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northbay news

The monthly newsletter of the NorthBay Chapter of the Society for Technical Communication

Volume 8, Number 7, Sept.-Oct. 2001

In This Issue

Single-Sourcing: Niku Corporation Delivers

Elyse Lord, NorthBay Chapter

In an April 2001 *northbaynews* article entitled "Real-Life XML-Based Documentation," Toby Wraye described how Niku Corporation technical writers in Petaluma had succeeded in producing a "crude but innovative incarnation" of online help and portable document format (PDF) files generated from a single FrameMaker (Frame) file.

It all leads back to a Single Source.

The Niku team's resourceful approach to documentation rendered much of the industry-wide debate about the feasibility of *single-sourcing* (producing multiple documents from information stored in one file) academic.

For example, Wraye and team members chose to write their own scripts to control their output, rather than attempt to purchase a prohibitively expensive delivery platform like Outstart Evolution, which sells for up to $150,000. As Annah Williams, Niku Petaluma

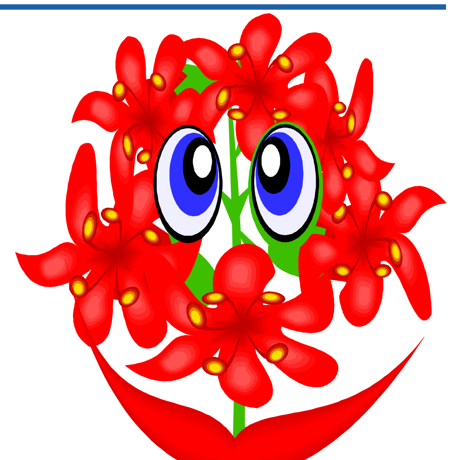
Continues on page 4 ☞

Coping in Downtime

Kathryn Dumont

Many of us are coping with the economic downturn and layoffs. CNN recently reported that over 400,000 high technology employees have lost their jobs during this slowdown. Technical writers, editors, and trainers know this reality all too well. Here are a few suggestions to help you cope if you are between jobs:

- Give yourself permission to grieve. Our coworkers and colleagues are often our friends and our work family, a team that



Don't forget to smell the flowers, but watch out if they start talking back!

Continues on page 7 ☞

society for technical communication

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STC Mission Statement

The mission of the Society for Technical Communication is to improve the quality and effectiveness of technical communication for audiences worldwide.

This Month's Meeting

Thursday, October 18, 2001

Touchstone Exhibit

View the Winning Entries

Exhibit of the winning entries in the Touchstone 2000 Competition.· View the winning entries in the competition. Learn about various categories of entries and opportunities for entering and judging in future competitions

Meeting Schedule

Location:	Golden Gate University, 150 Professional Center Dr. Rohnert Park	
Time:	5:30 - 6:15	Networking and Refreshments
	6:15 - 7:45	Introductions and Program
	7:45 - 8:00	More Conversation, Idea Swapping

August and September Presentations

John Dibs
Editor, northbay news

To eHelp and Beyond

At the August chapter meeting, vice president Chris Muntzer took the helm. Muntzer of Agilent Technologies reviewed the features of eHelp's (formerly Blue Sky Software's) RoboHelp's product and introduced two new authoring tools, RoboHelp Enterprise and RoboInfo Enterprise.

Measurable audience discontent surfaced when it was acknowledged that past software RoboHelp upgrades have come with few added features. Yet quickly perking up the atmosphere, Chris flashed witty images of objects dating from 50,000, 5,000, and 500 years back that showed the evolution of communications devices in human history. One ancient hand-held tablet rivaled the sleekness in design of any PDA on the market today!

During his guided tour of RoboHelp, Chris focused on HTML help authoring. A WYSIWIG tab enables easy editing and a TrueCode tab displays color-aided source code that even allows for adding comments. A Links view and broken link folder provide a user friendly means of managing links between topics. The Topics tab enables keeping track of the status of work in progress. In the Navigation pane, the Project, Topics, Index, Glossary, and Tools tabs each add value to the authoring software. Using one of the tools in the Tools tab, to give one example, authors can resize graphics for integrating into their help project.

The major HTML authoring packages—HomeSite, Dreamweaver, and FrontPage—interface with RoboHTML. Table formatting, spell checking, and image manipulation have been perfected. Cascading style sheets (projects can use more than one), the style editor, and DHTML triggers and targets have made RoboHelp the help authoring standard.

On the limitations end, printing topics (for example, for draft reviews) is still not easy. Chris offered a workaround to this annoyance: Capture Web help as a PDF using Acrobat's "Web capture" utility, then print.

