involved. Besides making tax reporting more efficient, uniformity in methods and standards also facilitates the sharing of the detailed information contained in the tax reports among tax authorities, and it enables taxpayers to better respond to tax authority requirements for information.

The Tobacco Uniformity Committee recommends that state tax administrators adopt a standard internet interface for tobacco taxpayers. The standard interface is included in this guide.

A listing of active work groups and the leadership of this sub-committee can be found on the next few pages.

### Committee Co-Chairs

|  |
| --- |
| Kara Parga, Nebraska Department of Revenue  Phone: 402-471-5781  Email: [kara.parga@nebraska.gov](mailto:kara.parga@nebraska.gov) |
| Mark Triplett, Triplett & Associates, Inc.  Phone: 804-433-3873  Email: [Mark@govaccess.com](mailto:Mark@govaccess.com) |

### Work Groups

The work group’s responsibilities are planning, implementation, and evaluation.

|  |  |
| --- | --- |
| XML Schema for Cigarette/Tobacco Tax Team | |
| Team Leader | Team Members |
| Kara Parga, Nebraska Department of Revenue  Phone: 402-471-5781  Email: [kara.parga@nebraska.gov](mailto:kara.parga@nebraska.gov) | Terry Garber, FTA - Advisor  Phone 803-898-5521  Email: [terry.garber@taxadmin.org](mailto:terry.garber@taxadmin.org) |
| Jonathan Lyon, FTA – Advisor  Email: [jonathan.lyon@taxadmin.org](mailto:jonathan.lyon@taxadmin.org) |
| Jacob Dubreuil, FTA – Advisor  Email: [JDubreuil@rsimail.com](mailto:JDubreuil@rsimail.com) |
| Scott Fitzgerald, Iowa Department of Revenue  Phone: (515) 281-5884  E-mail: [scott.fitzgerald@iowa.gov](mailto:scott.fitzgerald@iowa.gov) |

Team Focus:

* Preliminary review of Uniformity XML schemas and XML implementation guides.
* Maintain XML schema for cigarette and tobacco.
* XML for state-to-state data exchanges.
* Future XML discussion topics: migration strategies; common implementation strategies; and translation software.

|  |  |
| --- | --- |
| XML Implementation Review Team | |
| Team Leader | Team Members |
| Kara Parga, Nebraska Department of Revenue  Phone: 402-471-5781   * Email: [kara.parga@nebraska.gov](mailto:kara.parga@nebraska.gov) | Scott Fitzgerald, Iowa Department of Revenue  Phone: (515) 281-5884  E-mail: [scott.fitzgerald@iowa.gov](mailto:scott.fitzgerald@iowa.gov) |
| Ray Mattson-Grimm, SICPA  Phone: 571-275-0242  Email: [ray.mattson-grimm@sicpa.com](mailto:ray.mattson-grimm@sicpa.com) |
| Randall Burgess, ProImage  Phone: 704-847-4562  Email: [Randall.Burgess@new-proimage.com](mailto:Randall.Burgess@new-proimage.com) |

Team Focus:

* Responsible for Annual Update of Uniformity Tobacco Electronic Filing Guide.
* Annual Updates of XML and mapping in Guide.
* Preliminary review of State XML implementation guides.
* Preparation of mapping of schema of the yet to be approved cover sheet.

### Implementation Guide Approval Procedures

Procedure for having an eFile Software Guide (XML Guide) approved by the FTA Tobacco Uniformity Technology Sub-committee

* [Contact](#_Committee_Co-chairs) the chair of the Technology Sub-committee early with any preliminary questions or discussion; this will aid in resolving many issues before the first complete draft is submitted.
* Submit an electronic copy of proposed Guide to chair of the Technology Sub-committee.
  + Tax forms and schedules used by the State are helpful in determining proper mapping and should be submitted along with the Guide.
* The Guide is distributed to the XML Implementation Review Team for review.
* The Team members submit comments on the Guide to the Team Leader.
  + The Team will be given approximately 3 weeks for review of the Guide.
* The Team will have a conference call with Guide submitters.
  + Questions or changes will be addressed during the conference call. If mapping changes are required, the process restarts at submission of the Guide.
* The Guide is either preliminarily accepted or rejected.
* The Guide is submitted for approval by the Technology Sub-committee at the next Uniformity meeting.
* The Guide is approved.

Note: these procedures should be followed for new guide approvals and also for significant changes to existing guides.

### XML – State Implementation Guides

The following implementation guides were reviewed by the FTA Uniformity Committee and identified as following the standards defined by the committee for electronic file formats.

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|  | State | Guide Date | Guide Version | XML Version | FTA Approved Date |
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Footnotes:

## Chapter 2 - Migration Strategies

### Strategic Migration Document Overview

#### Description

As mature electronic filing implementation becomes part of day-to-day business activities for state agencies involved with the collection of filing information, there may be a point in time where a tax authority evaluates migrating to a new XML schema. It is important to have plans and strategies in place that will allow implementing a new XML schema with minimal disruption to government agencies and industry partners.

#### Mature Installments

Once a tax authority has created an environment where they are actively collecting tax filing data from tobacco tax filers or information providers (filers), the environment begins to mature over time. Duties in a mature environment move away from the initial set up of the program and instead focus on the issues of moving a new filer quickly and efficiently from setup, to testing, to full production. Once a filer has been certified by the tax authority and is established in the production environment, monthly processing is routine.

### 

### Minimizing Risk

It is important to understand that managing a tax authority’s assets are of strategic importance to the tax authority in both business and technical management. It is also crucial for industry to manage business and technical resources. For both the tax authority and industry, the risk of making changes which are not warranted, justified, essential, and strategically planned is significant. The following guidelines have proven valuable:

* Make sure there is a strong business case for moving to a new version of an XML schema and starting a new certification process.
* Implementing a new XML version should be well thought out, planned, coordinated, and managed.
* Allow trade associations representing the tobacco industry to participate in the planning, implementation, and communication process. Involve other state departments such as the Attorney General’s office, Department of Health, etc.
* The tax authority should ensure requirements are reasonable, easily understood, and simple to comply with.
  + Provide a well-defined electronic implementation guide
  + Provide adequate notification of implementation
  + Provide adequate testing opportunities
  + Provide a quick path to certification
    - Provide feedback quickly after a test is submitted, whether the filing is acceptable or changes are requested
    - Filers should need to test and file dual tax information in more than one XML schema for only a short period of time
    - For both industry and the tax authority, the goal is to use the minimum number of resources to quickly certify the filer in the XML schema format

### Implementation Guide Review:

Any new implementation guide should be submitted to the Federation of Tax Administrators Tobacco Uniformity Technology Sub-committee for review before implementation. Please see Section 1, Chapter 1 for the [Implementation Guide Approval Procedures](#_Implementation_Guide_Approval).

## Chapter 3 – Tobacco Tax Web Pages

### Introduction

The Tobacco Uniformity Technology Sub-committee recommends that state tax administrators adopt a standard Internet interface for tobacco taxpayers. A standard interface will help taxpayers to access the forms and information they need, regardless of the number of states in which they do business. Such access will also be helpful to other states as they look for comparable information. Each state tobacco tax Web site will include a predictable number of links and a standard set of informational categories, although the precise look and feel of each site will remain specific to the state. This will also help states build Web sites that include all the information a taxpayer will need, by providing a map to Web developers.

### Guidelines

The standard interface will consist of a recommended set of links to pertinent tobacco tax information, forms, and frequently asked questions. This set of links, or standard categories, with suggested subcategories, is:

* Frequently Asked Questions (FAQs)
* Forms and Publications
* Tobacco Tax Rates
* Laws, Regulations and Notices
  + Current Laws
  + Legislation
  + Current Regulations
  + Proposed Regulations
  + Departmental Notices or Newsletters
* Licenses
  + How to obtain a license
* Electronic Filing & Payment
  + Tobacco Electronic Filing Guide
  + XML Schema and reporting requirements
  + Electronic filing testing requirements
  + EFT
  + FAQs
* Contact Us
  + Email us
  + Write us
  + Call us

Under each of the category headings, states may place links to whatever types of information they require. The links will vary by state, but the category headings should remain standard. Taxpayers would then have the benefit of always knowing where to find certain types of information, no matter what state Web site they are using.

Taxpayers and administrators may have different needs; therefore, the Technology Sub-committee also includes this list of suggested categories, which will contain additional links. States may adopt and include whatever optional categories they wish, but the Technology Sub-committee recommends that the optional categories be placed after the set of standard categories.

The Optional Categories are:

* Tobacco Tax Statistics
* Other Links
  + Marketers’ Associations
  + IRS - Forms and Publications
  + IRS - Excise tax information

When each state develops its Tobacco Tax Web Interface, it should forward the URL of the interface page to Jonathan Lyon of the FTA at [jonathan.lyon@taxadmin.org](mailto:jonathan.lyon@taxadmin.org) so the link may be included on the FTA’s tobacco tax links to the states. If you already have such a Web page, please forward the URL to FTA even though you may be changing the content.

