



# Make it Simple, Make it Smart

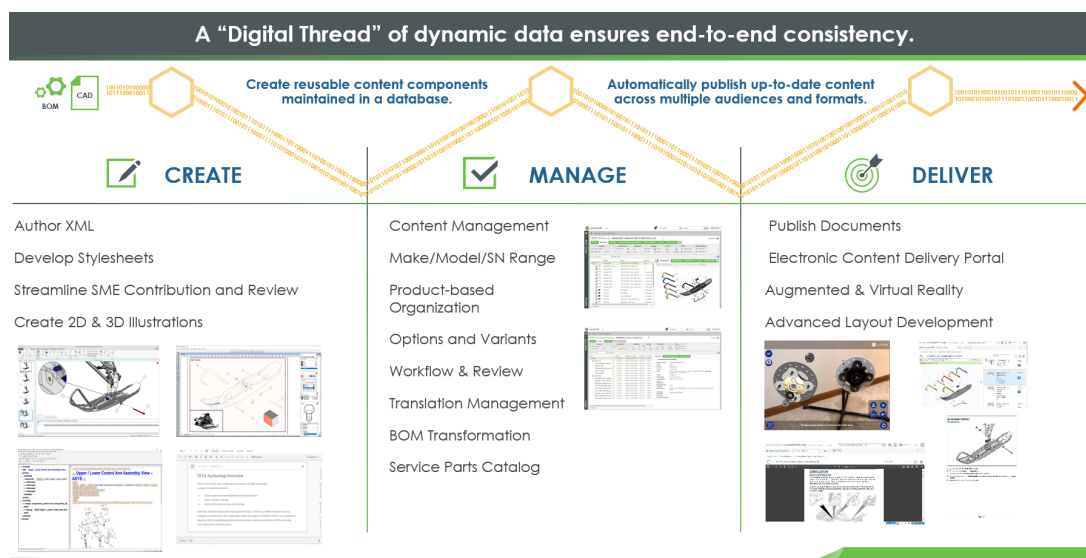
Arbortext for Technical Publications and Parts Catalog: Create, Manage, Deliver

The Arbortext solution is an end-to-end, dynamic publishing solution that streamlines how organizations create, manage, and deliver technical publications. The **Digital Thread** of dynamic data ensures end-to-end consistency by using the CAD Data and existing Bills of Materials from Engineering to create reusable content components, maintain them in Windchill, and automatically publish up-to-date content across multiple audiences and formats.

The Digital Thread is a single source of data truth creating consistency, collaboration, and alignment across functions by real-time data synchronization of related upstream and downstream derivative information. This scalable common set of democratized data enables enterprise-wide accessibility and continuity across products, processes, and people.

Many companies are stuck because their product data is complex. Manufactured Products are becoming more and more complex everyday as they evolve from purely mechanical to electro-mechanical and ultimately become smart and connected with the integration of embedded sensors and of complex software. Organizations are struggling to create, manage, and share product information to account for the increased volume and types of components.

Utilizing the Digital Thread brings Service Optimization to the organization. It improves technician effectiveness and first-time fix rate by providing up to date information in the field. It reduces asset downtime, truck rolls, and time-to-resolution. Delivering integrated service and parts information results in a great service experience, providing increased equipment availability and increased business opportunity. Leveraging product content from engineering to service ensures the delivery of accurate and up to date service and parts information.





## Key Benefits of PTC Arbortext

### 75% Writer Efficiency



Service information programs struggle when underlying technologies are insufficient. Provide users with high-quality content filtered for their equipment and task at hand

### 65% First-Time Fix Rate



Eliminate disjointed content from the engineering data source so content for field service technicians is always correct and up-to-date, improving technicians effectiveness in the field

### 25% Parts Revenue



Prevent technician inefficiencies caused by outdated and ineffective service manuals and parts catalogs. Decrease incorrect parts ordering to keep your customers happy and improve return business

### \$1M Lower Translation Costs



Insufficient translation can impede technician effectiveness, increase costs, and cause unnecessary additional truck rolls to reach resolution

### 15% Downtime Reduction



Ensure your technicians have the right information at the right time so they can do what they do best: ensure your customers maximize their up-time

## Ensure end-to-end data consistent with digital thread

Unleash a seamless flow of data across the value chain that will link every phase of the product life cycle.



