Windchill® Service Parts Information and Instructions

Manage context-specific associative service and service parts information to facilitate information reuse, streamline change management, and enable delivery of configuration-based technical publications and parts catalogs

The Windchill Service Parts Information and Instructions add-on improves service operations efficiency and effectiveness by enabling service and service parts information to be organized and optimized for accuracy, applicability, and rich, graphics-driven delivery. This add-on requires the Windchill Premium or Windchill Advanced license as a prerequisite.

To operate and service products effectively and efficiently throughout their lifecycle, support organizations and end users require accurate, relevant and timely service and service parts information. Recognizing the critical role service and service parts information plays in driving business success, more and more manufacturers are regarding service and support operations as competitive differentiators that serve as revenue and profit centers rather than cost centers.

Many manufacturers experience a serious “disconnect” between their engineering and service environments which severely compromise—or outright prevent— the timely creation and flow of high-quality, accurate spare parts and service information. Lacking such information, field service personnel often order and stock the wrong parts, take unwarranted actions that jeopardize parts revenue opportunities, and fail to repair or service products properly. The result is dissatisfied customers with weakened brand loyalty.

Built on PTC’s Windchill architecture, the Windchill Service Parts Information and Instructions add-on is a context-specific service information content and service parts manager that enables manufacturers and service organizations to manage information based on how the product is configured and serviced in the field. Organizing service content in a functional system within the context of a product with accurate information applicability helps organizations to maximize content reuse across product families, streamline change management processes, and facilitate delivery of contextual, configuration-specific service and service parts information.

The Windchill Service Parts Information and Instructions add-on enables companies to leverage their engineering and manufacturing product data to create high quality spare parts information. When used with the XBOM Management add-on, it facilitates the creation, management, and delivery of the most up-to-date, accurate and relevant spare parts service information in the form of a Service Bill of Material (sBOM) and associated part relationships including graphical representations. The Windchill Service Parts Information and Instructions add-on defines spare parts information for every product configuration and enables the automated delivery of graphical parts information throughout the product’s serviceable lifecycle.
The Windchill Service Parts Information and Instructions add-on provides an optimal way to organize service information so that product configuration-based data can be delivered electronically or to print publication formats.

- Information Structures are service-oriented breakdowns of products used to organize all the content required to operate and service those products throughout their lifecycle
- Publication Structures represent specific publications that can be generated from the data in the Information Structure
- Product Hierarchy captures the product classification to allow easy navigation of service information
- Applicability rules define which pieces of content are applicable for specific product configurations or usage conditions
- The service BOM captures service part association information like replacements, supersessions and recommendations
- Parts lists organize the service parts for use in parts catalogs
- 2D and 3D technical illustrations and accompanying callouts generated for the Parts Lists using PTC Creo® Illustrate provide accurate graphical information

**Key Benefits**

**Enhance service and parts information relevance**

- Define Applicability and effectivity rules, so the most relevant service and parts information is available for every product configuration and operating condition
- Eliminate wasted time spent searching through irrelevant service content
- Ensure the availability of the correct serviceable part using applicability rules for spares

**Maintain up-to-date service and parts information through streamlined change management**

- Maintain associativity between engineering and service information so that changes on the engineering side can be quickly integrated to service information
- Changes on the engineering parts are also flagged on the associated service parts and can be incorporated and reflected in updated service parts information
- Align service content with the product definition, for contextual information of the highest accuracy and consistency
- With an enterprise level of deployment of PTC Windchill, engineering can perform extensive impact analysis to assess the impact of a design change on manufacturing and service before authorizing/issuing the change

**Increase author productivity**

- Centralize management of all service information and organize that information in a logical, product-centric manner that facilitates content reuse
- Reduce service information authoring time
- Automatically generate Parts Lists from sBOM
- Facilitate content reuse and enhance content consistency across publications with the use of Publication Structures
- Create Parts Catalogs for interactive and print delivery. Automate multi-channel publishing to multiple formats
- Accelerate illustration creation by automatically generating interactive 2D and 3D representations of Parts Lists
Enhance Efficiency & Effectiveness of Support Organizations and End-Users

