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\<content solutions\>

How Bluestream XDocs DITA CCMS supplements PTC Windchill
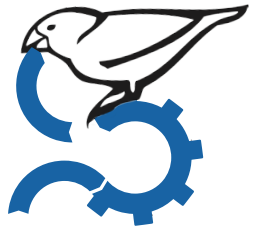
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PTC Windchill is good but.....

PTC Windchill is a suite of PLM (Product Lifecycle Management) tools used by thousands of companies worldwide. These products fall under several categories: PDM & Process, Product Analytics, Quality, Service, Collaboration, and Utilities, addressing most things a manufacturing company might need.

But despite the large number of applications, there is still plenty of scope for operational improvement. Bluestream XDocs Manufacturing Suite will enrich functionality and productivity in several key areas.

> Content re-use
> Localization
> Metadata management
> Evolving Content

> 'As-built' documentation, including the automated creation of Illustrated Parts Catalogs.
> Interactive Service Documentation Portals.

< Component Content Management for Technical Documentation >

Windchill has some basic capabilities for managing technical documentation and DITA. However, this falls short of the functionality of a fully-featured Component Content Management System developed from the ground up to support the DITA standard.

Adding Bluestream XDocs DITA CCMS improves:

< Content Re-use >

IBM created the DITA XML standard with re-use in mind; this is especially useful for manufacturing companies that:

> Build customized versions of machines — modular content means publications can be assembled more quickly.

> Supply a global client base — lower localization costs, will bring significant savings.

> Re-use sub-assemblies and components across various products — when parts and sub-assemblies are shared, documentation relating to those components and sub-assemblies can also be shared. The benfits increase when content is localized.

There are multiple benefits with this approach:

Firstly, you have a single source of the 'truth.' For example, one location with instructions on how to assemble and test a solenoid found on multiple machines. If that solenoid needs to be upgraded and the instructions changed, all documents related to its use across multiple devices can be simultaneously updated.

Equally, this applies to warnings and best practice guidelines — update in one place, and all related documents can also be updated — no more cutting and pasting, which is likely to lead to errors. Using DITA reduces reputation risk.

In many ways, the DITA standard mimics manufacturing; the individual DITA topics can be assembled and re-used in different ways to create various publications.

Equally, engineering components can be assembled and re-used on alternative machines.

To get the full benefits of re-use with DITA, you need a system conceived and developed with DITA in mind,

Windchill has some functionality, but it falls short. Bluestream XDocs Manufacturing Suite is built on an enterprise-class DITA CCMS (Component Content Management System), developed from the ground-up specifically to support the DITA standard.
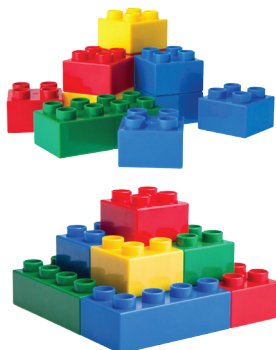
< Localization >

Delivering content in other languages is an essential requirement for many manufacturing companies.

This is an area where many people feel Windchill falls short; it is also a very manual process and relies on XLIFF. XLIFF is a standard format between a TMS (Translation Management System) and the translator's Translation Workbench.

As a result, it suppresses helpful context from the content and is not always the best approach with DITA.

Advanced localization processes set up by DITA-aware LSPs (Localization Service Providers) rely on raw DITA exchange. Taking advantage of DITA, they provide in-context translation and review for the 'in country' SMEs. Therefore, leading to more competitive, more qualitative translations and up-to-date translation memories.

Bluestream's XDocs DITA CCMS fully supports both of these approaches and delivers additional functionality and comprehensive reporting.

< Iterative Localization >

Goods cannot ship until the documentation is complete. Therefore, delays in shipping and payment are caused by waiting for completed source-language content before localization starts.

XDocs DITA CCMS supports 'iterative localization.' You can automatically send DITA topics for localization as soon as they are approved and before the whole document set is created. Likewise, as soon as it is available, localized content is automatically imported back into XDocs. This approach dramatically reduces the time to complete the localized document set and, therefore, reduces time to market.

< Metadata Management >

Metadata is data about data; it defines what content is, what it relates to, and more. For example, sub-assembly reference numbers could be added to all content related to that sub-assembly as a metadata tag. Customer references and order number details could also be added. These tags can then be used to quickly search the CCMS for content or identify how many places the sub-assembly is re-used or by which customer.

Metadata management and use within Windchill is complex and cumbersome, and when applied to technical documentation, even more so.

Content management challenges also increase as content repositories grow exponentially and content re-use grows more complex. There is so much benefit that good metadata, taxonomy, and ontology use can bring to an organization. However, it requires comprehensive management. Bluestream's XDocs DITA CCMS has market-leading metadata management enabling unrivaled capabilities. These include the automatic 'harvesting' of metadata tags every time content is checked into the CCMS and the ability to associate non-DITA files with the metadata.

< As-built Documentation >

Generic documentation helps nobody; information relating to parts or functions not included in a particular build gets in the way and leads to confusion. This confusion will manifest itself both in terms of operational efficiency and maintenance/ servicing difficulties. Operators will struggle to understand how to approach tasks, and machine maintenance will take longer. If you have customizable machines, you must have customized documentation to support them.