A TW ancestor of yours, perhaps?

Chris concluded his presentation by introducing RoboHelp Enterprise, a Web server application that offers reporting on help usage and usability. Using eHelp's other new product RoboInfo Enterprise, policies and procedures can be published for cross-functional use to support work groups and multiple departments. For more information, visit eHelp's Web site at www.ehelp.com.

Learning Objects

In September, longtime training entrepreneur Lee Alderman of CLARK Training & Consulting and Chuck Barritt of Cisco Systems shared a fascinating leading-edge project in a joint presentation entitled "The Reality of Implementing Learning Objects. They began with the premise that "The two great equalizers in life are the Internet and Education" (John Chambers).

The task at Cisco was to create an online e-learning delivery for some 16 certification courses. Responding to the challenge, Barritt devised a reusable learning object strategy that allowed for authoring of content and practices independent of delivery media. Many of the source "learning objects" were single sourced, enabling searching, reuse, and re-purposing. They achieved their goal all the while keeping in sinc with standards groups such as IMS Global Learning Consortium, Inc. (www.imsproject.org/metadata/) and Shareable Content Object Reference Model Initiative (SCORM) (xml.coverpages.org/scorm.html).

Along with creating an e-learning solutions architecture with content, data, and learning management, as well as business operations components, Barritt, with Alderman's help, mirrored Cisco standards and a Cisco E-learning Business Council was created to support both internal and external authors and gain IT support of authoring and delivery.

Alderman explained that the need for speed to information creates a new way of thinking about learning. Rather than "courses" and "manuals," users need to get at critical information as they need it. He defined reusability in terms of both database structure and multiple delivery

Continues on page 8 ☞

Single-Sourcing

Continued from page 1

technical publications manager, put it, a "lack of funds . . . forced us to be innovative in our approach, ultimately giving us greater control of our process and output." Since Wraye's article appeared, his team has streamlined its single-sourcing process and successfully produced context-sensitive Extensible Markup Language (XML) help and PDF files from the same Frame file. Niku's XML-based project management application generates more than 1,450 files once the customer installs the application on his or her computer.

Wraye and team members were gracious enough to discuss the evolution of their single-sourcing project with me and to elaborate on some of the problems they had to solve.

The Niku publication team's document development process consists of four stages:

1. Plan and problem solve.
2. Prepare the Frame document for publishing.
3. Modify the output to meet the chosen document type definition (DTD).
4. Perform administrative tasks.

Stage One: Planning and Problem Solving

As with any evolving project, the planning stage at Niku tended to be more circular than linear. The team encountered a problem, solved it, and then further refined the solution over time. However, the Niku team members did have to make some upfront decisions about tools, DTDs, and document structures before they were able to proceed to stage two. See Wraye's April article for additional information about how the Niku team solved planning-related problems.

Selecting Tools

For starters, Wraye and team members had to sort through a potentially confusing array of tool options. Because all Niku writers in Redwood City, Chicago, and Petaluma were already using Frame as their authoring tool, the Petaluma team decided to stick with Frame, although they also experimented with one copy of Frame 6 + SGML.

The Petaluma team also selected XML Spy, an XML editor (www.xmlspy.com), and StarBase's StarTeam (www.fox.se), a configuration management system. Although StarTeam lacked the power of a full-fledged content management system like Chrystal Software's Canterbury or HyNet Technologies' Directive, it provided the Niku team with version control, bug tracking, Web content management, and other capabilities. Because the Niku Corporation as a whole had already selected StarTeam for version control, the decision was also cost-effective.

Agreeing Upon a DTD

Another urgent question was how the team would develop a DTD that worked for all team members. (A DTD specifies which markup tags and values associated with markup tags are allowed in an XML document.) As Wraye discusses in his April article, the Niku writers found that DocBook, a DTD that is widely used within the computer documentation industry, would give them a strictly defined and functional set of elements (markup tags), as well as Extensible Style Sheet Language (XSL) for parsing to HTML pages free on the Internet. (XSL is used to convert XML documents into other formats like HTML and PDF.)

Team members were able to use most of the existing DocBook styles and templates, but had to create a few new templates (XSL processing elements) to get the output they desired.

In researching how best to verify the XML markup against the DTD, the team decided that purchasing Frame 6 + SGML and WebWorks Publisher for all team members would be too costly. They also wanted to retain control over their output.
Their approach was therefore to save the Frame files as XML files and modify Frame's standard XML mapping table to map particular paragraph styles to appropriate DocBook-compatible XML tags. (Frame initially creates the mapping table in each document's reference pages when the user saves the document as XML.) Had the team decided to use the WebWorks Publisher tool, it would have made use of the same table.

