DHSC Best Practices Guide

Contents

DITA and User Assistance

This topic describes the relationship between DITA and user assistance and Help systems in particular.

DITA can be used in the process of creating user assistance, and especially of Help systems, but is not currently (and may never be) used as a user assistance format itself.

DITA is a storage and authoring format, not a delivery format; it is a presentation-neutral format. The separation of content and form is fundamental to DITA's design; content is written in DITA, and must be transformed to a reading format before it can be delivered to the reader.

In principle, content written in DITA can be *transformed* to any reading format. In practice, it's not that simple. Before DITA can be transformed, a transformation process has to be devised. Many DITA authoring and publishing tools come with standard transformers for most common delivery formats, such as PDF, RTF and HTML. The *DITA Open Toolkit*, an open source collection of utilities and documentation to help writers work with DITA, includes basic transformers for PDF, RTF, HTML, DocBook, Eclipse Help, and Microsoft® HTML Help.

User assistance content is not defined by its format. A document in Microsoft HTML Help format isn't necessarily a Help system; user assistance is defined by the nature of the content. Conversely, user assistance content doesn't have to be delivered in a *traditional* Help format.

DITA promotes a single-source approach to documentation, so user assistance may commonly be one of a number of deliverables produced from a *repository* of information topics. The process of producing simple Help systems from DITA content using the standard DITA Open Toolkit transformers is straight-forward. It is a little more complicated to deliver such DITA-generated content for context-sensitive Help, but still readily achievable. Likewise, in principle, it is a trivial matter to incorporate DITA content into embedded user assistance and user interface elements, using standard XML tools and techniques. There is not yet a standard approach to user assistance, so there is also no standard way of using DITA in this way. Different organisations tend to develop their own individual, custom approaches, using inhouse technical expertise to do so.

Moving beyond simple Help systems, however, is currently difficult, but not impossible. The DITA Technical Committee is developing some changes to the DITA standard to allow these processes to be simplified. However, the apparent simplicity or complexity of using DITA for Help authoring will be in future determined by the capabilities of DITA editing and publishing tools. When it comes down to it, DITA is just a standard, and good tools are needed to work with good standards.

Developing DITA-based Help for Existing Help Environments

CSHelp Plug-in

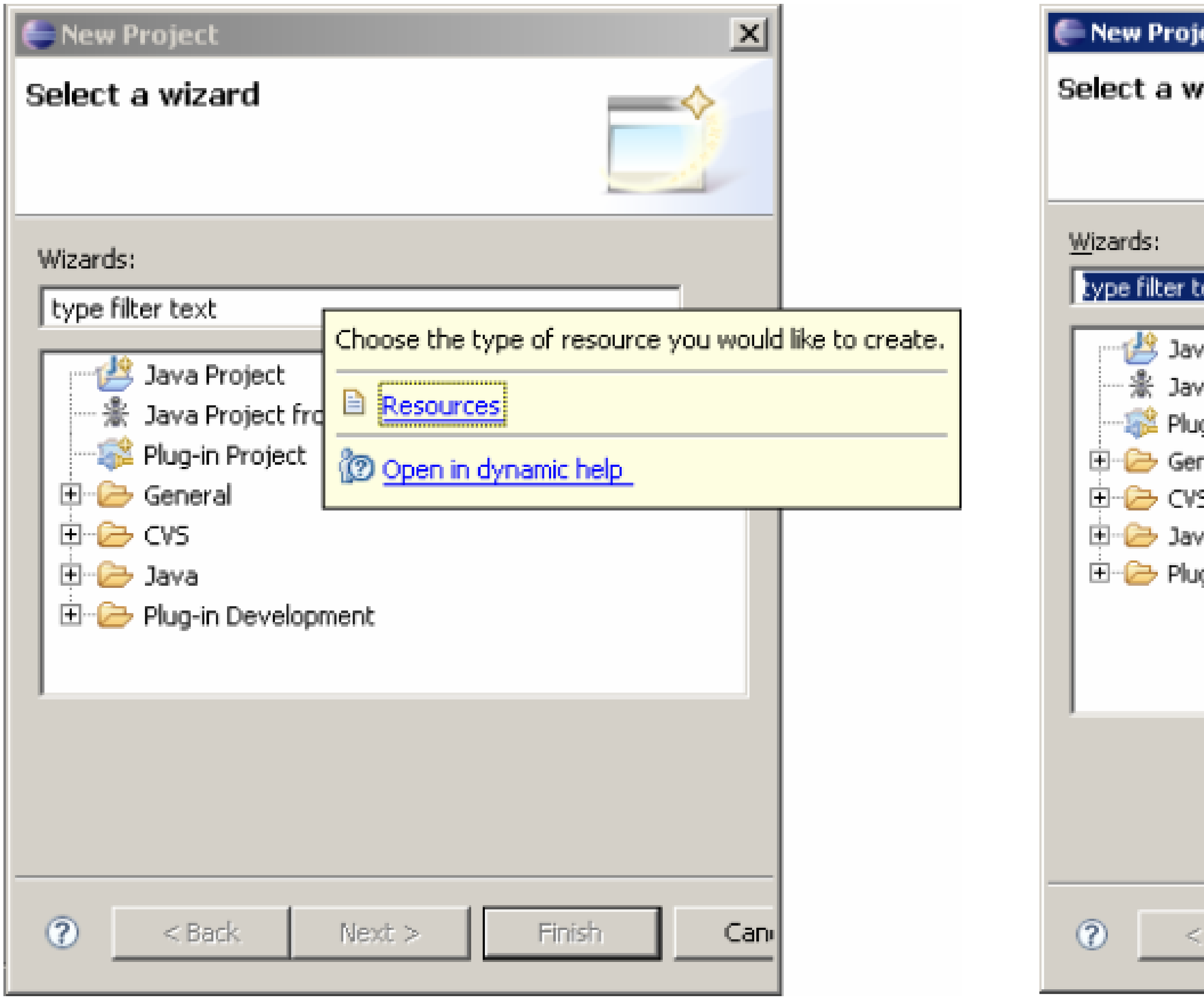
This topic provides an overview of the DITA-OT plug-in named cshelp (for context-sensitive help).