- Enable quick identification of the specific parts and service procedures required for repair to empower technicians and dealer networks to quickly and easily order the correct parts

Streamline translation management

- Improve time to market through streamlined translation process, making multiple languages available without lengthy delay
- Reduce cost through elimination of redundant and manual translation activities

Define Applicability

- Define multiple conditions (product configurations, system options and operating environments) or date and serial number effectivity information for when service content applies
- Include/exclude the appropriate service and parts information presented to users based on defined applicability criteria to yield product configuration-specific information
- Define a hierarchy of options and logic that specifies required/incompatible dependencies between available choices and apply these rules to service and parts information through an easy-to-use interface

Features

Organize content in Information structures

- Provide breakdown of a product into serviceable systems and sub-systems, typically defined at the product family or model level, to enhance content consistency and maximize content reuse
- Define content applicability such as product options, operating conditions, serial number, date effectivity.
- Enable initial and incremental publishing and delivery of rich, interactive, service and parts information specific to product configuration
- Organize and manage service and parts information pertaining to a product, whether it is PTC-created content such as illustrations, parts information, or procedures, or non-PTC-created content such as multimedia, videos, or graphics.
Create and manage Publication structures

- Publication structures represent a publication such as a Repair Manual or Parts Catalog
- Author Publication Structures by leveraging the organization of content in Information Structures. For example, a user can generate a publication structure for a specific serial number.

Define Service Bill of Material (SBOM) from existing product information

- Transform existing Engineering and/or Manufacturing Bill of Material (EBOM or MBOM) into Service Bill of Material and maintain associativity with the corresponding upstream parts. This requires the XBOM Management add-on that is included in Windchill Premium.
- Capture service-specific metadata like Serviceability and spare part relationships, Part Replacements, Part Supersessions and Service Kits
- Highlight changes to source eBOM/mBOM in the downstream sBOM and quickly incorporate appropriate changes
- Define Applicability rules on Parts/BOM to enable context-specific delivery of part information for a given product configuration, serial number or operating condition

Generate Parts Lists

- The Parts List Author leverages the sBOM organization to create individual Parts Lists
- The Parts List is stored in the Information or Publication Structure with other related service information
- Parts List can be overloaded with their own applicability rules to provide product configuration specific parts information to users

- Leverage Windchill structure management capabilities and the dynamic publishing capabilities of PTC Arbortext Publishing Engine™ to create product configuration-specific service manuals
- Content represented by the Publication Structure can be published for various print formats and electronic formats such as Arbortext Content Delivery bundles.
- Facilitate content reuse and enhance content consistency across publications using templates
- Publication Structures contain specialized objects such as Table of Content and Index that are automatically generated based on the content of the Publication Structure during publishing
Generate and manage 2D/3D Illustrations and accompanying Callouts

- Source 3D Technical illustrations and callouts from information authored in the Parts List and 3D CAD data
- Generate links between parts in the Parts List and associated 2D/3D illustrations automatically to make the part identification easy for service technicians when delivered electronically

Manage Translation content

- Manage the translation process of reusable service information topics for automated publishing of language-specific content
- Manage translated values for attributes of parts in Parts lists.
- Automatic detection and extraction of objects needing translation by language

Define the Product hierarchy

- Represent the hierarchical organization of serviceable products organized into product families, types, and models that allows a technician to navigate the contextual service information in Arbortext Content Delivery
- Capture additional information such as metadata and graphics for the product hierarchy nodes

Support multiple translation vendors

- Maintain associativity of translation content to source language content
- Enable support of multi-language authoring, pivot languages and valid language pairs

Learn More

For more information about Service Parts Information and Instructions and the entire portfolio of Arbortext software products, visit: www.ptc.com/go/arbortext.