Structuring the Documents

The Niku team had to decide how to structure its content so that it could be reused effectively. Team members decided that each help topic would begin by following the same header structure, which would contain five elements:

- An XML label (the name of the help topic file)
- An ID attribute (to keep track of what topics go with what specifications)
- A role (to put the topic in the appropriate table of contents)
- Keywords (to create keyword index topics)
- The XML title (the name that displays on the HTML pop-up window)

Stage Two: Preparing the Frame Document for Publishing

According to Niku team member and Frame guru Steve Miller, preparing the Frame

Continues ☞

Single-Sourcing

Continued from previous page

document for publishing is the easiest part of the process. Writers' main tasks are to assign paragraph tags, make sure beginning and ending tags are appropriate, assign conditions, and make sure cross-references are working.

Assigning Paragraph Tags and Elements

Writers have to assign paragraph styles to their text and pay attention to (not-necessarily intuitive) style requirements. For example, if the writer creates a list, the list must start with a "ListStart" paragraph tag and end with a "ListLast" paragraph tag. All other paragraphs in the list must be tagged as "ListItem." If the writer assigns incorrect paragraph tags, the file will not parse correctly.

If writers want a new paragraph tag, they need to resist the impulse to invent one on the spot and must instead request a new tag from the style patrol, the committee that evaluates the request and decides whether to add the style to the template.

Writers must also be sure to assign beginning and ending tags, known as elements, for each help topic.

Assigning Conditional Text Values

Writers need to specify which information will appear only in the online document and which information will appear only in the printed document. They do this by using Frame's conditional text feature, which allows them to assign an "XML" condition value to information that is going to appear online and a "print" condition value to text that is going to appear in a user guide.

Example: As discussed in the "Structuring the Documents" section, the XML label, the ID attribute, the role, the keywords, and

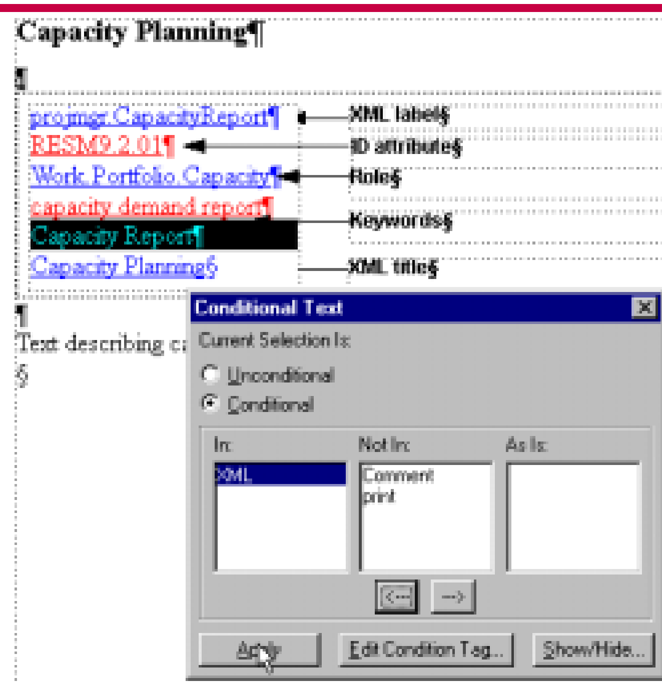

Figure 1 *Assigning Conditional Text Values to a Help Topic*

the XML title are part of the help file headers, so writers assign them an "XML" condition value. Figure 1 shows the conditional text dialogue box being used to assign an XML condition value to the keywords *Capacity Report.*

When Miller designed the template, he included formatting cues intended to help writers apply styles consistently. For example, in Figure 1, alternate blue and red fonts appear in the heading so that writers can scan a chapter and see at a glance that they've coded the entire introductory block correctly. If the header text is blue, writers know it's an XML label, not an XML ID, which appears in red.

Once the writer has assigned XML conditions, the conditional text will be red or blue and underlined; the underline tells writers and editors the text has been assigned a condition value. The colors and underline don't carry over to the actual online help text.

Another writer-friendly feature of the template is that the header paragraph tags automatically call the correct paragraph tag to follow. For example, the "xml label" paragraph tag automatically assigns "xml ID" as the next paragraph tag, and the "xml ID" tag automatically assigns an "xml role" as the next paragraph tag, and so on.