## Chapter 4 - Web Services

The term Web services describes a standardized way of integrating Web-based [applications](http://www.webopedia.com/TERM/A/application.html) using the [XML](http://www.webopedia.com/TERM/X/XML.html), [SOAP](http://www.webopedia.com/TERM/S/SOAP.html), [WSDL](http://www.webopedia.com/TERM/W/WSDL.html) and [UDDI](http://www.webopedia.com/TERM/U/UDDI.html) [open](http://www.webopedia.com/TERM/O/open.html) [standards](http://www.webopedia.com/TERM/S/standard.html) over an Internet [protocol](http://www.webopedia.com/TERM/P/protocol.html) [backbone](http://www.webopedia.com/TERM/B/backbone.html). XML is used to [tag](http://www.webopedia.com/TERM/T/tag.html) the data, SOAP is used to transfer the data, WSDL is used for describing the services available and UDDI is used for listing what services are available. Used primarily as a means for businesses to communicate with each other and with clients, Web services allow organizations to communicate data without intimate knowledge of each other's IT systems behind the [firewall](http://www.webopedia.com/TERM/F/firewall.html).

Unlike traditional [client/server](http://www.webopedia.com/TERM/C/client_server_architecture.html) models, such as a Web [server](http://www.webopedia.com/TERM/S/server.html)/Web page system, Web services do not provide the user with a [GUI](http://www.webopedia.com/TERM/G/GUI.html). Web services instead share business logic, data and processes through a programmatic interface across a network. The applications interface, not the users. Developers can then add the Web service to a GUI (such as a Web page or an executable program) to offer specific functionality to users.

Web services allow different applications from different sources to communicate with each other without time-consuming custom coding, and because all communication is in XML, Web services are not tied to any one [operating system](http://www.webopedia.com/TERM/O/operating_system.html) or [programming language](http://www.webopedia.com/TERM/P/programming_language.html). For example, [Java](http://www.webopedia.com/TERM/J/Java.html) can talk with [Perl](http://www.webopedia.com/TERM/P/Perl.html), and [Windows](http://www.webopedia.com/TERM/M/Microsoft_Windows.html) applications can talk with [UNIX](http://www.webopedia.com/TERM/U/UNIX.html) applications.

Web services do not require the use of [browsers](http://www.webopedia.com/TERM/B/browser.html) or [HTML](http://www.webopedia.com/TERM/H/HTML.html).

Web services are sometimes called application services.

## Chapter 5 - Implementing Uniform Electronic Filing

The goal of uniform reporting is to provide tax authorities with a model to follow so that they do not have to reinvent the electronic filing process, also to provide industry a standard by which they can more easily report information that tax authorities need. The easier it is for industry to comply, the more likely the tax authority will get the information timely and error free.

When implementing FTA schemas (XML), the tax authority should publish the entire uniform map or the sections of the uniform schema utilized by the tax authority. The tax authority should extract from the data the information they require. Once the uniform file is received, the tax authority can choose to ignore certain data fields. If tax authorities follow this recommendation, we can achieve uniform electronic filing and it will be easier for the filer to provide accurate and complete information.

Introduction to XML EDI

* 1. What is EXtensible Markup Language (XML)? It is a markup language much like HTML that is designed to describe data by using “tags.”XML is a platform, software, and hardware independent tool for storing, carrying, and exchanging information.
  2. Tags are not predefined in XML, but the Tobacco Uniformity Technology Sub-committee, through the assistance of Tax Information Group for EC Requirements Standardization (TIGERS), has designed a standard schema set to be used for reporting, supported by the Uniformity effort. The tags are considered self-describing, which makes reading the data stream intuitive.
  3. An XML schema provides a way to define and constrain the data contained in an XML document. XML schema is the XML-based alternative to data tag definition (DTD).

For more information regarding XML, visit [www.w3.org/standards/xml/](http://www.w3.org/standards/xml/)

For additional XML resources visit:

* [www.StateMeF.com](http://www.statemef.com/)
* [TIGERS](http://www.tigers/) Best Practices:   
  <http://www.statemef.com/projects/mef/Best_Practices_2008.pdf>
* [TIGERS](http://www.tigers/) Standards for FedState MeF:   
  <http://www.statemef.com/projects/mef/TIGERS_MeF_STANDARDS.pdf>
  1. For a software company that provides the most commonly used XML toolset, visit <http://www.altova.com/>

For more information on using XML to support the Tobacco reporting requirements, see [Section 2 - XML EDI](#_Section_3_-).

Why XML? -

* In 2006, as states gained XML experience through the fed/state Modernized e-Filing (MeF) effort, states expressed an interest in moving to XML for tobacco reporting. Because of industry’s request for XML standards, the Tobacco Uniformity Committee and TIGERS joined efforts to develop an XML schema.
* Key Design Parameters
  + Development was a joint Tobacco Uniformity Committee and TIGERS initiative.
  + Data structures are based on the Tobacco Uniformity Committees approved forms.

FTA Recommendation: Based on the return, require all data fields. Once the uniform file is received, the tax authority can choose to ignore unwanted data.

### Testing Timeline:

* From notifying the taxpayer to go-live, allow at least 6 months to test and convert the current process to EDI. This gives appropriate lead time to align resources, budgets, preparation and testing.
* Sample Data Test: Require 1 or 2 months of testing sample data. Be flexible as to what month and year the companies provide for testing. Due to development system limitations, only a limited amount of data may be available at any given time and it is very cumbersome to load data from prior month’s actual transactions. The point of this portion of the test is to test the system’s ability to process the file.
* Production Data Test: To ensure that EDI is accurate, the tax authority could require both paper and EDI for 2 to 3 months in production.
* After go-live, the paper and/or separate electronic submission via fax, email or Web site of summary reports contained in the EDI submission should no longer be required. If paying by check, a single-page paper remittance advice is appropriate.

### Forms and Schedules:

It is best not to change forms or codes at the same time you are moving to EDI. Moving from paper to EDI is more straight-forward when the forms/codes remain the same. We recommend changing forms/codes in advance of EDI by at least 6 months, if possible. This will make the transition into the new “EDI” method easier to understand and implement. Before and after full electronic filing implementation, forms and schedules should be made available by the tax authority on their Web site. This makes it clearer what information is required and how the data is used to compute tax due and/or inventories.

### Tax Authority Web Site:

If possible, the tax authority’s Web site could provide the following:

* Allow companies to upload and process test and production files using a secure or encrypted method.
* Provide clear error messages and confirmation that a return was filed. Error messages should allow the filer to identify which records resulted in the error. Include the name of the file and the date submitted.
* Validation/Pre-Check process: validate a file before submission to catch any data issues (i.e. invalid FEIN).
* Allow for multiple user logins by filer.
* Whether through FTP or Web site login, EDI filing methods should attempt to use standard technology. The recommended method for providing the file to the tax authority is a secure Web upload.
* Contain contact information (e-mail and phone number) for problems encountered when using the Web site or filing a return. Also, provide the office hours that filer support is available. Be sure to keep contact information up-to-date.
* Do not stop processing on the first error encountered. Process the complete EDI file and identify and return all the errors to the filer so the filer can correct them all at once.

### Retroactive Filing:

Requiring companies to re-file previously filed paper returns electronically is not a best or preferred practice. Once a return is filed with the tax authority (paper or EDI), that return should serve as the source. A filer cannot always modify historical data used for paper filing for use in back-filing; this applies for conversions from paper to electronic. Different or additional data is often required that cannot necessarily be provided after the fact.

If a tax authority expects they will be requiring the taxpayer to back-file they need to disclose that fact up front, so that the taxpayer can prepare for it while testing. It shouldn't come as a surprise at the end of the certifications process.

A tax authority could also be asked to suspend the paper schedules in exchange for a company's agreement to back-file the returns due during the test period.

### Recommendation before Starting EDI (XML)

Implement Uniformity Standards prior to the conversion to EDI. Check the following to ensure compliance:

* Tax Returns
* Codes
* Schedules

## Chapter 6 – Security

### File Transfer Protocol (FTP)

File Transfer Protocol (FTP) has been a staple of data file transmission since the inception of the Internet. Today FTP plays an important role in government electronic filing applications. FTP remains a popular choice for electronic filing due to its operating system independence, low cost, and ease of implementation. The startup costs for implementing FTP data exchange between government entities and trading partners are relatively low and the process is well documented.

Most computer operating systems contain built-in FTP functionality that programmers can utilize to develop scripted data file transfers. Additionally, the availability of free and commercial software to support managed FTP sessions simplifies data transfer allowing it to become a common clerical task. Once the trading partner relationship is established and account and directory configuration is completed most data file exchange transactions can be completed using drag-and-drop functionality at the user’s desktop.

FTP is network independent. This flexibility allows government and business trading partners to leverage the same tools and techniques they use for internal platform data exchange with external customers.

FTP is a common method of moving data internally between corporate and government computing platforms. The ability to use FTP to seamlessly transfer data between operating systems has made it the preferred choice of Information Technology shops. Using batch files, IT organizations have used FTP to create multi-platform job-sets for unattended program execution. The ability to create these programs using the operating systems built-in FTP capabilities generates significant cost-savings for organizations versus having to use commercial data migration programs.

