

The Digital Thread:

The Digital Thread: How to Cure the Expert Content Blues!

or, Strategies for Creating Compelling, Effective, Product User Documents, Faster with Less Hassle

One of the ongoing challenges in developing powerful, user-friendly technical product information—Installation Instructions, User Guides, Service Manuals—is instilling valuable expert points-of-view from the people who know and understand the product best.

The Technical Communications team typically invests many hours chasing Subject Matter Experts (SMEs)—Engineers, Product Marketing, Customer Service, and even End-Users—to capture product information, including specifications, theories, procedures, or diagnostics. When source documents are available, they are often hard to understand and must be converted into a usable format for the team's structured XML authoring environment. By this time, the Tech Comm version essentially becomes second-hand information, and the authors must circle back to the SMEs to verify its accuracy—often many times.

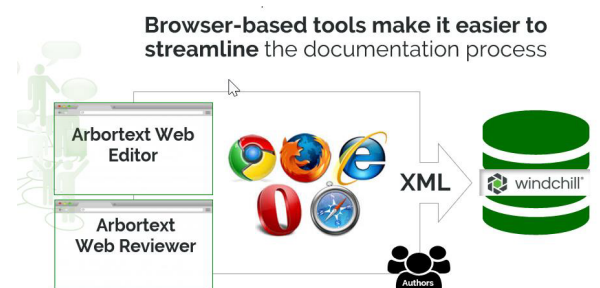


Wouldn't it make sense to find an easy way to streamline this process by getting the SMEs more directly involved in the documentation process?

Until now, there have been obstacles to this strategy: First, while SMEs are usually very supportive of high-quality user documentation, they are also very busy; and this is not their primary responsibility. Plus, the advanced tools used by the Tech Comm team add a significant barrier to occasional contributors because of their complexity and steep learning curve. SMEs just don't want to deal with all those scary XML tags.

The exciting news is, PTC now offers the Arbortext Web Editor and Arbortext Web Reviewer, which can help improve the quality, accuracy, and usability of the documents, as well as save a lot of time for both SMEs and the Technical Authors! These web-based tools allow occasional authors to contribute text, graphics, and more using a simple word-processing user interface via a standard web browser, and all the XML structured tagging is captured behind the scenes.

- What if Engineering contributions—or even their Specification documents—could be easily written in XML and made easily accessible to the Technical Authors?
- What if Product Managers could add their input directly to a document without the need for Tech Comm to copy, convert, and paste a bunch of text?
- What if Customer Support personnel could quickly and easily document and share their experiences and solutions?
- What if a Reviewer's insights could be captured in a collaborative way without adding layers of iterative markup to a static document?



What's In It For The Engineers?



Engineering expertise consists of very detailed product knowledge—how it is made, how to install it, how it works, how to fix it, and safety protocols. Their primary contribution to the overall process is in capturing this information in drawings and design specifications, which in turn, become source information for the Technical Authors. Engineers typically don't like writing user documentation because it takes too much time. They also don't want to dilute their focus to learn the complex process of developing structured content in XML.

As a result, the Technical Authors often need to arrange a series of interviews with an Engineer in order to clarify their understanding of the information. Then, they need to go back to have their drafts reviewed for accuracy. This cycle could be repeated over and over, potentially taking even more of the Engineer's time.

- The new Arbortext web tools can help reduce this cycle time by providing the Engineers with an easy way to clarify the documentation themselves.
- The Web Editor also offers an opportunity for Engineering to develop and store their original design specifications in XML directly in the Windchill environment, without the need to worry about tagging.
- XML Engineering documents could then be linked into the Tech Docs.

Opportunities for Product Management

Product Managers have a vested interest in the user documentation cycle. Their expertise is in articulating how the product best addresses the market, as well as how users can best achieve value from the product. And, they often have a better way of phrasing these concepts than other members of the team. However, they too, do not enjoy the time and effort involved in the structured documentation process.

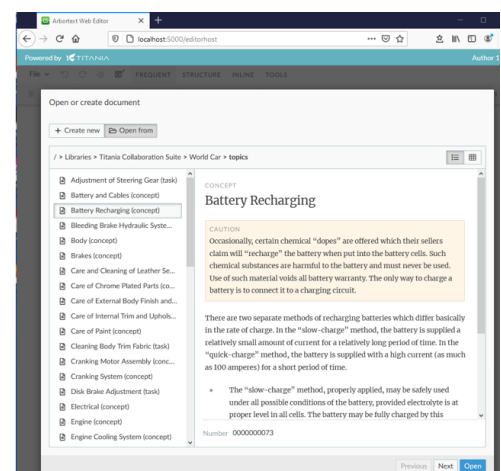
- The Arbortext Web Editor allows Product Managers to painlessly develop their point-of-view in a format that is easily absorbed by the Technical Authors.
- And the Arbortext Web Reviewer helps them to make sure it comes out right!

