PTC® PRODUCT & SERVICE ADVANTAGE

Technical Information for A&D

S1000D

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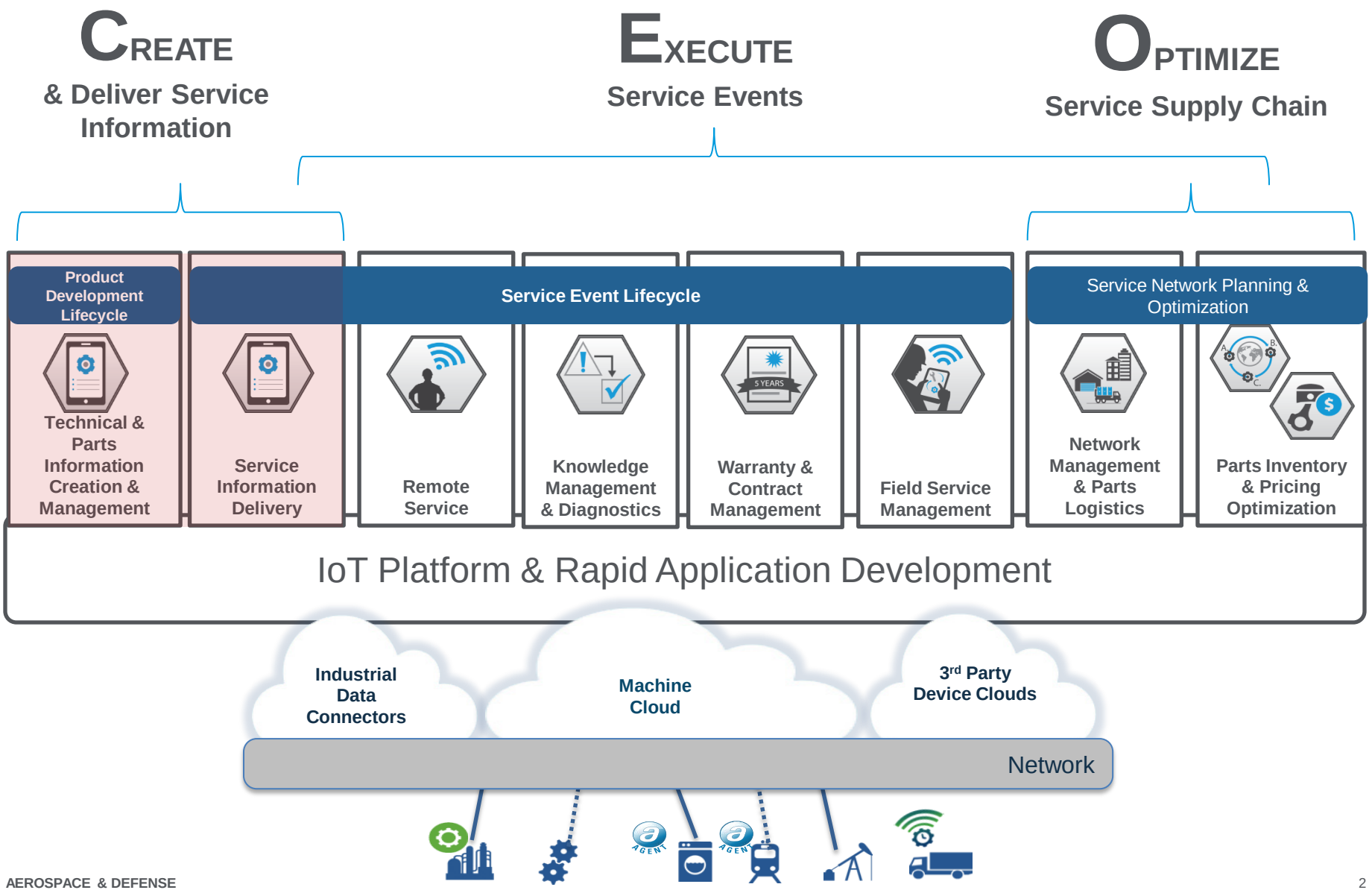
Sr Director Solution Management

March 12, 2015

PTC's SLM Portfolio for "Connected Service"

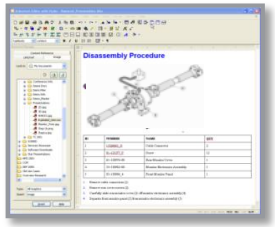


High Level Solution Modules Stack & Functional Scope

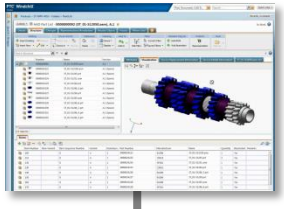
PTC Technical Information for A&D: Solution Overview

CREATE | MANAGE | DELIVER

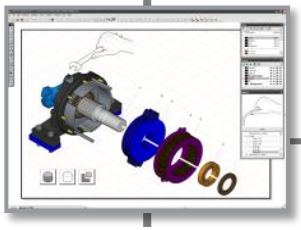
Editor / Styler



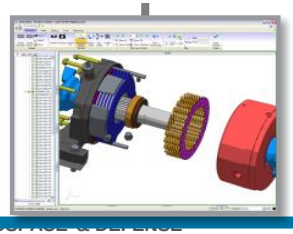
SPI Parts Editor



2D Illustrations



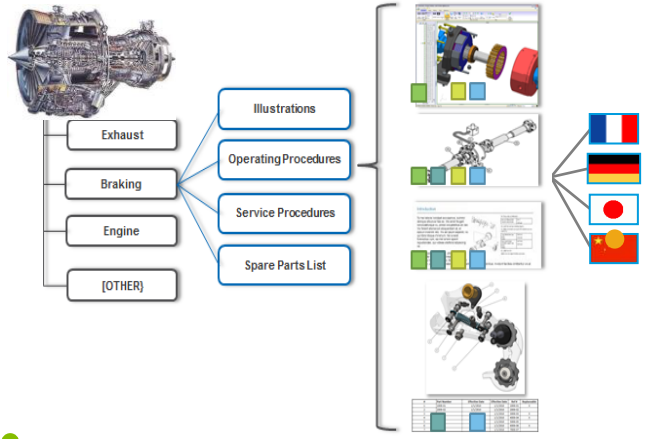
3D Illustrations



S1000D Solution Module

Windchill SIM/SPI

"Product Smart"



Customer PDM

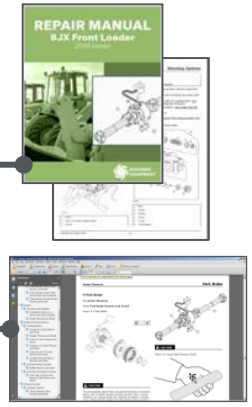
Design Parts Data, CAD Data, eBOM, mBOM

(leverage data from Windchill, Dassault, Siemens)