The most common medium for trading partner FTP exchange is via the Internet. This cost-effective connectivity only requires that government entities configure an Internet FTP server and that the trading partner have a connection to the Internet. Trading partner Internet access can be dedicated service or dial-up access through an Internet Service Provider. The bandwidth required for the electronic filing process is largely dictated by the size of the data files sent during the filing process.

Extranet networks also provide an ideal environment for utilizing FTP for the exchange of data. A significant drawback to FTP is that it provides no security during the electronic filing process. Many organizations have implemented encrypted extranet networks to provide increased security for data exchange using FTP.

The adoption of FTP as a common mechanism for electronic filing has been greatly facilitated by security programs developed to protect data during the transmission process.

FTP transmission over the Internet creates two distinct security concerns for electronic filing applications. The first concern is protecting the data file transmitted during the electronic filing process. The second concern is securing the trading partner login and directory mapping process that occurs prior to transmitting the data file. The common method for protecting data during the transmission process is encrypting the file prior to using FTP to send. Strategies for securing the login process vary from basic password management to establishing secure communications using Secure Socket Layer (SSL) encryption.

### Encryption

Encrypting the data prior to transmission has been the established standard for protecting data during electronic filing. When combined with an aggressive strategy of capturing and moving data after transmission, this security has proved effective in protecting trading partner data. The basic strategy is for government organizations and trading partners to exchange encryption keys allowing for the encrypting and decrypting of the data. Once the data is transmitted, the government entity rapidly collects the data and moves it to a secure location. Since the log-in and directory mapping process is performed in clear text over the Internet, quickly moving the data files to a secure location reduces the likelihood that the data file may be retrieved by unauthorized entities. Since the data file is encrypted the value of the compromised data is questionable, but trading partner confidence in the process is improved. In addition, FTP servers should allow the trading partners to frequently change their passwords to reduce the likelihood that data may be compromised.

To address the concern of account and directory mapping security, the use of SSL and Virtual Private Network(s) (VPN) is gaining in popularity. Products offering SSL FTP are generally available. While providing an additional layer of security, SSL FTP products are more proprietary in nature. Most implementations require the trading partners to use the same product on the server and client platforms. Requiring trading partners to adopt a proprietary software product may represent a significant barrier to electronic filing. Over time, market forces may drive default standards for proprietary security architectures increasing the flexibility offered to government organizations and trading partners for securing FTP transactions.

The security of FTP for electronic filing is benefiting from the investment government organizations and their trading partners are making in Public Key Infrastructure (PKI). As government organizations establish PKI capabilities, trading partners will have a standard set of tools at their disposal to authenticate themselves and protect their data.

### Secured Transmission (SSL, HTTPS)

SSL is perhaps the most common way of providing encrypted transmission of data between Web browsers and Web servers. Built upon private key encryption technology, SSL provides data encryption, server authentication, message integrity, and client authentication for any TCP/IP connection.

Web server certificates have become the de facto standard for organizations to deliver online trust. Web server certificates are used to authenticate the identity of a website to visiting browsers. When a user wants to send confidential information to a Web server, the browser will access the server's digital certificate. The certificate containing the Web server's public key will be used by the browser to authenticate the identity of the Web server (the website) and encrypt information for the server using SSL technology. Since the Web server is the only entity with access to its private key, only the server can decrypt the information. This is how the information remains confidential and tamper-proof while in transit across the Internet.

Some organizations use 40-bit encryption but many banks require 128-bit encryption for online banking because 40-bit encryption is considered to be relatively weak. 128-bit encryption is about 309 septillion times (309,485,000,000,000,000,000,000,000) stronger than 40-bit.

### Other Benefits:

For the most part, as a developer, implementing SSL is easy. The code remains the same.

All that changes is the Web server you serve your application from. When served from an SSL enabled server and directory, the browser and server will do all the work of encryption. No additional software is required.

The browser will even let the client know they have moved into a secure transmission mode for you.

### Possible Issues:

Users need to be aware that sending secure information (e.g., your credit card information) over an SSL connection does not ensure the integrity of the receiving organization. SSL/HTTPS only guarantees the data is secure while it is being transmitted from the Browser to the Web server or the Web server to the Browser. As an example, if you send credit card information across the internet via HTTPS it will be encrypted. Once it arrives on the server, it is decrypted. If the organization that receives the information saves it in its unencrypted form or makes it available to all their employees, obviously the risks increase.

Because all information going back and forth between the client and server is being put through an encryption process instead of being sent plain, the server and browser take longer to process this data. For this reason, many organizations will use SSL/HTTPS for only the pages that may contain sensitive data, while the other pages use HTTP without encryption for efficiency.

### Web Security and Security Issues

Security is an important consideration when using Web services. Because it is based on program-to-program interactions as opposed to human-to-program interaction, it is important for Web service security to address topics such as access control, authentication, data integrity and privacy. Today the most common security scheme is [SSL](http://www.webopedia.com/TERM/S/SSL.html) (Secure Sockets Layer), but when it comes to Web services there are limitations with SSL. The Web service technology has been moving towards different XML-based security schemes for Web services.

For additional information on XML security see [Section 2 Chapter 9](#_Chapter_4_-).

### WS-Security (Web Services Security)

Security Assertion Markup Language (SAML) from OASIS provides a means for partner applications to share user authentication and authorization information. This is essentially the single sign-on (SSO) feature being offered by all major vendors in their e-commerce products. In the absence of any standard protocol on sharing authentication information, vendors normally use cookies in HTTP communication to implement SSO. With the advent of SAML, this same data can be wrapped inside XML in a standard way, so that cookies are not needed and interoperable SSO can be achieved.

For additional information on Web Services, see [Section 1 Chapter 4](#_Chapter_4_-_1).

## Chapter 7 – Sample Trading Partner Agreement

*Trading Partner Agreement*

*For Electronic Data Exchange (XML)*

This Agreement is entered into on \_\_\_\_\_\_\_\_ (date), by and between the *(State Agency)* ("Department") and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ("Licensee").

The Department and the Licensee wish to provide a means by which the Licensee will file its *(State Name)* Tobacco report(s) by electronically transmitting data in substitution for conventional, paper-based documents and to assure that such report is legally valid and enforceable. In order to achieve this goal, the parties agree as follows:

1. Terms and Amendments: This agreement shall be effective on the date shown above and shall continue until terminated by either party. A party may terminate this agreement by giving thirty (30) days written notice to the other party or by the cancellation of their Tobacco License. This agreement may be amended at any time by executing a written addendum signed by both the Licensee and the Department.
2. Standards: The Licensee will electronically transmit report(s) to the Department according to the Department's standards and instructions that may be revised / updated by the Department from time to time. The Department will provide these standards and instructions to the Licensee in a reasonable time frame in advance of due dates to allow compliance with filing requirements.
3. Transmission: *(This is the definition of individual state's requirements for transmission, i.e. VAN, Direct Dial, Internet, etc.)*
4. System Operations and Security Procedures: The Licensee, at its own expense, shall provide and maintain the equipment, software, services and testing necessary for the Licensee to transmit the electronic report(s). The Department, at its own expense, shall provide and maintain the equipment, software, services and testing necessary for the Department to receive the electronic report(s). Each party shall use security procedures which are reasonably sufficient to ensure that all transmissions of the report(s) are authorized and to protect its business records and data from improper access.

*(Additional procedures defined by each state)*

1. Signatures: The name of the Licensee's authorized agent, or the Licensee's identification number, when included as part of the report filed pursuant to this agreement, shall constitute the signature of the Licensee on the report as if such report were actually signed by the Licensee.
2. Receipt of Transmission: A report shall be deemed to have been filed with the department when the report, in the stipulated format, is accessible to the Department or the Department's third party service provider and meets the requirements of the taxing authority. If the Licensee attempts to file and is unable to do so because the Receipt Computer is not available to receive a filing, the department will not impose late filing penalties or interest provided the Licensee contacts the Department immediately when an access problem is identified.
3. Acknowledgement of Transmission: Upon receiving a successfully transmitted report from the Licensee, the Department or the Department's third party service provider will transmit an acknowledgement in return within three (3) business day from receipt of the Licensee's report. The acknowledgement will communicate only that Department has received the Licensee's transmission. An acknowledgement does not imply any findings by the Department about the correctness of the report. A transmission that is received by the Department but is not in the stipulated format will not constitute a valid report.
4. Garbled Transmissions: If any transmission is received in an unintelligible or garbled form and the Department cannot identify the Licensee, no acknowledgement will be transmitted. The absence of an acknowledgement shall be treated as notice to the Licensee that the report was not received by the Department in the required format.
5. Record Retention: *(Define individual states record retention requirements)*
6. Admissibility of Returns/Reports as Evidence: A certified copy of any report may be introduced in paper form as evidence in any judicial or administrative proceeding by either party to the same extent and under the same conditions as any other business record. Neither party shall contest the admissibility of any report on the basis that it was not originated or maintained in paper form.
7. Payments: *(Define individual state's method of payment to accompany electronic report)*
8. Governing Law: This Agreement shall be governed by, and interpreted in accordance with the laws of the state of *(State Name)*.
9. Identifying Codes & Numbers: To ensure proper identification of electronically transmitted reports, the parties will exchange the identifying qualifiers listed below. Any changes in these qualifiers will be communicated to the other party before any transmission using the new qualifiers is sent.