According to Miller, representing each type of XML code by a different paragraph style pays off when troubleshooting Frame files. Once the troubleshooter assigns the correct styles, it is possible to generate alphabetical lists of references of XML keywords and XML labels to ensure that writers have used correct syntax and labels.

Checking Cross-Reference Markers

Broken cross-reference markers are the bane of single-sourcing, and creating conditional cross-reference markers for both print and XML help is time-consuming. Niku's team was able to automate this process and save its writers from having to create each cross-reference by hand by creating a cross-reference definition. The definition points to a title, which shows up as the linked text. It also attaches the preceding label and adds a font format that includes color coding for rapid identification.

Continues ☞

Single-Sourcing

Continued from previous page

Figure 2 shows how a writer could automatically establish a cross-reference to a title and label using the cross-reference definition that Miller created. Figure 3 interprets the cross-reference definition shown in Figure 2.

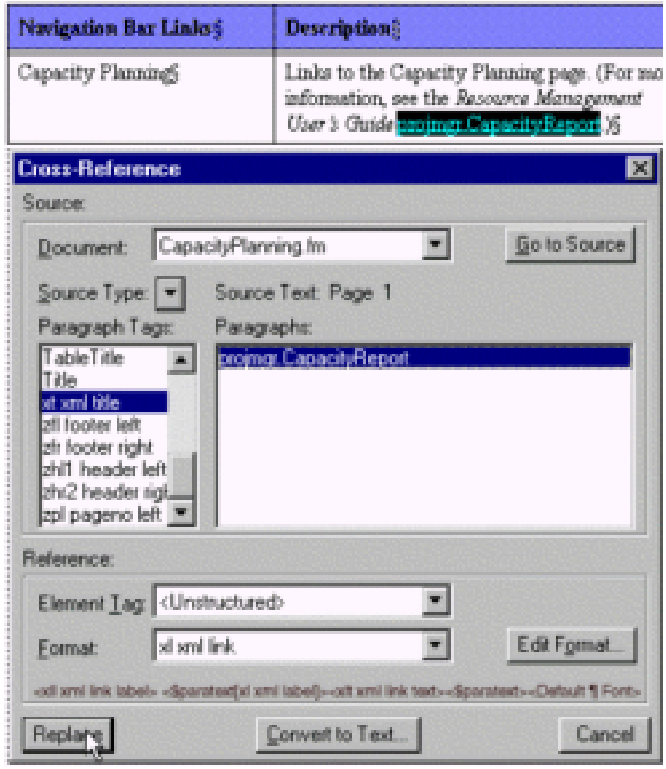

Figure 2 *Using the Cross-Reference Formula to Create a Cross-Reference*

Stage Three: Modifying the XML Output and Generating the Deliverable

Once the Frame file contains correct paragraph styles, appropriate conditional text markers, and functional cross-references, a relatively labor-intensive process begins: authors troubleshoot their files, and then Wraye, acting as the XML and XSL specialist, runs through a series of troubleshooting tactics before finally creating the deliverable help files.

Troubleshooting Frame Files

Writers need to make sure that every starting element has a closing element. For example, the DocBook standard is to begin a help topic with an XML label paragraph tag and end a help topic with an XML end paragraph tag, but writers often leave off a closing XML end paragraph tag. If the document lacks either the starting or closing paragraph tag, those elements will be missing in the XML output, and the desired help topic file won't be generated.

Figure 3 *Interpreting the Cross-Reference Definition*

<xll xml link label>
Applies this font style, which maps via the reference page to a particular XML code to begin a hyperlink. (The equivalent of an HTML "<a href=>".)

<$paratext[xl xml label]>
Inserts the text of the last "xl xml label" paragraph before the "xt xml title" paragraph used as the cross-reference source. So when a cross-reference to an "xt xml title" paragraph is inserted, this cross-reference format also inserts the preceding "xl xml label" paragraph.

<xlt xml link text>
Applies this font style, which maps via the reference page to a particular XML code to begin the displayed text for the hyperlink.

<$paratext>
Applies the text of the "xt xml title" paragraph used as the cross-reference source.

<Default ¶ Font>
Resets the font for the end of the cross-reference text.

Cleaning Up the Help Files and Running a Cleanup Batch File

After all the writers are satisfied (or as Wraye puts it, "totally frustrated") with their Frame files, Wraye uses Frame to combine the files into a new book called myhelptopics.book. Next, he updates the book's XML mapping and character macro tables, if necessary, and opens all of the

Continued on page 9☞

Coping in Downtime

Continued from page1

we esteem and enjoy. It is a loss socially as well as professionally when a job ends.

