GPSL

S1000D Solutions for Aerospace and Defence

An introduction **to GPSL**

Who we are

Experts in content technologies that support the creation, management and distribution of complex content

Our goal

To build long-lasting relationships with customers and work to create a more interactive world powered by intuitive content.

Our Aerospace and Defense Customers

We offer integrated solutions to support our customers working with the S1000D specification within Aerospace and Defense

About Our Speaker

Jake Memery, Xignal S1000D Product Manager.

- 25 years in Aerospace and Defence.

- Practitioner of S1000D for 20 years.

- Worked with various global companies: Airbus, Leonardo, Eurocopter, Cobham Aviation Services, Thales.

- Numerous appointments in various roles as an independent contractor/service provider: Tech Author, S1000D Consultant, Tech Pubs Manager.

- Founder & former Director Daedalus Aerospace (tech pubs offload house).

- Founder & former Director TechDocX (S1000D tools and consultancy)

The S1000D Specification

What is S1000D?

- An **international specification that defines how to produce technical information** for use in the support of operations, maintenance and training for a Product.

- Based on **XML (eXtensible Markup Language)** and is non-proprietary.

- Uses **Data Modules (DMs)** - small chucks of data which can be reused across the dataset

- All these DMs inter-reference each other, to avoid duplication of data throughout the dataset, and to ensure only one 'single point of truth'

GPSL

Purely paper based

- Used by the US aircraft industry
- Breaks down aircraft into systems, sub-systems equipment etc. in accordance with a pre-defined standard numbering scheme.

S1000D

A move to digital

- In 1994: Creation of the ATA specification 2100 – digital data standards for aircraft support
- In 2000: Creation of the ATA specification 2200 (Information Standards for Aviation Maintenance) based on the two specifications ATA 100 and ATA 2100.

S-SERIES

1956

1980

2000

Now

ATA 100

An International Spec

An international Specification for Technical Publications to harmonize all national and international specs into a specification based on ATA spec 100.

ATA 2200

Integrated Product Support (IPS) Specifications

- 2001: American Industry Association (AIA) joined
- 2005: Civil aviation joined
- Free of charge common international specification developed by ASD, AIA and ATA
- Evolved to become the S-series Integrated Product Support (IPS) specifications

S1000D integrations

S1000D can be used independently of any other S-Series specification but can also be integrated into a wider S-series implementation, where data gathered from other S-Series activities are fed into the S1000D technical publication process.

S3000L
Logistics
Support
Analysis

S2000M
Material
Management

S4000P
Preventative
Maintenance
Analysis

S1000D
Technical
Documentation

S6000T
Training
Information

Why S1000D?

Data reuse

- Reduces duplication

- Increases efficiency

- Enables multi-channel publishing & delivery

- Ensures consistency and standardization

Decreased costs

- Reduces the time to delivery

- Multiple publications from the same source

Interoperability

- Mature Specification

- Global adoption

- Collaboration (one format, one standard)

Our S1000D Solutions

About Our Speaker

Charles Angione, GPSL CTO.

- 20 years of experience managing enterprise technology solutions for domestic and international markets.

- Started career as a Logistics Engineer for Harris Corporation's Government Communications Systems Division in Palm Bay, Florida.

- Served as Chief Architect for Arbortext and a Technology Fellow for Parametric Technology Corporation (PTC).

- Active in the international communities surrounding the Standard Generalized Markup Language (SGML) and the Extensible Markup Language (XML).

- Chief Technology Officer at TechPubs Global, a PTC Global Airline Industry Platinum Partner.