*(Define states requirements for Identifying codes, numbers and Electronic Signature)*

Licensee:

|  |
| --- |
| Print Name of Licensee or Authorized Agent |
| Signature of Licensee or Authorized Agent Date |
| Email Address Phone Number |

Department:

|  |
| --- |
| Print Name of Authorized Agent |
| Signature of Authorized Agent Date |

# Section 2 - XML EDI

## Chapter 1 - Introduction to XML EDI

EDI is made up of many different methods of sharing data electronically between parties. The FTA has developed standards for the tax authority to follow when implementing electronic data interchange (EDI).

Electronic data interchange (EDI) is the structured transmission of data between organizations by electronic means, which is used to transfer electronic documents or business data from one computer system to another computer system, i.e. from one trading partner to another trading partner without human intervention.

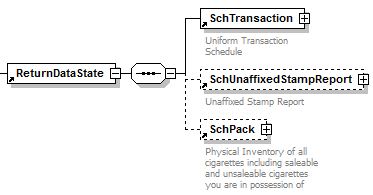
The XML EDI Process – Basic Components

* Header
  1. Information about Taxpayer/Company
     + Tax Type and Filing Period
     + Contact Info
     + Address Info
     + Check Values (Amount Due)
     + Schedules
  2. Information about the individual transactions and inventory amounts
     + Receipts and Disbursements
     + Information about Buyer, Seller, and Carrier

Key Design Concepts

* Generic data elements shared across returns
* Separate schema per return type
* Allow tax authority to restrict most enumerated lists

High Level diagram of XML Cigarette Filing



### EXtensible Markup Language (XML)

* 1. XML is a language much like HTML that is designed to describe data *by using “tags.”*  XML is a platform, software, and hardware independent tool for storing, carrying, and exchanging information.
  2. Tags are not predefined in XML, but the Tobacco Uniformity Committee through the assistance of Tax Information Group for EC Requirements Standardization (TIGERS) has designed a standard schema set to be used for reporting return information supported by the Uniformity effort. The tags are considered self-describing.

A key XML design concept incorporates the use of “simple” and “complex” element definitions or “eFile types.” A simple type, such as amount quantity, stands alone. The complex type consists of a parent element and child sub-elements, such as a taxpayer address with separate address, city, state, and zip code child elements. Multi-layer complex types are used to represent the various table structures that often appear in tax forms and schedules. We also created generic complex types that provide a defined data structure, but allow states to use their own field names to describe the data. Credits, dollar amounts, and quantity totals are an example of the information captured by these complex types. Reducing the XML maintenance overhead was an important underlying design principal.

* 1. Tobacco XML has 3 major components. The messaging protocol, the XML package, and acknowledgement process. The message contains information needed to transmit the XML file from the taxpayer to the tax authority. The technical instructions concerning how this is accomplished are up to the individual state. Those states with an active Modernized eFiling (MeF) [Web Services](#_Chapter_4_-_1) program will likely utilize that infrastructure. You can visit the State MeF website at [www.statemef.com](http://www.statemef.com) to get a better understanding of how the MeF process works.
  2. The XML package consists of the header and return data. The header provides high-level information about the company and filing. The Tobacco Header is based on the MeF generic header which is used by Corporate, Personal Income, Payroll and Streamlined Sales Tax. This is part of the FTA vision to provide a standard taxpayer interface/portal that can be shared across the taxes administered by state agencies. This “standardized” look and set of technologies will ultimately reduce implementation cost for both the government and private sectors. The Tobacco Header has been revised to include those data elements that are unique to our program. Many of the “shared” header data elements won’t be used in the tobacco filing.

The return data has the state-required information to ensure the filing obligation will be satisfied. This includes information about the return, schedule detail, and summary level return data. This set of data constitutes a return for a period of time.

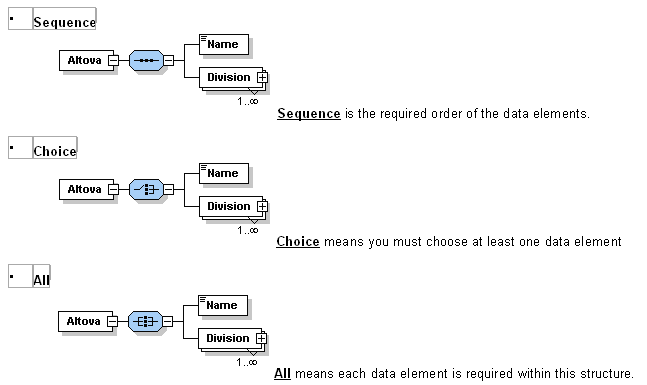
* 1. The Acknowledgement process is designed to provide the taxpayer with an electronic notification that their return has been received and processed and also to inform the taxpayer of any errors that would cause their electronic filing to be rejected. States with an active MeF program will likely utilize the Acknowledgement methodology. The details included in the XML errors are determined by the functionality of the individual state’s backend application.

The XML schema diagrams used in this guide were generated by Altova XMLSpy 2015 Enterprise Edition.

### Explanation of XMLSpy Terms and Symbols

We will now present a brief explanation of XMLSpy terms and flow charting symbols needed to understand the graphical output generated by the software. These diagrams provide a “user friendly” view of the basic “building blocks” used to create the tobacco schemas. The graphical representation of the component provides detailed information about the component's type and structural properties.

XML Basic Components



Mandatory single element el_single

The rectangle indicates an element and the solid border indicates that the element is required. The absence of a number range indicates a single element (i.e. minOcc=1 and maxOcc=1).

Single optional element el_optional

The rectangle indicates an element and the dashed border means the element is optional. The absence of a number range indicates a single element (i.e. minOcc=0 and maxOcc=1).

Mandatory multiple element el_multiple

The rectangle indicates an element and the solid border indicates that the element is required. The number range 1..5 means that minOcc=1 and maxOcc=5.

Mandatory multiple element containing child elements el_unbound

The rectangle indicates an element and the solid border indicates that the element is required. The number range 1..infinity means that minOcc=1 and maxOcc=unbounded. The plus sign means complex content (i.e. at least one element or attribute child).

* minOcc = Minimum Occurrence for the specific element.
* maxOcc = Maximum Occurrence for the specific element.

## Chapter 2 - XML Recommendations

### XML Guide

The tax authority should make an XML Guide available to all software providers and filers four to six months before an XML mandate takes effect. The XML guide should provide all expectations and requirements for reporting transactions such as data format requirements like not accepting any punctuation in names.

The Guide should explain which data elements are required and how to determine what types of transactions belong on each schedule. A schedule name is rarely sufficient to explain what should be placed on a schedule. The more thorough the tax authority is in its Guide the easier it will be for software providers and filers to make it through testing; this will save all parties, including the tax authority, time and money.

Policy changes should not be implemented, without notice to the filer, when moving from paper to XML. For example, if you’re moving from paper to an electronic format, the expectation is that the reporting requirements will remain the same. Any new requirements must be clearly documented in the implementation guide.

Work with your filers before starting this effort. Filers may provide valuable information and feedback that the tax authority may have otherwise overlooked if such feedback is solicited before implementing policy changes. This may prevent after-implementation programming changes and workarounds when the tax authority discovers the new information.

### Testing Procedures

The tax authority should test both software providers and individual filers. It is important to test both providers and filers. The filer’s data may need some perfecting to prevent unsuccessful filing even if using an approved software provider. Each filer should submit three month’s returns in test, using both the current method and in the new XML method. Once all three months are accepted, the tax authority may place the filer in XML production and cease requiring the prior filing method. Filers using a software provider should be tested after their software provider is approved and accepted.

### Error Reporting

When a tax authority reports errors back to the filer, they should, when possible, finish analyzing the submitted file and identify all errors and error types. Failure to do so may cause the filer to submit multiple files, fixing each error type as it goes, only to receive another error type in return. This could delay the final accepted return until it’s late.

### Validation or Confirmation Report

The tax authority should return a confirmation report to the filer as quickly as possible after receiving an acceptable file. The report should contain, at the very least, total tax due so the filer can double check it against its return, ensuring the return received by the tax authority is what the filer intended.

## Chapter 3 - XML Questions & Answers

**Question: The FTA XML schema has elements and options that are not required by my state. If the state adopts the FTA schema can it instruct that these elements be left blank?**

**Answer: The schema is designed to allow the state to adopt what is needed to meet the needs of the state. However, in order to share information with other states, the FTA recommends you request all the information on a transaction because that information may be provided to another** tax authority**. Without sufficient information collected, the transaction may become useless to the** tax authority **the transaction is being shared with. It has always been the FTA’s position that “more information is better than less information”. For example, if you only require your filers to provide your state license numbers, the other state you share with won’t be able to identify the filer because they don’t have your license. When designing your eFiling system, please keep this in mind for data sharing purposes.**

**Question:** If a filer’s return contains one or more errors, is the return deemed filed when first submitted or after all problems are corrected? Will a substantially complete return be considered timely filed even though a minor correction is still required?

**Answer:** It is recommended that a return be considered timely filed if it is substantially compliant and late filing penalties not be assessed. Each tax authority must determine its own policy regarding timely filing and outline the criterion for making that determination.

