Presentation date: 2018 10 30

Presenter name: Max Geuder / Raju Vaidya

Room name: Knowledge Theatre 1

Presentation title: Implementation of Teamcenter Technical Publishing at Siemens PG

TTP at Siemens PG

Implementation of Teamcenter Technical Publishing
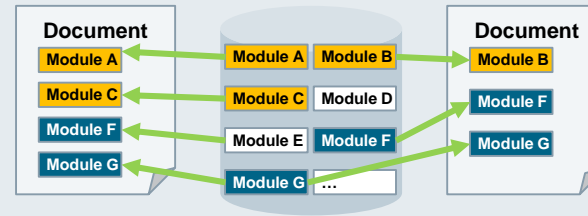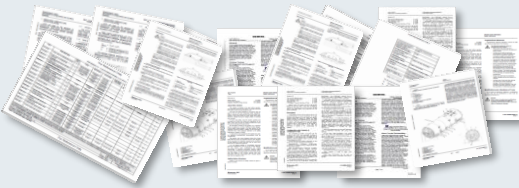at Siemens Power Generation

IT creates business value

Table of content

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Benefits of an integrated CMS solution
Reasons to implement a CMS solution - Examples

Motivation	Solution

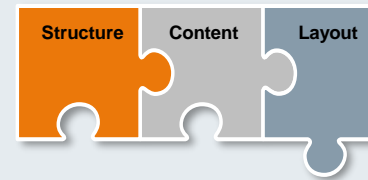**From independent documents to well structured re-usable content**
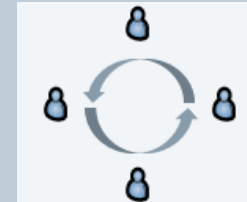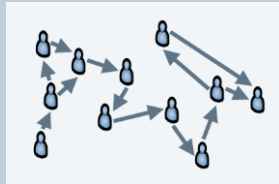
From complex and time-consuming workflows to lean and transparent approval processes

Structure | Content | Layout

From desktop publishing to layout independent authoring of content with a common look and feel

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kgu

TechPub Studio

Document Management | Content Management
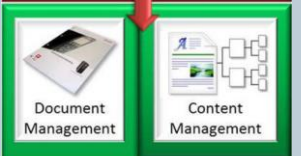
Teamcenter

Benefits of an integrated CMS solution
Technical documentation becomes part of PLM

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- **Improve collaboration**
  Let technical authors join the product lifecycle management platform!

  Author Product Handbook
  Author Manuals
  Author Service Doc
  Teamcenter
  Approver
  Author BID/AHB
  Engineer
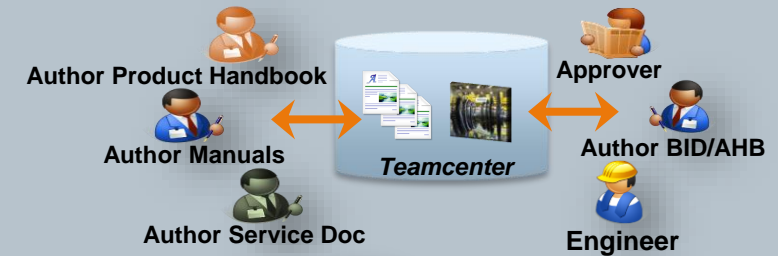
- **Improve cross-discipline communications**
  An integrated product definition that all related organization can use

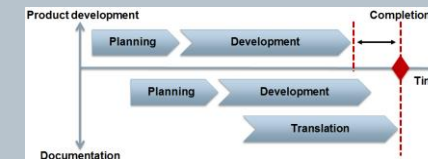 Creates the document structure and topics
 Author GT Manual
  Author Bidding Doc
  Contributes to existing topics

- **Reduce risk of inconsistent or out of date technical documentation**
  and **shortening the length and complexity** of the publication cycle thru an holistic environment

  Product development
  Planning | Development | Completion
  Planning | Development | Time
  Translation
  Documentation