The XDocs Manufacturing Suite has connectors to other systems in the 'smart' factory, including ERP, PIM, PLM, and CAD. BOMs (Bills of Materials) are used in these systems to specify what components are to be used for a particular machine or site. These BOMs are imported and managed by the XDocs Manufacturing Suite and used to generate site/build specific documentation, including IPCs (Illustrated Parts Catalogs).

< Evolving Content >

Machines, sites, and systems evolve over their lifetime; modifications and upgrades must be reflected in the documentation. As a result, the documentation must be created in a way that lends itself to the evolution of content. Heavy manufacturing machines have a long life expectancy; the content must be created in a future-proof way. It should also be possible to perform global updates across publications.

The XDocs Manufacturing Suite sits on Bluestream's enterprise-class DITA CCMS (Component Content Management System). DITA is an XML standard that uses a modular approach to build publications. Content is written as Topics — blocks of information that make sense on their own but can also be assembled into a larger document and published.

XML separates content from formatting and enables multichannel publishing — a single document can be published as a PDF, HTML, WebHelp, eBook, etc.

XML structured content is future-proof; it is not dependent on a single application to create or publish content, and DITA is an open-source standard.

With DITA, it is possible to update a single Topic and then update all publications where that Topic has been used. For example, if a sub-assembly is used in multiple versions of a machine and you need to make changes to the instructions relating to maintenance of that sub-assembly. You can **update the maintenance Topic and then simultaneously update all publications across all the machine types.**

<Interactive Service Documentation Portals >

Documentation has to be easily accessible to be effective. For example, engineers in the field need to access up-to-date information relating to the exact 'build' of the machine they are working on. In addition, they need to access maintenance instructions and quickly identify and order replacement parts. Unfortunately, paper manuals can soon become outdated, and they are also hard to work with, as are long PDF documents.

The XDocs Manufacturing Suite can use Bluestream's XDelivery platform to build Interactive Service Documentation Portals where all types of content can be stored and published. This includes bulk uploads of legacy PDFs together with audio and video files.

An interactive service documentation portal ensures the right content is always delivered to the relevant device or platform, including content published to IoT (internet of things) devices.
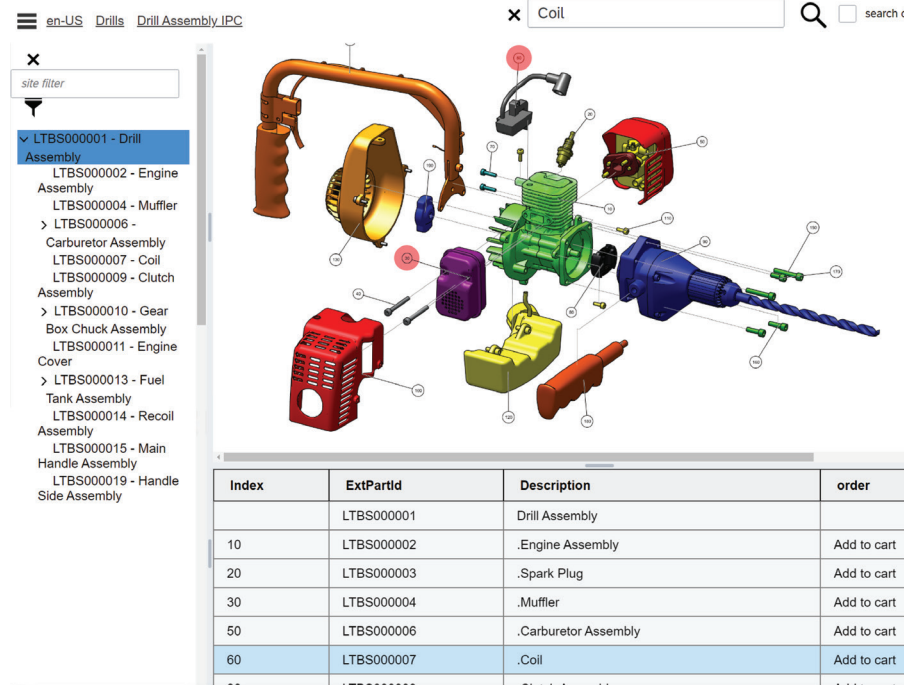
< About Bluestream XDocs DITA CCMS >

XDocs DITA CCMS is the leading single vendor solution for organizations looking to improve and enhance their information workflow. With a unique rapid-to-deploy methodology coupled with unrivaled functionality, XDocs DITA CCMS is inspiring teams of authors to create powerful user-focused content that is flexibly delivered to any device or platform.
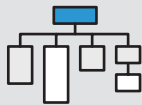
< End-to-end >

XDocs provides a complete solution. Your content team can create, review, find, update, manage, localize and deliver content with unparalleled agility.

< Support >

With worldwide partners and customers on every continent, Bluestream can support you wherever you are located.

< Out-of-the-Box >

Out-of-the-box XDocs DITA CCMS is fully functional and feature rich. It has solutions for all your content challenges.