- Active participant for 6 years in the Data Exchange Standard for Flight Operations ATA Spec 2300.
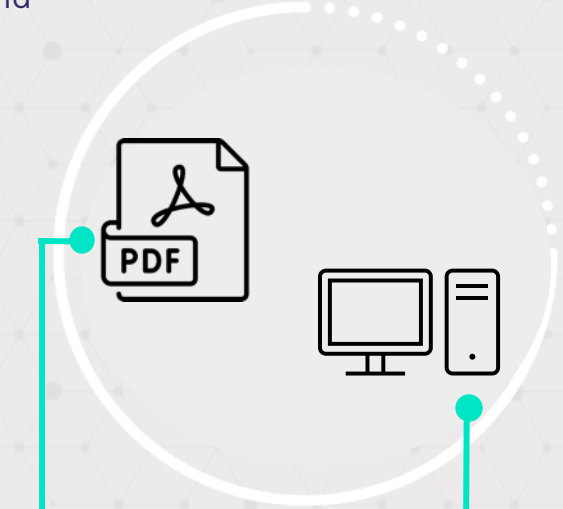
S1000D **for PTC Windchill**

Create

- Arbortext Editor
- Creo Illustrate

Manage

- S1000D CDSB for PTC Windchill

Deliver

- Arbortext Publishing Engine
- ViewPoint S1000D IETP

Supports S1000D Issue 2.3 to 5.0

Xignal **S1000D Suite**

Create

- Integrated browser-based WYSIWYG S1000D editor
- Creo Illustrate (or other graphics tool)
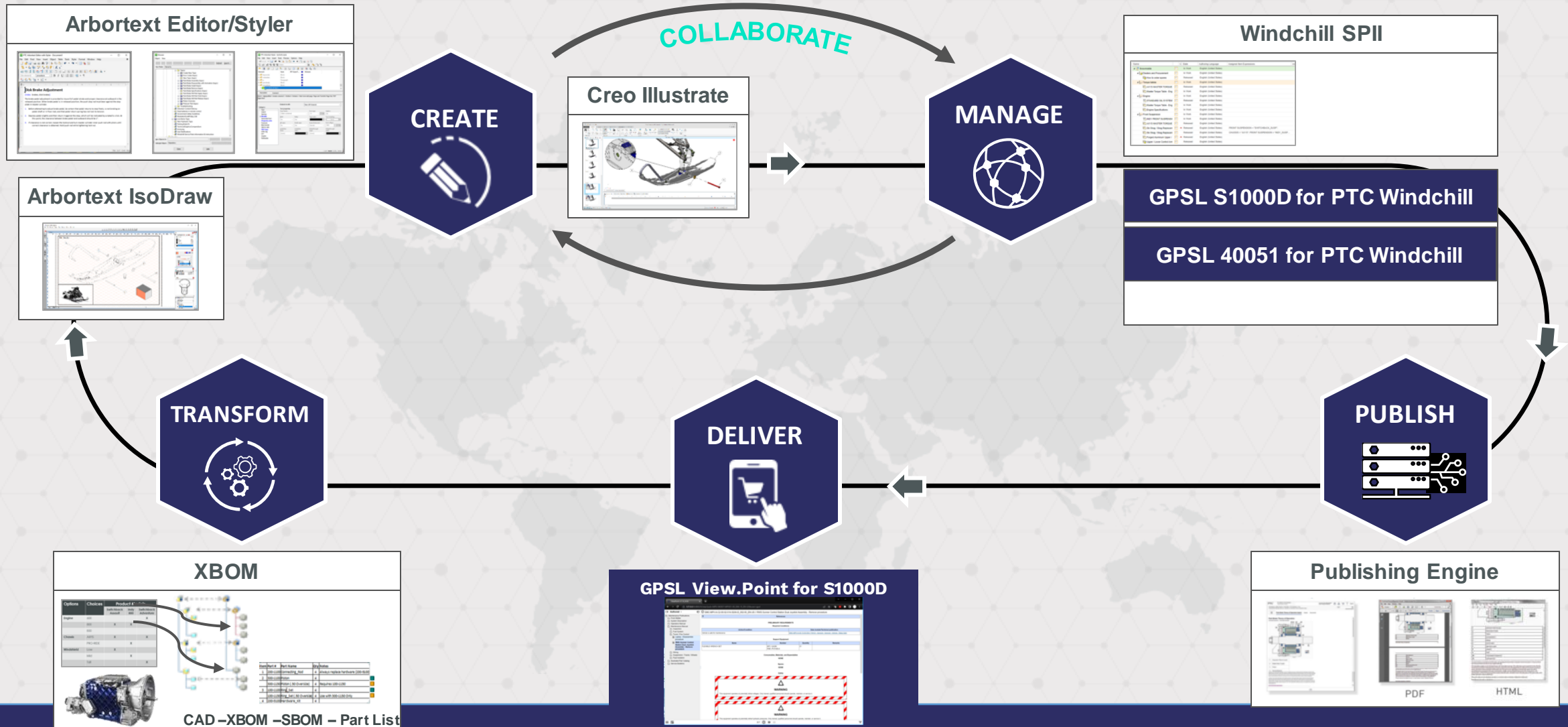
Manage

