

DITA Reuse Strategies

Radu Coravu
radu_coravu@oxygenxml.com
[@radu_coravu](https://twitter.com/radu_coravu)



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

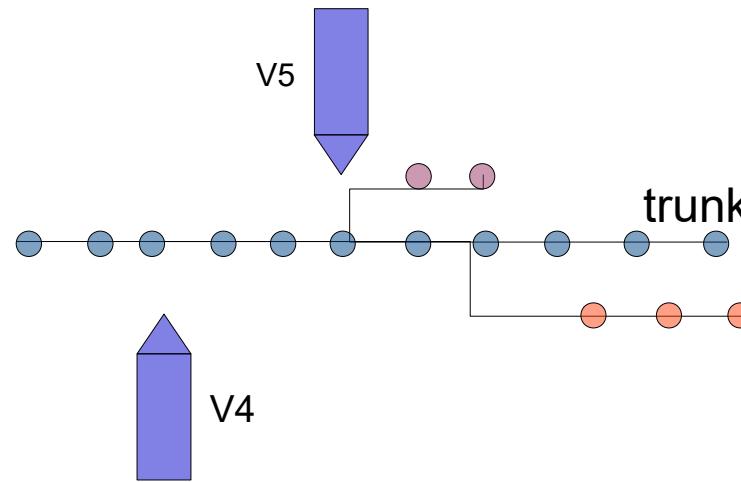


Discuss results of DITA Usage Poll:
<https://t.co/94pUgfQuYz>

Reuse



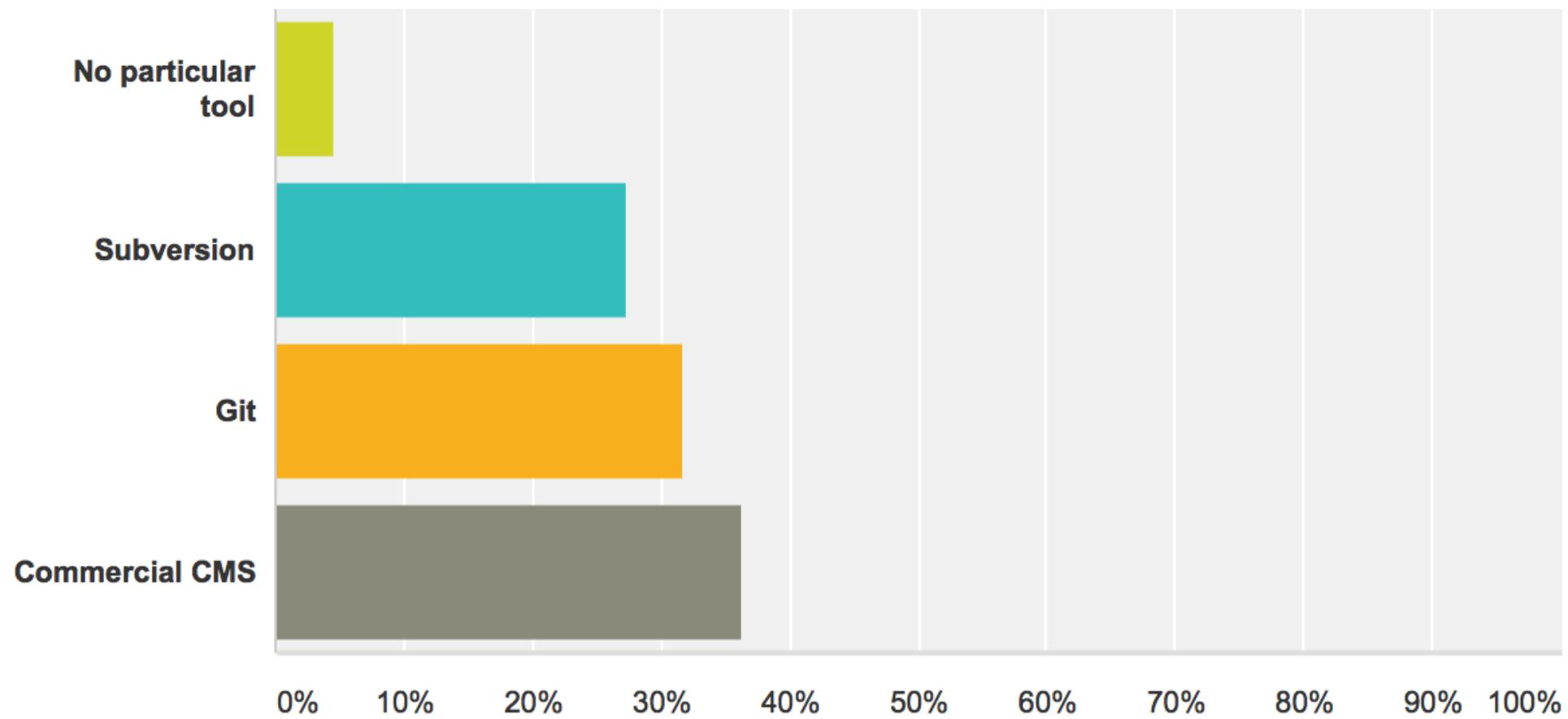
Version Control