Customer Service and Support Contributions

This group — Field Service Engineers (FSEs), the Call Center team, Test Lab Technicians — brings perhaps the most valuable point-of-view of all because they have their finger on the pulse of the customers. They know the product inside out, what works and what doesn't, what the problems are and how to resolve them. They also know what should be included, or clarified, in the manuals to make everyone's lives easier. But, as with the other SME groups, they don't have much spare time to help.

In this case, the new Arbortext Web tools offer these experts a simple way to capture their valuable and timely insights.

- These experts now have a tool to easily share their ideas in a new document, in a format easily accessible by the Tech Pubs team.
- They are also able to make direct edits to, or comment on, existing documents when appropriate.



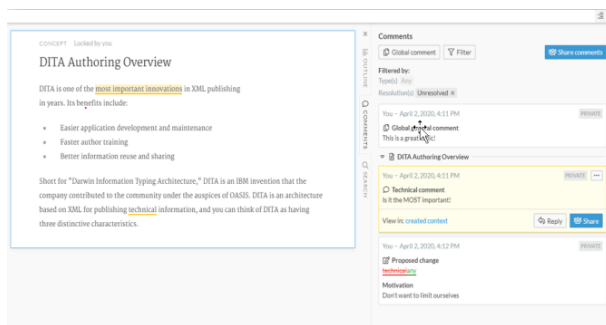
The Dreaded Review Cycle

Document reviews are critical for ensuring quality, accuracy, and usability. But, they can sometimes be one of the most painful parts of the entire information development process!

Sadly, the review cycle is often fraught with problems:

- In many cases, requests for a review are either ignored, or the response takes a long, long time. This is usually because the process is too difficult and takes too much time.
- Reviewers can't access, or edit, the source files. This causes extra work to create a representation for markup. Then, any suggestions must be converted back to XML and imported to the document by the authors.
- In some cases, the authors have difficulty understanding or interpreting the reviewer's notes. This results in far too many review cycles before the SME approves the document.
- In other cases, there can be conflicting feedback! When there are a lot of reviewers involved, they bring just as many opinions. These must be reconciled by the authors.

Name	Subject	State
Review Protection Request	Promotion Request - 60081.Show II	Approved
Review Protection Request	Promotion Request - 60061.ASM.S...	Approved
Review Protection Request	Promotion Request - 60021.Promot...	Approved
Review Protection Request	Promotion Request - 60011.MOSD	Approved
Review Change Notice Task	Change Task - 00349.Add Experien...	Resolved
Review Change Notice Task	Change Task - 00350.Create & Publ...	Resolved
Review Change Notice Task	Change Task - 00312.Update Engin...	Resolved
Review Change Notice Task	Change Task - 00310.Update Rear...	Resolved
Review Change Notice Task	Change Task - 00310.Update Intra...	Resolved
Review Change Notice Task	Change Task - 00310.Update Rear...	Resolved
Review Change Notice Task	Change Task - 00309.Update Engin...	Resolved
Review Change Notice Task	Change Task - 00311.Update Global...	Resolved
Review Change Notice Task	Change Task - 00269.Release new...	Resolved
Review Change Notice Task	Change Task - 00134.Adding Effect...	Resolved
Review Change Notice Task	Change Task - 00133.Turning on te...	Resolved



The Arbortext Web Reviewer can help alleviate many of these problems with these features:

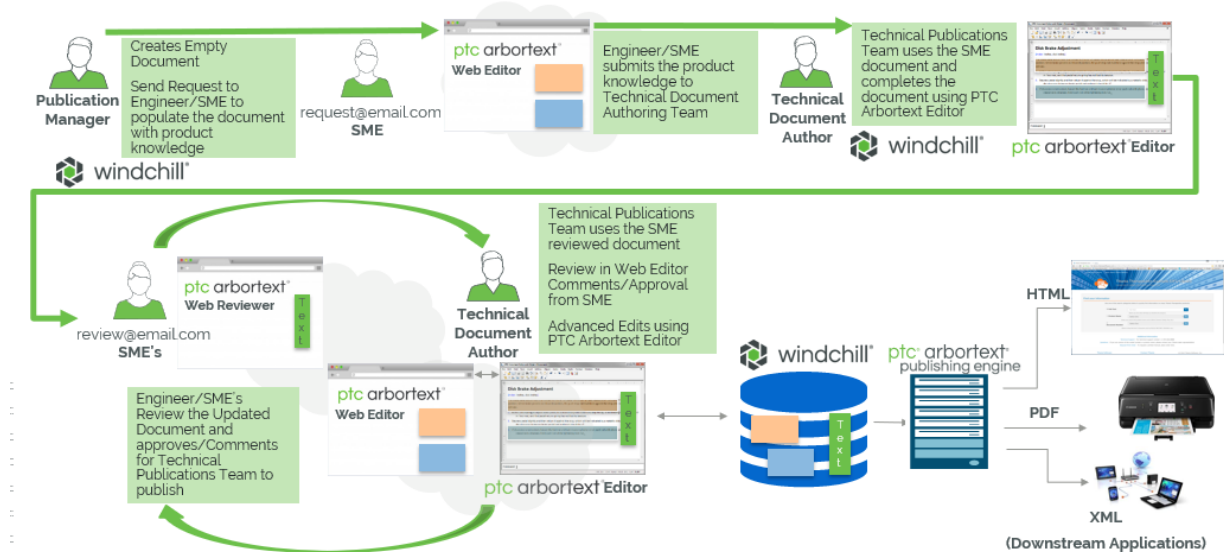
- Web-based annotations and commenting simplify stakeholder contributions.
- Type and motivation indicators for a proposed change support understanding.
- The ability to filter comments focuses the review and reduces the number of cycles.
- Accepting proposed changes automatically updates the source document, eliminating copy and paste.
- Real-time collaboration on the same content helps to resolve potential conflicts.
- Built-in integration with Windchill provides access to content and helps manage the process with workflows.

How the New Arbortext Web Tools Work

Features:

- Edit EXISTING content components stored in Windchill.
- Create NEW content components based on templates.
- Real time XML validation with no visible markup. Supports either DITA or Tech Info DTD.
- Single topic or map/bookmap views.
- Supports copy & paste, drag & drop, from common formats (MS Word, Excel, PDF etc).
- Images, audio, video, formulas, etc. can be added to a document either from Windchill or uploaded.
- Built-in integration with Windchill, including check out/in, version control, workflow routing, and more. (Not supported if Windchill is in the PTC cloud.)
- Web Editor and Web Reviewer can be opened from within a Task or directly from a Windchill XML content object.
- Multiple content reviewers can work in parallel.
- Web Reviewer markups, dispositions, and change tracking are archived in the tool for future reference.
- Cannot use some xml constructs including CDATA, xml:space, text or file entities, keyed content references, inline SVG graphics.
- Designed for occasional contributors—does not replace advanced Arbortext Editor functions.

The Typical Document Development Journey



This example demonstrates use of the Arbortext Web Tools with a predefined Windchill workflow. (The roles and paths shown are just one example of many possibilities.)

- 1 Publication Manager creates a document, kicks off a task to send it to a selected SME (or Author).
- 2 SME receives email with a link to open the document in Web Editor.
- 3 SME populates the document with Technical Information.
- 4 SME routes the completed document to a Tech Pubs Author.
- 5 Tech Pubs Author formalizes the content into a well-structured document using Arbortext Editor.
- 6 Draft document is sent to multiple SME's via review task links.
- 7 SME adds comments and recommendations in Web Reviewer for changes and re-assigns to the Author.
- 8 Tech Pubs Author updates and releases final version.

What Does This Mean for the Team?

In today's competitive world, the most effective information is accurate, consistent, accessible, up-to-date and easy to use and understand. Along with these goals, Tech Pubs teams also strive for efficient development processes based on reusable, targeted information modules that can be assembled into multiple structures and outputs.

It takes a team with specialized skills to accomplish these goals. Yesterday's practice that assigned a book to an isolated writer using desktop publishing software just doesn't work anymore. The best product literature is now developed by multiple authors, along with graphic artists, editors, linguists, and production specialists, all under the guidance of at least one Information Architect. PTC supports this vision with industry leading tools like Arbortext Editor and Styler, Windchill Content Management, and the Arbortext Content Delivery system.

Now, the new Arbortext Web Editor and Web Reviewer tools help extend the solution by bringing valuable product expertise closer to the process. As a result, the expanded team can:

- Simplify the capture of text and non-textual content for all contributors
- Shorten content creation, review and publishing cycles
- Reduce documentation burdens on SMEs, IT and authoring teams
- Improve consistency and accuracy of product information
- Improve time-to-market

Learn More

For more information about Arbortext software products, visit: www.ptc.com/go/arbortext

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