InService for A&D

Publishing Engine

Pre-published Documents



EXISTING SERVICE CONTENT

OEM / Service Partners

Service & Repair

Owners / Operators

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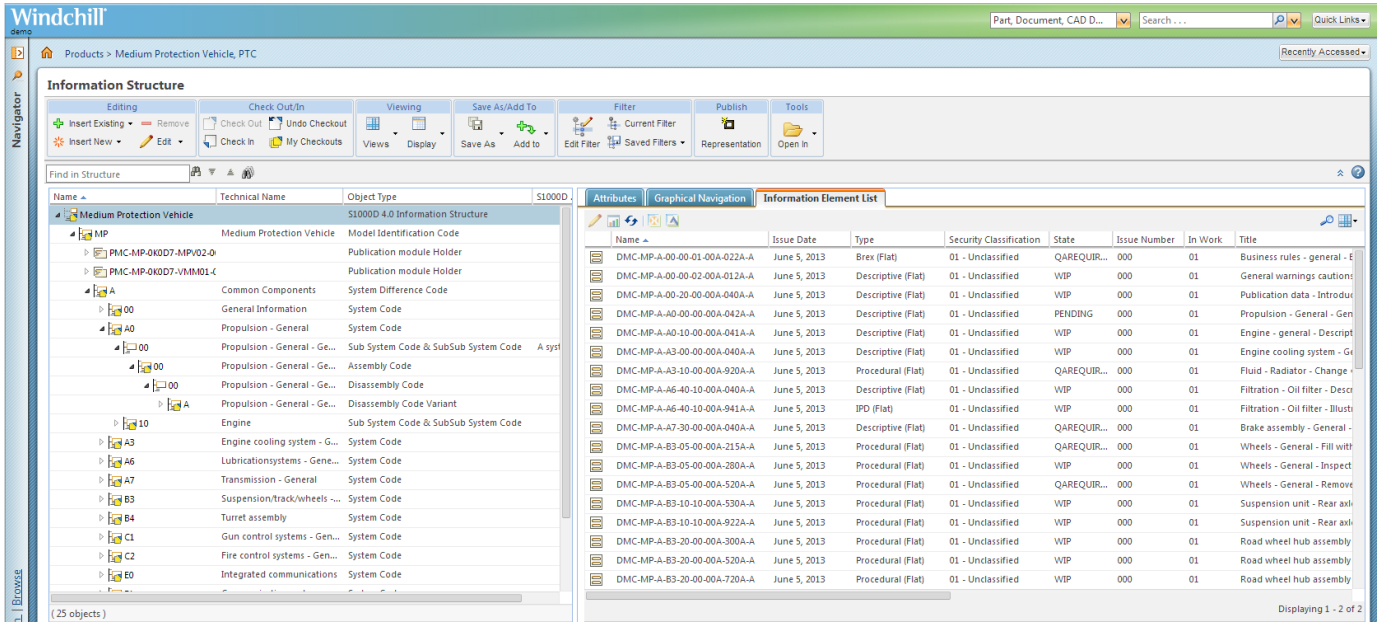
SIM S1000D Capabilities Overview

Current release 10.2 M022

Technical Information Solution Overview

Windchill Based Solution for Technical Information Authoring, Content Management, Publishing and Delivery

- Leverage **Service Information Manager / Service Parts Information** Capabilities
  - Provide structured authoring of reusable information components to automate the publishing of personalized, product- and language-specific content.
  - Enable single-source management of structured document components (DM), 2D and 3D graphics, and links to related enterprise data in order to automate authoring, review, approval, and change management workflows
  - Enable creation of Publication layout structures



Service Information Manager with S1000D Module

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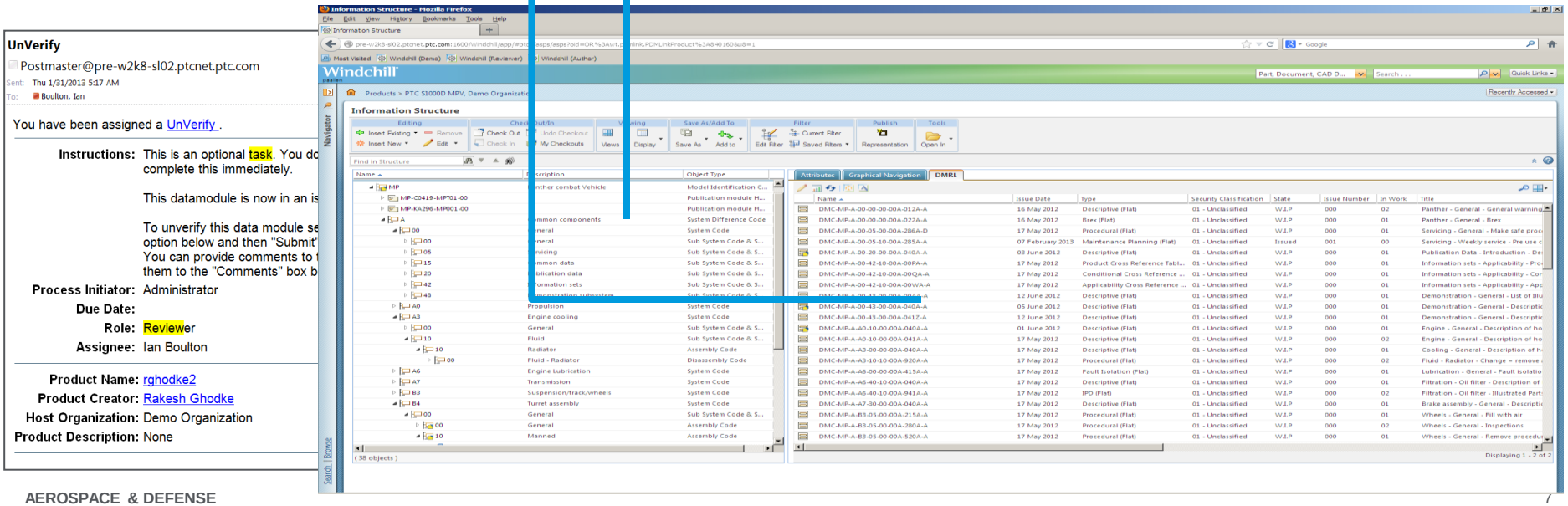
Enterprise level solution for technical information management

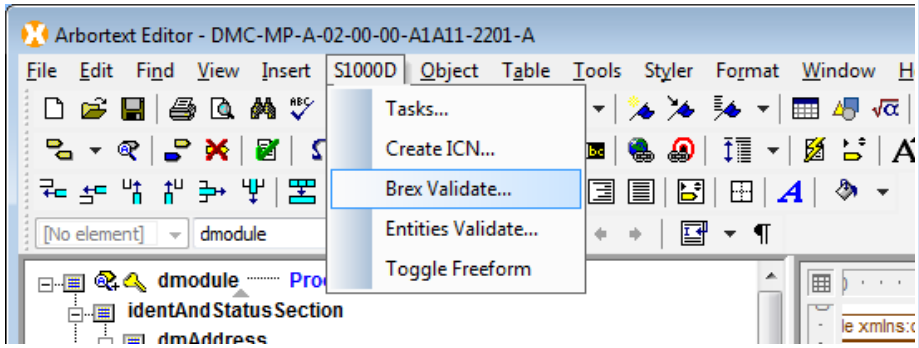
- Required to set up and administer S1000D projects
- Import/export data
- Set up SNS
- Set up DMRL
- Set up and parse against project BREX
- Manages XML and Illustration requirements
- Manages Project Workflow
- Support for 4.0 & 4.1 schemas

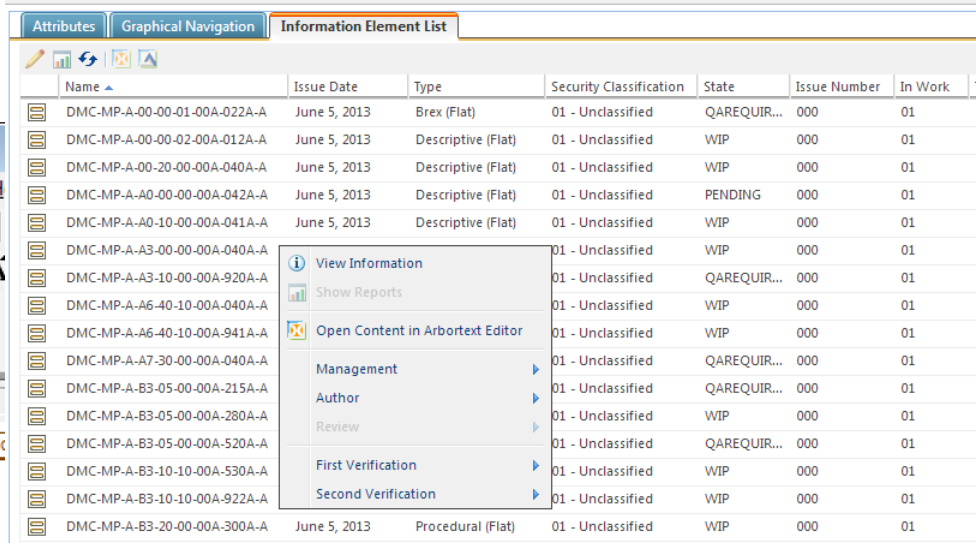


Technical Information Solution Overview

Windchill Based Solution for Technical Information Authoring, Content Management, Publishing and Delivery