  Saving time by reuse and parallelization

- **Improve quality**
  by accessing content that is authored directly from engineering
  Uniform Layout
  by using Stylesheets to meet company standards
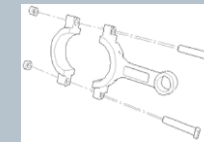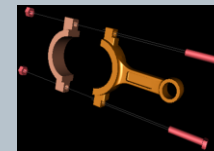
  Equal layouts in publications

  Norms and directives
  Warnings and Safety advises
  Logos and images …

- **Reduce costs and complexity of the IT application landscape**
  by using the in-house PLM backbone

  TEAMCENTER
  PLM PLATFORM
  Apps

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Benefits of an integrated CMS solution
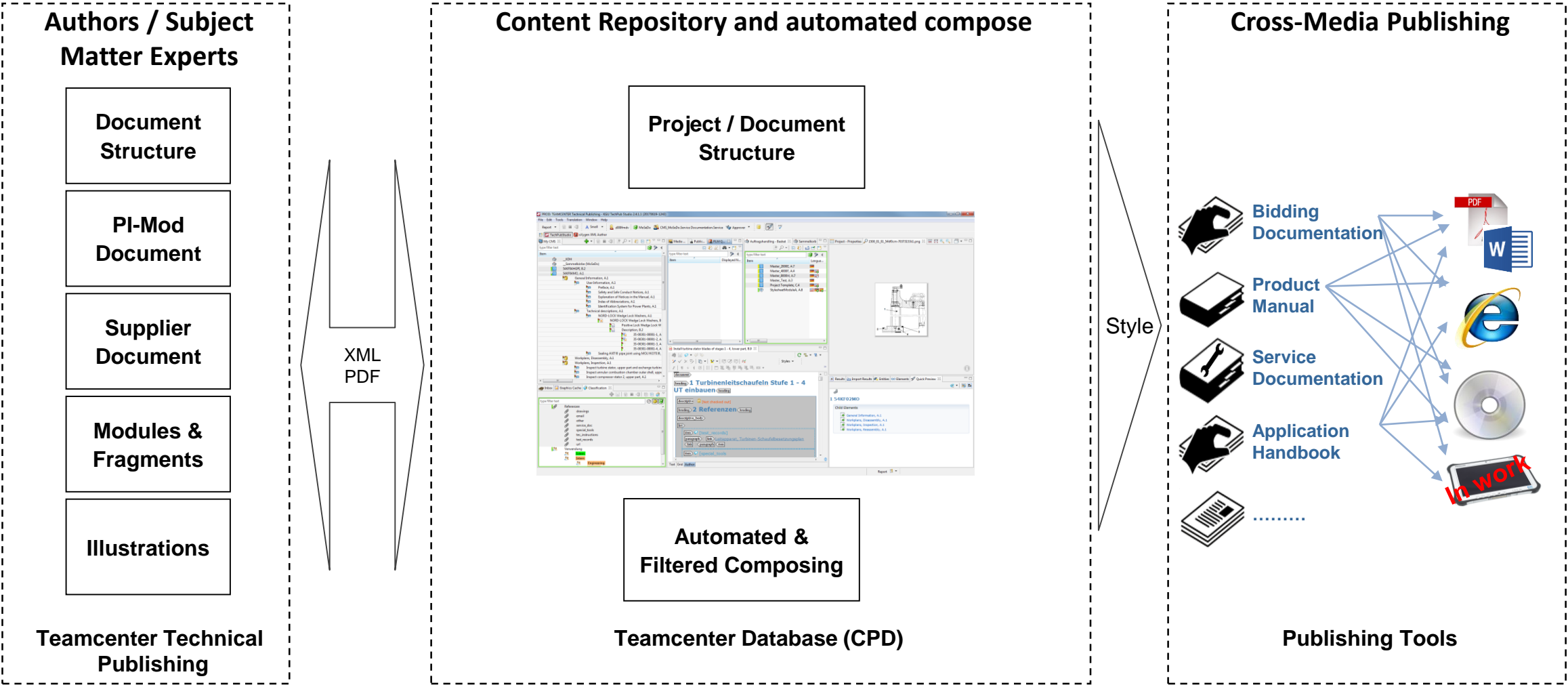## From authoring to publishing HQ documentation