- Give your feelings a voice: Smack a tennis ball, paint, dance, write, keep a journal, make a collage, or compose a song. Getting the feelings out and expressing them is cathartic.
- Force your routine and keep your usual hours. Get up at your usual time, shower, and dress, and keep as much structure in your daily life as possible.
- Without work, some of us feel that our lives are insignificant. It helps to remember that you are a part of a family, community, and society. All your contributions are valuable. You matter and have a place, something worthwhile to give and do. Volunteering for a cause can help at this time and add structure to the day and week.

It helps to remember that you are a part of a family, community, and society.

- Remember the beauty in life. A walk in nature, a few hours of gardening, and similar activities can soothe your spirits.
- If you feel tense or anxious, remember to keep breathing. Yoga and other forms of meditation focus on the breath. Check in with your breathing now and again during the day, and take long, deep, slow breaths.
- As for managing the financial side of a job loss, that is a challenge for most of us. I recommend creating a budget and axing nonessential spending. Each person and family is different and has different needs and goals, so one size does not fit all. My grandmother's axiom may help: Watch the pennies, and the dollars will take care of themselves.

You can network just about anywhere...but some places may be better than others.

As for finding new work, here are a few suggestions:

- Stay positive. Attitude is everything.
- Update your résumé on a weekly basis with job boards (www.dice.com; www.monster.com; www.hotjobs.com, etc.).
- Create a site and park your résumé there so that active recruiters can find you during Web searches.
- Identify other jobs and professions that map to your skills and interests. Joseph Campbell often advised to follow your bliss; this free time may be the opportunity to do that and review your career goals.
- Stay in touch with recruiters regularly (every two to three weeks is pretty good).
- Remember that you are between jobs. There's a distinction between being between jobs and being out of work.
- Review whether more education or training works for you at this time, and where classes are available.
- Increase your contact database on a daily basis by networking online and offline.
- Tell friends, family, and others that you are available for work and would appreciate any job leads that they may hear about. The six degrees of separation rule (the hypothesis that there are only six degrees of separation between any two living people; see www.urbanlegends.com, select the science topic, and click on Six Degrees Experiment) works wonders in this case! And pay it forward . . . help others who are also looking.
- Join the Society for Technical Communications, special interest groups (SIGs) and similar organizations, or attend the monthly meetings. When the markets turn up and work becomes available, you'll be connected with those who share job listings with their members.

Joseph Campbell often advised to follow your bliss; downtime may be the opportunity to do that.

I'm not going to mince words: It is a tough job market out there right now. The truth is that work will come knocking; the only question is when. Often, golden opportunities occur in downtimes, and I hope these suggestions will make your search a little easier.

Enroll Now!

Kurt Huget, NorthBay Chapter President

I'm happy to announce that the membership of our proud STC NorthBay chapter now stands at 112 members. It's reassuring to know that so many of you have registered your commitment to our local chapter, and to the greater STC organization as well. In fact, new membership in STC has grown tremendously over the last 5 years (22%), reflecting growth in the field of technical communications and continued faith in our organization.

That said, STC has never been content to rest on its laurels, and has now initiated its "2001 Membership Drive" to entice new members into the fold. All prospective members should take note that October is the best time to join STC because memberships that begin on or after October 1, 2001, are good for 15 months, ending December 31, 2002!

Autumn is a great time to carve pumpkins, rake leaves, enjoy the foliage, and renew your STC membership.

What do you get when you join STC?

- Our monthly chapter meetings, which provide an excellent opportunity for networking, getting job leads, enjoying guest speakers, and munching on hors d'oeuvres
- Subscription to Intercom magazine and Technical Communication journal
- Membership in special interest groups geared to your area of expertise
- Invitation to national and regional STC conferences
- And much more . . .

So, to all non-members who are considering signing up, and need a little encouragement, this is a great window of opportunity. The quickest and easiest way to enroll is online (www.stc.org/join_online.html). There you'll find several options for joining us. I look forward to seeing your name on our membership roster soon!

STC Region 8 Annual Conference

EARLY REGISTRATION DEADLINE EXTENDED TO OCTOBER 24, 2001!

HOTEL LOWERS STC ATTENDEE ROOM RATES!

