

# Schematron Use Cases



George Bina

# Use cases

- Provide error messages that normal people can understand
- Check rules that cannot be specified in DTD, XML Schema or Relax NG
- Controlled values - check against an external data source
- Integrity checks across multiple files
- Style guide integration
- Test transformation chains end-to-end
- Allows anyone to define business rules

# Error messages

- E [Xerces] Unexpected element "abstract". The content of the parent element type must match "(title,titlealts?,(shortdesc|abstract)?,prolog?,body?,related-links?,topic\*)".

VS

- Your topic does not contain a title, please add a title at the beginning of the topic.
- You have a title in this topic but the title should be the first thing inside the topic, now it is added after the "abstract" element. Please move the "title" element with the value "Introduction" at the beginning of the topic.

# Specification rules

## Examples:

- Jarno Elovirta Schematron schemas for DITA  
Enhanced by oXygen to include additional checks
  - @id attribute values should be unique inside the containing topic
- Check that a **uicontrol** element is followed by whitespace or a punctuation mark

# Controlled values

Schematron can access external data sources using the `document()` function

## Example

- check that a revision value is one of the allowed revisions

# Integrity checks across multiple files

## The Relax NG schemas for DITA

- check to see that a **domains** attribute includes all the included domain values that are defined in each domain module

# Style guide integration

Uses the `@see` attribute to point to a styleguide topic when an issue is identified in a document

Example:

- do not mix text and block elements in a **note**
- do not start a note with the label "Note:"
- etc.

# Test transformations end to end

## Example

- Check that the number of images in the output matches the number of figure elements in the input



# Allow anyone to define business rules

## Abstract patterns

- implement the actual check
- expose an interface to allow instantiating patterns only with parameters

# Thank you!

George Bina  
[george@oxygenxml.com](mailto:george@oxygenxml.com)  
[@georgebina](#)

For more information about oXygen please see  
[www.oxygenxml.com](http://www.oxygenxml.com)