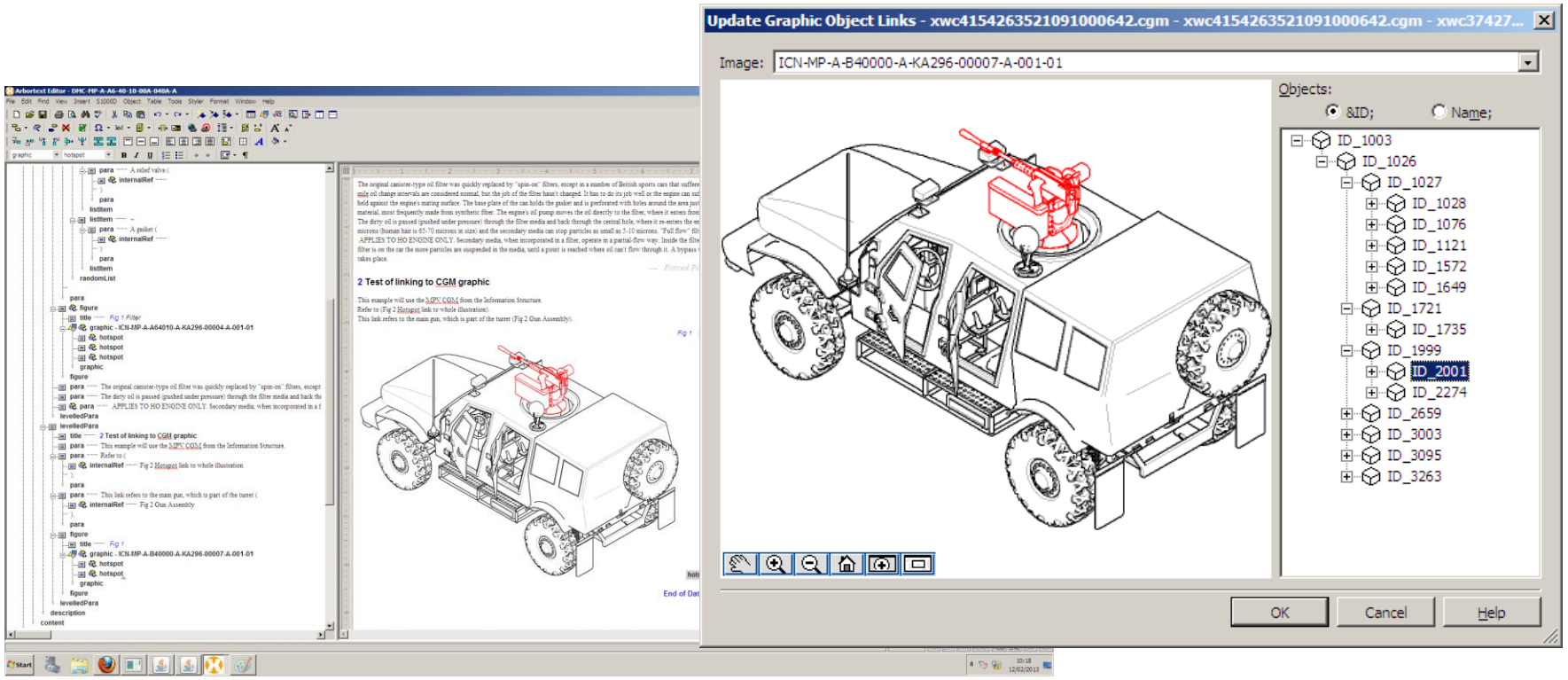
- Integrated with **Arbortext Editor** Authoring application
  - Creating and editing Structured content (XML)
  - Working with content both as components and as compound documents
  - Reusing content across an organization
  - Improving information accuracy, consistency, and flexibility
  - Supports both XML Document Type Definitions and XML Schemas for data modeling and validation (including standards)
  - Directly integrated with Windchill - Service Information Manager





Use of standard Arbortext Editor Capabilities

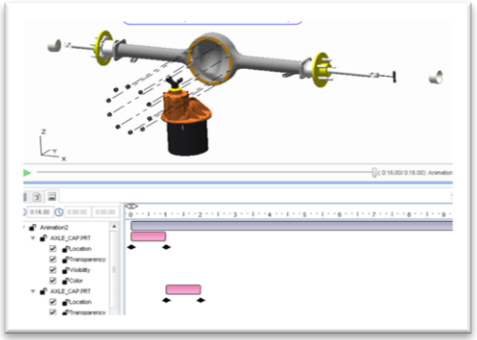
- Functions as primary author interface to the solution
- One required for each writer to author XML data modules
- Enables re use of content via Windchill Service Information Solution CSDB
- Contains authoring “Wizards” for S1000D using standard editor connectivity to SIM



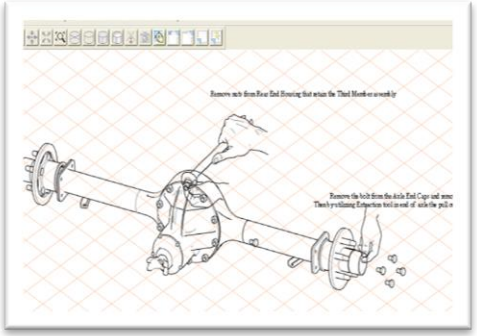
CAD-Based 2D and 3D Technical Illustrations

PTC®

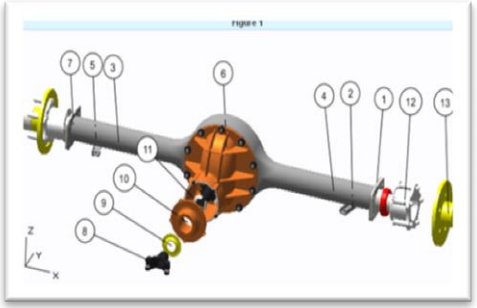
- Practice
  - Automate the creation of high quality, intelligent 2D and 3D illustrations and animations from 3D CAD product designs



- Capabilities
  - Reuse of a CAD models as basis for technical illustrations
  - Create intelligent, interactive graphics
  - Associated textual and graphical content
  - Manage, search and retrieve illustrations
  - Evaluate impact of changes through “where used” relationships
  - Automatic updating of illustration when source CAD models change



- Value
  - Improve illustrator productivity through integration with CAD and service content
  - Eliminate illustration specific requirement on engineering resource
  - Start illustration process earlier due to automatic updating of illustration
  - Increased information accuracy based on source engineering data
  - Improved illustration comprehension due to increased user interaction & control
  - Lower localization costs