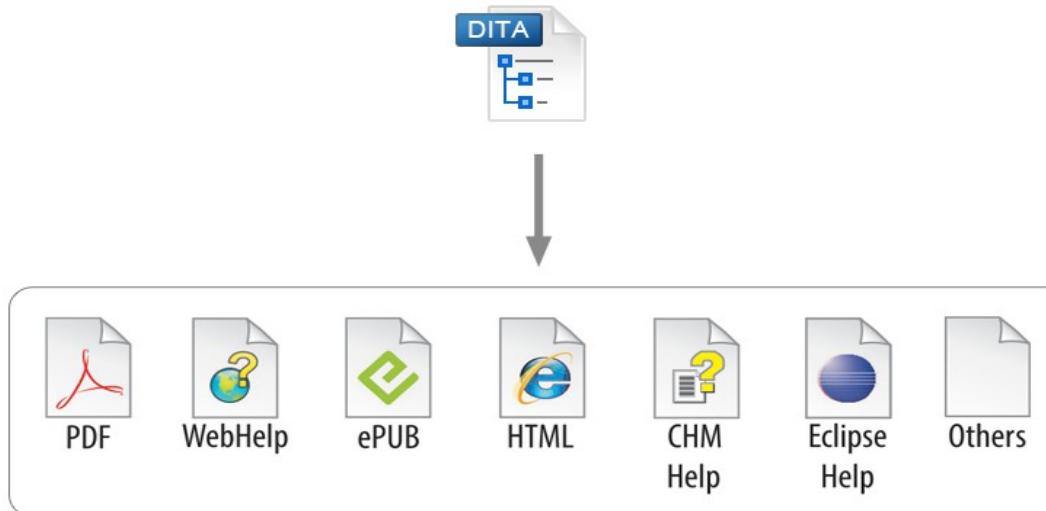
- Version control allows you to reuse content tagged at a certain point in time in order to produce older versions of your publications.

What tool are you using for version control and collaboration with your DITA project?

Answered: 44 Skipped: 0



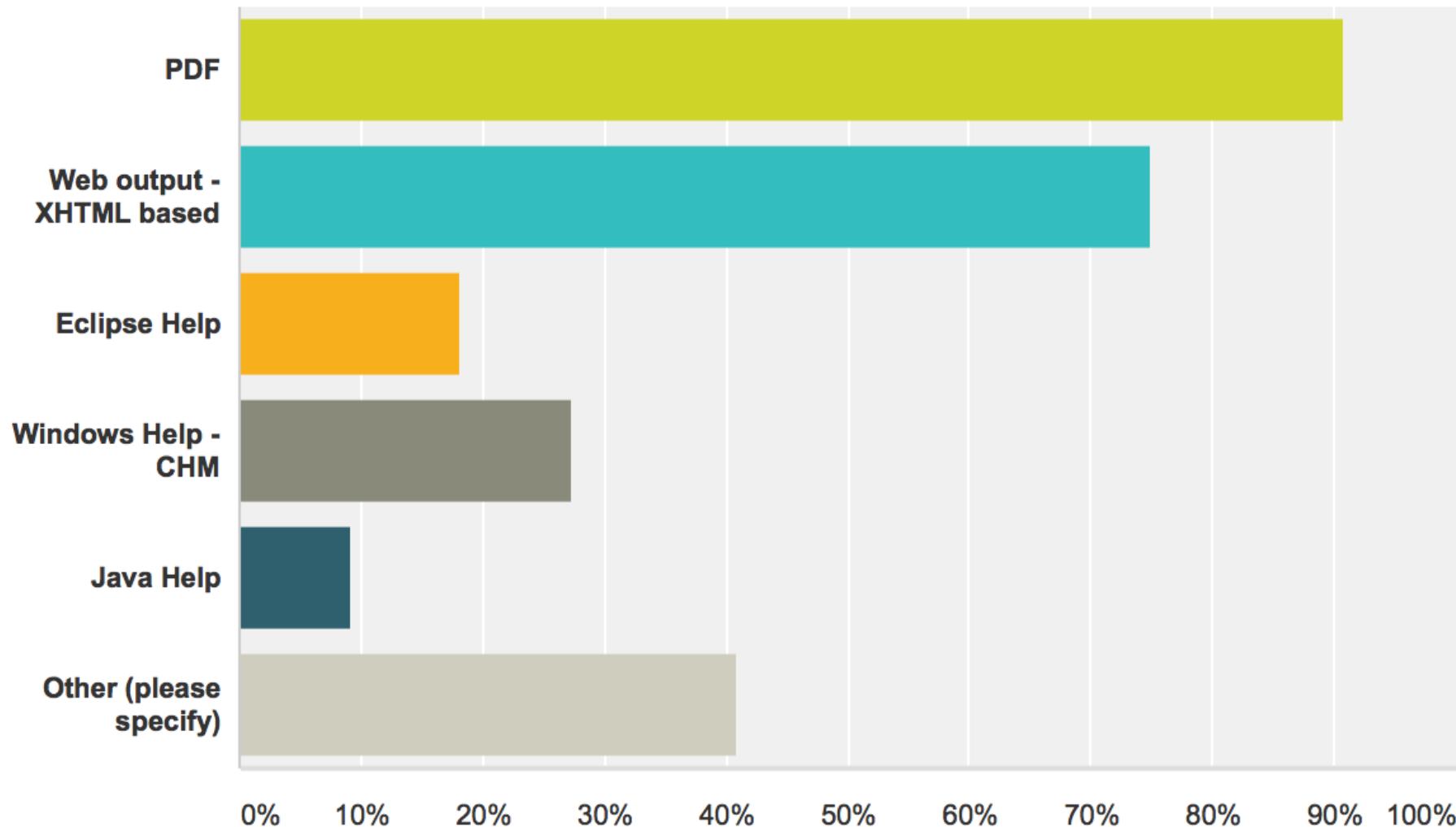
Publishing DITA content to different formats



- 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



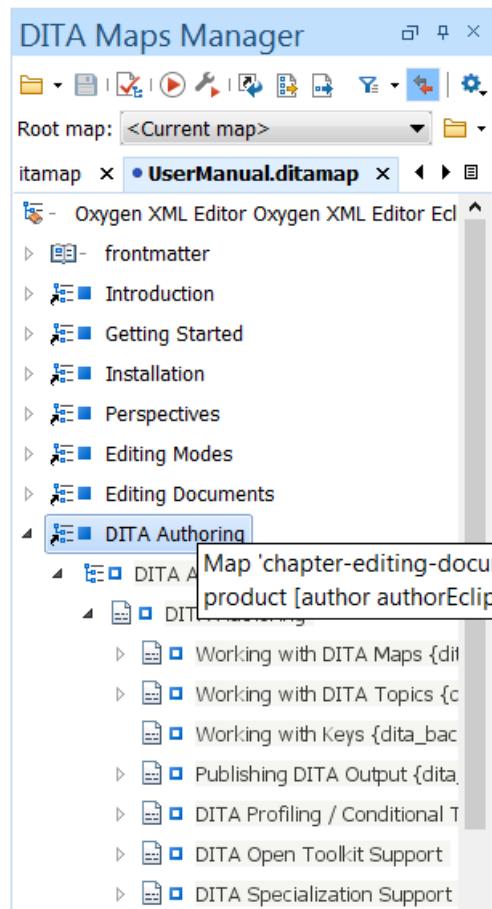
Create larger publications from existing ones



- Merge multiple existing DITA Maps in various new publications.

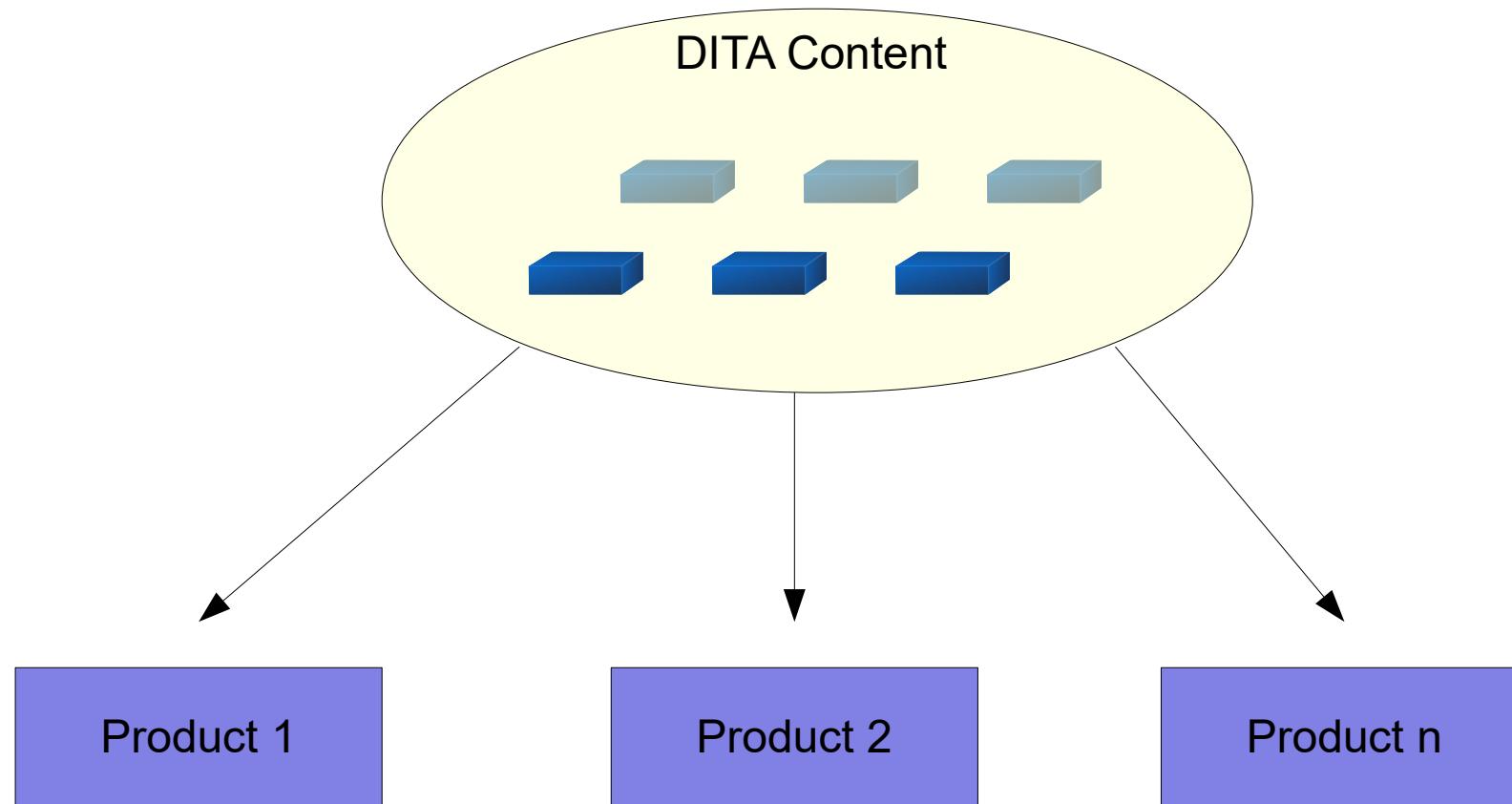


Even if you have a single root map you can keep related sections in different DITA Maps.

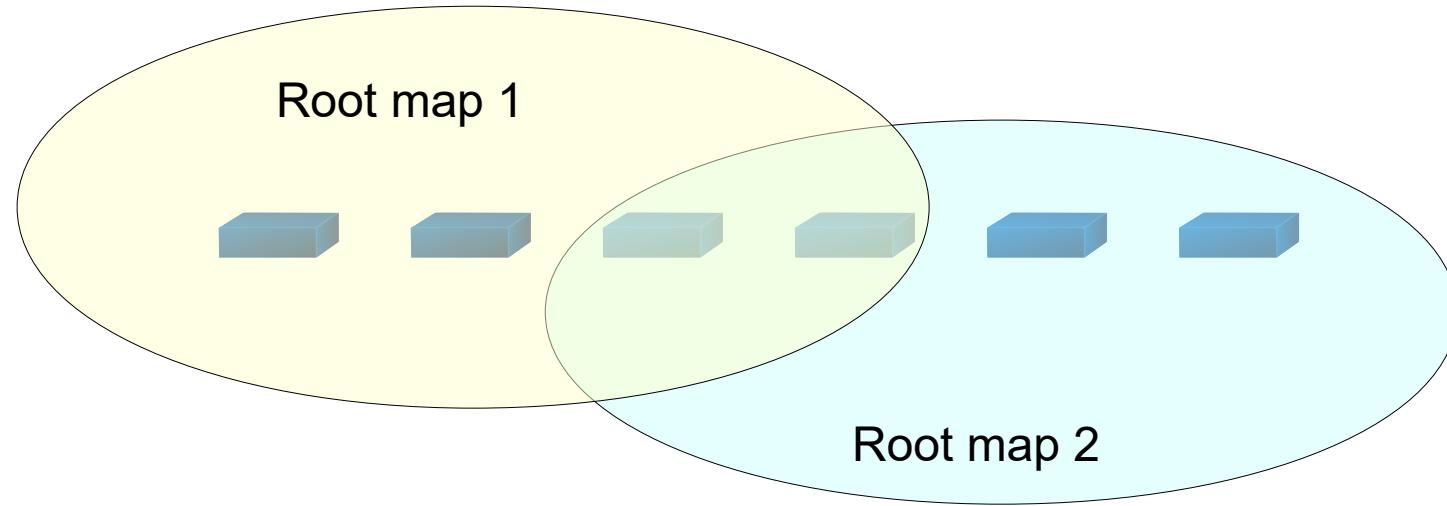


```
<chapter href="chapter-editing-documents.ditamap"
collection-type="sequence" format="ditamap"/>
```

Reuse content for similar products

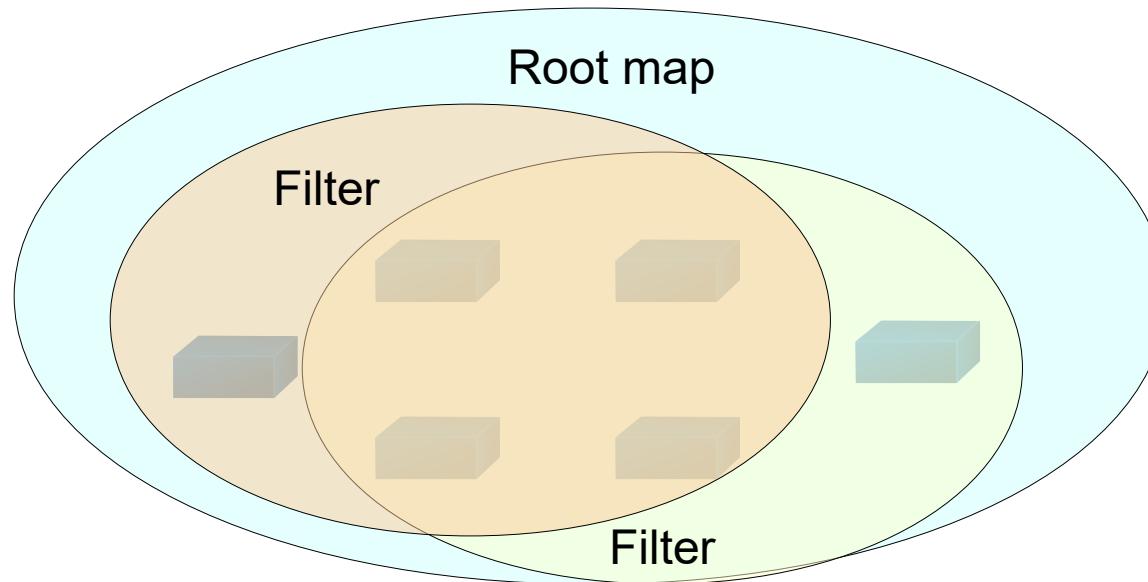


1. Use multiple root maps.



- 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

▼ [a]■ 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]

▼ [a]■ 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]

Alternate Text

▼ 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.