- Integrated S1000D CSDB

Deliver

- Integrated publication module builder for S1000D & ATA Spec 1000BR PDF
- Xignal View (HTML output)
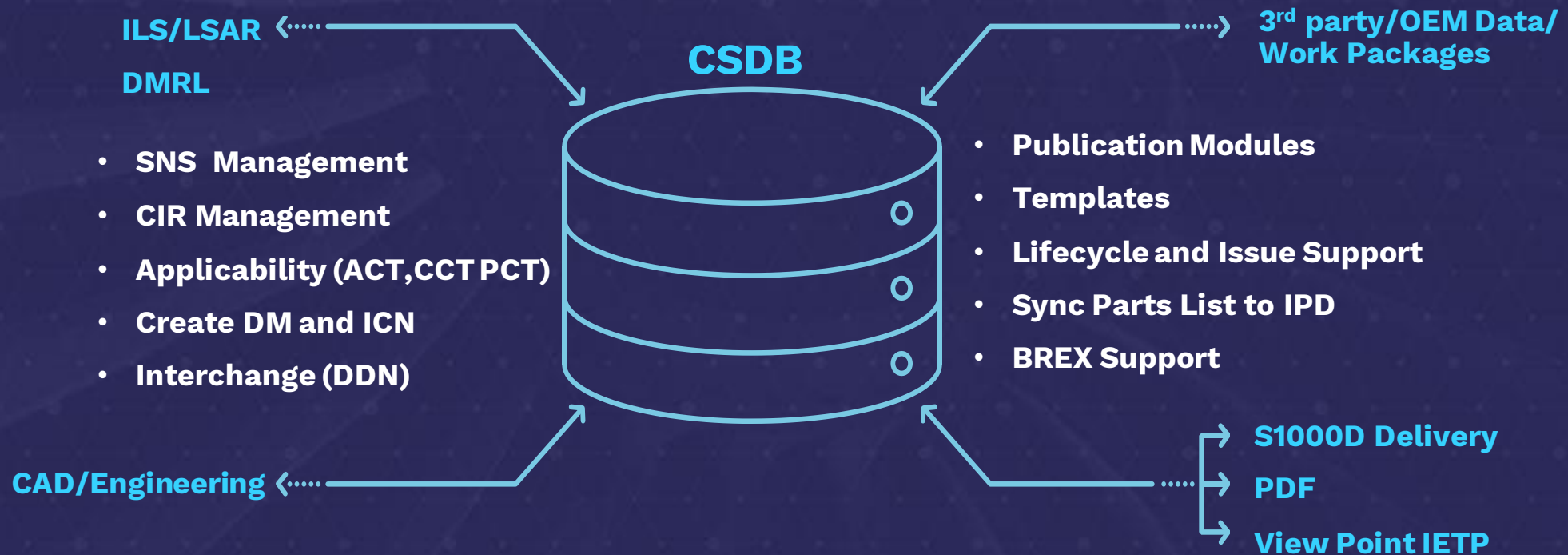
Supports S1000D Issue 4.0 to 5.0

GPSL S1000D for PTC Windchill

S1000D for PTC Windchill — An End-to-End Digital Thread

COLLABORATE

Arbortext Editor/Styler

Creo Illustrate

Windchill SPII

CREATE

MANAGE

GPSL S1000D for PTC Windchill

GPSL 40051 for PTC Windchill

Arbortext IsoDraw

PUBLISH

TRANSFORM

DELIVER

XBOM

CAD –XBOM –SBOM – Part List

GPSL View.Point for S1000D

Publishing Engine

PDF   HTML

S1000D **CSDB**

- Lifecycle, version control and workflow management
- Information / Publication Service Structures
- Information element management (DM, PM, ICN)
- Filtering based on applicability and technical conditions for context specific