CAD-Based 2D and 3D Technical Illustrations

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Storyboard Overview

Illustrator

Start

1 Identify Source CAD Models

2 Generate and Edit Illustration

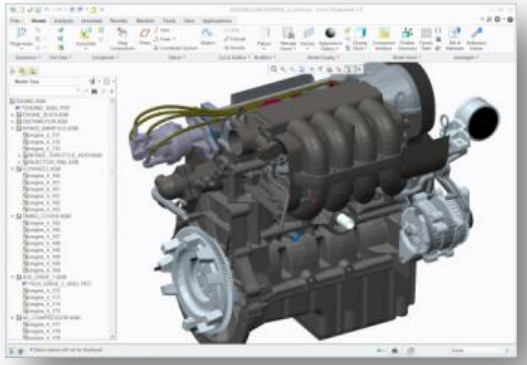
3 Release and Publish

4 Review Engineering Change and Identify Impacted Illustration

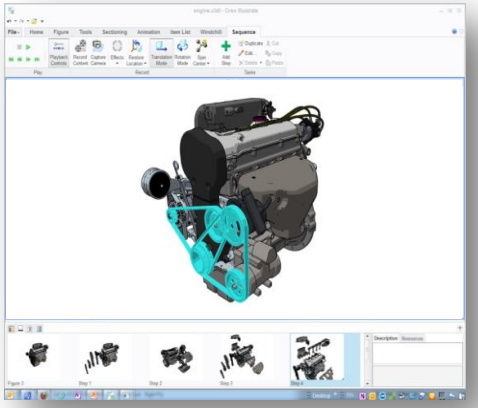
5 Update Illustration and Republish

End

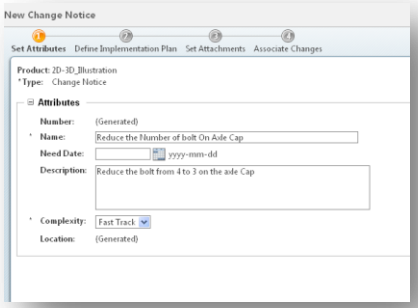
1 Identify Source CAD Models



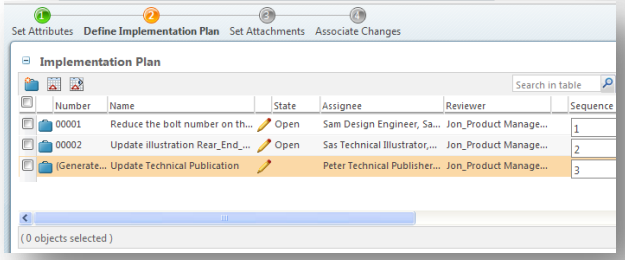
2 Generate and Edit Illustration



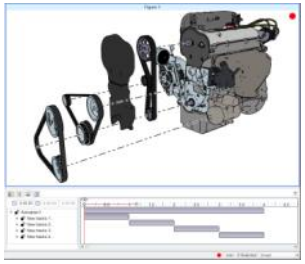
3 Release and Publish



4 Review Engineering Change and Identify Impacted Illustration



5 Update Illustration and Republish

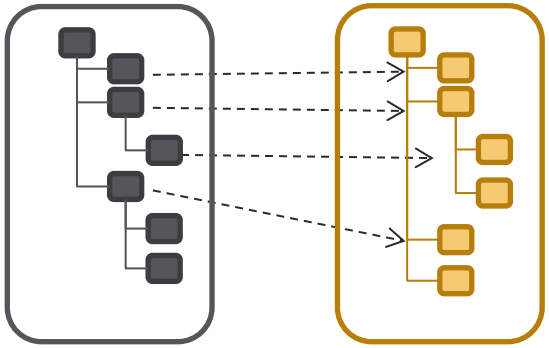


10.2 M030

Available March 2015

Summary of Updates for the 10.2 M030 Release

Integration to Service Parts Information to create IPD Data Modules

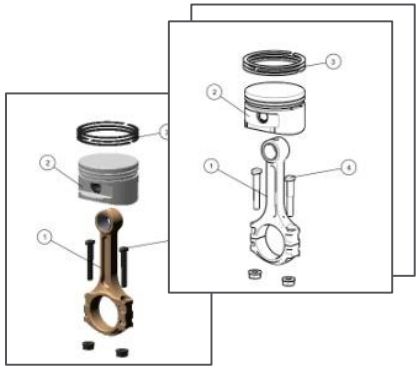


eBOM/sBOM

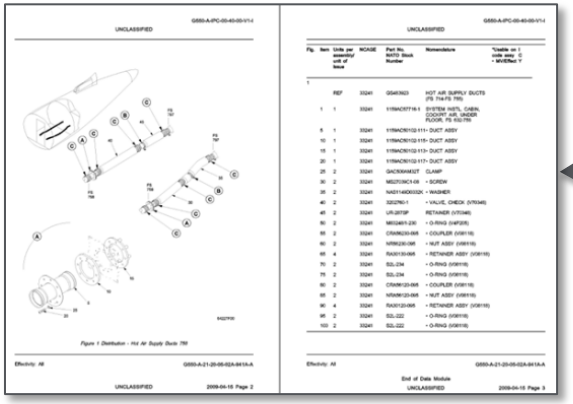
spareBOM

Item	Part #	Part Name	Qty	Notes
1	200-1100	Connecting_Rod	4	Always replace hardware (200-5100)
2	300-1100	Piston	4	
	300-1150	Piston (.50 Oversize)	4	Requires 100-1150
3	100-1100	Ring_Set	4	
	100-1150	Ring_Set (.50 Oversize)	4	Use with 300-1150 Only
4	200-5100	Hardware_Kit	4	

