



CASE STUDY

“Thanks to Bluenog ICE, we have a more agile content update cycle... and it’s all about agility!”

— Gerry Grenier,
Director of
Publishing
Technologies,
IEEE



IEEE: Enabling Collaborative Content Management

The Business Challenge

IEEE (Institute of Electrical and Electronics Engineers) is home to IEEE Xplore, a popular research and publications e-commerce site. A portion of the content for IEEE Xplore was previously provided by content owners for management by the technical staff. These content owners were non-technical users who wanted the ability to easily manage and edit content for this high revenue producing web portal. The old process did not give them the flexibility to do so. Content changes were delivered to the technical staff, who then modified the data for consumption on the IEEE Xplore website. IEEE needed a cost effective alternative to address their integration and content management challenge.

Solution

IEEE used Bluenog ICE™ to seamlessly integrate with existing systems and deliver an easy, cost effective solution for content managers. ICE provided pre-built integration with IEEE’s existing Portal infrastructure. It also provided vital ECM features such as content type creation, workflow and publication that required little customization to be effective for the content creators. This solution allowed the business to have the content management control and flexibility they wanted, while technical staff maintained an appropriate level of control of the underlying infrastructure.

Background

As a non-profit corporation with more than 375,000 members, IEEE is the world’s leading professional association for the advancement of technology. Through its global membership, IEEE is a leading authority on areas ranging from aerospace systems, computers and telecommunications to biomedical engineering, electric power and consumer electronics, among others. Since its launch in 2000, IEEE Xplore offers subscription access to a century of IEEE publishing, reaching back to Alexander Graham Bell and Thomas Edison, consisting of nearly two million articles within over 100 publication titles on electrical engineering and

computer science. Thanks to the useful and extensive nature of the publications offered, IEEE Xplore is an invaluable resource for researchers worldwide.

Technical Challenge

Xplore’s technology stack was based on several enterprise components:

- BEA WebLogic for the application server and portal framework
- Oracle for the metadata repository
- Documentum as the master document repository
- Verity K2 for search

Licensing and maintenance costs, while under control, were significant. According to Gerry Grenier, Director of Publishing Technologies, “A continuing challenge is to expand our level of service to readers while keeping costs flat.”

As the site grew, managing content became a primary issue. Technical staff managed all the content, including workflow, staging and publishing. Internal editors made changes to content, which were then delivered to technical staff to upload to the live sites. This was a largely manual process performed by the technical staff, which often resulted in days or even weeks of delays between the change in content and its posting to IEEE Xplore.

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- Application server and portal framework: *BEA WebLogic*
- Metadata repository: *Oracle*
- Master document repository: *Documentum*
- Search Engine: *Verity K2*

“This is the right fit. Overall development time was minimal and the solution did exactly what we had envisioned.”

— *Mehul Trivedi, Manager, Software Development*

Technical staff needed to control the domain of users who could access content for specific role-related purposes. The cost and time to integrate and automate this process with the existing tools would be substantial, since the existing products did not have the required workflow, publishing or security capabilities. A custom built solution was deemed too expensive and time consuming.

Finally, while everybody agreed that these changes would be “nice”, nobody knew what the ROI was. A solution was required that provided the integration necessary as well as the features needed, at a reasonable price point.

Solution Details

The Bluenog team worked closely with IEEE to understand their detailed requirements. First, the content editors needed content types created – essentially a set of rules that technical staff could enforce automatically that would allow editors to make content changes without technical staff involvement. IEEE worked with Bluenog to identify a handful of content types to start with in a Proof of Concept (POC). Second, integration with their web presentation framework (BEA WebLogic Portal) was required. Fortunately, ICE has a pre-built adapter to WebLogic Portal that enabled their presentation tier to automatically pull content from ICE with absolutely no coding required.

Next, integration with their identity management system was needed in order to automatically manage entitlements. This was done using standard LDAP integration. Lastly, integration with their document system of record (Documentum) was needed for audit purposes. A simple batch loader was created to automatically load content from ICE into Documentum nightly.

Business Impact

Given the quick time to complete the POC, IEEE decided to move forward with the implementation. Once the solution was created, users no longer needed to involve technical staff at any point to create, edit, preview, approve or publish content.

Bluenog's licensing was very attractive, as it was based on a subscription model instead of the more prevalent and costly 'per CPU' model. The out-of-the-box integration with existing legacy significantly reduced implementation time. In addition, Bluenog's attentive and flexible customer support was a compelling asset to IEEE. Development of a second separate site using ICE has already begun, with no increase in license fees.

IEEE can confidently contain cost while enjoying growth, thanks to the solution provided by Bluenog. The impact on always-precious IT resources has been substantially reduced, and the system is much more flexible than before. In addition, new functionality has been added more quickly and efficiently than before. ●

Bluenog is an enterprise software and solutions company that specializes in integrated content management, portal, and business intelligence. Leading organizations rely on Bluenog products to build and deploy Rich Internet Applications (RIA), and manage dynamic website content at a fraction of the cost of traditional alternatives. Bluenog Solutions Group meets our customers' unique challenges with pragmatic combinations of commercial and open source software. Headquartered in Piscataway, N.J., Bluenog is also an Oracle and Actuate reseller. For more information, visit www.bluenog.com.