ILS/LSAR

DMRL

- **SNS Management**
- **CIR Management**
- **Applicability (ACT,CCT PCT)**
- **Create DM and ICN**
- **Interchange (DDN)**

CAD/Engineering

CSDB

3rd party/OEM Data/ Work Packages

- **Publication Modules**
- **Templates**
- **Lifecycle and Issue Support**
- **Sync Parts List to IPD**
- **BREX Support**

S1000D Delivery

PDF

View Point IETP

S1000D Standard Numbering System (SNS)

Problem Report, Chang... ▾   Search . . . 🔍 ▾   Quick Links ▾

Recently Accessed ▾

Actions ▾   S1000D 5.0 Information Structure - **0000053747, S1000D 5.0 BIKE Data, U17V0, A.2 (Service)**   In Work ❓

Details	Structure	Changes	⊕

Editing	Check Out/In	Clipboard	Viewing	New/Add To	Filter	Publish	Tools	Reports
Insert Existing ▾ Remove	Check Out Undo Checkout	Paste	Views	New	Current Filter ▾	Representation	Open In	Reports Export
Insert New ▾ Edit ▾	Check In Checkouts ▾	Copy	Display	Add to	Saved Filters ▾			

Find in Structure ⌄ ⌃ All   ⌃ ❓

Name	C	Technical Name	
▲ 🗂 S1000D 5.0 BIKE Data			
▷ 🗂 CAGE Based Entities			
▷ 🗂 S1000DBIKE			
▷ 🗂 BRAKE			
▲ 🗂 S1000DLIGHTING			
▲ 🗂 AAA			
▲ 🗂 D00			
▲ 🗂 00		General	
▲ 🗂 00		General	
▷ 🗂 00		General-General	
▷ 🗂 01			
▲ 🗂 02			
▲ 🗂 AA		Lights	
📄 DMC-S1000DLIGHTING-AAA-D00-00-0(			

Attributes	Information Element List	Impacted By

✏️ 📊 🔄 📝 🗎 ❓   ⊞ ▾ ❓

	Name ▲	Issue Number	In Work	Issue Type	State
🗐	DMC-S1000DLIGHTING-AAA-D00-00-00-02AA-012A-A	003	00	status	Issued