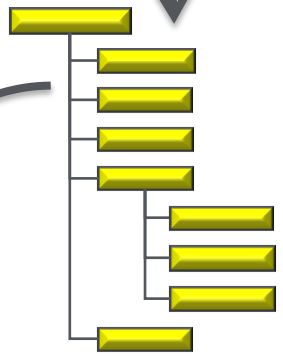
Parts List



3D & 2D Call- Out Illustrations



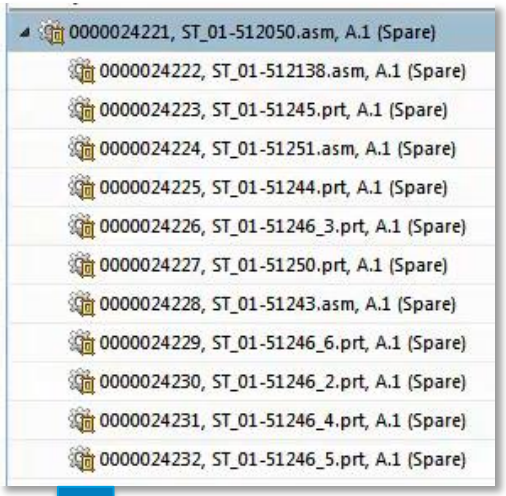
Illustrated Part Data Modules

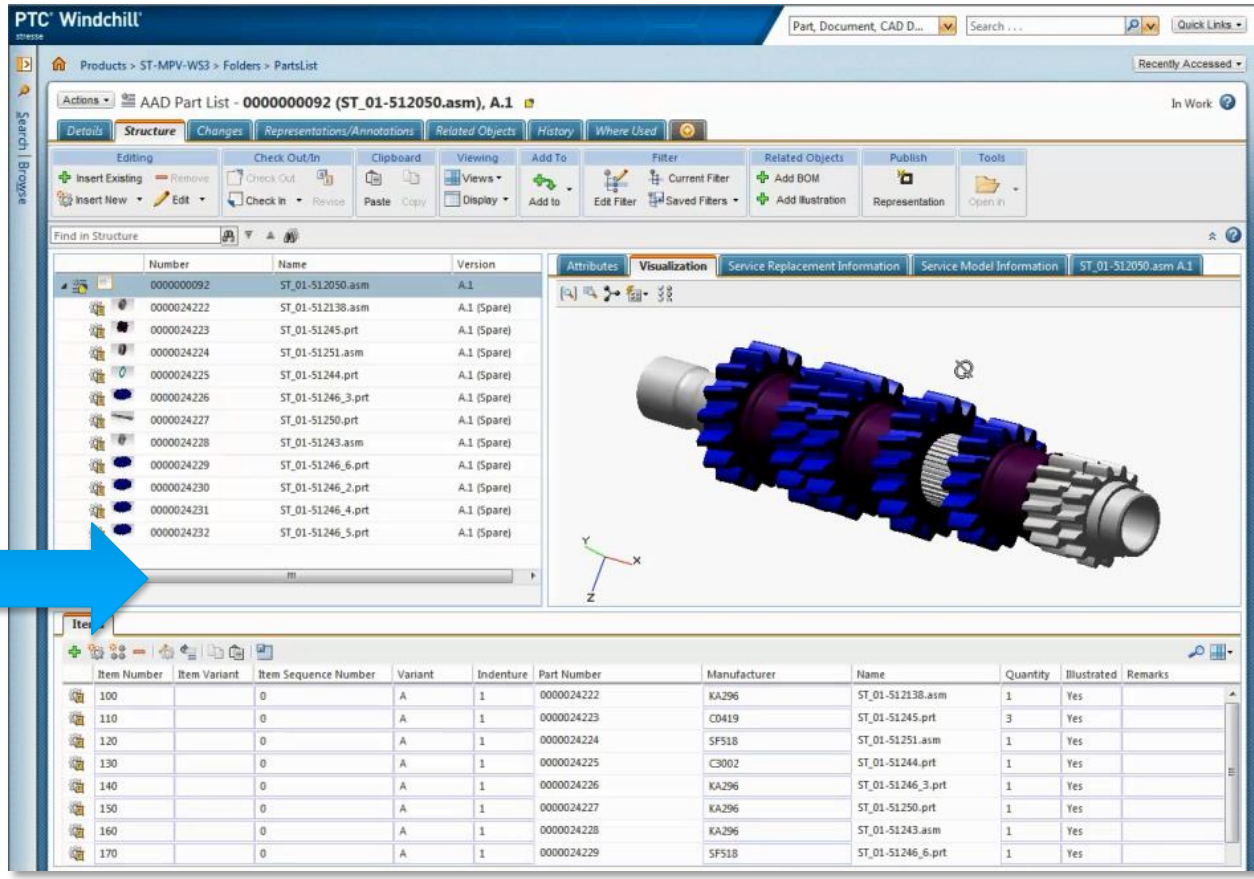


Information / Publication Structure (SNS/PM)

Summary of Updates for the 10.2 M030 Release

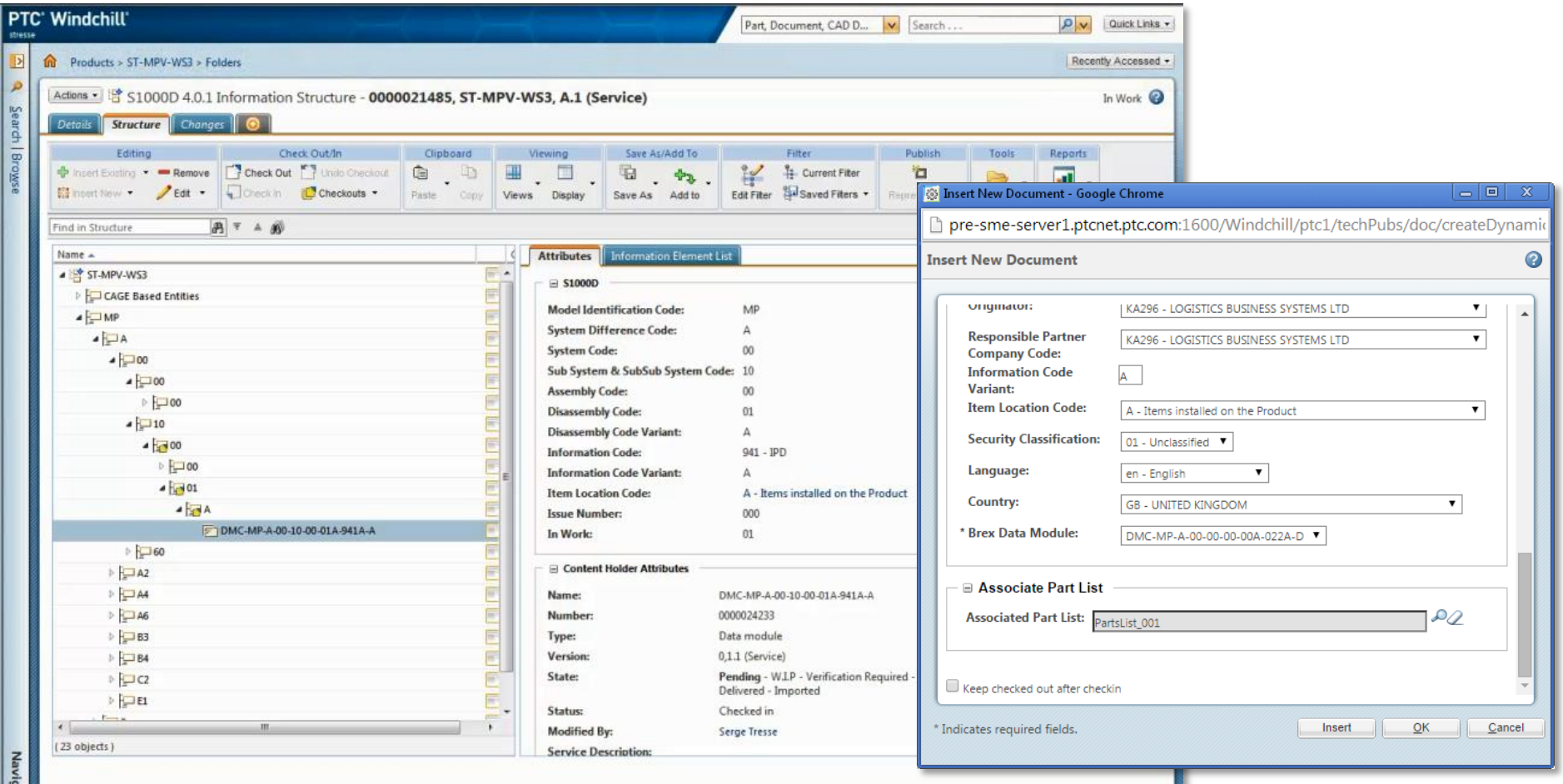
- Integration to Service Parts Information to create IPD Data Modules
  - eBOM/sBOM to SpareBOM Transformation and PartsList Generation (Auto or Manual Selection)





Summary of Updates for the 10.2 M030 Release

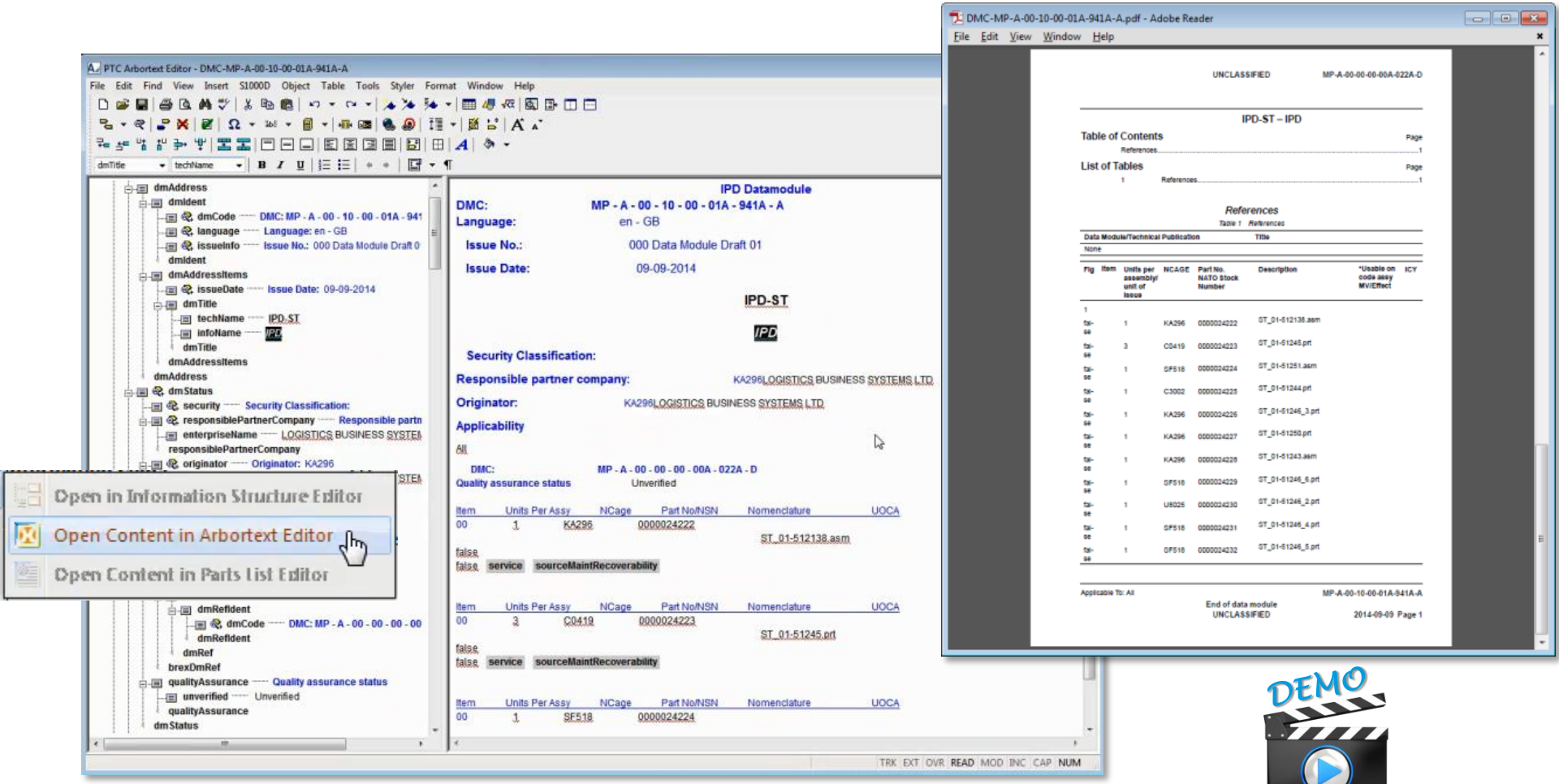
- Integration to Service Parts Information to create IPD Data Modules
  - Creation of S1000D IPD Data Module from SNS Tree and Association with PartsList



Forward Looking Information Subject to Change

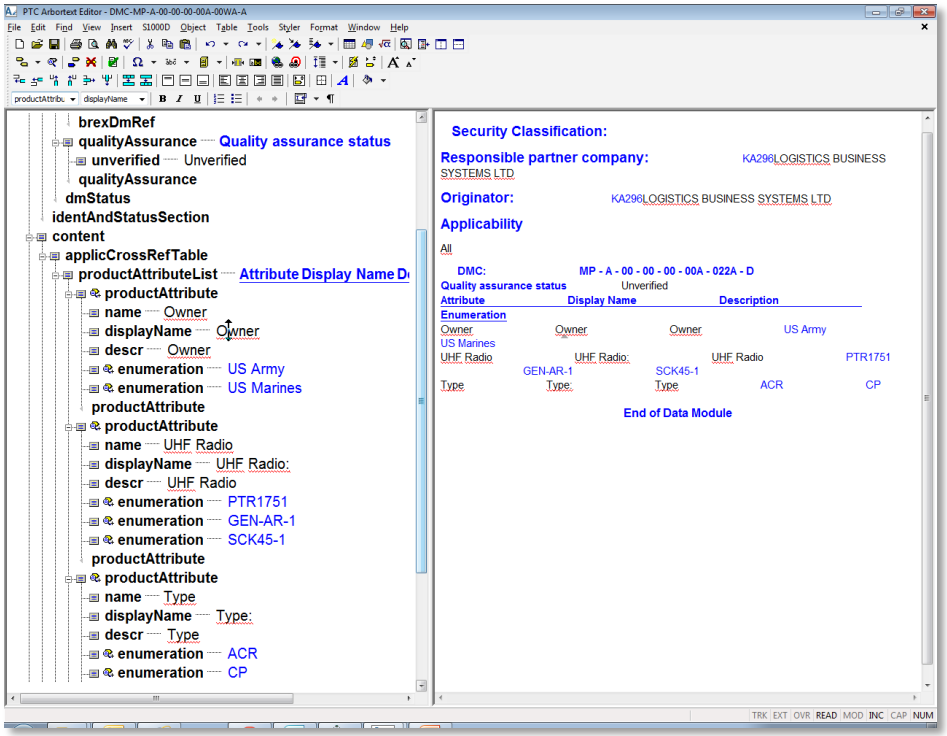
Summary of Updates for the 10.2 M030 Release

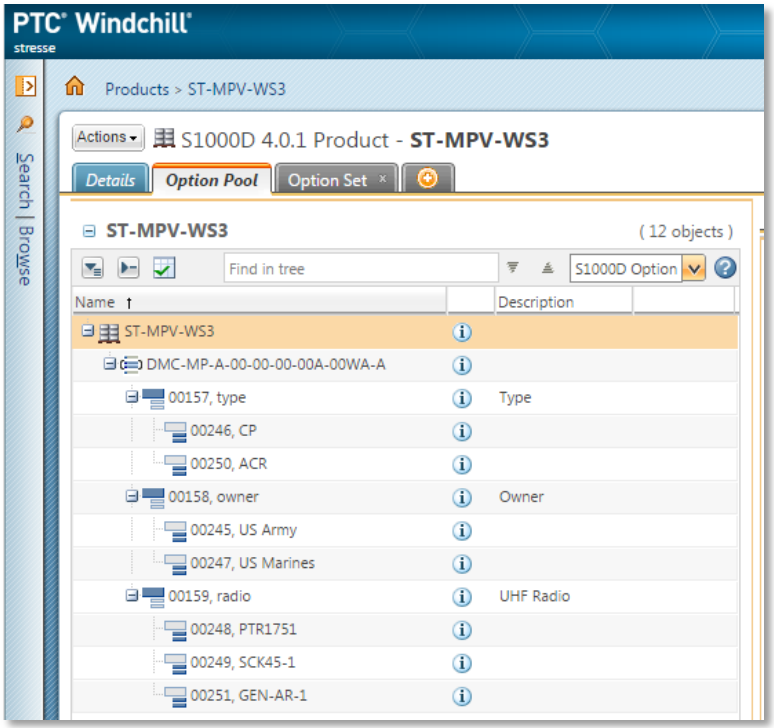
- Integration to Service Parts Information to create IPD Data Modules
  - From the PartsList, Automatic Generation of the IPD DM Content and PDF Publication



Summary of Updates for the 10.2 M030 Release

- Import and management of Applicability ACT/CCT/PCT
  - Includes import of ACT/CCT/PCT
  - Management of the Applicability options now controlled through the Windchill UI
  - Synchronisation of the Data Module Level Applicability to the Manage Applicability dialog
  - To come : Publishing with Applicability/inline filtering
  - To come : CIR External Applicability as CIR is not part of this release.



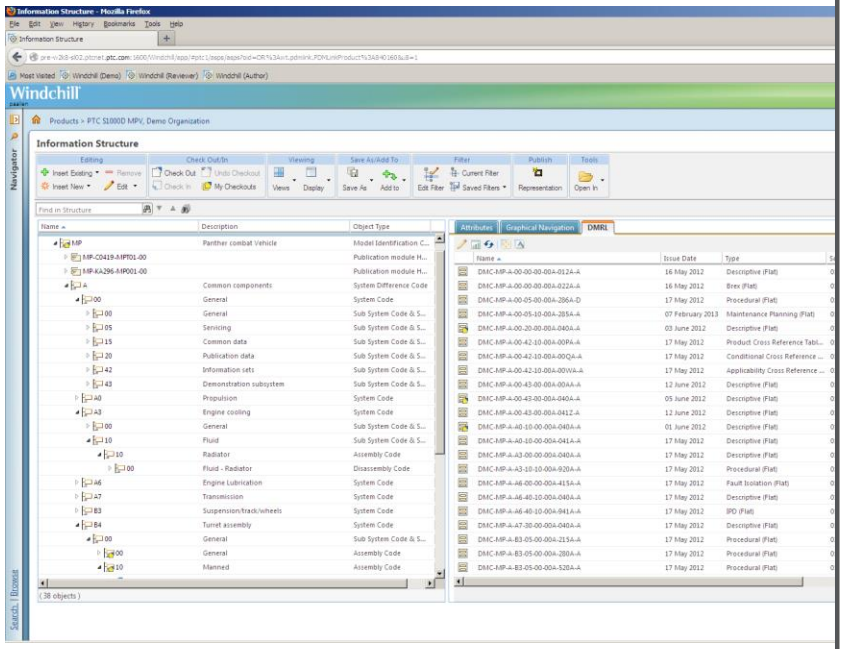


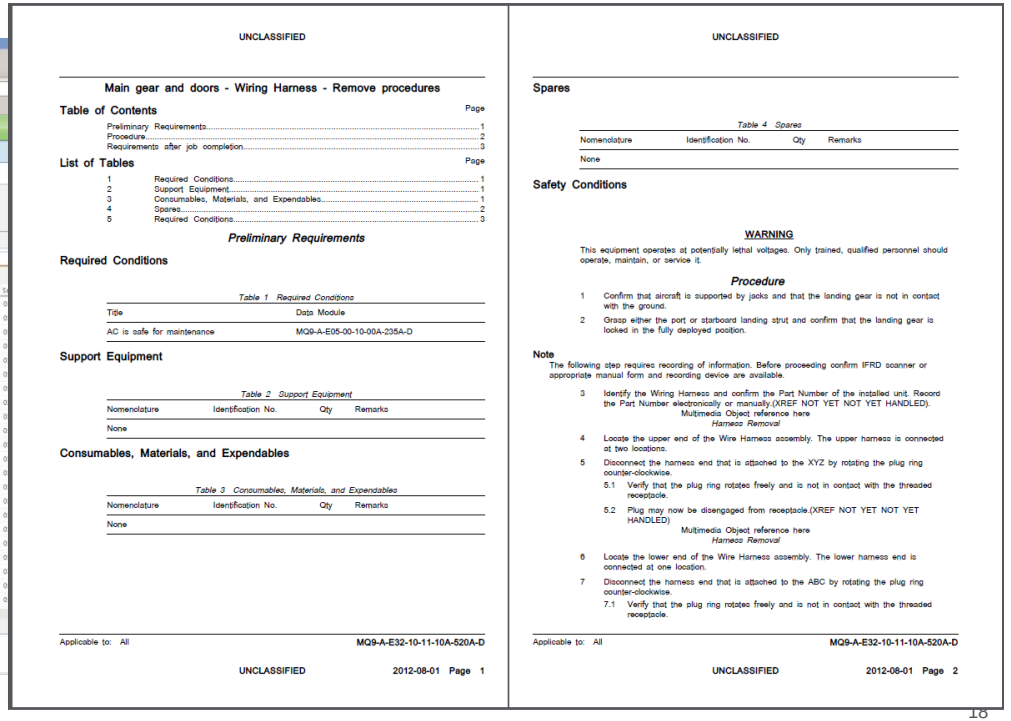
Publishing & Delivery with Arbortext Publishing Engine

PTC®

Windchill based Solution for Technical Information Authoring, Content Management, Publishing and Delivery

- Manipulate, Aggregate, and Profile Content
- Enterprise level, server side publishing i.a.w guidelines (e.g. S1000D)
- Publishing processes automated via CSDB workflows
- Style sheets customizable via Editor Styler Interface





UNCLASSIFIED

Main gear and doors - Wiring Harness - Remove procedures

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Procedure....2
Requirements after job completion....3

List of Tables Page

1 Required Conditions....1
2 Support Equipment....1
3 Consumables, Materials, and Expendables....1
4 Spares....2
5 Required Conditions....3

Preliminary Requirements

Required Conditions

Table 1 Required Conditions

Title	Data Module
AC is safe for maintenance	MQ9-A-E05-00-10-00A-235A-D

Support Equipment

Table 2 Support Equipment

Nomenclature	Identification No.	Qty	Remarks
None			

Consumables, Materials, and Expendables

Table 3 Consumables, Materials, and Expendables

Nomenclature	Identification No.	Qty	Remarks
None			

Applicable to: All MQ9-A-E32-10-11-10A-520A-D

UNCLASSIFIED 2012-08-01 Page 1

UNCLASSIFIED

Spares

Table 4 Spares

Nomenclature	Identification No.	Qty	Remarks
None			

Safety Conditions

WARNING

This equipment operates at potentially lethal voltages. Only trained, qualified personnel should operate, maintain, or service it.

Procedure

1 Confirm that aircraft is supported by jacks and that the landing gear is not in contact with the ground.

2 Grasp either the port or starboard landing strut and confirm that the landing gear is locked in the fully deployed position.

Note

The following step requires recording of information. Before proceeding confirm IFRD scanner or appropriate manual form and recording device are available.

3 Identify the Wiring Harness and confirm the Part Number of the installed unit. Record the Part Number electronically or manually.(XREF NOT YET NOT YET HANDLED).
Multimedia Object reference here
Harness Removal

4 Locate the upper end of the Wire Harness assembly. The upper harness is connected at two locations.

5 Disconnect the harness end that is attached to the XYZ by rotating the plug ring counter-clockwise.

5.1 Verify that the plug ring rotates freely and is not in contact with the threaded receptacle.

5.2 Plug may now be disengaged from receptacle.(XREF NOT YET NOT YET HANDLED)
Multimedia Object reference here
Harness Removal

6 Locate the lower end of the Wire Harness assembly. The lower harness end is connected at one location.

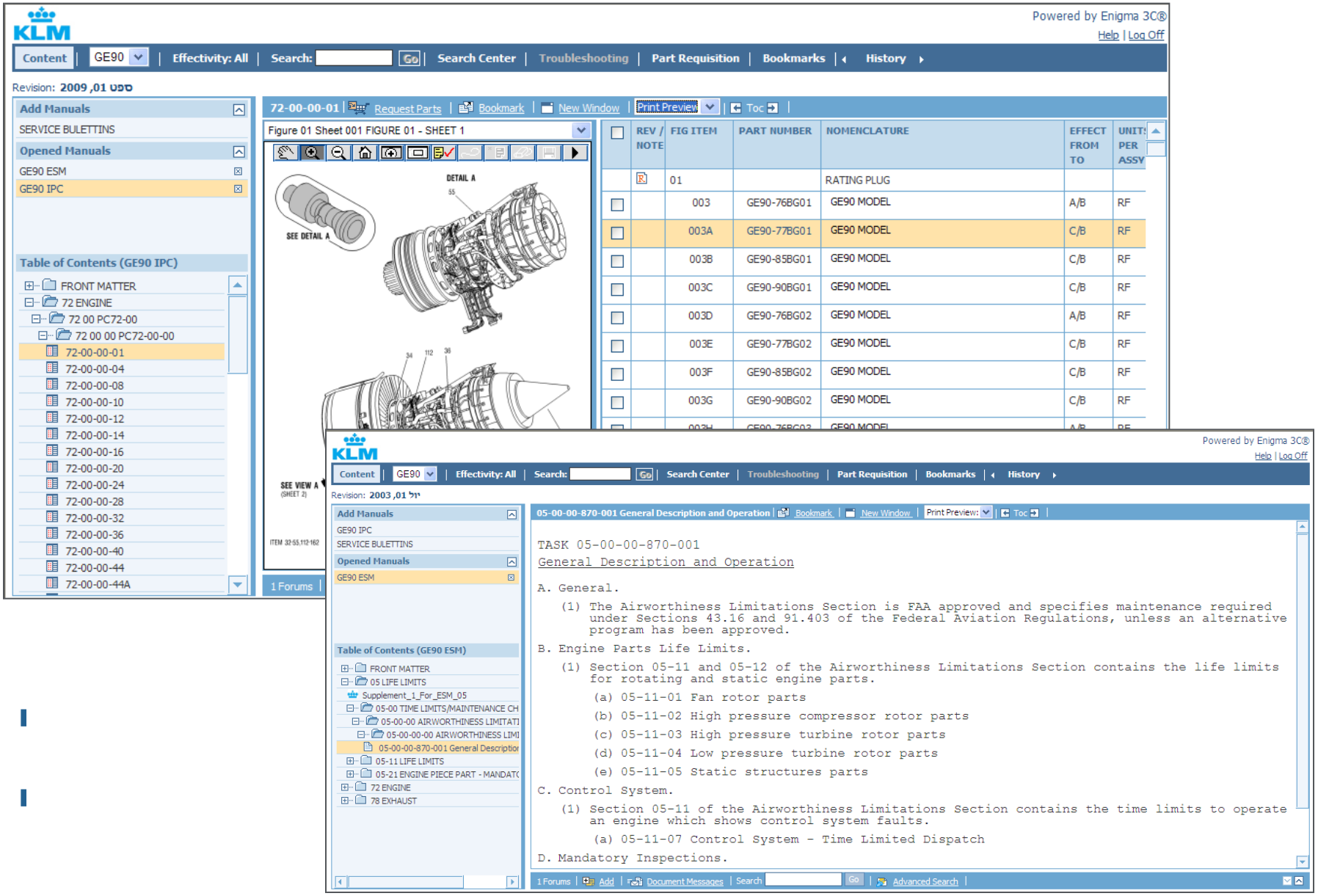
7 Disconnect the harness end that is attached to the ABC by rotating the plug ring counter-clockwise.