The cshelp plug-in generates contexts files in the format that Eclipse-based applications use for context-sensitive help. The standard DITA-OT transforms can be used to produce XHTML output. This chapter focusses on producing Eclipse contexts files.

Overview

If you develop code plug-ins that extend the Eclipse user interface, or develop documentation for development teams that do, you either already are or should be incorporating context-sensitive help into the user interface. If you already use DITA to source your Eclipse documentation plug-ins, sourcing the content-sensitive help in DITA allows you to maintain a consistent authoring and build environment and consistently formatted output.

The Eclipse user interface allows you to display context-sensitive help as an infopop (left) or in a dynamic help view. The latter option includes information and functionality in addition to the contents of the context-sensitive help topic.



Choose the type of resource you would like to create.

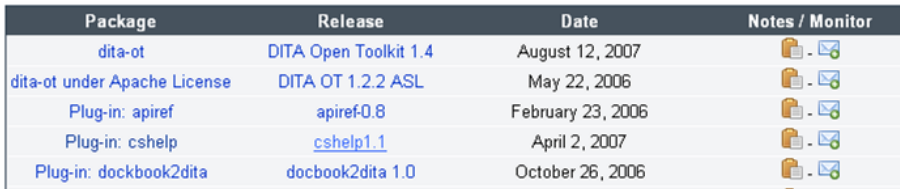
For more information on contexts files and developing context-sensitive help for Eclipse, refer to the documentation for the current Eclipse release, available on *http://www.eclipse.org*.

The cshelp plugin was developed by a team of writers representing the various software brands in IBM, led by the author. It is currently in use by products in several brands that develop applications for the Eclipse environment.

Setup and configuration

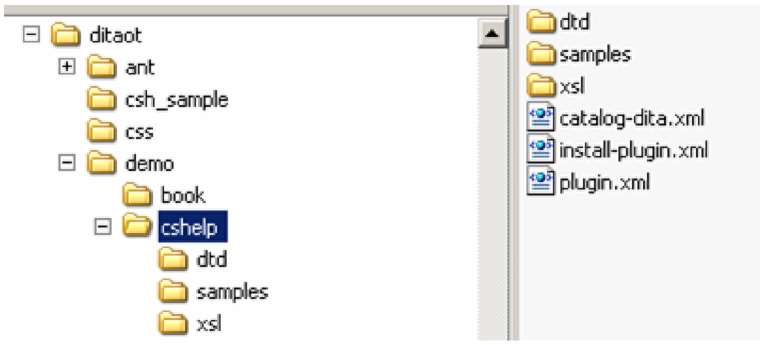
The cshelp plug-in is available from the DITA-OT site on sourceforge.net:

http://sourceforge.net/project/showfiles.php?group_id=132728



Package	Release	Date	Notes / Monitor
dita-ot	DITA Open Toolkit 1.4	August 12, 2007	-
dita-ot under Apache License	DITA OT 1.2.2 ASL	May 22, 2006	-
Plug-in: apiref	apiref-0.8	February 23, 2006	-
Plug-in: cshelp	cshelp1.1	April 2, 2007	-
Plug-in: dockbook2dita	docbook2dita 1.0	October 26, 2006	-

Download and unzip the plug-in into your DITA-OT installation (typically, the `<DITA-OT>/demo` directory).



To complete the installation, open a command prompt and run the Ant integrator build file from your DITA-OT directory (`ant -f integrator.xml`).

Authoring

The structure of a cshelp DITA file mirrors that of an Eclipse contexts file. A contexts file is an XML file that contains one or more context elements inside a containing contexts element. Each context element contains a unique ID, the text of the context-sensitive help topic, and optionally, links to help topics in the help system.

```
<?xml version="1.0" encoding="UTF-8"?>
<?NLS TYPE="org.eclipse.help.contexts"?>
<contexts>
    <context id="new_wizard_selection_wizard_page_context">
        <description>
         Choose the type of resource you would like to create.
        </description>
        <topic label="Resources" href="concepts/concepts-12.htm"/>
    </context>
    …
</contexts>
```

Similarly, a cshelp DITA file contains one or more cshelp elements inside a containing cshelp element (which is otherwise unused). Each nested cshelp element contains a unique ID, text, and related links.

