

Key User Web Conference Call

How to Validate a File

February 11, 2010

Introduction

- The purpose of this meeting is to go over how to validate an XML File. We will look at a file and the schema and validate the file with XML Copy Editor.
- After the presentation we will do a demonstration of how to use it.
- By the end of the, you should be able to validate a file.

Agenda

- Overview of XML
- Overview of XSD
- How to use XML Copy Editor
- XML Copy Editor Demonstration

What is XML?

- XML = eXtensible Markup Language
 - A flexible text format for creating structured electronic documents.
 - Composed of Elements that have Markup Tags and Data
 - An Element is data that surrounded by Markup Tags that describe the data.
- For Example
 - Person Element = `<person>Juan Esparza</person>`
 - `<person></person>` are the Markup tags.
 - Juan Esparza is the data that represents a person.
 - There are no predefined tags and are made up as needed that is why it is extensible.

EMSTARS XML Structure

```
<EMSTARSDataset>  
  <EventHeader>  
    <E01_01>PCR Number</E01_01>  
    ....  
    <E23_11>Florida Alert Type</E23_11>  
  </EventHeader>  
</EMSTARSDataset>
```

Questions



What is an XSD

- XSD = XML Schema Definition
 - XSD provides the syntax and defines a way in which elements can be represented in a XML document.
 - In essence, an XSD is defines parameters for an XML file.
- For Example
 - `<person>Juan Esparza</person>`
 - An XSD would tell me that `<person>` has to be a 20 character long.
 - It can only be Juan Esparza or John Ross.
 - If it can be repeated or not.

Florida's XSD

- Florida's XSD defines the following properties of the EMSTARS XML File:
 - Structure
 - Pick list values
 - Data Type in the elements (number, string, etc.)
 - Required Elements
 - Repeatability of Elements
 - Order of Elements

Florida's XSD

- The XSD can be found at:
 - www.floridaemstars.com/downloads.htm
- It will be under the Software Developer Resources.
- The link is Version 1.4.0
- It will be a compressed (zip) file.
- It must be extracted and the emstarsdataset.xsd file must be saved on your computer in order to use it.

