Teamcenter Digital Lifecycle Management Solutions
Enterprise Knowledge Management

Agenda

Teamcenter Content Management Overview
- Why Tech Pubs support
- What is Content Management
- Basic functionality
- Availability

Demo
- Review interface
- Build document structure
- Author new content and reference graphics
- Publish

Q&A
Why Technical Pubs Support?

The **volume of product information** that must be published when the product goes to market is resulting in missed product launches and increased production costs.

Challenges

- **Diverging Documentation**: Keeping up with **product changes**
- **Launch Delays**: **Concurrent development** of product and documentation
- **Amplification of the Global Trend**: Managing translation content
- **Compliance** with Federal and Industry publications standards
Business Challenge

“We have a number of products that have shared features, and one of the biggest challenges we are currently facing is developing targeted documentation. We are planning to switch to a robust content management system that would help us in developing customized documentation for our customers.”

Bonni Graham, Scantron Corporation

“...Manufacturers are increasing their focus on product documentation and making it an integral part of the entire product lifecycle.

Goals of Improved Technical Documentation

<table>
<thead>
<tr>
<th>Goal</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faster time to market</td>
<td>61%</td>
</tr>
<tr>
<td>Product development cost reduction</td>
<td>58%</td>
</tr>
<tr>
<td>Higher quality product documentation</td>
<td>47%</td>
</tr>
<tr>
<td>Promote reuse and efficiencies</td>
<td>47%</td>
</tr>
<tr>
<td>Identify and automate documentation updates based on product changes</td>
<td>44%</td>
</tr>
</tbody>
</table>

Source: AberdeenGroup, June 2006
Technical Documentation Challenges

**Acquire**
- Multiple sources & formats of input data
- On critical path but dependant on engineering data flow

**Create**
- Managing publications for each product variant
- Maximize element reuse for an increasing volume of elements

**Edit**
- Ensure consistent structure, format, and terminology

**Review**
- Managing review and approval processes between departments in an enterprise
- Viewing status of document generation

**Publish**
- Multi-channel output
- Globalization of documentation

**Distribute**

Copyright © Siemens PLM Software Inc. 2008. All rights reserved.
Typical Disconnected Environment

**AUTHOR:**
Create / Layout / Manage Assets

**INPUT:**
Leverage Enterprise Knowledge

**PREVIEW/PUBLISH:**
Export documents for viewing

**VIEW:**
Examine authored documents

Comments

Copyright © Siemens PLM Software Inc. 2008. All rights reserved.
Siemens PLM Software
Manage the generation and publishing of SGML/XML based information

Applications of content management include:

- **Technical and Users Manual** generation – aerospace, defense, automobile, machinery, consumer products
- Online and off-line **Parts and Product Catalogs** generation
- **Work Instructions** Generation
  - Manufacturing Process Sheets
  - Assembly/Disassembly Instructions
  - Service & Repair Manuals
- **MRO** – **Logistics Support documents** (e.g. maintenance or repair instructions)
Teamcenter Content Management

*Multi-Channel Publishing – a.k.a. Re-purposing*

Authors / Subject Matter Experts

- Process Instructions
- Graphics
- Legal
- Warranty
- Recall Notices

Teamcenter Repository

*XML topics/chunks*

English
- User Manual
- Repair Manual
- Service Bulletins
- Recall Notices

Chinese
- User手册
- 修理手册
- 服务公告
- 回忆通知

Automated Assembly and Publishing Server

Multi-Formats

- Print or PDF
- Web
- CD/DVD
- Handheld

Copyright © Siemens PLM Software Inc. 2008. All rights reserved.

Siemens PLM Software
Teamcenter Content Management

Environment Components

Authoring Tools
- JustSystems XMetaL
- Arbortext
- XML Spy
- FrameMaker

Publishing Tools
- XyEnterprise XPP / ContentaView
- Antenna House XSL Formatter
- Arbortext
- Framemaker
- Enigma
- Inmedius

Source Systems
- Teamcenter
- Other

Teamcenter

Storage & Structure
- Content / Components (Text, Graphics, Links)
- Supporting Information

Management Process
- Workflow
- Security
- Structure

Translation System/Vendor
- Idiom
- Trados
Content Management

Leveraging XML/SGML Components

More pieces to manage drives a need for a system to manage them

Facilitates content reuse and collaboration

Supports intelligent content exchange

Structured (SGML or XML)

- Consistent structure - Schema / DTD
- Validation - Schema / DTD
- Multi-channel output - Style sheets
- Archiving in standard format
XML Document Benefits

XML documents can be “smart”
- … more abstract and general
- … have as much metadata as is useful
- … integrated with other information systems

Smart documents can become active participants in business processes
- As computer-readable data objects
- As interactive online documents
- As printed or PDF documents
XML Construction: Data Models

DTDs or Schemas
Data models ensure consistency
- A set of declarations that conform to a particular syntax structure and types of content allowed
- Ensure the ability to format to multiple media using scripts
Allow for interchange
- Between documents
- Between organizations
- Between systems
Teamcenter Content Management

Graphics Management

- Manages multiple instances of a graphic
  - Formats
  - Language
- Captures / Imports Graphics
  - Rich Client
  - User Authoring Session
- Publishes in Context
  - Media
  - Customer
Publication Structure

Publication
- 010999
  - Header
    - 010888
  - Manual
    - 010888
      - Version 1.4
  - GenComp
    - 010879
      - Version 2.0
    - 010877
      - Version 2.0
    - 010887
      - Version 1.0
    - 010879
      - Version 2.0

Published Documents

Document
- 10112345-2
  - 010999
  - Ver 2.1

Composed content
- Renditions
- Annotations
- Publishing results

Print or PDF
CD/DVD
Web
Components are managed by **language**
Users can request translation by
- **Any level** in the document structure
- Specific languages
- **Multiple** translation “offices”
System automatically
- Builds the translation order
- Organizes components
- Tracks status
- **Imports returned content**
- Relates it to source
Teamcenter Content Management

Ease of Administration

Configuration and setup are done with UIs

- No coding, command lines
Teamcenter Content Management

Solution Strategy

Build “platform” for content management
- Components, structure, languages

Manage topics
- Text - multiple languages
- Graphic - multiple languages, formats
- Relationships between components (link management)

Provide framework to support any SGML/XML applications

Support leading SGML/XML applications
- **Authoring** (e.g., XMetaL, Arbortext Editor, XMLSpy)
- **Publishing** (e.g., XSL Formatter, XyEnterprise XPP, Arbortext Publishing Engine)
Extending Documentation Value through Teamcenter
Content Management

What value does the system provide?

- Enables integration of authoring and publishing systems to a **single environment**
- Facilitates **rapid publication** of product variant documents
- Ensures completion of **critical path** documentation dependent on engineering data flow
- Supports **multiple formats and languages**
- Maximizes component and topic **re-use**
- Facilitates systematic and **repeatable processes**

Everything related to document & process gets easier and faster!

<table>
<thead>
<tr>
<th>Acquire</th>
<th>Create</th>
<th>Edit</th>
<th>Review</th>
<th>Publish</th>
<th>Distribute</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Change Management and Notification, Security and Access Rights, Workflow
Availability

Teamcenter Enterprise 2005 SR1 Available Today
Teamcenter Enterprise 2007.1 Available Today
Teamcenter 8 End 2008
- Review interface
- Build document structure
- Author new content and reference graphics
- Publish
Siemens PLM Connection

Thank You