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Authors / Subject Matter Experts

- Document Structure
- PI-Mod Document
- Supplier Document
- Modules & Fragments
- Illustrations

Teamcenter Technical Publishing

XML PDF

Content Repository and automated compose

Project / Document Structure

Automated & Filtered Composing

Teamcenter Database (CPD)

Style

Cross-Media Publishing

- Bidding Documentation
- Product Manual
- Service Documentation
- Application Handbook
- ....

Publishing Tools

Benefits of an integrated CMS solution
TTP within the Siemens Technical Documentation

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Engineering

- Technical Information
- Technical Drawings
- BOM / SAS

Not yet automated

Technical Documentation

- Illustrations
- UCS
- Vendor Literature
- Content Management System (TTP)
- SiGaMa/SerGaDo
- Service Documentation
- Protocols & Quality Documentation
- Product Manual
- Bidding Documentation/ Application Handbook
- Active Workspace Client
- SAP-PDM

Consumer

- Sales & Engineering
- Field Service
- SC – Sales and Customers

Challenges
Ensuring full benefit of CMS

- Business
  - Modular XML-based authoring instead of traditional way
  - New processes
  - Stylesheets instead of manual formatting

- IT
  - Integrate TTP into an existing PLM landscape
  - Multiple groups with different requirements
  - Stylesheet implementation
  - Service: TTP Support

"The modularization and classification of content has made it possible to publish the increasingly complex documentation for different target groups."
Klaus-Dieter Hust (Business Tool Owner)
PS PG
Siemens AG

"Modularization and classification of content forms also the basis for complex text configurations in bidding documents, e.g. regarding selection of scope of supply."
Thomas Korinek (Business Lead)
PG SC EMEA
Siemens AG

Efficiency

"By working in the PLM system, the technical editing department can centrally author their documentations, use it across divisions and integrate the engineering into the approval process."
Klaus-Dieter Hust (Business Tool Owner)
PS PG
Siemens AG

"Variables in documents, whose values are comfortably managed in an Excel spreadsheet, allows re-use of standardized documents for different documentation projects."
Thomas Korinek (Business Lead)
PG SC EMEA
Siemens AG

"Active Workspace enable us to serve the latest and greatest information to all users – even if they haven´t TC Rich Client access"
Alfred Rott (Business Lead)
PG PR MGT
Siemens AG

Outlook

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What are the next steps

- **Completely embed Technical Documentation into the Product Lifecycle Management process!**
  - Direct reuse of engineering 3D and 2D data in technical documentations (Cortona 3D)
- **Improve quality of content and collaboration**
  - Implementation of Acrolinx for improve content/syntax of the documentation
  - Extend collaboration of Regions
- **Digitalization of Technical Documentation to be prepared for future trends**
  - Finalize HTML5 publication in addition to PDF and Word
  - Interactive service documentation (AR)

TTP Extensions & Optimization
To match business process, ease of use and for optimal use of CMS concept

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- **XML Data Model**
  - Pi-Mod
- **Structure Management**
  - Derive Master Structure into Product specific Structure
  - Supplier Document Management
  - Replace by Copy
  - Content Review: Document Validity
  - Graphic Management
- **Release Management**
  - Content, Structure release
  - Find Non-released objects in Structure
  - Structure update
  - Minor Edit
- **Translation Management**
  - New process to connect directly to Siemens Global Translation Service
  - Get Translation Status
- **Publish Management**
  - PDF, Word, (HTML) Stylesheet
  - Stylesheet Module
  - Variable Module
  - Option Handling
- **Admin Configuration**
  - **Project Setting:** Managing requirements / features / access for different user groups