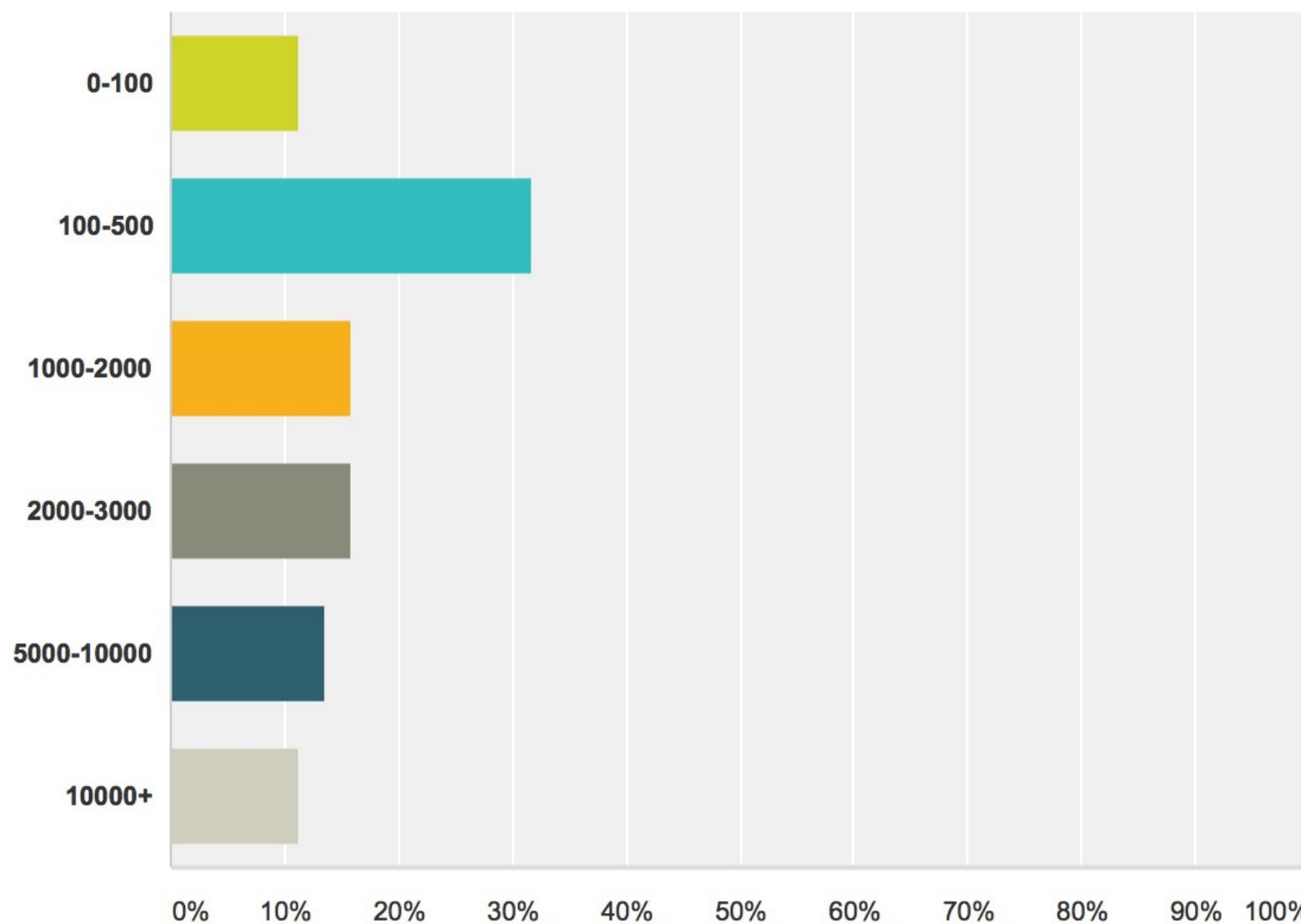
DITA Filtering

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

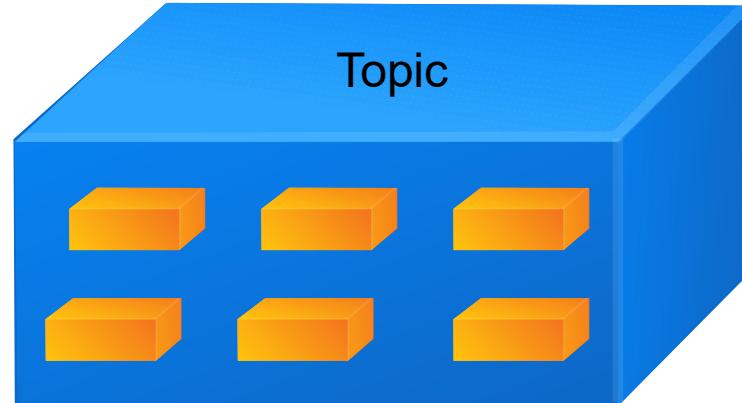
- Exclude elements based on various value combinations.
- Flag/Passthrough elements.

How many topics are in your DITA-based project?

Answered: 44 Skipped: 0



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

```
<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>
```

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

Conref

CPU

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

Preview



Tips

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

▼ Shortcuts List

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

Content key references

```
<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>
```

Reusable component

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

```
<dd conkeyref="reusable-install/minimum_cpu_usage"/>
```