Displaying 1 - 1 of 1
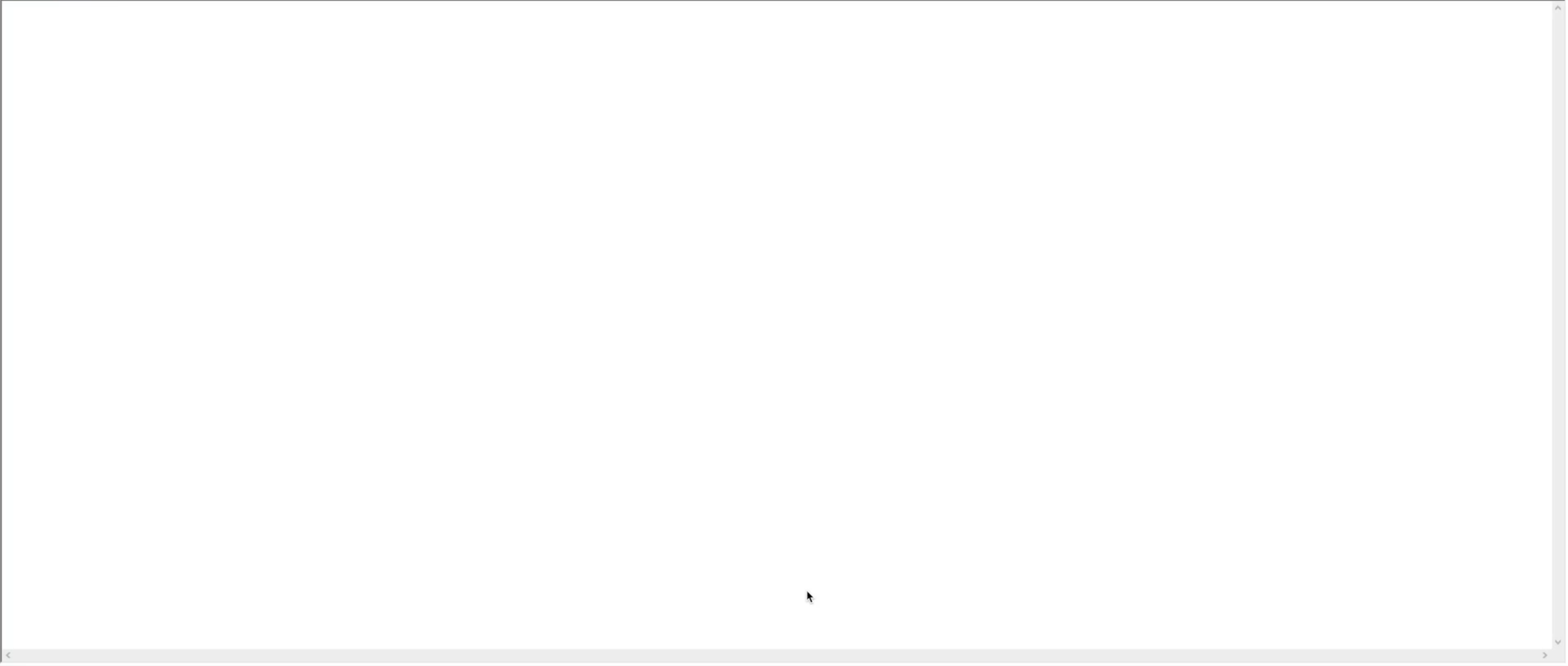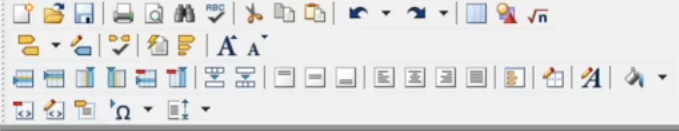
S1000D Creation with **Arbortext Editor**