The Region 8 Conference will be held at the Irvine Marriott in Irvine, CA on November 1-3, 2001. Registration is now open. Register by October 24 to get the early bird discount; make your hotel reservation by October 15 to qualify for the conference rate. The hotel has lowered the conference room rate from $95.00 to $69.00 per night.

For more information about registration, accommodations, presentation topics, and opportunities to volunteer, visit the Conference home page, stcregion8conference.org/region8/.

August and September Presentations

Continued from page 3

for publishing. A reusable learning object (RLO) focuses on a single job task, called a lesson, and can contain from five to nine reusable information objects (RIOs). An RIO supports a job task, called a topic, page, or section, and has from five to nine "chunks."

Praising CLARK Training's founder, Ruth Clark, Alderman explained that the approach to classifying information or data makes use the Information Mapping categories of concept, fact, procedure, principle, and process. RIOs can be tagged as content, practice or assessment items depending on the context.

At times, reusing learning objects does not make practical sense. "Repurposing," on the other hand, involves copying an object and modifying it. Repurposing adds to the complexity as it creates another database object; however it still saves time by leveraging from existing learning objects. Learning object reuse must be viewed as a long term process. Organizations won't reap the benefit until a good deal of information has been entered in the database.

For tools, Cisco chose Evolution (www.outstart.com). Alderman gave examples of writing that differ for printed materials, e-learning, and a more generic standard. He indicated that huge mind shifts are needed that seem to add time to the project, but keeping the end goal in mind gets project members through the difficulty. Along with new thinking, there's a new role for editors or indexers to create labels for the metadata that make up a learning objects database. Careful attention to metadata labeling becomes a key contribution to content reuse and repurposing.

Single-Sourcing

Continued from page 6

Frame book's chapter files. He then saves the book as myhelptopics.xml, which can take up to 30 minutes.

When the files have been saved, Wraye runs an XML cleanup batch file that deletes all the GIFs that Frame created. (Since the files are context-sensitive, the help text will be generated in tandem with a relevant image, so having GIFs within the XML help application is not necessary.)

The batch file first runs a Perl script to ensure that the XML created by Frame has the parent-child elements needed to create a transformation document. (An element is a start tag and an end tag. The parent element would be higher than the child element in the hierarchy of data.) Then

Because the process has, according to Wraye, "never gone smoothly," he sets aside ample time for troubleshooting.

the batch file runs the parser, which transforms all the topics into DocBook-compatible elements with content and creates a table of contents, an alphabetized keyword index, and alphabetized glossary link lists.

Troubleshooting and Modifying Files and XML Code

Because the process has, according to Wraye, "never gone smoothly," he sets aside ample time for troubleshooting. If any errors in formatting exist in any writer's file, they break the process. The parser stops at the first error, forcing Wraye to troubleshoot myhelptopics.xml.

As Wraye discovers problems, he notes them in a text file (so he can inform the writers) and also makes necessary changes in the Frame file and in the XML code. Modifying

For a single-sourcing project to work, someone has to keep track of file names, labels, IDs, roles, and titles.

the Frame file and the XML code saves him from having to parse the files again.

Finally, Wraye opens and runs another batch file that generates the deliverable.

Stage Four: Tending to Administrative Details

For a single-sourcing project to work, someone has to keep track of file names, labels, IDs, roles, and titles. Moreover, because the Niku team is managing more than 1,450 help files, some of which are at this point dummy or placeholder files for topics that have not yet been written, someone needs to keep track of which files are complete and which files are dummies. Similarly, someone needs to make sure that outdated help labels do not trigger creation of obsolete help files.

As Wraye pointed out in his April article, single-sourcing's track record is not always "encouraging."

Niku's team takes care of these types of administrative tasks with help from an Access database that can automatically find new and duplicated files, render obsolete help labels inactive, and the like.

Conclusion

As Wraye pointed out in his April article, single-sourcing's track record is not always "encouraging." However, the resourcefulness of the Niku team suggests that, with the right project and the right combination of talent and determination, single-sourcing can work. As Miller put it, "Once we worked out the errors . . . [single-sourcing] got cleaner and cleaner and easier and easier."

Thanks to Petaluma Niku Corporation team members for graciously providing information for this piece: Toby Wraye, senior technical writer and XML and XSL specialist; Steve Miller, editor, designer, and Frame guru; Garrie Nicoll, writer and Perl programmer; Karen Converse, writer; and Annah Williams, technical publications manager.

Thanks also to Michael Meyer and John Dibs for their helpful counsel.

We meet on the third Thursday of each month

Our November Meeting

Thursday, November 15, 2001

Topic:
To Be Announced

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