CPU

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

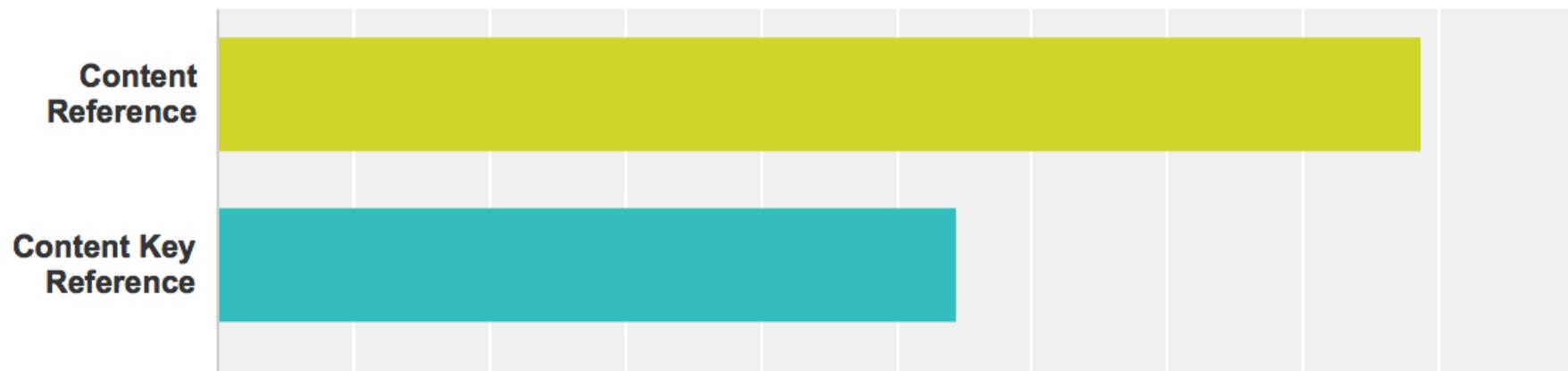
Preview



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>
```

Reusable components

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

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

Conkeyref range

1. Wash the vegetables thoroughly.
2. Put on some thick mittens.
3. Pass the peeler gently over the vegetable.

Preview

Key references (Variables)

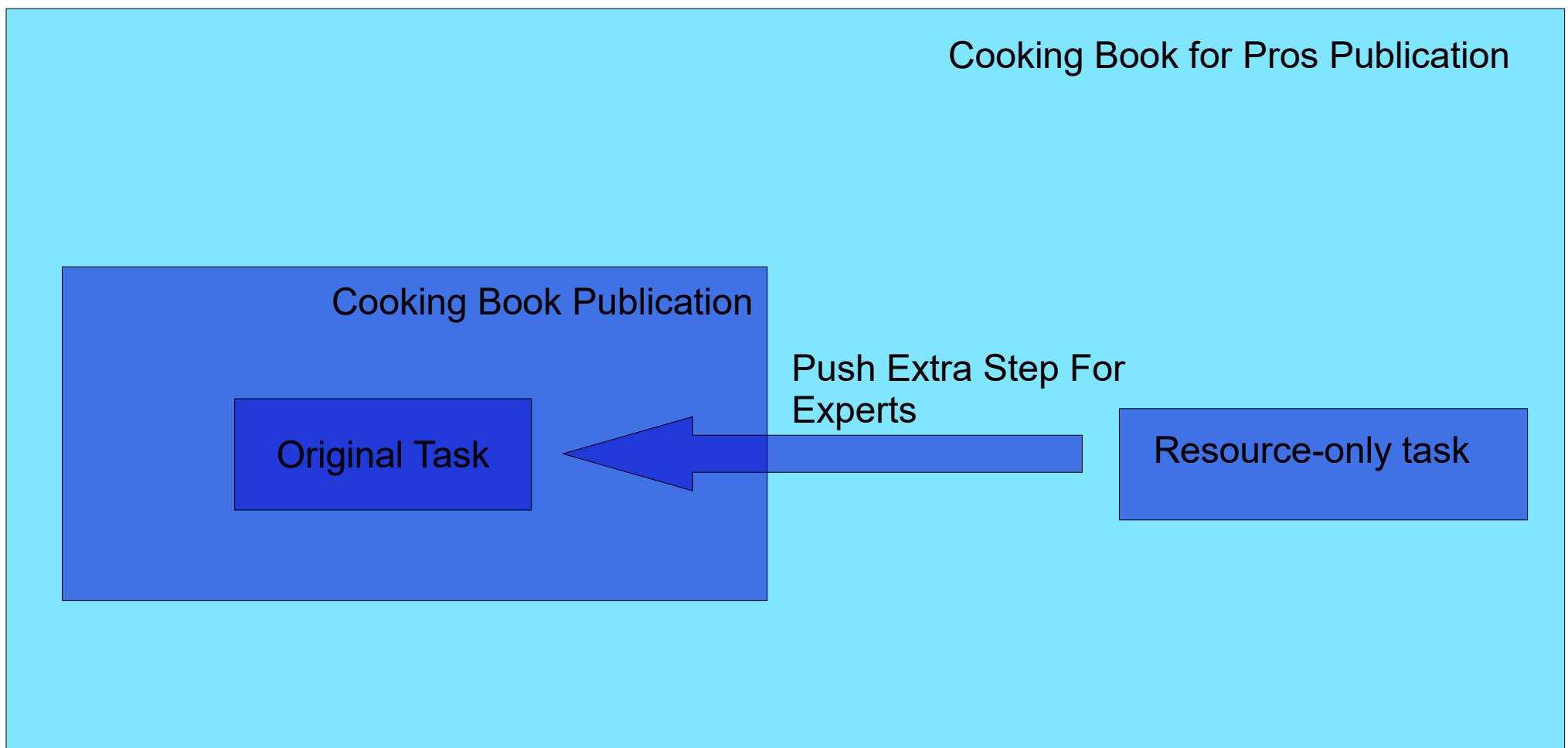
Reuse simple variables like product name, executable, etc.

```
<!-- 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?



Content push

```
<steps>
```

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

Original steps

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

```
<steps>
```

```
  <step conaction="mark" conkeyref="peeling/peeler_handling">  
    <cmd/>  
  </step>  
  <step conaction="pushafter">  
    <cmd>Read the instructions.</cmd>  
  </step>  
</steps>
```