- Functions as primary author interface to the solution
- Valid content based on required structure
- Windchill integration for S1000D Processes and Seamless Content Management
- Contains authoring "Wizards" for S1000D
- Familiar Word processing capabilities
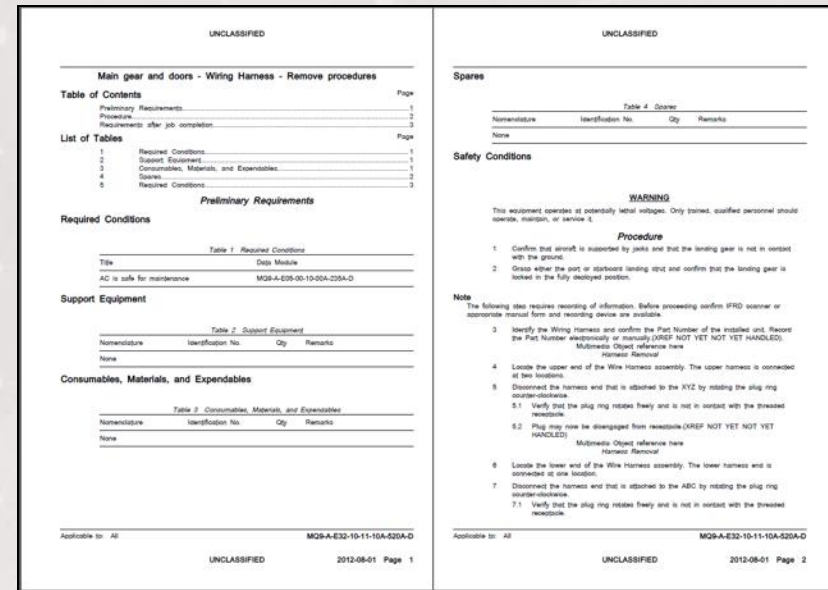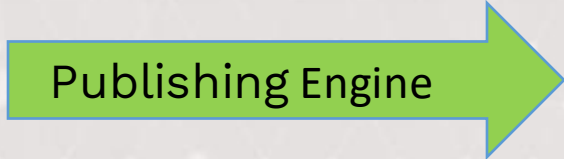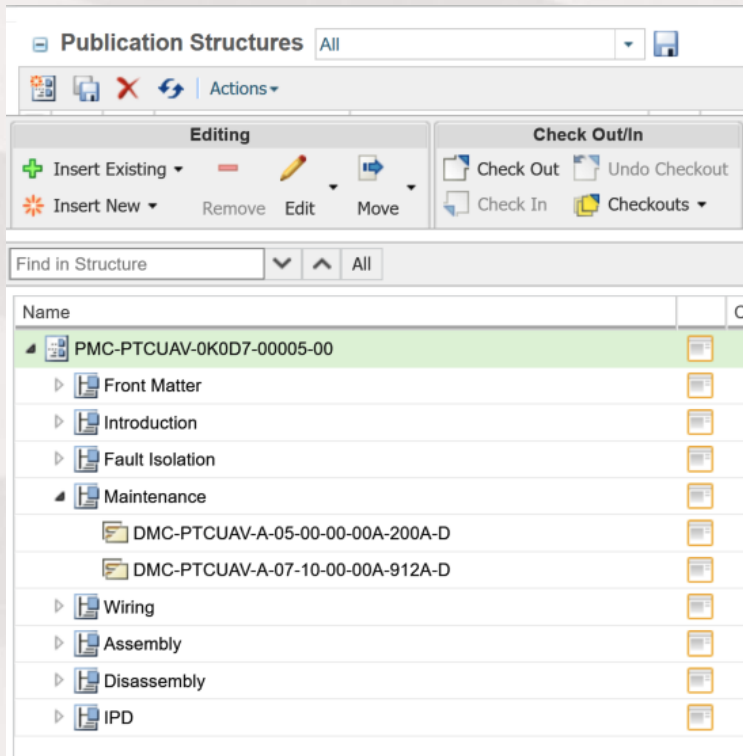- Real time validation
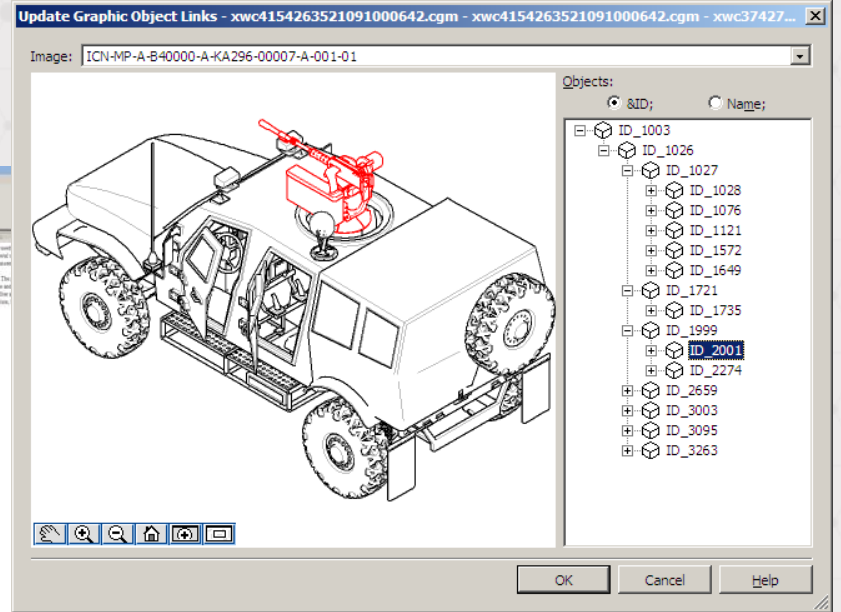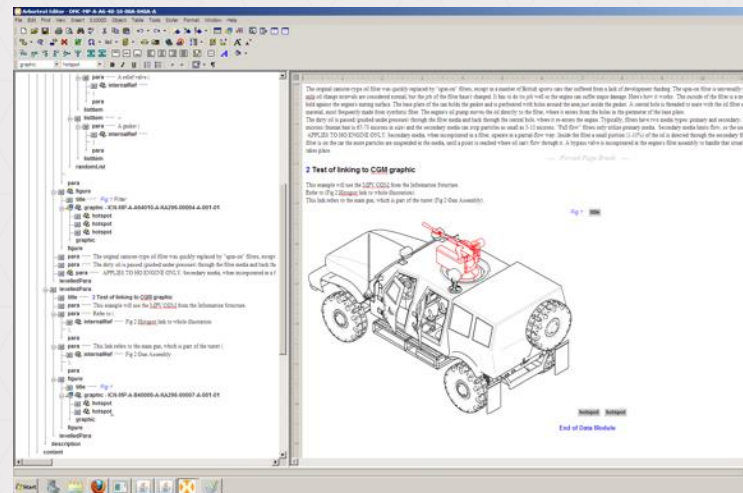
Deliver S1000D