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE cshelp PUBLIC "-//OASIS//DTD DITA CSHelp//EN"
 "..\demo\cshelp\dtd\cshelp.dtd">
<cshelp id="csh_outer_container" xml:lang="en-us">
  <title>sample1_context</title>
  <shortdesc></shortdesc>
  <csbody></csbody>
  <cshelp id="new_wizard_selection_wizard_page_context">
    <title></title>
    <shortdesc>Choose the type of resource you would like to create.</shortdesc>

    <csbody>
    </csbody>
    <related-links>
      <link format="htm" href="concepts/concepts-12.htm" scope="peer">
        <linktext>Resources</linktext>
      </link>
    </related-links>
  </cshelp>
  ...
</cshelp>
```

It is important to note that the only highlighting markup that can be used inside Eclipse context-sensitive help is the bold (<b></b>) tag, and the only formatting options are the carriage return and the space key. All of these are permissible only inside the description element. When sourcing context-sensitive help in DITA, all of the highlighting and formatting markup options that are available in the shortdesc and body elements of the topic type may be used. The transform that produces a contexts file from the DITA source produces output that conforms to the restrictions of the contexts file. In most cases, the output approximates what would be seen in HTML output, but some DITA elements are simply ignored:

- Table and simpletable
- Image (only the text in the <alt> attribute or tag will display)
- Object
- Figure (only the text in the <desc> tag will display)
- Footnote
- Indexterm, indextermref
- Xref

Use as many DITA files per Eclipse plug-in that you want, and create a simple DITAMAP file inside the plug-in that points to each of them. Include any copyright information in the DITAMAP; this information will appear in comment tags in each generated contexts file. Note, however, that relationship tables (reltables) cannot be used to create related links when producing Eclipse contexts files.

Integration

Refer to the Eclipse documentation for instructions on incorporating context IDs in code plugins. This information is typically in Platform Plug-in Developer Guide > Programmer's Guide > User assistance support > Help > Context-sensitive help > Declaring a context ID.

http://www.eclipse.org/documentation/

Output

When processing the DITAMAP file, there are two parameters that need to be set:

- Use the switch that identifies a separate XSL file, and point to the dit2context.xsl file in the cshelp/xsl directory. For example, if you are using Ant file:

  ```
  <property name="args.xsl"
  value="${dita.dir}${file.separator}demo${file.separator}cshelp${file.separator}xsl${file.separator}dit2context.xsl"/>
  ```

- Use the switch that indicates the output extension of the generated file will be XML. For example, if you are using Ant:

  ```
  <property name="args.outext" value="xml"/>
  ```

The contents of the generated XML file should resemble the example contexts file in the Authoring section.

Summary

Developing Custom DITA-based Help Systems

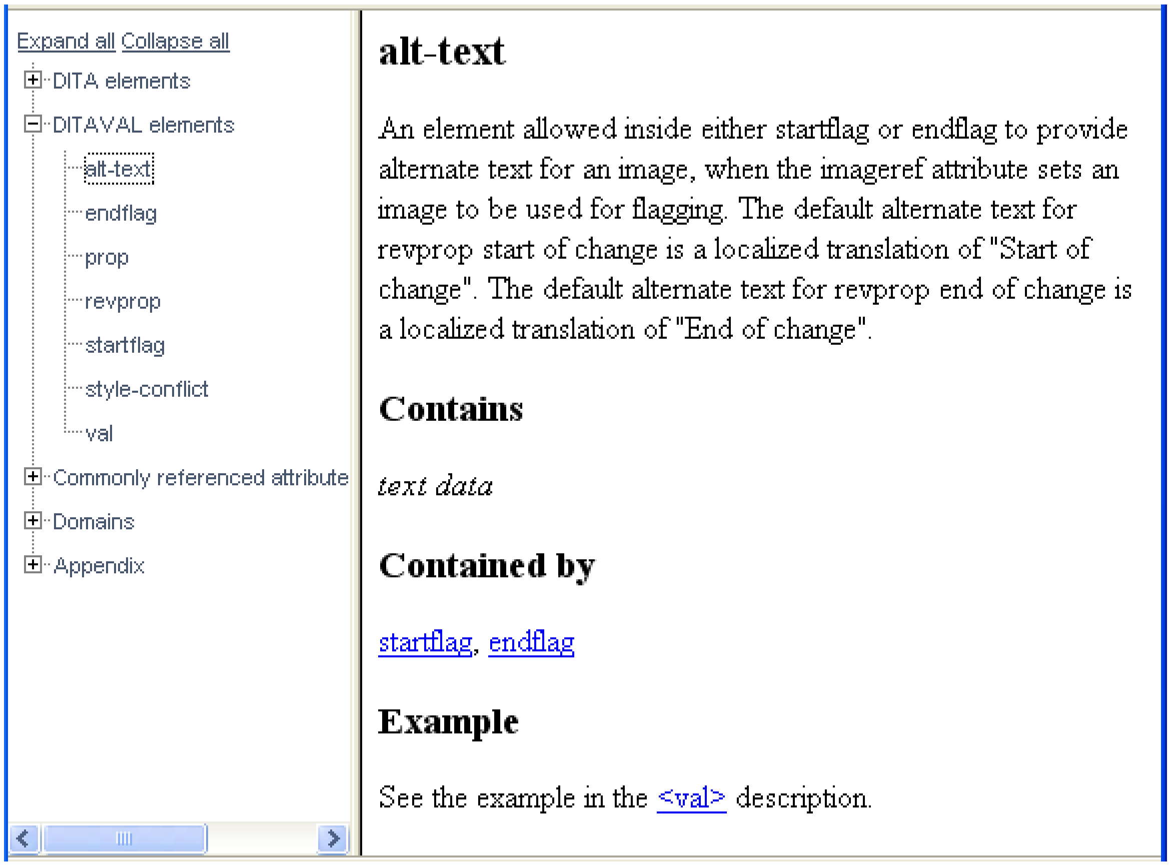
TOCJS and TOCJSBIS Plug-ins

This topic provides an overview of the DITA-OT plug-ins named tocjs and tocjsbis.

The tocjs DITA-OT plug-in and its more recent enhancement named tocjsbis generate a JavaScript-based table of contents page for any DITA topics that you reference in your `.ditamap` file.

Overview

These plug-ins are very popular in the DITA community; we even use them on the DITA Technical Committee for our DITA 1.2 specifications.



alt-text

An element allowed inside either startflag or endflag to provide alternate text for an image, when the imageref attribute sets an image to be used for flagging. The default alternate text for revprop start of change is a localized translation of "Start of change". The default alternate text for revprop end of change is a localized translation of "End of change".

Contains

text data

Contained by

startflag, endflag

Example

See the example in the <val> description.

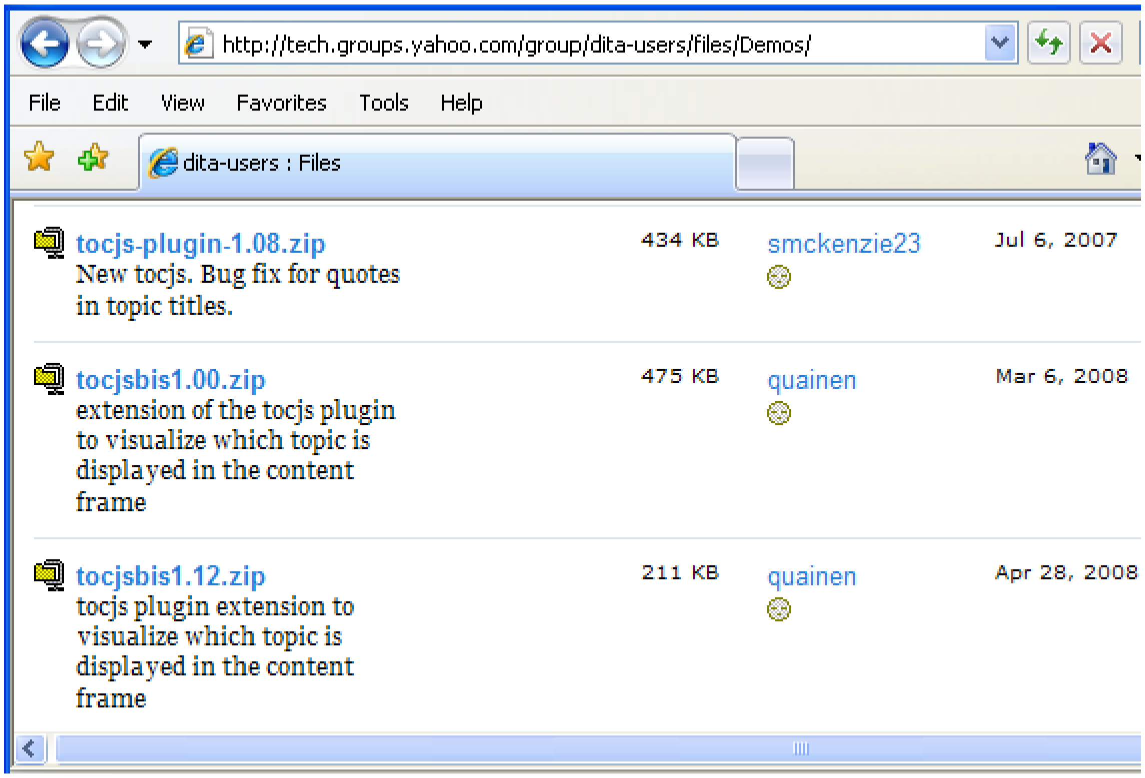
- *tocjs*: The tocjs plug-in was developed by Shawn McKenzie, currently working at Sophos in beautiful Vancouver, BC (Canada). The tocjs plug-in executes after the standard DITA-OT XHTML transform, so each tocjs TOC entry knows the name of its target XHTML topic.
- *tocjsbis*: The tocjsbis plug-in was written by Nadege Quaine and adds the important feature of topic synchronization, i.e. the highlighted topic entry in the TOC updates in sync with the topic being displayed in the contents frame. The plug-in achieves synchronization by adding a unique ID to each XHTML output topic (<meta content="id-tocjsbis_about" name="DC.Identifier" />) and by synchromizing the TOC entry against that topic ID. If you have generated HTML output from RoboHelp or WebWorks Publisher, this technique should be familiar.

If you are generating HTML output of any sort from your DITA sources, you should test one or both of these plug-ins. I use tocjsbis in my context-sensitive Help builds where I work. To the extent that the tree control in tocjs and tocjsbis are based on the Yahoo tree control library, you can customize the way that the final TOC tree displays and behaves in your Help system. They can be tricky, but customizations work.

Setup and configuration

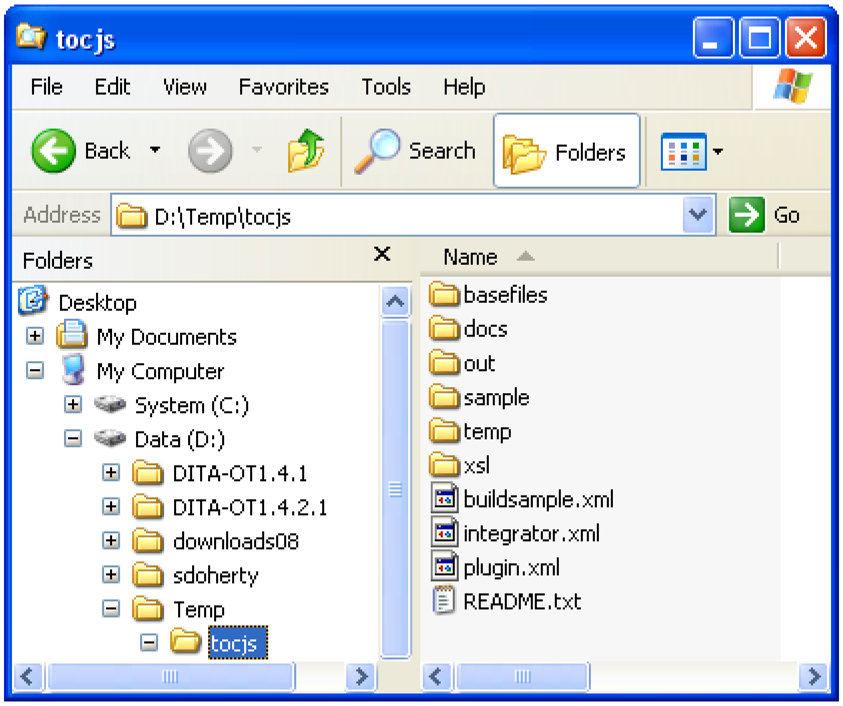
The tocjs and tocjsbis plug-ins are free downloads from the Yahoo DITA-OT site.

http://tech.groups.yahoo.com/group/dita-users/files/Demos/

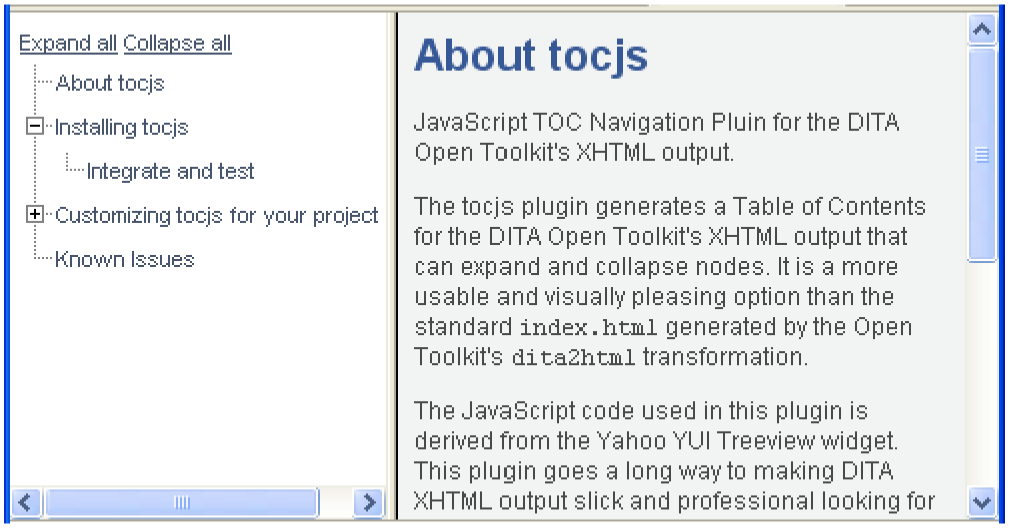

http://tech.groups.yahoo.com/group/dita-users/files/Demos/
File Edit View Favorites Tools Help
dita-users : Files

tocjs-plugin-1.08.zip New tocjs. Bug fix for quotes in topic titles.	434 KB	smckenzie23	Jul 6, 2007
tocjsbis1.00.zip extension of the tocjs plugin to visualize which topic is displayed in the content frame	475 KB	quainen	Mar 6, 2008
tocjsbis1.12.zip tocjs plugin extension to visualize which topic is displayed in the content frame	211 KB	quainen	Apr 28, 2008

After you have unzipped these archives to a local directory, you can browse the documentation to get a feel for what tocjs offers and how you can install it in your DITA-OT directory.



The pre-built documentation for tocjs lives in the `/docs` subdirectory.



About tocjs

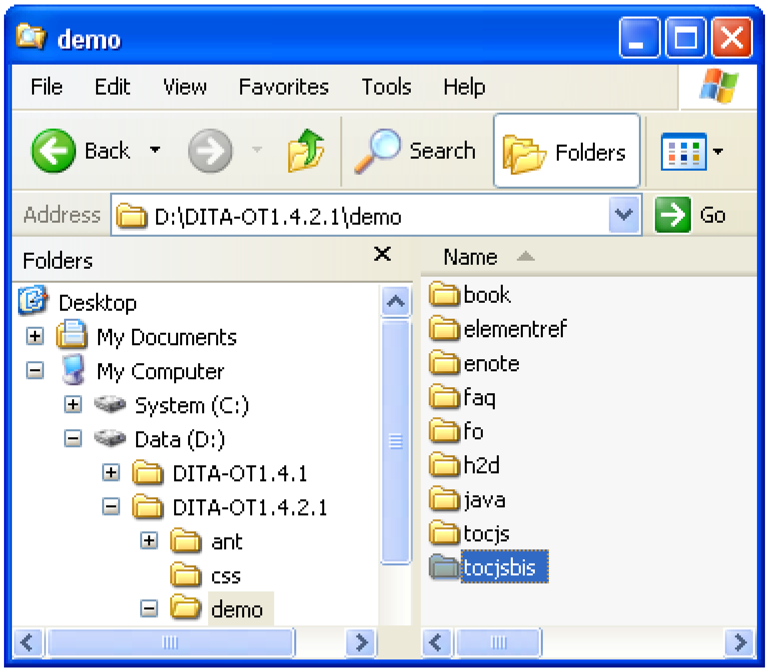
JavaScript TOC Navigation Pluin for the DITA Open Toolkit's XHTML output.

The tocjs plugin generates a Table of Contents for the DITA Open Toolkit's XHTML output that can expand and collapse nodes. It is a more usable and visually pleasing option than the standard `index.html` generated by the Open Toolkit's `dita2html` transformation.

The JavaScript code used in this plugin is derived from the Yahoo YUI Treeview widget. This plugin goes a long way to making DITA XHTML output slick and professional looking for

Installing tocjs or tocjsbis is very straightforward.

1. Copy the un-achived tocjs or tocjsbis subdirectory into the demo subdirectory of your DITA Open Toolkit directory.



2. Open a shell command window from your DITA-OT directory.
3. Enter the following command to integrate the new plugin or plugins with your current DITA-OT environment.

   ```
   ant -f integrator.xml
   ```

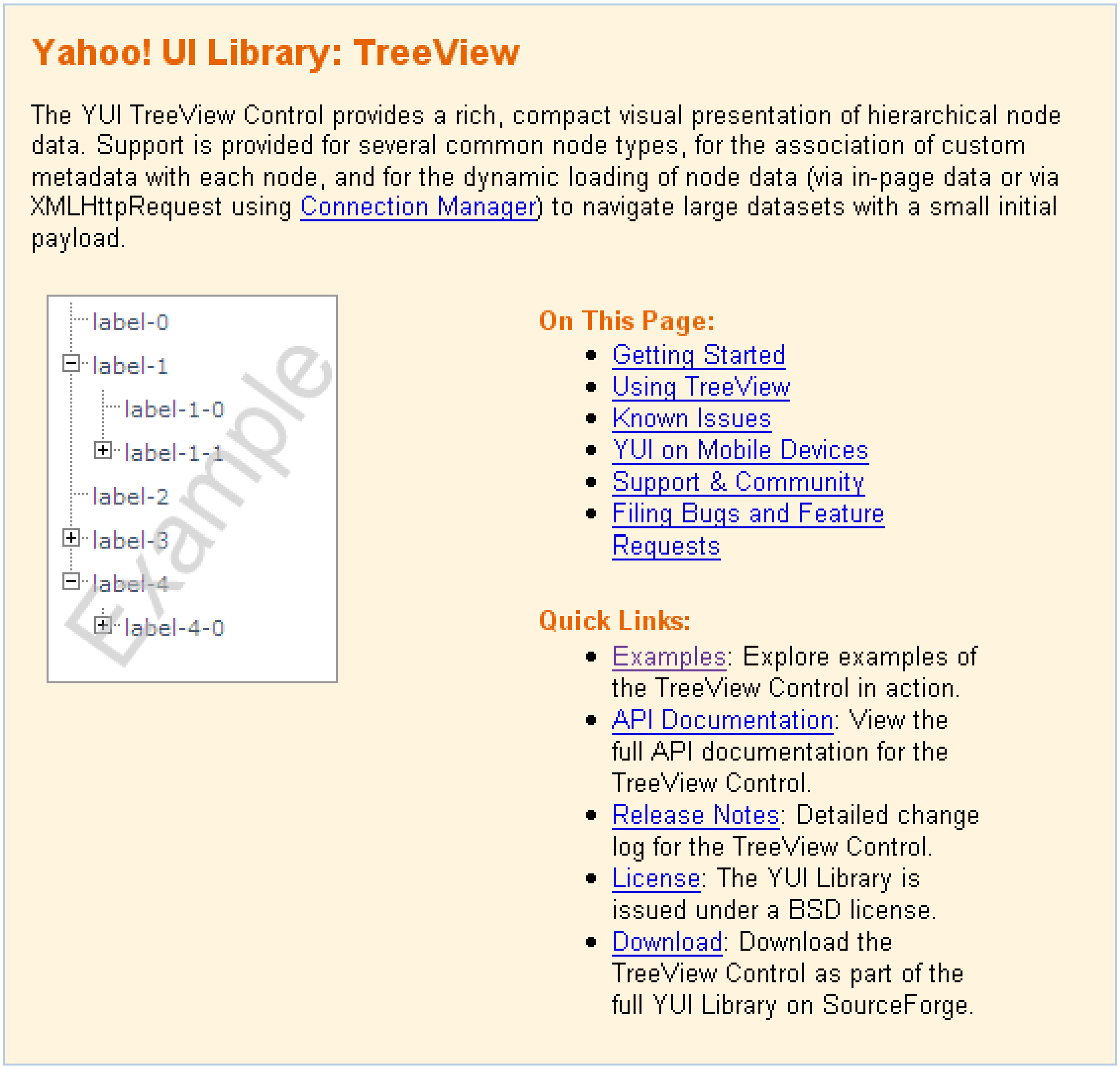
4. Change directory into the `demo/tocjs` or `demo/tocjsbis` subdirectory and enter the following command to build the sample DITA topics.