Conkeyref push

1. Wash the vegetables thoroughly.

2. Put on some thick mittens.

3. Pass the peeler gently over the vegetable.

4. Read the instructions.

Preview

Pushing content capabilities

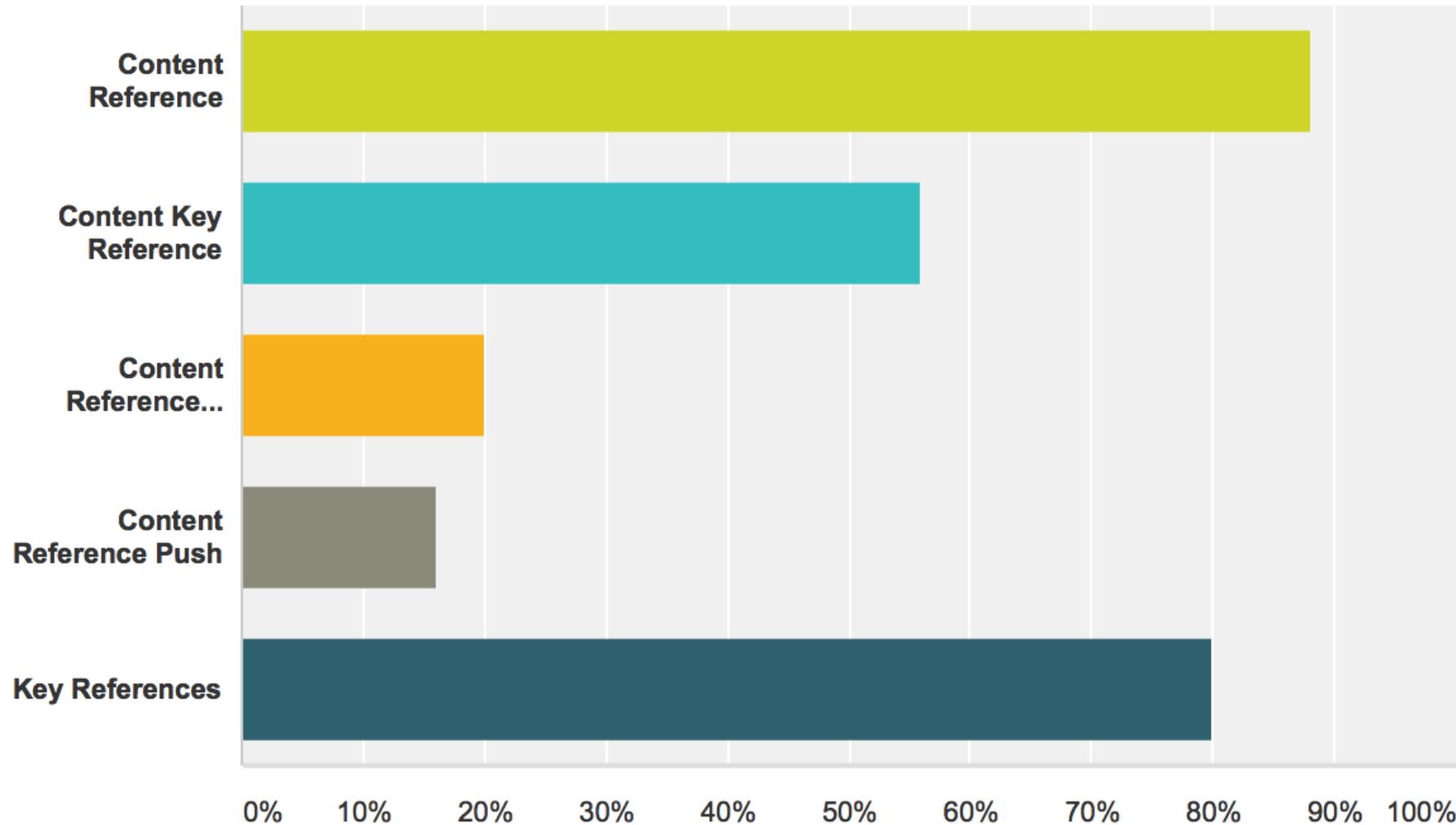
<http://docs.oasis-open.org/dita/dita/v1.3/csprd01/part2-tech-content/langRef/attributes/theconactionattribute.html>

- Replace element.
- Push before.
- Push after element.

Please check all features that you are currently using:



Answered: 25 Skipped: 0



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>
```

Product key reference

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>  
.....
```

