

## XML - A Quick Primer

XML, or **Extensible Markup Language**, is a text-based markup language used to convey data over the web. As with HTML, XML uses tags (identifiers enclosed in angle brackets <...>) which collectively are known as markup. Unlike HTML, XML is extensible; the language provides a facility to define tags and the structural relationships between them whereas HTML tags are fixed. Another key difference between these markup languages is their purpose; HTML tags describe how to display data while XML acts as a data container where tags describe the data itself. It is for this reason that XML is often referred to as being a self-describing language and has the ability to act as a medium to transmit information.

The XML file is not generally considered human readable, and requires either an application to parse the data or client tools to provide a human readable interface to the data. XML parsers parse the XML file into a datastream suitable for use by an application or for writing to a database. Validating XML parsers have additional functionality in that they also validate the file against an XML schema (XSD), a set of rules defining the structure of the specific XML document, which is referenced within the header of the XML file.

The XML file can also be viewed in human readable form using client web browsers (e.g. Internet Explorer). Such tools translate raw XML into HTML format. While Internet Explorer and other browsers have built-in default stylesheets to provide an integral translation capability, they do not provide a simple user experience and the appearance of the translated XML data is difficult to read. External translation files (XSL files) specifically designed for each XML file allow for a better viewing experience and are referenced within the XML file itself.

The IESO has published XSL files, sometimes referred to as style sheets, to render most of the IESO-provided XML documents as HTML. This makes the web browser the standard client tool for viewing IESO automated documents.