

ArticleExpress and Edifix: Effective Collaboration Leads to Innovation

A Better Production Workflow: Sheridan ArticleExpress

Since 1994, [Sheridan Journal Services](#) and Inera have enjoyed a unique and thriving collaborative relationship based on a shared vision of delivering state-of-the-art publishing technology, high-quality results, and exceptional customer service. In fact, Sheridan's services for journal publishers (copyediting, composition services, and online deliverables) have long integrated software from Inera, including eXtyles, to style documents, streamline copyediting functions, process and link reference entries, and produce high-quality XML.

Sheridan's latest innovation—[ArticleExpress](#)—is a cloud-based article production workflow for authors and editors that integrates [Edifix](#), Inera's cloud-based reference formatting, linking, and correction solution.

The Challenge: Overcoming the PDF-Based Production Process

With decades of collective experience in all phases of journal production, Sheridan was ideally placed to tackle what has become a perennial challenge: cumbersome, slow, and redundant journal production workflows that use static print-ready PDFs in the production, correction, and proofing process. In designing a new production workflow to meet this challenge, Sheridan also needed to maintain its long-term commitment to producing

valid, high-quality, full-text XML for all content processed through its workflow.

The primary goal for Sheridan was to create a friendly and easy-to-use HTML environment enabling users to edit their articles in the cloud while also maintaining a full-text JATS XML structure under the hood. The result had to produce no-compromises XML while hiding all of its complexity from end users.

The Solution: Journal Production in the Cloud with ArticleExpress

Sheridan designed the ArticleExpress platform to solve specific problems with standard PDF-based production and proof-handling workflows. For Sheridan customers, however, the main attraction of ArticleExpress is reduced time to publication. Both goals are achieved through an online WYSIWYG editing environment that lets authors edit their article content directly but tracks all changes so that the production editor can monitor and accept, reject, or modify them based on journal style. The content is displayed as HTML but stored as XML, which is constantly updated and validated behind the scenes and ultimately drives both the HTML display and the automated composition engine. The online environment also provides better ways for co-authors to collaborate while allowing editors to ensure that every t is crossed and every i is dotted.

Following Through on the Commitment to XML Integrity

In most journal articles, some of the more complex XML is found in bibliographic references. A key challenge for Sheridan in meeting their ease-of-use goals was to ensure seamless handling of the complex, potentially error-prone process of editing or adding references at the proof stage.

In standard journal production workflows, a new reference inserted at proof must either have appropriate XML tags added manually—a challenging process for people not trained in XML—or remain untagged. DOIs and PMIDs must also be added if they are to be included in the final publication, but untagged references added late in the production process usually lack these key links. When references are not fully tagged or lack DOI/PMID links, an article's reference list is less valuable to readers, and citation data may be affected. Sheridan wanted this part of their new workflow, like the rest, to improve on existing methods and tools.

Mike Hepp, VP of Product Development at Sheridan, explains that when designing

ArticleExpress, he and his colleagues wanted their new workflow to provide the same automated parsing, restructuring, and linking capabilities for references added at the author proof stage that eXtyles provides at the pre-edit stage. They also needed to have the same level of confidence in the technology used for ArticleExpress as they had in eXtyles. Mike and his colleagues had some key requirements for the new platform's Insert New References tool:

- The user interface had to be intuitive and easy for authors to use, because authors would interact with the platform only occasionally.
- The process for adding a new reference had to be seamlessly integrated and keep the user within the branded ArticleExpress environment.
- The tool had to be quick, cloud-based, and reliable, minimizing lag time and providing instant, user-friendly feedback, because ArticleExpress itself is a cloud-based real-time system.

Enter Edifix: Sophisticated Reference Processing Software

Thanks to their long and collaborative working relationship with Inera, Sheridan knew exactly where to turn for a reliable, stable solution, backed by deep industry and technology expertise, and first-class technical support.

