DITA Reuse Strategies

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syncro soft
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About the Author

Background:

- Software engineer.
- 10+ years XML technologies experience.
- 5+ years DITA experience.
What is the DITA standard?

- August 2007 DITA V1.1.
- XML data model for authoring and publishing.
- Topic-based authoring.
- Focus on content reuse.
Overview

Go through every item in the toolkit

Discuss results of DITA Usage Poll: https://t.co/94pUgfQuYz
• Version control allows you to reuse content tagged at a certain point in time in order to produce older versions of your publications.
What tool are you using for version control and collaboration with your DITA project?

Answered: 44  Skipped: 0

- No particular tool
- Subversion
- Git
- Commercial CMS
Publishing DITA content to different formats

- Reach larger audience.
- Convenience.
- List of available output formats is not fixed (eg: DITA->Word).
Check all output formats that you need to obtain from DITA content:

Answered: 44  Skipped: 0

- PDF
- Web output - XHTML based
- Eclipse Help
- Windows Help - CHM
- Java Help
- Other (please specify)
Create larger publications from existing ones

- Merge multiple existing DITA Maps in various new publications.
Even if you have a single root map you can keep related sections in different DITA Maps.

```xml
<chapter href="chapter-author-dita.ditamap" collection-type="sequence" format="ditamap"/>
```
Reuse content for similar products
1. Use multiple root maps.

- Reuse entire topics.
- Define variable product names.
- Remap links and reused content using keys.
2. Use single root map.

- Define variable product names.
- Use profiling attributes to filter content at topic or element level.
Profiling At Topic Level

- Topic Group: product [editor]
  - Global Preferences: product [editor]
  - Add-ons Preferences: product [editor]
  - Fonts Preferences: product [editor]
  - Document Type Association Preferences: product [editor]
  - Perspectives Layout Preferences: product [editor]
  - Encoding Preferences: product [editor]
  - Editor Preferences: product [editor]
  - CSS Validator Preferences: product [editor]
  - XML Preferences: product [editor]
  - Data Source Preferences: product [editor]
  - SVN Preferences: product [editor]
  - Diff Preferences: product [editor]
    - Archive Preferences: product [editor]
    - Plugins Preferences: product [editor]
  - External Tools Preferences: product [editor]
  - Menu Shortcut Keys Preferences: product [editor]
  - File Types Preferences: product [editor]
    - The Open/Find Resources Preferences Page: product [editor]
    - Custom Editor Variables Preferences: product [editor]
  - Network Connection Settings Preferences: product [editor]
    - XML Structure Outline Preferences: product [editor]
    - View Views Preferences: product [editor]
    - Messages Preferences: product [editor]

- Topic Group: product [author]
  - Global Preferences: product [author]
  - Add-ons Preferences: product [author]
  - Fonts Preferences: product [author]
  - Document Type Association Preferences: product [author]
  - Perspectives Layout Preferences: product [author]
Choosing an installer

You have a choice of installers.

- The native installer for your platform. On Windows and Linux, the native installer can run also in unattended mode.

  product [author, developer, editor, svnClient]

- The All-platforms installer, which can be used on any supported platform.

  product [author, developer, editor, svnClient]

- The Update Site installation.

  product [authorEclipse, developerEclipse, editorEclipse]

- The Zip archive installation.

  product [authorEclipse, developerEclipse, editorEclipse]
DITA Profiling attributes

http://docs.oasis-open.org/dita/dita/v1.3/csprd01/part2-tech-content/archSpec/base/condproc.html#condproc

- Default profiling attributes: @audience, @deliveryTarget, @otherprops, @platform, and @props

- Custom profiling attribute names creating by specialization.
DITA Filtering

http://docs.oasis-open.org/dita/dita/v1.3/csprd01/part2-tech-content/langRef/containers/ditaval-elements.html

- Exclude elements based on various value combinations.
- Flag/Passthrough elements.
How many topics are in your DITA-based project?

Answered: 44   Skipped: 0

- 0-100
- 100-500
- 1000-2000
- 2000-3000
- 5000-10000
- 10000+
Reuse fragments of content

- Content references
- Content key references
- Content reference ranges
- Content push
- Key references
Content references

http://docs.oasis-open.org/dita/dita/v1.3/csprd01/part2-tech-content/archSpec/base/conref.html#conref

**Reusable component**

```html
<ul id="minimum_cpu_usage">
  <li>Minimum - Intel Pentium III class processor, 1 <term>GHz</term>.</li>
  <li>Recommended - Dual Core class processor.</li>
</ul>
```

**Conref**

```html
<ul conref="path/to/reusables.dita#topicID/minimum_cpu_usage"/>
```

**Preview**

**CPU**

- Minimum - Intel Pentium III™/AMD Athlon™ class processor, 1 GHz.
- Recommended - Dual Core class processor.
**Tips**

- Keep all your reused content in special topics located in special folders.
- Keep a description for each reused element.

### Shortcuts List

<table>
<thead>
<tr>
<th>Shortcut</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alt + LeftArrow</strong></td>
<td>Promotes the current node.</td>
</tr>
<tr>
<td><strong>Alt + RightArrow</strong></td>
<td>Demotes the current node.</td>
</tr>
<tr>
<td><strong>Alt + Shift + Comma</strong></td>
<td>Deletes the start and end tag of the current element (Eclipse).</td>
</tr>
<tr>
<td><strong>Alt + Shift + ForwardSlash</strong></td>
<td>Inserts the last tag used by the Surround with tag action (Eclipse).</td>
</tr>
<tr>
<td><strong>Alt + Shift + E</strong></td>
<td>Allows you to choose a tag that encloses a selected portion of content</td>
</tr>
<tr>
<td><strong>Alt + Shift + Enter</strong></td>
<td>Allows you to edit the attributes of the selected component in Design</td>
</tr>
</tbody>
</table>
**Content key references**

```xml
<ul id="minimum_cpu_usage">
  <li>Minimum - Intel Pentium III class processor, 1 <term>GHz</term>.</li>
  <li>Recommended - Dual Core class processor.</li>
</ul>
```

```xml
<keydef keys="reusable-install" href="reusables/reusable.installation.dita"/>
```

**CPU**

- Minimum - Intel Pentium III™/AMD Athlon™ class processor, 1 GHz.
- Recommended - Dual Core class processor.
Tips

- Use a special DITA Map for defining reusable keys
- Use conkeyrefs instead of conrefs.
Conrefs vs conkeyrefs?
Content reference ranges

<steps>
  <step id="washing">
    <cmd>Wash the vegetables thoroughly.</cmd>
  </step>

  ....

  <step id="peeling">
    <cmd>Pass the peeler gently over the vegetable.</cmd>
  </step>
</steps>

<keydef keys="reusable_steps" href="reusable_steps.dita"/>

<steps>
  <step conkeyref="reusable_steps/washing" conrefend="default.dita#default/peeling">
    <cmd/>
  </step>
</steps>

1. Wash the vegetables thoroughly.
2. Put on some thick mittens.
3. Pass the peeler gently over the vegetable.
Key references (Variables)

Reuse simple variables like product name, executable, etc.

<!-- product name -->
<keydef keys="product" product="editor">
  <topicmeta>
    <keywords>
      <keyword>Oxygen XML Editor</keyword>
    </keywords>
  </topicmeta>
</keydef>

<title>Installation Options for <ph keyref="product"/></title>

Installation Options for Oxygen XML Editor
Why push content?

Original Task

Cooking Book Publication

Push Extra Step For Experts

Resource-only task
Content push

Original steps

```xml
<steps>

 .........

 <step id="peeler_handling">
   <cmd>Pass the peeler gently over the vegetable.</cmd>
 </step>

</steps>

<keydef href="stepsPusher.dita" keys="peeling"/>

Conkeyref push

```xml
```xml
<steps>

 <step conaction="mark" conkeyref="peeling/peeler_handling">
   <cmd/>
 </step>

 <step conaction="pushafter">
   <cmd>Read the instructions.</cmd>
 </step>

</steps>
```

Preview

1. Wash the vegetables thoroughly.
2. Put on some thick mittens.
3. Pass the peeler gently over the vegetable.
4. Read the instructions.
Pushing content capabilities

http://docs.oasis-open.org/dita/dita/v1.3/csprd01/part2-tech-content/langRef/attributes/theconactionattribute.html

- Replace element.
- Push before.
- Push after element.
Please check all features that you are currently using:

Answered: 25  Skipped: 0

- Content Reference
- Content Key Reference
- Content Reference Push
- Key References
DITA 1.3 contributions to Reuse.

- Reuse topic with variable content depending on context (keyscopes).
  
  http://docs.oasis-open.org/dita/dita/v1.3/csprd01/part2-tech-content/langRef/attributes/the-key-scope-attribute.html

- Reuse the same content profiled in various ways in the same publication (branch filtering).
  
  http://docs.oasis-open.org/dita/dita/v1.3/csprd01/part2-tech-content/langRef/base/ditavalref.html
Reuse with Key Scopes

<title><ph keyref="model"/> Phone Overview</title>

Various key values in various scopes

...............<topicref href="phoneOverview.dita" keyscope="X1000Scope"> <keydef keys="model"> <topicmeta><keywords><keyword>X1000</keyword></keywords></topicmeta> </keydef>

...............<topicref href="phoneOverview.dita" keyscope="X2000Scope"> <keydef keys="model"> <topicmeta><keywords><keyword>X2000</keyword></keywords></topicmeta> </keydef>

...............
Reuse with Branch Filtering

Merge two product documentation maps

..................
<topicref href="phoneDetails.ditamap" format="ditamap">
  <ditavalref href="ditaval/X1000Branch.ditaval">
    <ditavalmeta><dvrResourceSuffix>1</dvrResourceSuffix></ditavalmeta>
  </ditavalref>
</topicref>

..................
<topicref href="phoneDetails.ditamap" format="ditamap">
  <ditavalref href="ditaval/X2000Branch.ditaval">
    <ditavalmeta><dvrResourceSuffix>2</dvrResourceSuffix></ditavalmeta>
  </ditavalref>
</topicref>

..................

X1000 Phone Overview
- Brief Specifications
- Available Colors and Accessories
X2000 Phone Overview
- Brief Specifications
- Available Colors and Accessories

Preview
Please check all DITA 1.3 features that you plan to use:

Answered: 38    Skipped: 6

- Key Scopes
- Branch Filtering
- Trouble Shooting Topic
- MathML Support
- SVG Support
- Other (please specify)
Reuse non-DITA resources in multiple publications.

- Reuse images (href or keyref).
- Reusing blocks of content from other files (href or keyref).
- Reuse videos and reuse other resources (PDFs).

**Hints and Tips**

- Choose your image format wisely (suggestion: PNG).
- Try to scale images before referring to them.
What image formats are you using?

Answered: 25  Skipped: 0

- PNG: 80%
- GIF: 20%
- JPEG: 60%
- SVG: 60%
- MathML: 0%
- Other (please specify): 0%
Advantages of Content Reuse

- Reuse content in multiple similar publications.
- Consistent content (product names, notes, etc).
- Lower translation costs (with DITA-aware agencies).
Your opinion is important to us! Please tell us what you thought of the lecture. We look forward to your feedback via smartphone or tablet under http://ta15.honestly.de or scan the QR code.

The feedback tool will be available even after the conference!
Thank You!

Questions?

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