   ```
   ant -f demo/tocjs/buildsample.xml sample2tocjs
   ```

5. Load the newly generated `demo\tocjs\out\sample\frameset.html` file in your browser.

If you are considering customizations to tocjs or tocjsbis, consult the documentation for the Yahoo UI tree control at the following URL.

http://developer.yahoo.com/yui/treeview/



Yahoo! UI Library: TreeView

The YUI TreeView Control provides a rich, compact visual presentation of hierarchical node data. Support is provided for several common node types, for the association of custom metadata with each node, and for the dynamic loading of node data (via in-page data or via XMLHttpRequest using Connection Manager) to navigate large datasets with a small initial payload.

On This Page:

- Getting Started
- Using TreeView
- Known Issues
- YUI on Mobile Devices
- Support & Community
- Filing Bugs and Feature Requests

Quick Links:

- Examples: Explore examples of the TreeView Control in action.
- API Documentation: View the full API documentation for the TreeView Control.
- Release Notes: Detailed change log for the TreeView Control.
- License: The YUI Library is issued under a BSD license.
- Download: Download the TreeView Control as part of the full YUI Library on SourceForge.

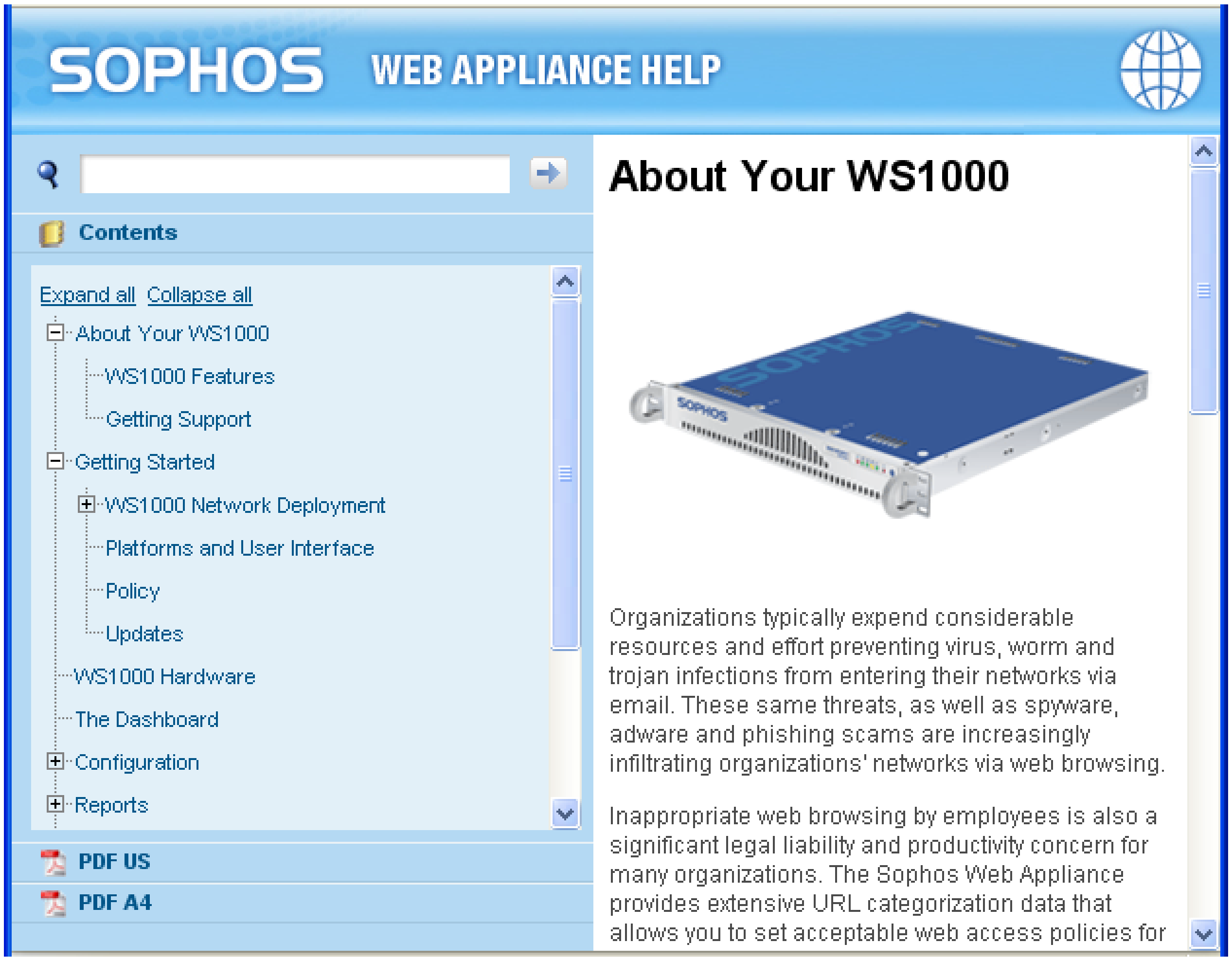
That is about all that is involved with installing and configuring tocjs and tocjsbis.

Authoring

These plug-ins piggy-back whatever investment you have already made in authoring your DITA topics and map files. Beyond setting up a new ant script for tocjs or tocjsbis, there is nothing additional required.

Integration

The tocjs and tocjs plug-ins present few integration problems or opportunites, especially as regards managing context sensitivity between Help output and the calling software application. Many DITA Help writers customize the `frameset.html` file that ships with the tocjs plug-in to personalize or brand the final product. Here's what Shawn McKenzie does with tocjs on his Sophos corporate website.

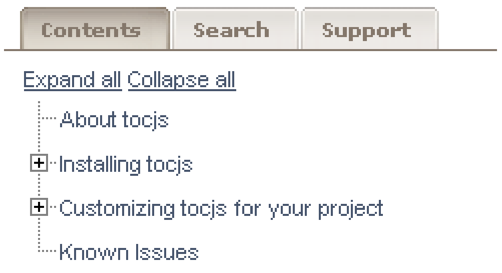


About Your WS1000

Organizations typically expend considerable resources and effort preventing virus, worm and trojan infections from entering their networks via email. These same threats, as well as spyware, adware and phishing scams are increasingly infiltrating organizations' networks via web browsing.