Inera is known for collaborative relationships with partners, some of which span multiple decades—including [our involvement in the development of JATS](#) and our long-term relationship with Crossref, for which both organizations were awarded [first place in the 2014 New England Publishing Collaboration \(NEPCo\) Awards](#).



Edifix—a cloud-based reference processing solution from Inera—automatically formats, links, and corrects bibliographic references, then exports them to a variety of formats, including Word and JATS XML.

Edifix takes plain-text references from authors or editors, identifies their elements (author names, title, year, etc.) using patented heuristics, finds links to external databases such as [PubMed](#) and [Crossref](#), updates and corrects references with data from those services, automatically copied-its the result to a user-selected style, and then provides the result in rich JATS XML or other selected formats.

While working with an application program interface (API) to integrate Edifix into ArticleExpress was new, Sheridan was able to embark on this venture with confidence because, as Mike Hepp explains, working with Inera means “dealing with a reliable, intelligent product-development approach.” Staff at Sheridan knew from experience that Inera’s team “works long and hard on developing features before releasing them,” and that any implementation issues would be resolved quickly.



Using the API allowed Sheridan to integrate Edifix during the development of the ArticleExpress platform and to perform multiple rounds of testing, thus ensuring that the service rolled out to customers and users would be highly reliable. When asked what Sheridan would do differently if undertaking the Edifix implementation again, Mike says, “Nothing!”

For Sheridan, a key attribute of Edifix is that it provides the results they need to uphold one of their key goals: the updated XML in ArticleExpress is constantly validated with the DTD, and thanks to Edifix, newly inserted references are automatically structured and validated according to the DTD.

Like past Sheridan innovations, ArticleExpress was designed to meet a need that Sheridan clients had not yet articulated for themselves—but that they have been quick to appreciate. The real-time, cloud-based proof-handling platform shortens production time by increasing automation and reducing duplication of effort, especially re-keying of corrections. And all this automation is driven by the fact that the system is constantly producing and validating XML under the hood—new references included!

In the second year of production use, 1350 articles were processed through ArticleExpress; within those articles, a total of 4391 reference entries were edited at proof, and 386 new entries were inserted—without requiring complex or time-consuming work by authors. As new customers come on board with ArticleExpress, these numbers are expected to grow significantly.

By leveraging Edifix to add new references during article proofing and correction, the Insert New References tool makes a complex multi-step process easy, seamless, and streamlined for authors. And for Sheridan’s customers, happy authors—along with production efficiencies and shorter publication time—are a key performance indicator!

“Reliable, Expert, Thorough”

Cloud-based services need to be highly reliable, and ArticleExpress is no exception. A crucial concern for Sheridan was to ensure that all parts of ArticleExpress would be well designed, work together seamlessly, and be equally reliable.

For other organizations considering Edifix, Mike Hepp stresses the primary reason Sheridan felt comfortable adopting Edifix: it is based on what they consider “the strongest elements of eXtyles,” namely, the algorithms that parse, restructure, link, and correct bibliographic references. Although ArticleExpress and its Insert New References tool may be a new service, Mike notes, “the technology, the intelligence, the

expertise behind it is the same that’s been behind industry-leading [eXtyles] software for the past 20 years.”

At Inera, we take pride in the sophistication and quality of our software and in our long-term partnerships with companies like Sheridan, who rely on us not just for routine tech support but also for our counsel, expertise, and enthusiasm for new ideas. In turn, our customers and partners continually inspire us to improve our software solutions and collaboratively develop creative new applications of our technologies.

Edifix for Your Enterprise: Take a Test Drive for Free!

Inera understands the critical importance of applying sophisticated technology to journal publishing, and we are proud to help Sheridan deliver a great user experience to their customers via ArticleExpress. We’d love to help your organization, too!

You can kick the tires by Edifixing 100 references absolutely free with an Edifix trial. Questions? Check out Edifix.com or [contact us](#) for more information.

Interested in an Enterprise subscription, custom templates, or Edifix API integration? Contact our sales team at sales@edifix.com.

Follow Edifix on Twitter [@edifix](https://twitter.com/edifix).

As of November 2017:

