

Instructions for Using dtd2schema.xsl

The dtd2schema.xsl file is an XSLT stylesheet that transforms EAD instances compliant with the 2002 DTD into instances that are compliant with either the Relax NG or W3C Schema.

In order to use dtd2schema.xsl, you must install an XSLT processor that will apply the transformation instructions in dtd2schema.xsl to convert an EAD “DTD” instance into an EAD “schema” instance.

Using XSLT in XML Editors

Many XML editors incorporate an XSLT processor. Oxygen (<http://www.oxygenxml.com/>) and XML Spy (http://www.altova.com/products/xmlspy/xml_editor.html) are two popular editors.

Stand-alone XSLT Processors

There are two robust XSLT processors available as open source: Saxon (<http://saxon.sourceforge.net/>) and Xalan (<http://xalan.apache.org/index.html>). Note that both of these XSLT processors are included in Oxygen, as are several others.

The procedures for installing either Saxon or Xalan as stand-alone applications will vary from one operating system to another. Please see the installation instructions of each application for a detailed description of the procedures.

Batch Conversion

It is possible to do batch conversion of “DTD” instances into “schema” instances. In the latest versions of Oxygen, this can be done using its Projects features. See the Oxygen documentation for further information. Either Saxon or Xalan installed as stand-alone XSLT processors can be used for batch conversion. Saxon supports batch processing by allowing the “source” instance to be a directory (which contains the XML files to be converted). See the Saxon documentation for further information. You can also use Xalan for batch processing, but you need to write a script.

Parameters in dtd2schema.xsl

There are two default parameter values in dtd2schema.xsl that should be evaluated and possibly changed before the stylesheet is used.

The first parameter has the name “schema”, begins on line 51, and its default value is “W3C”. For this default value, the stylesheet adds the namespace and addressing attributes to the <ead> element that are necessary for validating against ead.xsd. Set the value to “RNG” to add the namespace attribute to <ead> and a processing-instruction to alert Oxygen to the address of ead.rng. (Note: Relax NG does not support directly referencing the schema by using an attribute value in the document tree. Such referencing is done either through a processing-instruction, a command line parameter when invoking to the schema validator, or an intermediate mapping protocol, such as NRL (Namespace Routing Language).

The second parameter has the name “schemaPath”, begins on line 58, and contains the schema’s location in the file system. The path can either be expressed as a relative or absolute path. The default value is “../”, which is a relative path that tells a processor to “go up” one level in the file system, that is, go to the directory that contains the current directory. The default value should be changed to correspond with the directory structure that contains the schemas and XML instances.