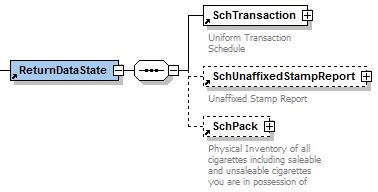
Suppose the return includes one incorrect FEIN or one invalid code, and hundreds, or even thousands, of correctly reported transactions. Does the tax authority want to penalize the filer for such a minor error? Statutory or regulatory authority to assess late filing penalties could contain a provision for waiver.

*Chapter 4 - Implementing Cigarette/Tobacco XML*

High Level Filing Overview

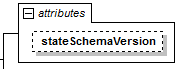
This section will give you a top-down view of the flow of information within XML and the basic components used to convey the data. You will be able to see how the filing is organized as well as how the individual pieces of data are defined within the schema structure. Our intent is to present enough detail to help you understand how the XML was designed, but not so technical as to overwhelm the non-IT person.

The first diagram provides the complete Cigarette Filing package containing SchTransaction, SchUnaffixedStampReport, and SchPack.



Attributes

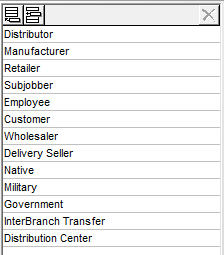
Attributes provide additional information about elements and often provide information that is not part of the data. The attributes at this level declare the version of the schema expected in this filing.



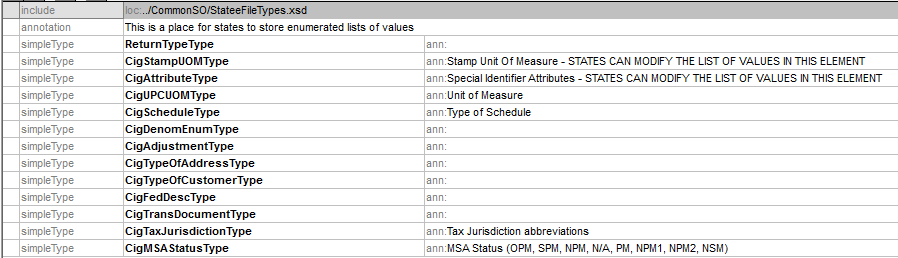
*Chapter 5 - Schema Design Principles*

Enumerated Lists

To define a list of acceptable values, enumerated lists are incorporated to ensure the schemas follow uniform reporting requirements. The following enumerated list for Type of Customer is an example. Codes can be removed from the approved lists to meet your reporting requirements.



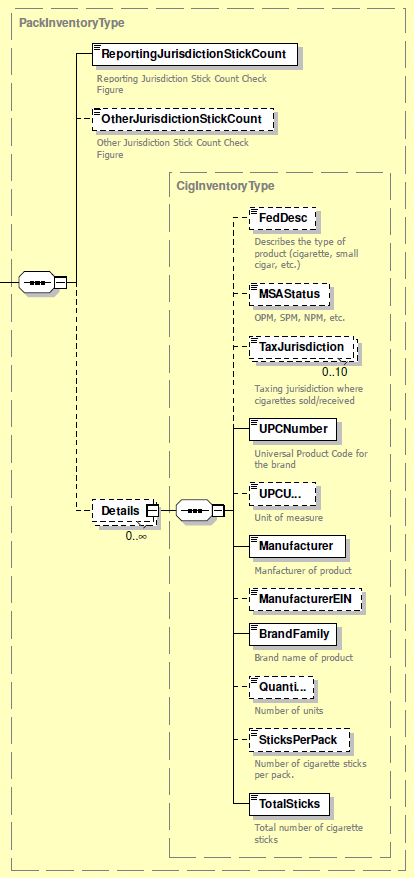
These are the Enumerated types (list) that were provided for tobacco. Some may have as few as 2 values, while other values may have hundreds. The schema will use the list to validate if provided.



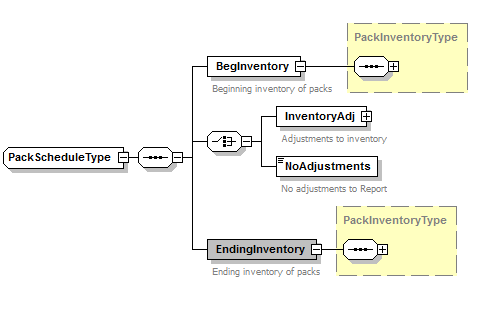
Complex Type Elements

ComplexType elements are a predetermined set of elements that are used in more than one area of a schema. ComplexType elements are easier to maintain if changes are made. The change would be made in the ComplexType and not each time the data is used throughout the schema.

For example, PackInventoryType is used for inventory information in both beginning and ending inventories as well as inventory adjustments because the same information is needed for all. One XML structure works for all. The structure allows you to provide a total stick count as well as detail information.



Shared elements that use the PackInventoryType.



## Chapter 6 - Use of Business Rules in the Schema

A potential advantage of XML is that much of the logic for accepting or rejecting a return can be in the schema. Having this logic in the schema makes it clear what constitutes the acceptance or rejection criteria.

The business rules should be:

* Generally only one cause for the business rule
* Clearly worded
* Properly organized by category
* Rule number indicates form to which it applies
* Could not be prevented by a schema validation error

The downside of validation errors is there are nearly an infinite number of ways they can occur and it can be difficult to communicate to taxpayers when they do occur. Therefore, states should strive to not be too restrictive compared to their legacy e-file application.

Other Schema best practices relating to Business rules:

* Provide your business rules in the comment section of the XPath Document
* Don’t require information in the schema that is not on the form. This depends solely on your form/system requirements.
* Any restriction or unique characteristics for an element should be included in the business rule document.
* States should write business rules so they can be easily understood by taxpayers.
* Avoid use of tag names in the business rule text; use line numbers on the tax forms instead.

## Chapter 7 - Getting your Schema approved by the Uniformity Committee

To ensure compliance with the FTA Tobacco Uniformity Committee standards, please follow these general rules:

* The FTA Tobacco Uniformity Committee will be the keeper of the Uniform XML Schema.
* States cannot add elements that are not in the master schema, but can elect to use a subset of the FTA defined elements.
* States cannot rename elements that are in the master schema.
* States cannot alter schema structure from the master schema.
* States can restrict data, but cannot expand it (reduce field length, but not increase).

Bottom line: Any XML instance document that validates against the state-specific schema must still validate against the master schema.

Please go to the following link to ensure your [XML](#_Implementation_Guide_Approval) will comply with the Uniformity standards.

## Chapter 8 - XPath Documentation

### Explanation of XPath Document

The previous section provided an explanation of the basic XML schema components and the rules that govern the use of the schemas by the individual states. This section will provide an example of how states may use the XPath document to link the paper form to the XML. The XPath document also has additional information about how the individual data elements are used within the particular XML schema. In our case, we have expanded the Excel spreadsheet to include form (Uniformity and State) information, field attributes and field specific business rules. The XPath spreadsheet is named Tobacco XPath Documents 2016.xls and may be obtained by contacting a member of the XML Implementation Review Team.

## Chapter 9 - Security

### XML digital signature

The XML Signature specification is a joint effort of World Wide Web Consortium (W3C) and Internet Engineering Task Force (IETF). XML Signatures provide integrity, message authentication and/or signer authentication services for data of any type, whether located within the XML that includes the signature or elsewhere.

### XML Encryption

W3C's XML Encryption specification addresses the issue of data confidentiality using encryption techniques. Encrypted data is wrapped inside XML tags defined by the XML Encryption specification.

### XKMS (XML Key Management Specification)

The XML Key Management Specification (XKMS) is comprised of the XML Key Information Service Specification (X-KISS) and the XML Key Registration Service Specification (X-KRSS). The X-KISS specification defines a protocol for a Trust service that resolves public key information contained in XML-SIGelements. The X-KISS protocol allows a client of such a service to delegate part or all of the tasks required to process elements. The X-KRSS specification defines a protocol for a Web service that accepts registration of public key information. Once registered, the public key may be used in conjunction with other Web services including X-KISS.

### SAML (Secure Assertion Markup Language)

SAML is an XML-based framework for communicating user authentication, entitlement and attribute information. As its name suggests, SAML allows business entities to make assertions regarding the identity, attributes, and entitlements of a subject (an entity that is often a human user) to other entities, such as a partner company or another enterprise application. The OASIS Security Services Technical Committee is in charge of defining, enhancing, and maintaining the specifications that define SAML.

# Section 3 – XML Schemas

## Chapter 1 – Cigarette and Tobacco Schemas – Schedules & Code Tables

The following schedules and code tables are shared among the cigarette and tobacco schema.