7.1 Verify that the plug ring rotates freely and is not in contact with the threaded receptacle.

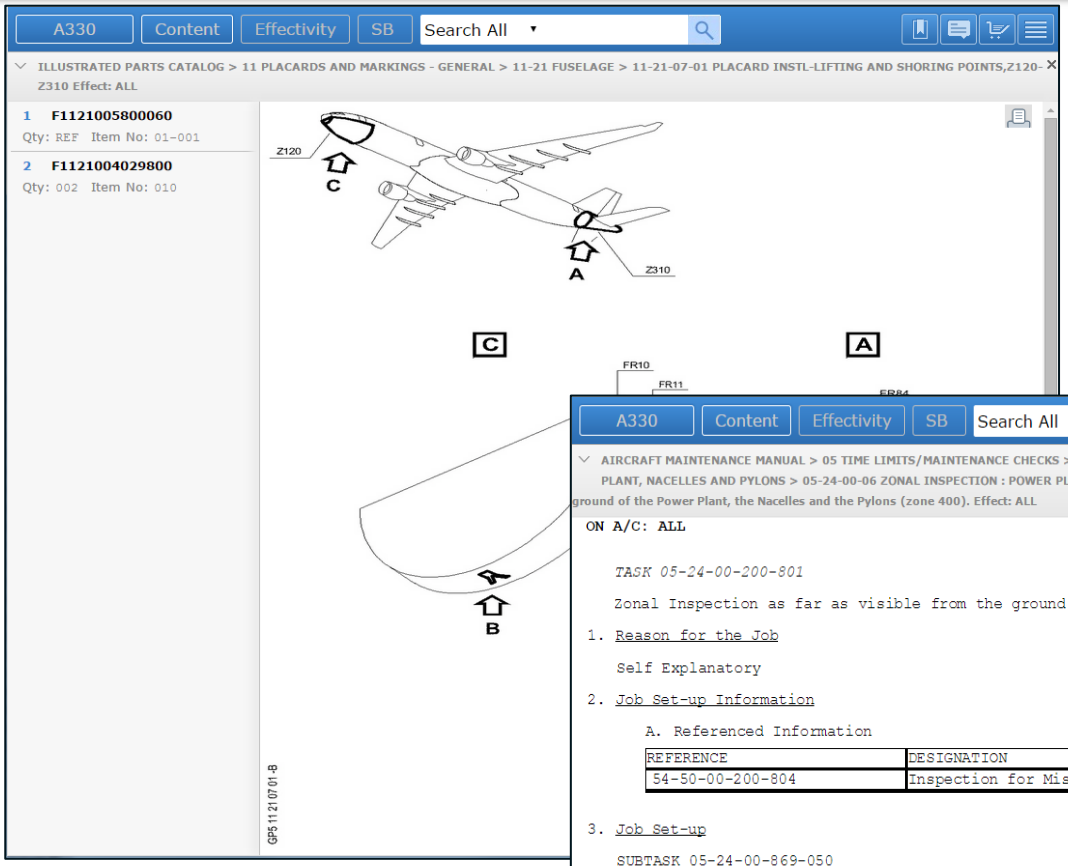
Applicable to: All MQ9-A-E32-10-11-10A-520A-D

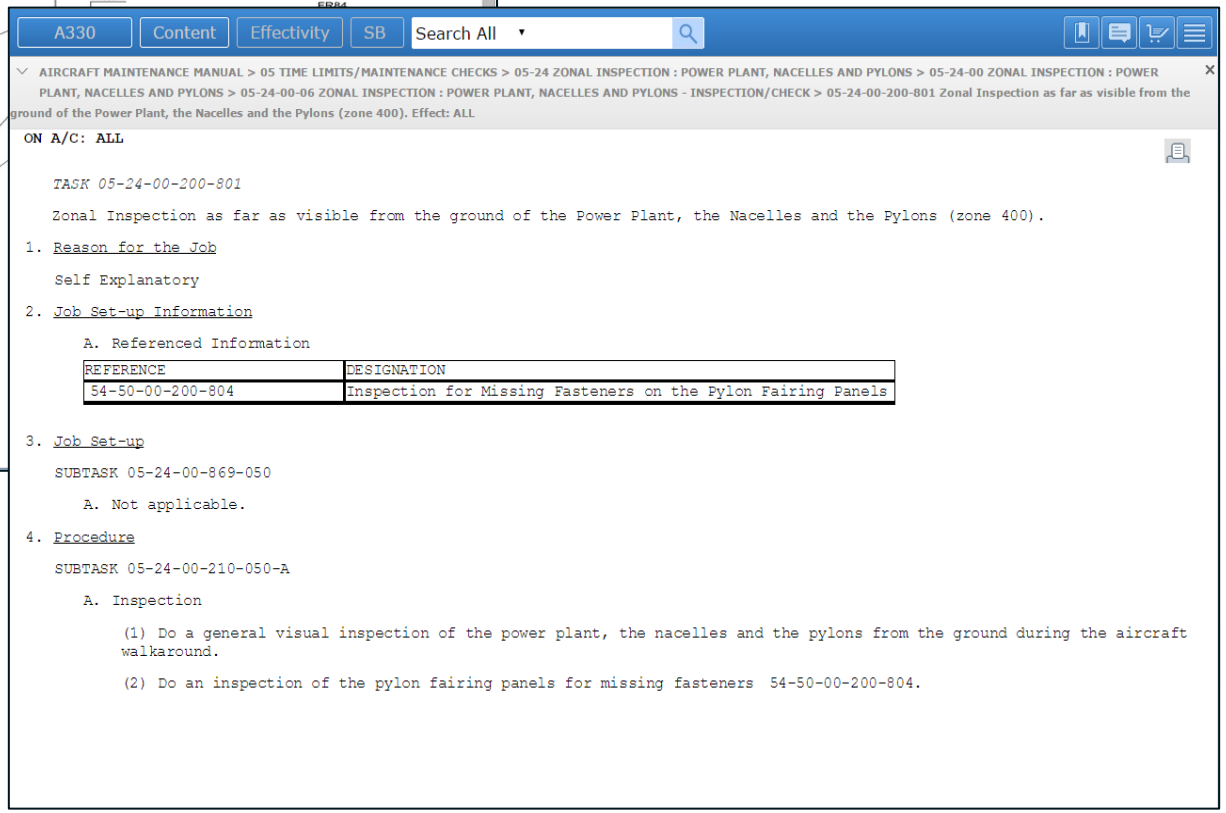
UNCLASSIFIED 2012-08-01 Page 2

InService A&D – IETM



InService A&D – Mobile UI





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