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

Preview

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>
```

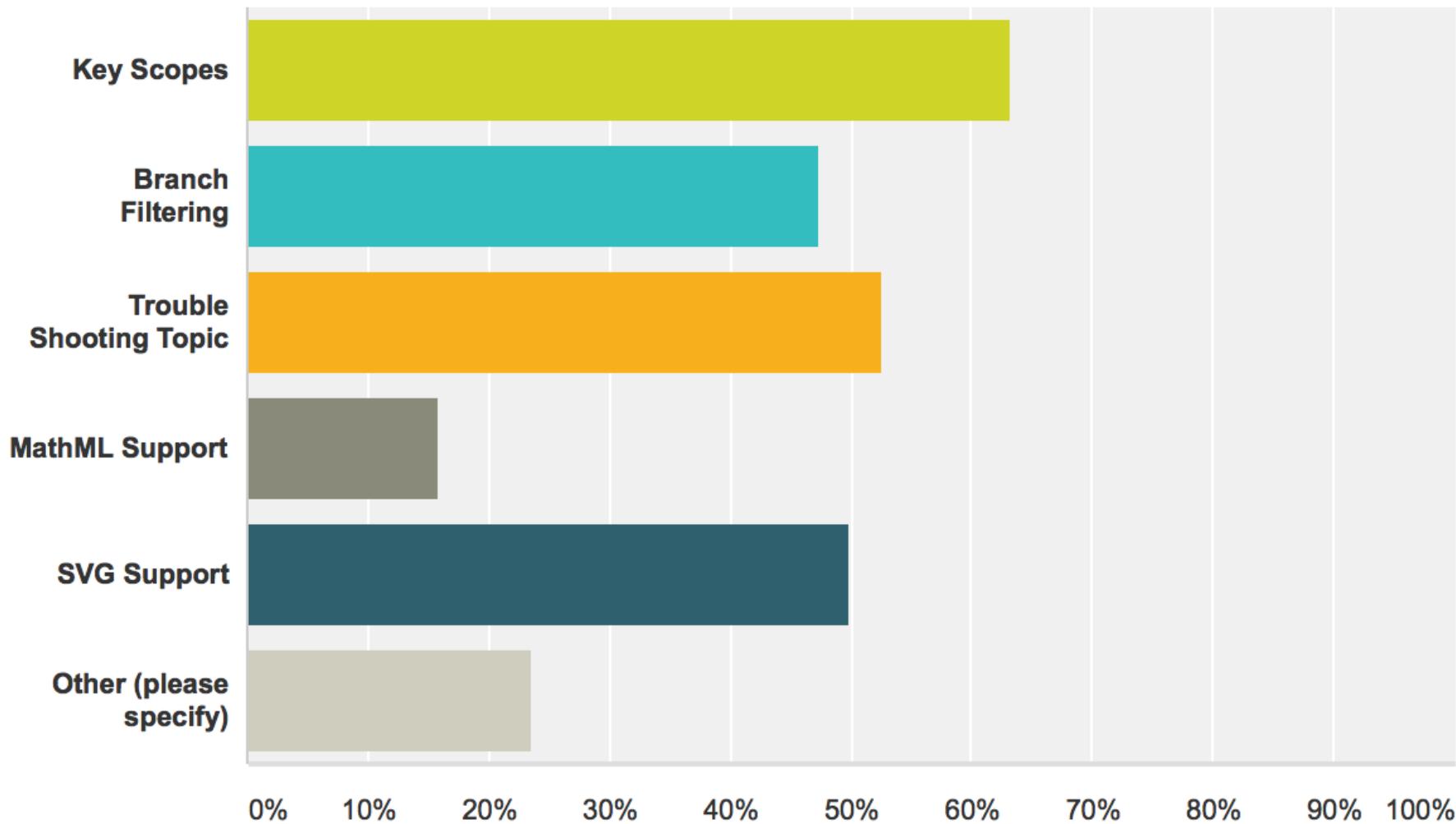
```
<topicref href="phoneDetails.ditamap" format="ditamap">
  <ditavalref href="ditaval/X2000Branch.ditaval">
    <ditavalmeta><dvrResourceSuffix>2</dvrResourceSuffix></ditavalmeta>
  </ditavalref>
</topicref>
```

 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



Reuse non-DITA resources in multiple publications.

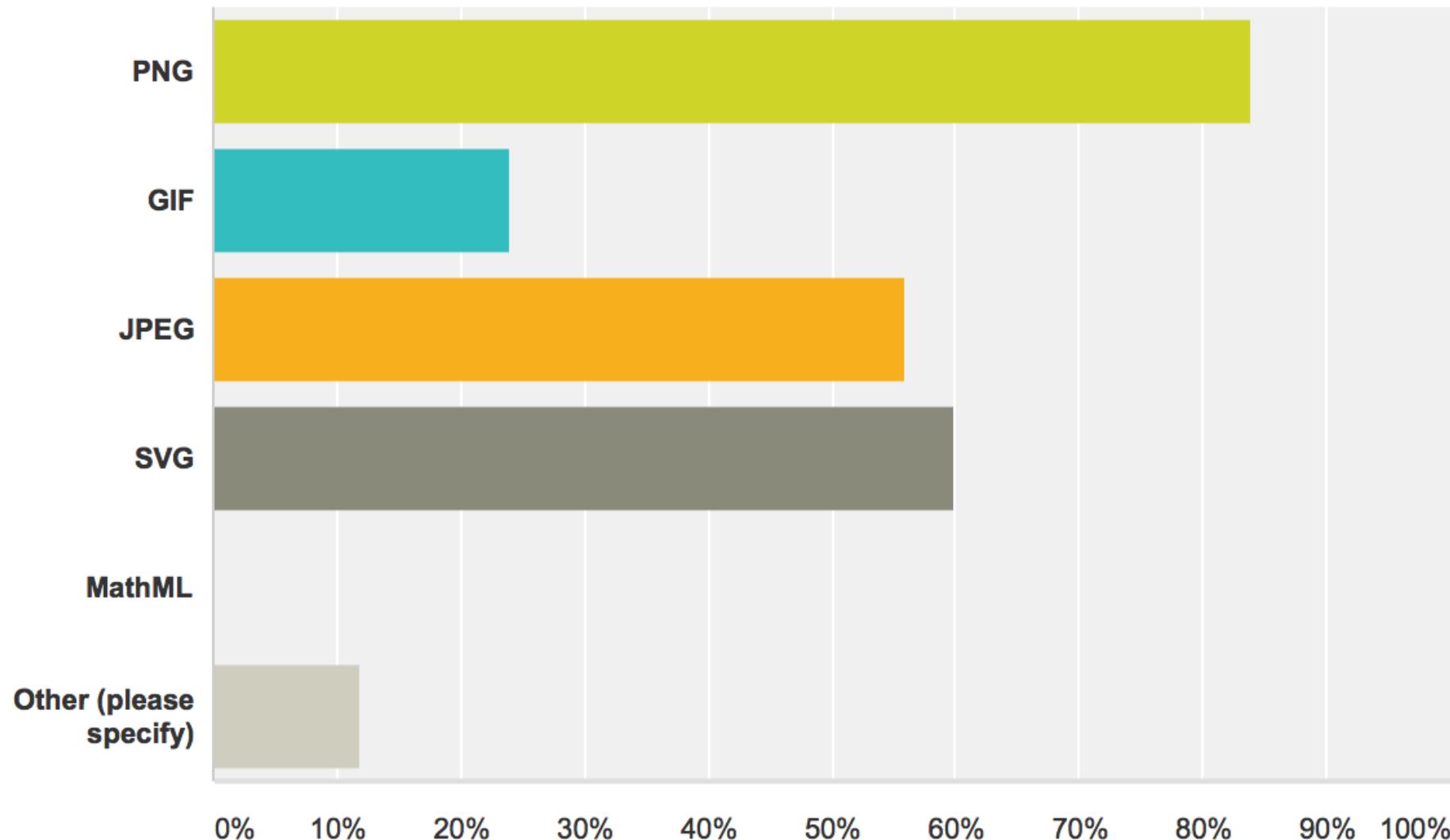
- Reuse images (href or keyref).
- Reusing blocks of content from other files (href or keyref).
- Reuse videos and reuse other resources



- 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



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?

Radu Coravu
radu_coravu@oxygenxml.com
[@radu_coravu](https://twitter.com/radu_coravu)