



RUBRIC[®]

A better localization experience.



E-LEARNING SOLUTION PUTS ACCENT ON CONSISTENCY

Among Global 2000 companies, workplace e-learning represents equal parts promise and pitfall. Well localized e-learning allows companies to share knowledge and train employees, suppliers, partners, and customers more consistently and cost-effectively than ever before. But errors and delays in the localization process can be both embarrassing and expensive.

When Docent, a pioneering provider of e-learning software and services for Global 2000 companies, wanted to localize the user interface for its Docent LMS learning-management platform, it chose Rubric to handle the highly challenging project. Not only did Docent's core product need to be internationalized before it could be localized into fourteen languages, but the project also required managing a project team—including project managers, linguists, engineers, testers, and in-country partners—that was dispersed all over the globe.

Preparing for localization

Before we could localize Docent's files from English into other languages, we needed to determine whether the core interface, in U.S. English, contained bugs that would prevent supporting multiple languages. We used our proprietary LI0nInspector™ to create pseudotranslations—machine conversions of English letters into characters simulating the target alphabets—and test them for localization readiness.

With non-English European languages, we created pseudotranslations using accented characters—é instead of e, for example; with non-Roman alphabets such as Chinese, each English character was converted to a double-byte character. Because English is more linguistically compact than many other languages, translated sentence strings were often artificially elongated. Our pseudotranslation was then used to verify the readiness of potential problem areas—installation on the target operating systems, hard-coded text and encoding, and wrapping as a result of text expansion.

Our developers used Unicode for all string processing and database storage, extracting localizable components to easily translatable XML resources that we made available to the target software. Users would then display content in their browsers using the legacy encoding specified in the localized resource file. This exercise generated new requirements for localized content, and these requirements were continuously fed back to the Docent engineering staff.

"Our management team was in California, and Rubric's was in Japan. But because Rubric gave us incremental daily status reports as well as comprehensive weekly reports, everyone stayed well informed regardless of location."

*Localization Manager
Docent (SumTotal Systems)*

SumTotal[®]

"Pseudotranslation testing is really the key to identifying potential problem areas where a rework of the code might be required. We used our L10nInspector tool to distinguish internationalization problems from localization issues and keep the project moving efficiently."

Katrina Nabavi
Senior Product Manager, Rubric



Support for multilingual e-Learning courses was designed from the start; a Mexican user, for example, can take the same training course as his American colleague—the Mexican taking it in Spanish and the American in English. If a user takes more than one course, his language preference remains in his profile, so that the Mexican always sees the course in Spanish.

Dates and times presented another internationalization challenge. European, North American, and Japanese date conventions are distinct and potentially confusing; the European "3 December 2004" is "December 3, 2004" to a North American and "2004 year 12th month 3rd day" to a Japanese. To make sure each localization was appropriate, our engineers wrote a JavaScript file for each locale. Times are stored as Coordinated Universal Time (UTC) but displayed as local times; dates are expressed in the preferred local convention. A person taking the course in Japan sees Japan Standard Time information, while a participant in Boston views Eastern Standard Time—even though the course server may be located in the Pacific time zone.

To ensure consistency in testing and help us maintain an agreed-on level of

quality, we created a QA matrix along with unique test case numbers, screen captures of every corresponding screen, and screen-recreation path definitions in the localization test scripts. Bugs were categorized along a predefined problem severity scale, from graphics issues to broken pages.

Global collaboration

To keep all members of the far flung project teams informed about project status, we employed StreamNET™, our extranet and knowledge portal. StreamNET enabled our teams to access project data, share status reports, and maintain version control of schedules, glossaries, and style guides.

A major component of StreamNET is BugzNET™, our online bug tracking and reporting system. BugzNET gave Docent a 100% transparent, real-time view into the QA process at every stage. In addition, any generic issue raised in one language could be automatically replicated across all languages. This made all data in the database fully portable, at any point in the process, into Docent's databases. And it made internal analysis, project management, and reporting quicker and more comprehensive.

We also used BugzNET to manage discussions of linguistic issues among translators, editors, and Docent reviewers (among them several large Docent customers, sometimes more than one in a given country). We centralized the information with other project data, recorded a history of each discussion, and clearly defined the status of each linguistic topic.

Learning in the future

Between 2001 and 2004, the global e-learning industry more than doubled, and there's no foreseeable end to the growth curve. One result of this growth has been consolidation. In March 2004, Docent merged with another e-learning company, Click2learn, to become SumTotal Systems. It brought its Docent LMS product into the merger, and Rubric has continued to work on localization of the user interface.

"Rubric's insistence on preventive testing and extensive global collaboration are important pluses for us," says the Localization Manager, who made the transition from Docent to SumTotal. "Rubric takes care of the details while never losing sight of the big picture—just as we do."

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