## Type of Transaction Document Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |
| --- |
| Type of Transaction Document Codes |
| Invoice |
| Purchase Order |
| Credit Memo |
| Affidavit |
| Returned Goods Authorization |
| Confirmation |
| Bill of Lading |
| Other |

## Type of Customer Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |
| --- |
| Type of Customer Codes |
| Distributor |
| Manufacturer |
| Retailer |
| Subjobber |
| Employee |
| Customer |
| Wholesaler |
| Delivery Seller |
| Native |
| Military |
| Government |
| InterBranch Transfer |
| Distribution Center |

## Type of State Abbreviation Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

| Code | State | Code | State | Code | State |
| --- | --- | --- | --- | --- | --- |
| AL | Alabama | MD | Maryland | SC | South Carolina |
| AK | Alaska | MA | Massachusetts | SD | South Dakota |
| AZ | Arizona | MI | Michigan | TN | Tennessee |
| AR | Arkansas | MN | Minnesota | TX | Texas |
| CA | California | MS | Mississippi | UT | Utah |
| CO | Colorado | MO | Missouri | VT | Vermont |
| CT | Connecticut | MT | Montana | VI | Virgin Islands |
| DE | Delaware | NE | Nebraska | VA | Virginia |
| DC | District of Columbia | NV | Nevada | WA | Washington |
| FL | Florida | NH | New Hampshire | WV | West Virginia |
| GA | Georgia | NJ | New Jersey | WI | Wisconsin |
| GU | Guam | NM | New Mexico | WY | Wyoming |
| HI | Hawaii | NY | New York | Armed Forces | |
| ID | Idaho | NC | North Carolina | AA | APO/FPO [Americas] |
| IL | Illinois | ND | North Dakota | AE | APO/FPO [Europe] |
| IN | Indiana | OH | Ohio | AP | APO/FPO [Pacific] |
| IA | Iowa | OK | Oklahoma | Territories | |
| KS | Kansas | OR | Oregon | AS | American Samoa |
| KY | Kentucky | PA | Pennsylvania | FM | Fed St of Micronesia |
| LA | Louisiana | PR | Puerto Rico | MH | Marshall Islands |
| ME | Maine | RI | Rhode Island | MP | N Mariana Islands |
|  |  |  |  | PW | Palau |

## Type of Address Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |
| --- |
| Type of Address Codes |
| Mailing |
| Location |
| Billing |
| Delivery |

## Type of Country Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

Note: The following table is for illustration purposes. The Country Codes will be follow current standards and updated when needed.

| Code | Country | Code | Country |
| --- | --- | --- | --- |
| US | United States of America | CA | Canada |

## Type of MSA Status Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |  |
| --- | --- |
| MSA Status Codes | Description |
| OPM | Original Participating Manufacturer |
| NPM | Non-Participating Manufacturer |
| SPM | Subsequent Participating Manufacturer |
| N/A | Not Applicable |
| PM | Participating Manufacturer |
| NPM1 | Non-Participating Manufacturer 1 |
| NPM2 | Non-Participating Manufacturer 2 |
| NSM | Texas |

## 

## Type of Account Holder Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |  |
| --- | --- |
| Account Holder Codes | Description |
| 1 | Business |
| 2 | Personal |

## Type of Process Type Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |  |
| --- | --- |
| Process Type Codes | Description |
| T | Test |
| P | Production |

## Chapter 2 – Cigarette Schema - Schedules and Code Tables

### Cigarette Schema – Return Data State

The following sub-schedules are unique to the reporting of cigarettes

#### [Schedule 1 – Uniform Transaction Schedule](http://www.taxadmin.org/fta/tobacco/uniformity/aug_2014/FTA_UniformCigTransactionSch_20140716_blue.pdf)

##### Sub-Schedules

Schedules of Receipts

Schedules of Disbursements

#### [Schedule 2 – Uniform Stamp Schedule](http://www.taxadmin.org/fta/tobacco/uniformity/aug_2014/FTA_UniformStampSch_20140716_green.pdf)

##### Sub-Schedules

Beginning Inventory

Purchases

Adjustments

Ending Inventory

Stamps Affixed

#### [Schedule 3 – Uniform Cigarette Inventory Schedule](http://www.taxadmin.org/fta/tobacco/uniformity/aug_2014/FTA_UniformCigPackSch_20140813_red.pdf)

##### Sub-Schedules

Beginning Inventory

Adjustments

Ending Inventory

## Type of Schedule Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |
| --- |
| Type of Schedule Codes |
| 1A – Cigarettes received from manufacturer or first importer |
| 1B – Cigarettes received from a person other than a manufacturer or first importer |
| 1C – Cigarettes received from a retailer or end user |
| 1D – Cigarettes received by manufacturer or first importer from a person other than a manufacturer or first importer |
| 2A – Cigarettes disbursed by a manufacturer or first importer |
| 2B – Cigarettes disbursed to a person other than a manufacturer or first importer |
| 2C – Cigarettes disbursed to a retailer or end user |
| 2D – Cigarettes returned to the manufacturer |

Note: Cigarettes and OTP are reported separately however the schemas have similar types of schedule codes to report receipts and disbursements.

## Type of Fed Desc Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |
| --- |
| Fed Desc Codes |
| Cigarette |
| Small Cigar |

## Type of Tax Jurisdiction Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

Note: The following table is for illustration purposes. The Tax Jurisdiction Codes will be determined and maintained by each State.

| Code | Tax Jurisdiction | Code | Tax Jurisdiction |
| --- | --- | --- | --- |
| AA | Military American | ALASV | Alabama Ashville |
| AE | Military European | ALATH | Alabama Athens |
| AL | Alabama | ALATT | Alabama Attalla |
| ALABB | Alabama Abbeville | ALAUB | Alabama Auburn |
| ALADD | Alabama Addison | ALAVN | Alabama Avon |
| ALALB | Alabama Alabaster | ALBWC | Alabama Baldwin County |
| ALABV | Alabama Albertville | ALBNK | Alabama Banks |
| ALAXC | Alabama Alexander City | ALBRB | Alabama Barbour County |
| ALALV | Alabama Aliceville | ALBYM | Alabama Bay Minette |

## Type of UPC Unit of Measure Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |  |
| --- | --- |
| UPC Unit of Measure Codes | Description |
| CAR | Carton |
| CSE | Case |
| PAK | Pack |
| STK | Stick |

## Type of Stamp Unit of Measure Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |
| --- |
| Stamp Unit of Measure Codes |
| 10 |
| 20 |
| 25 |

## Type of Adjustment Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |
| --- |
| Type of Adjustment Codes |
| Damaged |
| Destroyed |
| Floor Stock |
| Small Cigar |
| Counting Error |
| Returned |
| Shipment Error |
| Stolen |
| Transfer |
| Shrinkage |
| Timing |

## Chapter 3 – Tobacco Schema - Schedules and Code Tables

### *Tobacco Schema – Return Date State*

The following sub-schedules are unique to the reporting of OTP

#### Schedule 1 – Uniform Transaction Schedule

##### Sub-Schedules

Schedules of Receipts

Schedules of Disbursements

## Type of Schedule Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |
| --- |
| Type of Schedule Codes |
| 1A – OTP received from manufacturer or first importer |
| 1B – OTP received from a person other than a manufacturer or first importer |
| 1C – OTP received from a retailer or end user |
| 1D – OTP received by manufacturer or first importer from a person other than a manufacturer or first importer |
| 2A – OTP disbursed by a manufacturer or first importer |
| 2B – OTP disbursed to a person other than a manufacturer or first importer |
| 2C – OTP disbursed to a retailer or end user |
| 2D – OTP returned to the manufacturer |

Note: Cigarettes and OTP are reported separately however the schemas have similar types of schedule codes to report receipts and disbursements.

## Type of Fed Desc Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |
| --- |
| Fed Desc Codes |
| Chewing Tobacco |
| Cigarette |
| Cigarette Paper |
| Cigarette Tube |
| Large Cigar |
| Pipe Tobacco |
| Roll Your Own |
| Small Cigar |
| Snuff |
| Alternative Nicotine Product |
| E-liquid Product |
| Vapor Products |
| Other |

## Type of State Desc Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

Note: The following table is for illustration purposes. The State Description Codes will be determined and maintained by each State.

| Code | State Desc Code |
| --- | --- |
| KY-ANP1 | **Reserved** (Alternative Nicotine Product) means a product that consists of or contains nicotine that can be ingested into the body by chewing, smoking, absorbing, dissolving, inhaling, snorting, sniffing, or by any other means |
| KY-CGR1 | **Reserved** (Class 1 Cigars) (Not Defined in KY Statute) |
| KY-CGR2 | **Reserved** (Class 2 Cigars) (Not Defined in KY Statute) |
| KY-CGR3 | **Reserved** (Class 3 Cigars) (Not Defined in KY Statute) |
| KY-CGR4 | **Reserved** (Class 4 Cigars) (Not Defined in KY Statute) |
| KY-CGR5 | **Reserved** (Class 5 Cigars) (Tax Capped) (Not Defined in KY Statute) |
| KY-CH1 | **Reserved** (Chewing value based) (Not used in KY Statute) |
| KY-DS1 | **“Dry Snuff”** |
| KY-ELIQ1 | **Reserved** (E-liquid" and "e-liquid product) means a liquid product, which may or may not contain nicotine, that is vaporized and inhaled when using a vapor product, and that may or may not include without limitation propylene glycol, vegetable glycerin, nicotine from any source, and flavorings; |
| KY-LCGR1 | **Reserved** (Large Cigar) (Not Defined in KY Statute) |
| KY-LL1 | **“Loose Leaf Chewing tobacco"** means any leaf tobacco that is not intended to be smoked, but "loose leaf chewing tobacco" does not include plug chewing tobacco, twist chewing tobacco, snuff, dry snuff, or snus.  **Single unit"** means a consumer-sized container, pouch, or package:  (a) Containing less than four (4) ounces of chewing tobacco by net weight;  (b) Produced by the manufacturer to be sold to consumers as a single unit and not produced to be divided or sold separately; and  (c) Containing one (1) individual container, pouch, or package; |
| KY-LL2 | **“Loose Leaf Chewing tobacco"** means any leaf tobacco that is not intended to be smoked, but "loose leaf chewing tobacco" does not include plug chewing tobacco, twist chewing tobacco, snuff, dry snuff, or snus.  **Half-pound unit"** means a consumer-sized container, pouch, or package:  (a) Containing at least four (4) ounces but not more than eight (8) ounces of chewing tobacco by net weight;  (b) Produced by the manufacturer to be sold to consumers as a half-pound unit and not produced to be divided or sold separately; and  (c) Containing one (1) individual container, pouch, or package; |
| KY-LL3 | **“Loose Leaf Chewing tobacco"** means any leaf tobacco that is not intended to be smoked, but "loose leaf chewing tobacco" does not include plug chewing tobacco, twist chewing tobacco, snuff, dry snuff, or snus.  **"Pound unit"** means a consumer-sized container, pouch, or package:  (a) Containing more than eight (8) ounces but not more than sixteen (16) ounces of chewing tobacco by net weight;  (b) Produced by the manufacturer to be sold to consumers as a pound unit and not produced to be divided or sold separately; and  (c) Containing one (1) individual container, pouch, or package. |
| KY-LL4 | **“Loose Leaf Chewing tobacco"** means any leaf tobacco that is not intended to be smoked, but "loose leaf chewing tobacco" does not include plug chewing tobacco, twist chewing tobacco, snuff, dry snuff, or snus.  **“Over a Pound Unit”** means the container, pouch, or package contains more than sixteen (16) ounces by net weight, the rate that shall be applied to the unit shall equal the sum of the pound unit plus the sum for each increment of four (4) ounces or portion thereof exceeding sixteen (16) ounces sold. |
| KY-MS1 | **"Moist Snuff"** means tobacco that is finely cut, ground, or powdered and is not for smoking. Each one and one-half (1-1/2) ounces or portion thereof by net weight sold; |
| KY-MS2 | **Reserved** (Moist Snuff Half Pound Unit) (Not Defined in KY Statute) |
| KY-MS3 | **Reserved** (Moist Snuff Pound Unit) (Not Defined in KY Statute) |
| KY-MS4 | **Reserved** (Moist Snuff Over a Pound Unit) (Not Defined in KY Statute) |
| KY-NT1 | **Not Taxable by Definition** including “Reference Tobacco”, Vapor Products, E-liquid and e-liquid products, Alternative Nicotine Products. |
| KY-PL1 | **“Plug Chewing tobacco"** means any leaf tobacco that is not intended to be smoked, but "plug chewing tobacco" does not include loose leaf chewing tobacco, twist chewing tobacco, snuff, dry snuff, or snus.  **Single unit"** means a consumer-sized container, pouch, or package:  (a) Containing less than four (4) ounces of chewing tobacco by net weight;  (b) Produced by the manufacturer to be sold to consumers as a single unit and not produced to be divided or sold separately; and  (c) Containing one (1) individual container, pouch, or package; |
| KY-PL2 | **“Plug Chewing tobacco"** means any leaf tobacco that is not intended to be smoked, but "plug chewing tobacco" does not include loose leaf chewing tobacco, twist chewing tobacco, snuff, dry snuff, or snus.  **Half-pound unit"** means a consumer-sized container, pouch, or package:  (a) Containing at least four (4) ounces but not more than eight (8) ounces of chewing tobacco by net weight;  (b) Produced by the manufacturer to be sold to consumers as a half-pound unit and not produced to be divided or sold separately; and  (c) Containing one (1) individual container, pouch, or package; |
| KY-PL3 | **“Plug Chewing tobacco"** means any leaf tobacco that is not intended to be smoked, but "plug chewing tobacco" does not include loose leaf chewing tobacco, twist chewing tobacco, snuff, dry snuff, or snus.  **"Pound unit"** means a consumer-sized container, pouch, or package:  (a) Containing more than eight (8) ounces but not more than sixteen (16) ounces of chewing tobacco by net weight;  (b) Produced by the manufacturer to be sold to consumers as a pound unit and not produced to be divided or sold separately; and  (c) Containing one (1) individual container, pouch, or package. |
| KY-PL4 | **“Plug Chewing tobacco"** means any leaf tobacco that is not intended to be smoked, but "plug chewing tobacco" does not include loose leaf chewing tobacco, twist chewing tobacco, snuff, dry snuff, or snus.  **“Over a Pound Unit”** means the container, pouch, or package contains more than sixteen (16) ounces by net weight, the rate that shall be applied to the unit shall equal the sum of the pound unit plus the sum for each increment of four (4) ounces or portion thereof exceeding sixteen (16) ounces sold. |
| KY-PT1 | **Reserved** (Pipe) (Not Defined in KY Statute) |
| KY-SMCGR1 | **Reserved** (Small Cigar) (Not Defined in KY Statute) |
| KY-SS1 | **“Snus”** |
| KY-TP1 | "**Tobacco products**" means any smokeless tobacco products, smoking tobacco, chewing tobacco, and any kind or form of tobacco prepared in a manner suitable for chewing or smoking, or both, or any kind or form of tobacco that is suitable to be placed in an individual's oral cavity, except: cigarettes, reference tobacco, snuff, and chewing tobacco. (All things taxed on value by definition). |
| KY-TW1 | **“Twist Chewing tobacco"** means any leaf tobacco that is not intended to be smoked, but "twist chewing tobacco" does not include loose leaf chewing tobacco, plug chewing tobacco, snuff, dry snuff, or snus.  **Single unit"** means a consumer-sized container, pouch, or package:  (a) Containing less than four (4) ounces of chewing tobacco by net weight;  (b) Produced by the manufacturer to be sold to consumers as a single unit and not produced to be divided or sold separately; and  (c) Containing one (1) individual container, pouch, or package; |
| KY-TW2 | **“Twist Chewing tobacco"** means any leaf tobacco that is not intended to be smoked, but "twist chewing tobacco" does not include loose leaf chewing tobacco, plug chewing tobacco, snuff, dry snuff, or snus.  **Half-pound unit"** means a consumer-sized container, pouch, or package:  (a) Containing at least four (4) ounces but not more than eight (8) ounces of chewing tobacco by net weight;  (b) Produced by the manufacturer to be sold to consumers as a half-pound unit and not produced to be divided or sold separately; and  (c) Containing one (1) individual container, pouch, or package; |
| KY-TW3 | **“Twist Chewing tobacco"** means any leaf tobacco that is not intended to be smoked, but "twist chewing tobacco" does not include loose leaf chewing tobacco, plug chewing tobacco, snuff, dry snuff, or snus.  **"Pound unit"** means a consumer-sized container, pouch, or package:  (a) Containing more than eight (8) ounces but not more than sixteen (16) ounces of chewing tobacco by net weight;  (b) Produced by the manufacturer to be sold to consumers as a pound unit and not produced to be divided or sold separately; and  (c) Containing one (1) individual container, pouch, or package. |
| KY-TW4 | **“Twist Chewing tobacco"** means any leaf tobacco that is not intended to be smoked, but "twist chewing tobacco" does not include loose leaf chewing tobacco, plug chewing tobacco, snuff, dry snuff, or snus.  **“Over a Pound Unit”** means the container, pouch, or package contains more than sixteen (16) ounces by net weight, the rate that shall be applied to the unit shall equal the sum of the pound unit plus the sum for each increment of four (4) ounces or portion thereof exceeding sixteen (16) ounces sold. |
| KY-VAP1 | **Reserved** (Vapor Products) means an electronic oral device of any size or shape that contains a vapor of nicotine, e-liquid, or any another substance that when used or inhaled simulates smoking, regardless of whether a visible vapor is produced, including without limitation a device that:  (A) Is composed of a heating element, battery, electronic circuit, chemical process, mechanical device, or a combination of heating element, battery, electronic circuit, chemical process, or mechanical device;  (B) Works in combination with a cartridge, other container, or liquid delivery device containing nicotine or any other substance and manufactured for use with vapor products;  (C) Is manufactured, distributed, marketed, or sold as any type or derivation of a vapor product, e-cigarette, e-cigar, e-pipe, or any other product name or descriptor. |

## Type of Tax Jurisdiction Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

Note: The following table is for illustration purposes. The Tax Jurisdiction Codes will be determined and maintained by each State.

| Code | Tax Jurisdiction | Code | Tax Jurisdiction |
| --- | --- | --- | --- |
| AA | Military American | ALASV | Alabama Ashville |
| AE | Military European | ALATH | Alabama Athens |
| AL | Alabama | ALATT | Alabama Attalla |
| ALABB | Alabama Abbeville | ALAUB | Alabama Auburn |
| ALADD | Alabama Addison | ALAVN | Alabama Avon |
| KY | Kentucky |  |  |

## Type of Unit Description Codes

FTA Tobacco Tax Section Uniformity Committee has adopted the following codes for the codes to be used on the Uniform Forms.

|  |  |
| --- | --- |
| UPC Unit of Measure Codes | Description |
| PAK | Pack |
| STK | Stick |
| BOX | Box |
| ECH | “Eaches” (each defined unit of taxable product) |
| BAG | Bag |
| TIN | Tin |
| FOI | Foil |
| CAN | Can |
| BUL | Bulk |
| TUB | Tub |
| PCH | Pouch |
| BUN | Bundle |
| PLG | Plug |
| CUT | Cut |
| BOT | Bottle |
| JAR | Jar |
| OTH | Other |

# Section 4 - Appendices

## Appendix A - Glossary of Terms

**Application** - An application is a program, or group of programs, that is designed for the end user. Application software can be divided into two general classes: systems software and applications software. Applications software (also called end-user programs) include such things as database programs, word processors, Web browsers, and spreadsheets.