### CREATE

- Automatically update content in conjunction with product development changes and stay connected to engineering data
- Reuse and leverage content with XML authoring
- Support effective translation management
- Enable efficient cross-teams collaboration on content
- Achieve more efficient task assignment, routing, and authoring collaboration



### MANAGE

- Manage technical content originating from multiple sources
- Be included in the change process when content needs updating
- Leverage CAD and facility information for quicker delivery and content development
- Enable a more efficient review process
- Reduce manual workflows and non-value-added tasks



### DELIVER

- Cost-effectively deliver up-to-date documentation to customers and service personnel
- Reduce operational costs of service information delivery
- Use automated publishing to reduce labor costs and the need for multiple manual applications
- Enable engineering changes to be more efficiently integrated into product information to maintain up-to-date publications

## Create

PTC's suite of create tools enables users to produce a variety of content from writing XML documents and developing style sheets to designing 3D and 2D illustrations. Users are able to create efficiently, because PTC's tools maintain connected data across platforms and provides the ability to reuse content.

### Benefits

- Automatically update content in conjunction with product development changes. Stay connected to Engineering Data
- XML authoring and ability to reuse and leverage content
- Support for translation management
- Enable efficient and parallel content creation and editing
- Enable more efficient task assignment, routing, and authoring collaboration

**Arbortext Editor** is a sophisticated toolset designed to help you create and edit documents in SGML and XML. Arbortext Editor's familiar word-processing interface makes it easy for authors to create structured content for reuse and automated publishing.

**Windchill Service Parts Information and Instructions Parts List Editor** enables generation and automated update of associative parts list from BOMs, enrichment of spares data and dynamic update of their 2D and 3D illustrations.



**Arbortext Styler** helps you create simple to complex stylesheets for publishing to multiple outputs. Using Arbortext Styler's simple user interface, a designer can define format settings for both electronic and print output without having to learn any of the stylesheet programming languages.

**Arbortext IsoDraw** produces illustrations using original 3D and 2D CAD data to optimize product and support information, such as assembly and disassembly instructions, parts catalogs, operator and service manuals, training documents, and more.

**Arbortext Web Editor and Reviewer** provides users with an intuitive user interface that captures and manages XML behind the scenes. Accessible via a browser, these tools make it easy for casual contributors to quickly and effectively collaborate with the documentation team. All aspects of the content production process can be streamlined by removing the need for manual conversions and iterative reviews. For those contributors already using Windchill for content management the collaboration process begins in the familiar Windchill interface.

**Creo Illustrate** enables you to create rich 3D technical illustrations, 2D drawings, and interactive animated sequences that accurately reflect current product configurations and support formats from hard copy to augmented reality. This software allows you to communicate complex service information easily and accurately.

## Manage

PTC's manage tools improve the product lifecycle management process by maintaining connectivity through the digital thread.

### Benefits

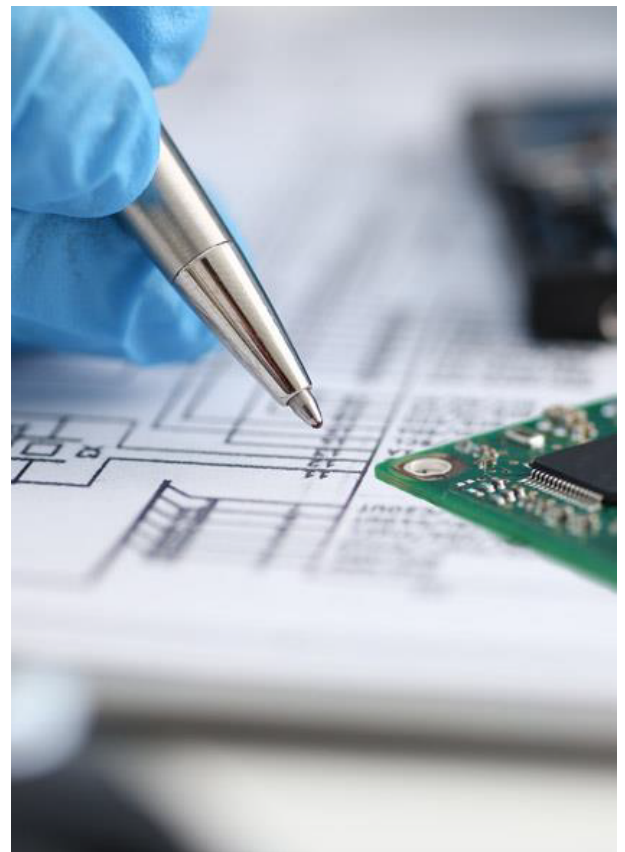
- Manage technical content originating from multiple sources in multiple languages
- Content is included in the change process when upstream content is updated
- Leverage CAD content for illustration creation
- Enable a more efficient review process
- Reduce manual workflows and non-value-added tasks

