Schematron development with oXygen



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What is Schematron?

- An ISO standard
 - ISO/IEC 19757 DSDL Document Schema Definition Language - Part 3: Rule-based validation - Schematron
- An XML schema language
 - Rule-based, using XPath as its expression language
- A simple and very useful technology
 - The most simple XML schema language
 - Expresses and enforces business rules



Simple Schema Structure

schema

- phase
 - active
- pattern
 - rule
- assert
- report
- diagnostics
 - diagnostic

schema modules

- include



Standard Schematron Development

- Edit Schematron documents
- Content completion with embedded XPath support
- Visual editing mode
- Validate the Schematron schema
- Support embedded Schematron
 - as annotations in XML Schema and Relax NG
- Support for multiple Schematron versions
 - ISO Schematron, pre-ISO versions 1.5 and 1.6

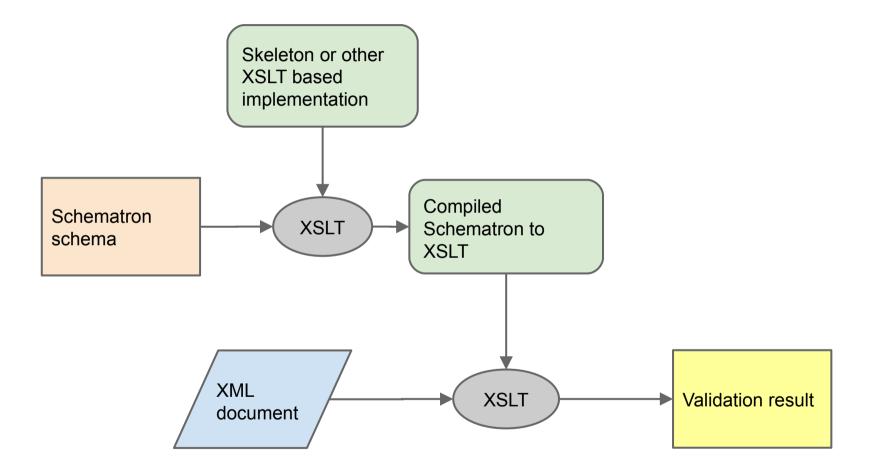


Enhanced Schematron Support

- Improved Schematron validation
- Dynamic content completion from the entire schema hierarchy
- Editing in context (master files support)
- Hierarchy/Dependencies views
- Rename/Move schemas updates references
- Search and Refactoring actions
- Code templates
- Validation scenarios for embedded Schematron



Schematron Validation





Relocate errors back to the source

- In the Schematron schema
 - extract Schematron rules from the host language, if applicable (XML Schema or Relax NG)
 - resolve import statements
 - instantiate abstract patterns
 - convert to XSLT
- In the XML document
 - apply the compiled Schematron XSLT on the XML document
 - use the **source** attribute to better locate errors



Demo



Thank you!

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For more information about oXygen please see www.oxygenxml.com