**Backbone** - Another term for bus, the main wire that connects nodes. The term is often used to describe the main network connections composing the Internet.

**Browser** - Short for Web browser, a browser is a software application used to locate, retrieve, and display content on the World Wide Web, including Web pages, images, video, and other files. As a client/server model, the browser is the client run on a computer that contacts the Web server and requests information. The Web server sends the information back to the Web browser which displays the results on the computer or other Internet-enabled device that supports a browser.

**CGI** - Abbreviation of Common Gateway Interface, CGI is a specification for transferring information between a World Wide Web server and a CGI program. A CGI program is any program designed to accept and return data that conforms to the CGI specification. The program could be written in any programming language, including C, Perl, Java, or Visual Basic.

**Client/Server** - Client-server architecture (client/server) is a network architecture in which each computer or process on the network is either a client or a server. Servers are powerful computers or processes dedicated to managing disk drives (file servers), printers (print servers), or network traffic (network servers ). Clients are PCs or workstations on which users run applications. Clients rely on servers for resources, such as files, devices, and even processing power.

**Firewall** - A firewall is a system designed to prevent unauthorized access to or from a private network. Firewalls can be implemented in both hardware and software, or a combination of both. Firewalls are frequently used to prevent unauthorized Internet users from accessing private networks connected to the Internet, especially intranets. All messages entering or leaving the intranet pass through the firewall, which examines each message and blocks those that do not meet the specified security criteria.

**GUI** - Pronounced GOO-ee. Acronym for graphical user interface.

**HTML** - Short for HyperText Markup Language, the authoring language used to create documents on the World Wide Web. HTML is similar to SGML, although it is not a strict subset. HTML defines the structure and layout of a Web document by using a variety of tags and attributes. The correct structure for an HTML document starts with <HTML><HEAD>(enter here what document is about)<BODY> and ends with </BODY></HTML>. All the information you'd like to include in your Web page fits in between the <BODY> and </BODY> tags.

**Java** – Java is a general purpose, high-level programming language developed by Sun Microsystems. The small team of engineers, known as Green Team, initiated the language in 1991. Java was originally called OAK, and was designed for handheld devices and set-top boxes. Oak was unsuccessful so in 1995 Sun changed the name to Java and modified the language to take advantage of the burgeoning World Wide Web. Later, in 2009, Oracle Corporation acquired Sun Microsystems and took ownership of two key Sun software assets: Java and Solaris.

**Open** - Accessible. When used to describe designs or architectures, open means public.

**Operating System** - The operating system is the most important program that runs on a computer. Every general-purpose computer must have an operating system to run other programs and applications. Operating systems perform basic tasks, such as recognizing input from the keyboard, sending output to the display screen, keeping track of files and directories on the disk, and controlling peripheral devices such as disk drives and printers. For large systems, the operating system has even greater responsibilities and powers. It is like a traffic cop; it makes sure that different programs and users running at the same time do not interfere with each other. The operating system is also responsible for security, ensuring that unauthorized users do not access the system.

**Perl** - Short for Practical Extraction and Report Language, Perl is a programming language developed by Larry Wall, especially designed for processing text. Because of its strong text processing abilities, Perl has become one of the most popular languages for writing CGI scripts. Perl is an interpretive language, which makes it easy to build and test simple programs.

**Programming Language** – A vocabulary and set of grammatical rules for instructing a computer to perform specific tasks. The term programming language usually refers to high-level languages, such as BASIC, C, C++, COBOL, FORTRAN, Ada, and Pascal. Each language has a unique set of keywords (words that it understands) and a special syntax for organizing program instructions. High-level programming languages, while simple compared to human languages, are more complex than the languages the computer actually understands, called machine languages. Each different type of CPU has its own unique machine language.

**Protocol** - An agreed-upon format for transmitting data between two devices. The protocol determines the following:

•the type of error checking to be used

•data compression method, if any

•how the sending device will indicate that it has finished sending a message

•how the receiving device will indicate that it has received a message

There are a variety of standard protocols from which programmers can choose. Each has particular advantages and disadvantages; for example, some are simpler than others, some are more reliable, and some are faster. From a user's point of view, the only interesting aspect about protocols is that your computer or device must support the right ones if you want to communicate with other computers. The protocol can be implemented either in hardware or in software.

**Server** - A computer or device on a network that manages network resources. There are many different types of servers. For example:

•File server: a computer and storage device dedicated to storing files. Any user on the network can store files on the server.

•Print server: a computer that manages one or more printers, and a network server is a computer that manages network traffic.

•Database server: a computer system that processes database queries.

Servers are often dedicated, meaning that they perform no other tasks besides their server tasks. On multiprocessing operating systems, however, a single computer can execute several programs at once. A server in this case could refer to the program that is managing resources rather than the entire computer.

**SGML** - Short for Standard Generalized Markup Language, a system for organizing and tagging elements of a document. SGML was developed and standardized by the International Organization for Standards (ISO) in 1986. SGML itself does not specify any particular formatting; rather, it specifies the rules for tagging elements. These tags can then be interpreted to format elements in different ways. SGML is used widely to manage large documents that are subject to frequent revisions and need to be printed in different formats. Because it is a large and complex system, it is not yet widely used on personal computers. However, the growth of Internet, and especially the World Wide Web, is creating renewed interest in SGML because the World Wide Web uses HTML, which is one way of defining and interpreting tags according to SGML rules.

**SOAP** - Short for Simple Object Access Protocol, a lightweight XML-based messaging protocol used to encode the information in Web service request and response messages before sending them over a network. SOAP messages are independent of any operating system or protocol and may be transported using a variety of Internet protocols, including SMTP, MIME, and HTTP.

**Standards** - A definition or format that has been approved by a recognized standards organization or is accepted as a de facto standard by the industry. Standards exist for programming languages, operating systems, data formats, communications protocols, and electrical interfaces. From a user's standpoint, standards are extremely important in the computer industry because they allow the combination of products from different manufacturers to create a customized system. Without standards, only hardware and software from the same company could be used together. In addition, standard user interfaces can make it much easier to learn how to use new applications.

**Tag** - A command inserted in a document that specifies how the document, or a portion of the document, should be formatted. Tags are used by all format specifications that store documents as text files. This includes SGML and HTML.

**UDDI** - Short for Universal Description, Discovery and Integration. A Web-based distributed directory that enables businesses to list themselves on the Internet and discover each other, similar to a traditional phone book's yellow and white pages.

**UNIX** - Pronounced yoo-niks, a popular multi-user, multitasking operating system developed at Bell Labs in the early 1970s. Created by just a handful of programmers, UNIX was designed to be a small, flexible system used exclusively by programmers. UNIX was one of the first operating systems to be written in a high-level programming language, namely C. This meant that it could be installed on virtually any computer for which a C compiler existed. This natural portability combined with its low price made it a popular choice among universities. (It was inexpensive because antitrust regulations prohibited Bell Labs from marketing it as a full-scale product.) Bell Labs distributed the operating system in its source language form, so anyone who obtained a copy could modify and customize it for his own purposes. By the end of the 1970s, dozens of different versions of UNIX were running at various sites.

**W3C** - Short for World Wide Web Consortium, an international consortium of companies involved with the Internet and the Web. The W3C was founded in 1994 by Tim Berners-Lee, the original architect of the World Wide Web. The organization's purpose is to develop open standards so that the Web evolves in a single direction rather than being splintered among competing factions.

**Windows** - A family of operating systems for personal computers. Windows dominates the personal computer world, running, by some estimates, on 90% of all personal computers. The remaining 10% are mostly Macintosh computers. Like the Macintosh operating environment, Windows provides a graphical user interface (GUI), virtual memory management, multitasking, and support for many peripheral devices.

**WSDL** - Short for Web Services Description Language, an XML-formatted language used to describe a Web service's capabilities as collections of communication endpoints capable of exchanging messages. WSDL is an integral part of UDDI, an XML-based worldwide business registry. WSDL is the language that UDDI uses. WSDL was developed jointly by Microsoft and IBM.

**XML** - Short for Extensible Markup Language, a specification developed by the W3C. XML is a pared-down version of SGML, designed especially for Web documents. It allows designers to create their own customized tags, enabling the definition, transmission, validation, and interpretation of data between applications and between organizations.