**Windchill PLM Software** is a product lifecycle management application suite that enables geographically dispersed, multi-disciplinary teams to strategically collaborate with partners and customers using trusted, up-to-date product information.

Windchill's open architecture enables easy integration with other enterprise systems, including IoT, providing a solid foundation for a product-driven digital thread. Expand self-service access of traceable product data to non-experts who don't typically use PLM, while avoiding over-customization and complexity.

**Windchill Service Parts Information and Instructions add-on** is a context-specific service information content manager that enables manufacturers and service organizations to manage information based on how the product is configured and serviced in the field. The Windchill Service Parts Information and Instructions add-on improves service operations efficiency and effectiveness by enabling service information to be organized and optimized for accuracy, applicability, and rich, graphics-driven delivery.

For Aerospace and Defence, **GPSL's S1000D for PTC Windchill Add-On** modules provides preconfigured libraries and Arbortext configurations in support of S1000D.





## Deliver

PTC's Deliver Tools allow you to publish and distribute content to your customers efficiently and reliably.

### Benefits

- Up to 25% increase in parts revenue and reduced part returns
- Cost-effectively deliver up-to-date documentation to customers and service personnel
- Reduce operational costs of service information delivery
- Use automated publishing to reduce labor costs and the need for multiple manual applications



**Arbortext Publishing Engine** is a server-based system that pulls XML and SGML content from a file system or content management system, assembles that content for different audiences, and automatically publishes the assembled content in both print and electronic forms, all with high-quality layout and formatting. It provides the starting point for creating publications out of reusable components, and provides authors with the functionality they need to aggregate content into publications and to make those publications dynamic and personalized.

**Arbortext Content Delivery** is a powerful scalable web-based parts catalog and technical information portal, allowing dealers, distributors, and end user customers to easily find and access the updated high quality product configuration-specific content, regardless of where it is created or stored across your enterprise. Arbortext Content Delivery also integrates with e-commerce business systems to facilitate the parts ordering process for service repairs. It delivers the parts information required for servicing a product along with the supporting documentation required for maintenance and repair operations, right on time, boosting user productivity.

**Arbortext Layout Developer** enables the creation of templates for the automated print (PDF) production of documents where output quality and/or performance is of prime importance. Layout Developer templates allow the use of **Arbortext Layout Editor** for document finishing

processes such as changing text formatting to reflow pages in a more pleasing manner and adding floating page regions containing text or graphics.

**Vuforia View** is an application that delivers Augmented Reality (AR) enabled experiences to a mobile or eyewear device. It is what you use to access and utilize an AR experience. Vuforia View works by tracking in your real-world space where to launch and anchor the AR content.

**Vuforia Studio** can transform your existing CAD and IoT data into detailed AR experiences that provide critical information to front-line workers when and where they need it most.

## Feature Matrixes

### Arbortext Authoring and Publishing Feature Matrix

Arbortext	Editor	Print Composer	Publishing Engine	Styler	Layout Developer	Layout Editor	Architect	Web Editor	Web Reviewer
XML Authoring	X								
Lightweight XML Authoring	X							X	
Add Review Comments to XML	X							X	X
Print Preview while Authoring		X	X	X					
Create/Maintain XML-based Stylesheets									
For Print and PDF				X	X				
For HTML				X					
For Other Formats					X				
WYSIWYG Stylesheet Development					X				
Document Finishing and Manual Page Make-up					X	X			
Locally Publish XML									
To Print and PDF		X		X	X	X			
To HTML		X		X					
To Other Formats					X	X			
Server Publish XML									
To PDF			X						
To HTML			X						
To Other Formats			X						
Using Windchill/Service Parts Information and Instruction (SPII)									
Publish Documents using Windchill UI and Windchill Workflows			X						
Publish SPII Structures to PDF and HTML			X						
Publish SPII Structures to Bundles (for ACD)			X						
Create/Maintain Authoring/Publishing Configuration Files							X		