Inappropriate web browsing by employees is also a significant legal liability and productivity concern for many organizations. The Sophos Web Appliance provides extensive URL categorization data that allows you to set acceptable web access policies for

Wrapping other navigational devices around the tocjs output is not difficult. I add the conventional tabs for tri-pane Help systems.



In terms of translation, note that all the text strings associated with entries in the TOC tree are stored in one file named `toctree.js`. These files can be localized, for sure, but they are not very friendly. To make life easier on our sisters and brothers in L10N, you can post-edit this `toctree.js` file to swap JavaScript resource strings for literal strings.

Output

Here again is a link to a live demo of tocjs running at Sophos.

http://ca-repo1.sophos.com/docs/ws1000/

Summary

If you are comfortable customizing XHTML output to build an HTML-based help system, you should consider tocjs and tocjsbis. They are sufficiently lightweight to work in Help systems or web-based portals.

Stan Doherty

OASIS DITA Help Subcommittee

[INTERNAL] DHSC Best Practices Proposal

This document describes the general contents for the proposed *Best Practices Guide for Authoring Help in DITA*.

Overview

This document follows up on the proposal for a best practices document approved by the DITA Help Subcommitee (hereafter DHSC) on June 5, 2008 and updated on June 26. The general notion here is that our subcommittee has devoted time to reviewing the current options for developing Help in DITA. Until we can develop Help specializations for DITA 1.3, these options are the only things that DITA-based organizations can implement, short of developing something new from scratch. We would be doing the DITA community in general a service by summarizing our findings and providing links to relevant Help-oriented resources.

Proposed Contents and Contributors

I propose that we keep things pretty simple. If we can develop one DITA topic per content area, I can pull these together into something buildable and reviewable pretty quickly. Following the general shape of the demos that we had over the past few months, here's what I would propose for a starting outline.