ptc· arbortext· publishing engine

- Enterprise level, server side publishing to PDF and IETP
- Generate configuration specific publications
- Automated Publishing Processes
- Style sheets customizable with Arbortext Styler

Publishing Engine

Problem Report, Chang...

Search . . .

Quick Links ▾

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- ⊟ 🗔 S1000D 5.0 BIKE Data, U17V0
  - ○ Details
  - ○ Information Structure
  - ○ Publication Structures
  - ○ Folders
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  - ○ Network
  - ○ Plans
  - ○ Packages
  - ○ Team
  - ○ Tasks
  - ○ Change Monitor
  - ○ Discussions
  - ○ Templates
  - ○ Reports
  - ○ Utilities
- ⊞ 🗔 S1000D 4.1 BIKE Data, U17V0
- ⊞ 🗔 DART Jet (40051), U17V0
- ⊞ 🗔 DART Jet (S1000D 4.2), U17V0
- ⊞ 🗔 UAV, U17V0
- ⊞ 🗔 S1000D Lookup Library, U17V0

Customize ▾

(471 objects)

Search in table 🔍

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	State	Status	Deadline	Assigned ↓	C
- DMC-DRTJ-A-26-00-00-00A-130A-A, U17V0, 0,1.2	Verification Required	Potential		2023-08-01 09:33 EDT	
- ICN-PTCUAV-A-092000-A-C0419-00000-A-001-01, U17V0, A.1	Verification Required	Potential		2022-09-20 11:13 EDT	
- DMC-PTCUAV-A-09-20-00-00A-010A-D, U17V0, 0,1.3	Work In Progress	Potential		2022-09-19 12:40 EDT	
- DMC-PTCUAV-A-05-00-00-00A-200A-D, U17V0, 0,1.2	Verification Required	Potential		2022-09-19 12:03 EDT	
- DMC-PTCUAV-A-05-00-00-00A-200A-D, U17V0, 0,1.2	Verification Required	Potential		2022-09-19 12:03 EDT	
- DMC-PTCUAV-A-05-00-00-00A-200A-D, U17V0, 0,1.2	Verification Required	Potential		2022-09-19 12:03 EDT	
- DMC-PTCUAV-A-33-02-01-00A-051A-D, U17V0, 0,1.1	Work In Progress	Potential		2022-09-19 11:42 EDT	
- DMC-PTCUAV-A-32-60-00-10A-720A-D, U17V0, 1,1.1	Work In Progress	Potential		2022-09-19 11:42 EDT	
- DMC-PTCUAV-A-32-60-00-10A-411A-D, U17V0, 0,1.1	Work In Progress	Potential		2022-09-19 11:42 EDT	
- DMC-PTCUAV-A-32-60-00-10A-520B-D, U17V0, 0,1.1	Work In Progress	Potential		2022-09-19 11:42 EDT	
- DMC-PTCUAV-A-32-20-00-00A-040A-D, U17V0, 0,1.1	Work In Progress	Potential		2022-09-19 11:42 EDT	
- DMC-PTCUAV-A-32-10-00-01A-365A-D, U17V0, 0,1.1	Work In Progress	Potential		2022-09-19 11:42 EDT	
- DMC-PTCUAV-A-33-02-01-00A-056A-D, U17V0, 0,1.1	Work In Progress	Potential		2022-09-19 11:42 EDT	
- DMC-PTCUAV-A-00-00-00-00A-018A-D, U17V0, 0,1.1	Work In Progress	Potential		2022-09-19 11:42 EDT	
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- DMC-PTCUAV-A-00-00-00-01A-941A-D, U17V0, 0,1.1	Work In Progress	Potential		2022-09-19 11:42 EDT	
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- DMC-PTCUAV-A-00-20-00-00A-012A-D, U17V0, 0,1.1	Work In Progress	Potential		2022-09-19 11:42 EDT	

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Navigator

- Built from ground–up with aim to *simplify* S1000D

- Intuitive tool means reduced need for extensive training on both S1000D and XML

- Instant access, with no company IT support required

- Built as collaboration environment, meaning external stakeholders can be part of workflow

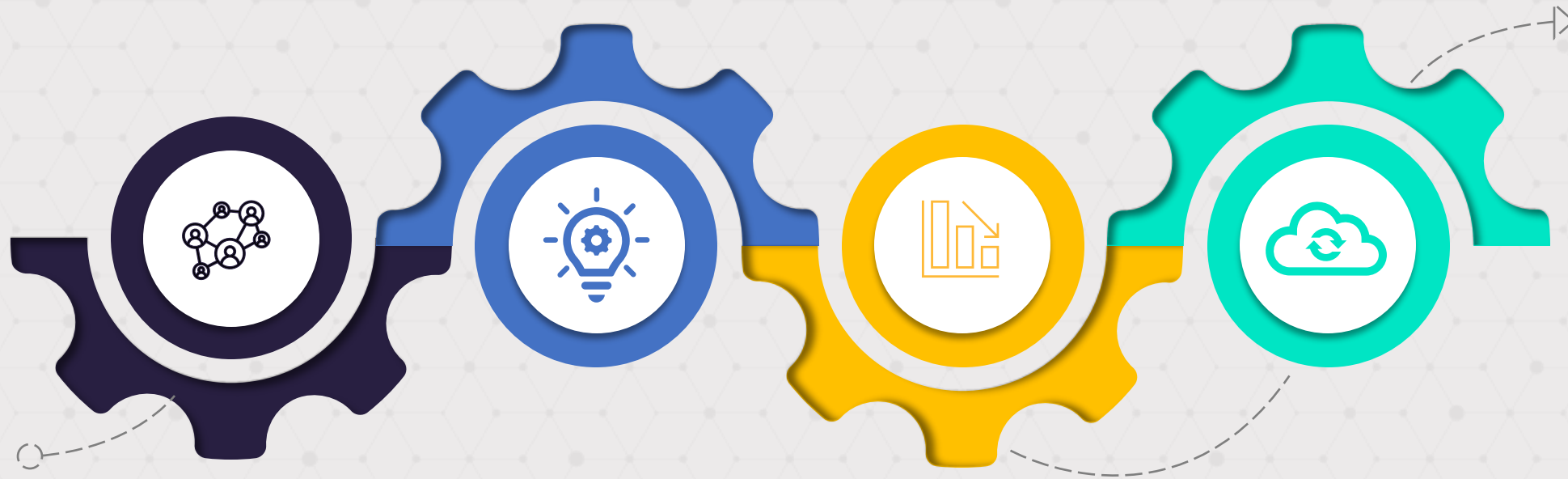# Xignal S1000D Suite

DEMO

S1000D In Summary

Improved Interoperability

By adopting a common standard that promotes content sharing among the aerospace and industrial sector, the military, and the supply chain that links them.

Increased Efficiency

From working with a module based data structure and grounding S1000D principle of data re-use which drives consistency across your data sets.

Reduced costs

As a result of shorter document creation, update & release cycles from the efficiencies of the S1000D Spec and the superior functionality in the Xignal S1000D Suite.

Scalability

Achieved from the adoption of our flexible S1000D solutions. Secure, robust and ready to evolve as your business grows.