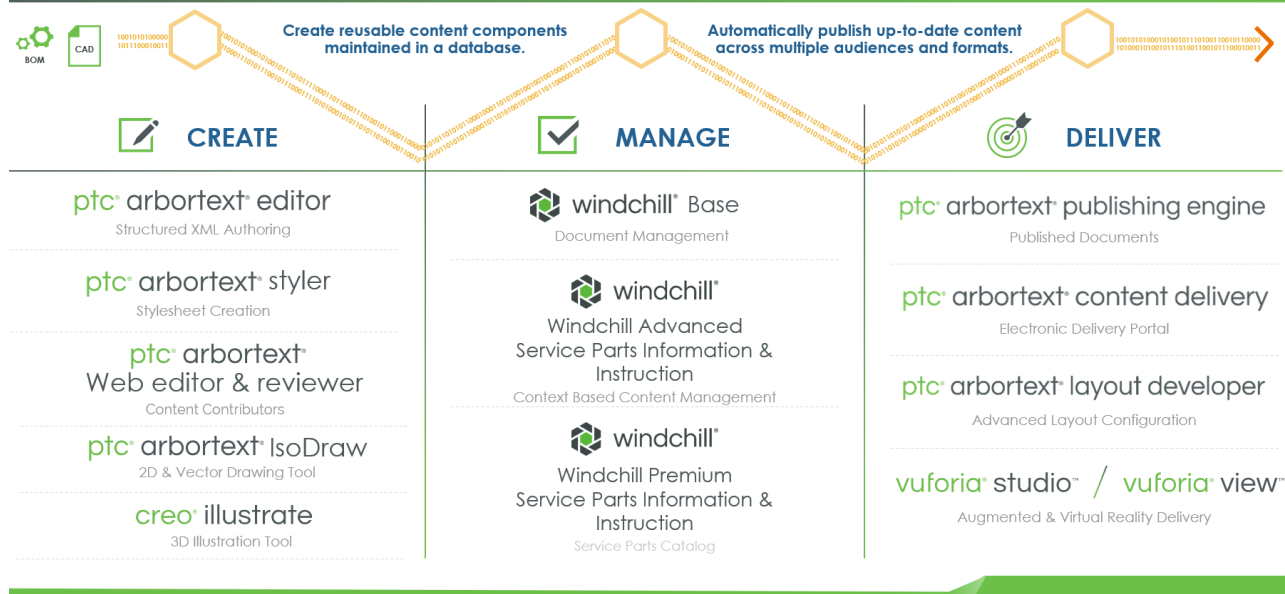
### Arbortext Content Deliver Feature Matrix

	Base Server for Arbortext Technical Content Delivery	Viewer for Technical content extension	Viewer for Service Parts extension	Offline viewer extension	Viewer - All Inclusive Site Access license Based
Deployment setup (via Configurator GUI)	X				
Create product collections of information	X				
Publish and Load Content collections	X				
Access Control (management of Users, Privileges and Service Groups)	X				
Set system preferences (Global and per Service Group)	X				
Product Hierarchy and Information Structures thumbnails Navigation		X			X
Product hierarchy and product Instances based Search		X			X
View and Print XMLs		X			X
View and Print PDFs		X			X
View 2D/3D Illustrations – PVZ, SVG, PNG, JPEG, GIF, PDF		X			X
View Audio and Video files (mp4, mp3)		X			X
View and download Zip files		X			X
Page Print		X			X
Create Book Print		X			X
Create Private or Public Notes		X			X
Send User's Feedback		X			X
Bookmark content		X			X
View Parts and Parts Lists			X		X
View Animations and sequences (PVZs)			X		X
Parts and Parts-List ordering			X		X
Generate Offline activations				X	X
Setup Offline environments				X	X
Create offline packages for download				X	X
Download/Synch collections of content into Offline				X	X



## PTC Transforms Technical Information

A “Digital Thread” of dynamic data ensures end-to-end consistency.



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