Texas Engineering Extension Service

Leading training provider accelerates creating content for homeland security curriculum using Adobe® FrameMaker® software, XML, and DITA

Texas Engineering Extension Service

www.teex.com

In Partnership With

Integrated Technologies, Inc.

www.intech.com

Industry

Training and Education Services

Challenges

• Integrate authoring processes with backend systems
• Adopt industry standards such as XML and DITA

Solution

• Single-source publishing

TEEX is using Adobe FrameMaker and a content management system to streamline creation of hundreds of training manuals in accordance with DITA specifications.

Results

• Accelerated creating manuals by as much as 25%
• Reduced costs to update manuals
• Improved quality and consistency of materials
• Enabled effective reuse of content across manuals
• Adopted industry standards to support long-term growth

Systems At A Glance

• Adobe FrameMaker
• Adobe Acrobat® Professional
• Platform: Microsoft® Windows® 2003 Server and PCs running Microsoft Windows XP

Right training, right response

Proper training is crucial when responding to emergency situations. For firefighters, police officers, homeland security agents, and others protecting the public, the Texas Engineering Extension Service (TEEX) offers renowned training and education programs via its Texas headquarters to locations worldwide. Every year, more than 175,000 people participate in TEEX programs, gaining the skills to respond safely and successfully.

With more than 550 programs in areas ranging from homeland security to health and safety, TEEX serves a range of clients in the public and private sectors. At the core of TEEX programs are comprehensive education manuals developed by content specialists and leaders in emergency response, public safety, and other disciplines.

"Our materials include everything from 400-page manuals to quick-reference data sheets," says Trey McCallie, manager of curriculum services at TEEX. "Regardless of the document, we have to know that content is accurate and up-to-date." To build a dynamic document authoring environment, TEEX is using powerful software, including Adobe FrameMaker and a Siberlogic content management system (CMS). The company is also working with solutions provider Integrated Technologies for training and consulting services.

Too many processes and tools

TEEX customers work in highly regulated industries, where changes to protocol can happen every few months. These changes have to be reflected in training materials. With hundreds of courses across business units, the demands on the 60 employees in the Curriculum Development group are intense. To further complicate the process, TEEX had no standard authoring tool, with some staff using Microsoft Word software and others using Adobe FrameMaker.

"It was difficult to implement effective quality control processes across groups, and we couldn't easily leverage work done by each person," explains McCallie. "Our goal was to deploy a system that enabled us to produce higher-quality, more consistent manuals that contained reusable content."
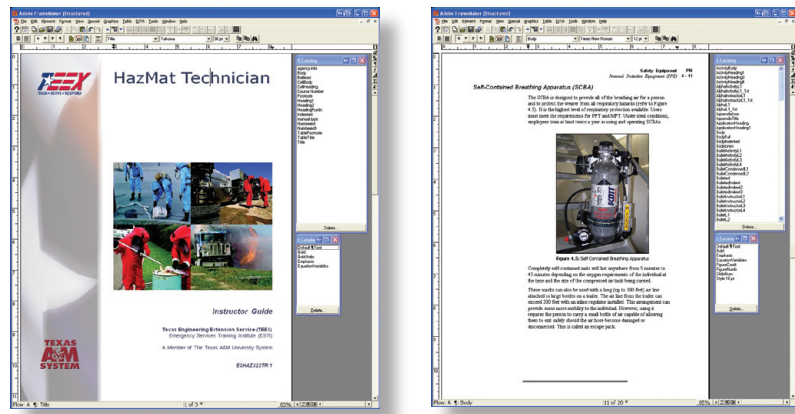
Single-source publishing

In looking for a document authoring tool, TEEX wanted to address several criteria, including support for standards like XML and the Darwin Information Typing Architecture (DITA); reliable handling of long documents; easy integration with a CMS; and the ability to reuse content.

"We needed a single-source publishing model that leveraged XML data in our CMS," says McCallie. "This would make it easier to quickly create customized manuals for clients. And by working in a structured environment, we could improve the quality and consistency of materials."

One tool, multiple advantages

The Curriculum Development group's largest team used Adobe FrameMaker 7.1, as well as newer versions of the software, and was impressed by the application's ability to handle long

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TEEX

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By using Adobe FrameMaker, TEEX can provide document type definition (DTD) templates readily accessible to more than 40 curriculum content developers. As a result, the final training manuals have a more professional, polished appearance because how and where content appears is consistent, regardless of the staff that creates them.

"With FrameMaker, we have better control over the layout and overall look of manuals," says McCallie. "There's also a boost in employee productivity because our content specialists are free to focus on writing and editing text, not on learning how to be page-layout experts."

Tremendous efficiency gains

The structured authoring environment delivers the added advantage of enabling TEEX to better leverage XML content in its Siberlogic CMS. For example, blocks of information in XML can be used and reused at the paragraph level, allowing curriculum developers to take frequently used safety processes and guidelines and insert them automatically into the appropriate pages.

"This is a tremendous efficiency gain for our staff," says McCallie. "Now, we can revise and reuse content easily across manuals, and then automatically insert it everywhere it needs to appear. The efficiencies could accelerate creating manuals by as much as 25%."

By adopting FrameMaker and accessing DITA FrameMaker plug-ins from Integrated Technologies, TEEX is taking advantage of document architecture specifications outlined in DITA. "As an XML-based architecture for authoring, producing, and delivering technical information, DITA makes it easier for TEEX to reuse content and then deliver final documents to recipients," says Tom Aldous, president of Integrated Technologies, Inc.

For most TEEX manuals, converting documents to Adobe Portable Document Format (PDF) files for printing is the final step in getting manuals ready for clients. In some cases, teams of TEEX reviewers will use electronic commenting tools in Adobe Acrobat Professional software to add comments to drafts of manuals in PDF.

Because it deals with many consultants, TEEX finds it useful to add security and control to manuals in Adobe PDF. The documents in PDF can be password protected to limit access to materials, and information in files can be locked to prevent recipients from altering underlying content.

A long-term solution

"Using FrameMaker software, we integrated our front-end authoring with our back end systems," says McCallie. "At the same time, we put standards in place that will streamline our work for years to come."