Section	Topic	Contributor
Introduction	Introduction	Tony Self (HyperWrite) Stan Doherty (Individual)
Developing DITA-based Help for Existing Help Environments	Introduction	Volunteer??? Stan Doherty (Individual)?
-	EclipseHelp	Jeff Antley (IBM)
-	CSHelp Plug-in	Jeff Antley (IBM)
-	AIRHelp	Scott Prentice (Individual)
-	PTC Help	Chris Goolsby (PTC) Dan Cunningham (PTC)?
-	HTMLHelp	Deborah Pickett (Moldflow)
-	WinANT outputs and optins	Tony Self (HyperWrite)
Developing Custom DITA-based Help Systems	Introduction Need matrix of options/choices.	Stan Doherty (Individual)
-	WinANT context ID management	Tony Self (HyperWrite)
-	TOCJS plugin	Stan Doherty (Individual)
-	HTMLSearch plugin	Stan Doherty (Individual)

Section	Topic	Contributor
-	XHTML (DITA-OT)	Stan Doherty (Individual)
-	CSHelp Plug-in	Jeff Antley (IBM)
-	Dynamically-rendered HTML	Tony Self (HyperWrite)
-	VistaHelp-style expandable content	Tony Self (HyperWrite)
Using DITA Source with Existing HATs	Introduction	TBD???
-	MadCap Flare	TBD???
-	RoboHelp	TBD???
Resources and Demos	Resources	Joe Welinske
-	Demos (links)	Joe Welinske
Futures?	Introduction	Tony Self (HyperWrite) ?

Topic Structure

At the risk of sounding "pushy," I'd recommend that we start with a generic DITA topic that has a common set of headings. If writers need to rearrange them or delte them, fine ... but at least we'd be starting from a common set of items to discuss. Obviously, where there is existing documentation for a plugin or tool, we point off to it ... where there is little or no documentation, we may need to do a little writing.

Here's my take on some common <section> headings to start with.

- *Overview*: discussion of what the plug-in or tool does (features) and why someone might want to use it
- *Setup and configuration*: where to download or purchase it, how to install (high-level) it, and how to configure it (high-level)
- *Authoring*: what to do (if anything) in DITA source files to take advantage of the plugin or tool
- *Integration*: what does someone do to integrate this plugin or tool with an engineering environment (context IDs at a minimum)
- *Output*: screen shots or links to live output
- *Summary*: final comments, evelautaions, recommendations

Stan Doherty