Questions

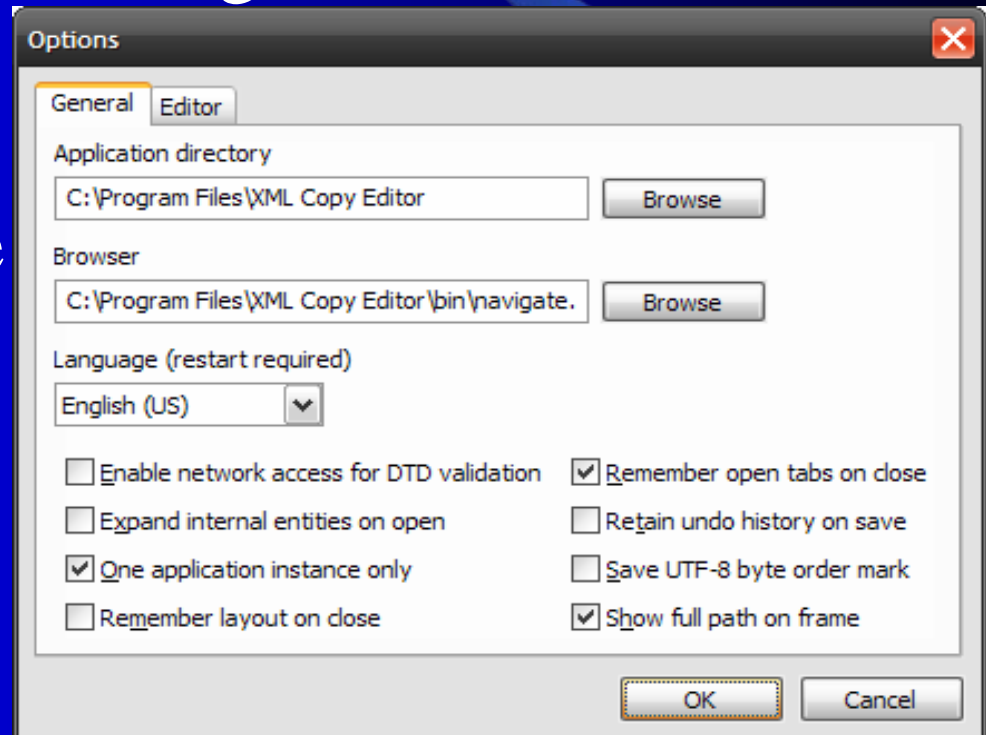


XML Copy Editor

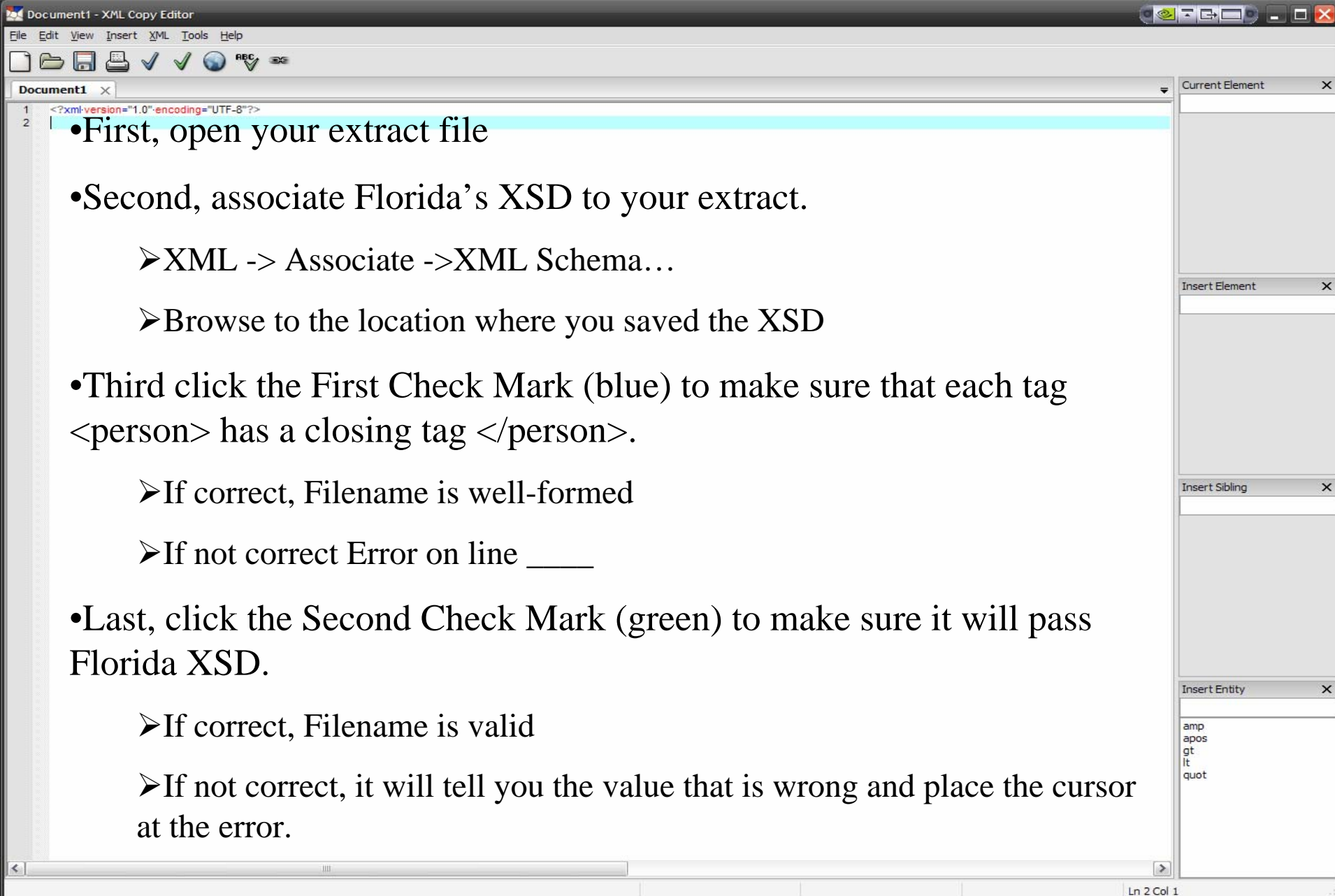
- It is free XML editor.
- It can be downloaded at:
 - <http://sourceforge.net/projects/xml-copy-editor/>
- Installation Instructions can be found at www.floridaemstars.com/downloads.htm.

Settings for XML Copy Editor

- There is only one setting that must be changed:
- Tools -> Options
- Save UTF-8 byte order mark must be unchecked.
- It is checked by default.



XML Copy Editor Interface



The screenshot shows the XML Copy Editor interface. The main window displays the following XML code:

```
1 <?xml:version="1.0" encoding="UTF-8"?>
2
```

The instructions are as follows:

- First, open your extract file
- Second, associate Florida's XSD to your extract.
 - XML -> Associate -> XML Schema...
 - Browse to the location where you saved the XSD
- Third click the First Check Mark (blue) to make sure that each tag `<person>` has a closing tag `</person>`.
 - If correct, Filename is well-formed
 - If not correct Error on line _____
- Last, click the Second Check Mark (green) to make sure it will pass Florida XSD.
 - If correct, Filename is valid
 - If not correct, it will tell you the value that is wrong and place the cursor at the error.

The interface also shows a right-hand sidebar with panels for 'Current Element', 'Insert Element', 'Insert Sibling', and 'Insert Entity'. The status bar at the bottom right indicates 'Ln 2 Col 1'.

Questions



Summary

- XML gives us the ability to create a file structure for EMS in Florida and the nation.
- An XSD specifies the what the XML must conform to for standardization.
- XML Copy Editor allows you to ensure that your software creates the XML like it is supposed to.
- It also allows you to see what your software is exporting on the back end and ensures that your mapping is correct.

Presentation

Questions