XML Data Model
PI-Mod

- Designed to meet the requirements of the industrial machine and plant production
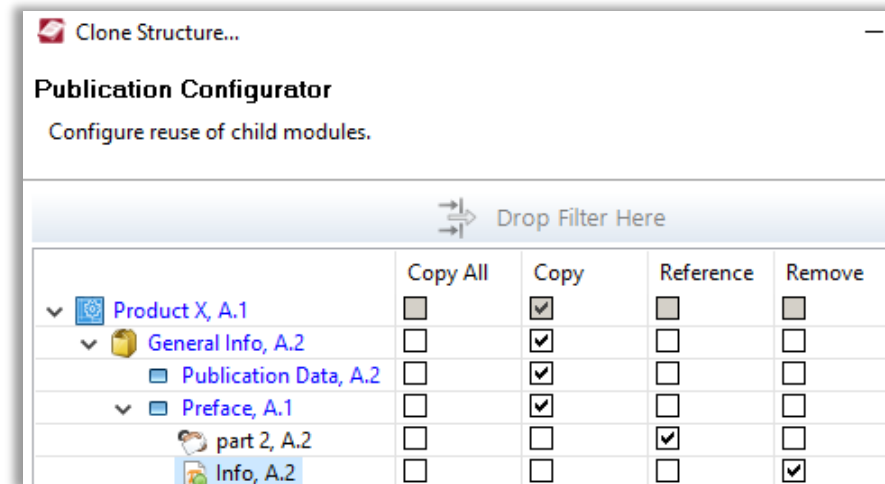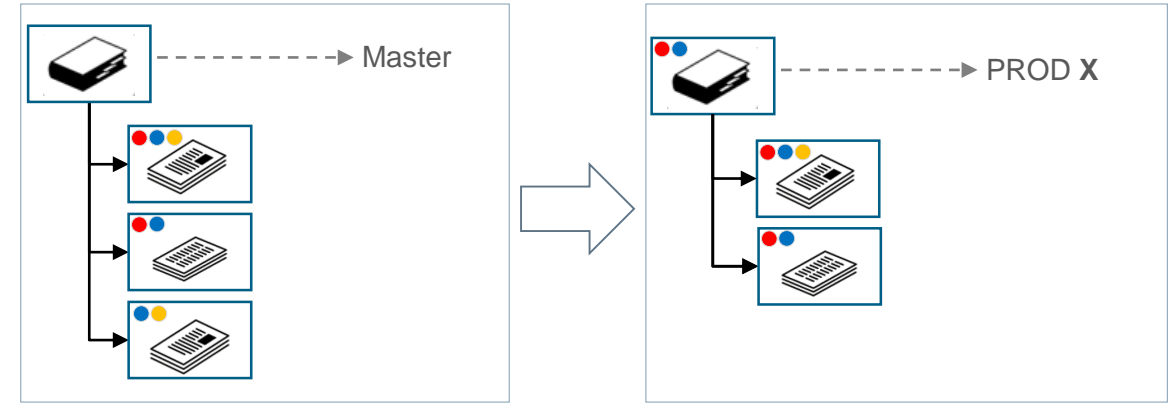- **P**roduct and **I**nformation Classification
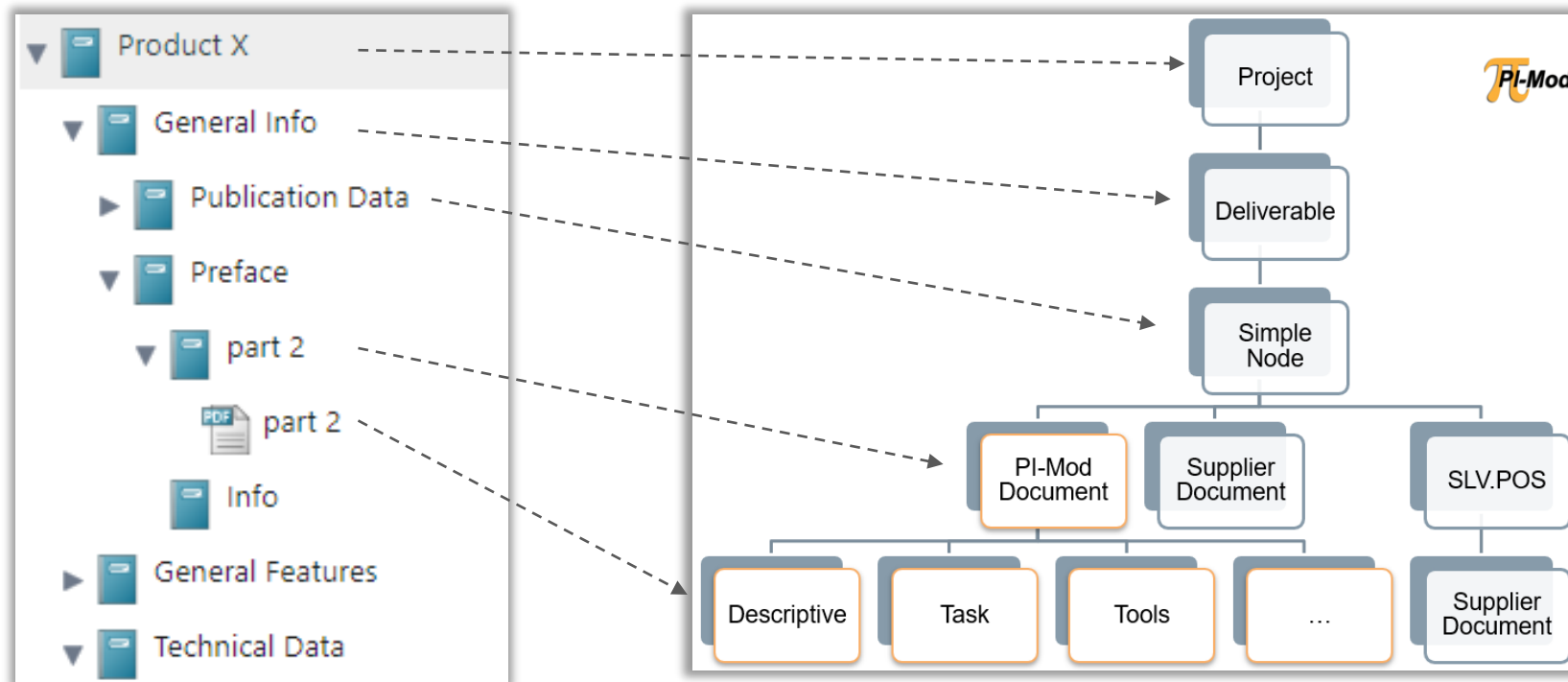
Structure Management
## Master & Product Specific Structure

Master Structure: 150%

- Contains information for complete product line with metadata and classifications
  - Restricted Access, Warning on check-out
- Several ways to create Product Specific Structure
  - **Publication Clone / Configurator**
  - **Customized Project Management**
    - including completeness check of the Product Specific Structure

Clone Structure...

Publication Configurator

Configure reuse of child modules.

Drop Filter Here

	Copy All	Copy	Reference	Remove
Product X, A.1	☐	☑	☐	☐
General Info, A.2	☐	☑	☐	☐
Publication Data, A.2	☐	☑	☐	☐
Preface, A.1	☐	☑	☐	☐
part 2, A.2	☐	☐	☑	☐
Info, A.2	☐	☐	☐	☑

Supplier Document Management

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To manage documentations for supplier parts

- Master Structure contains all Supplier Parts documents
- List of Supplier Parts in a product structure
- Get necessary supplier documents from Master Structure
- List missing documents

Master

PROD **X**
Doc

PROD **X**
Engineering Structure
Supplier parts list
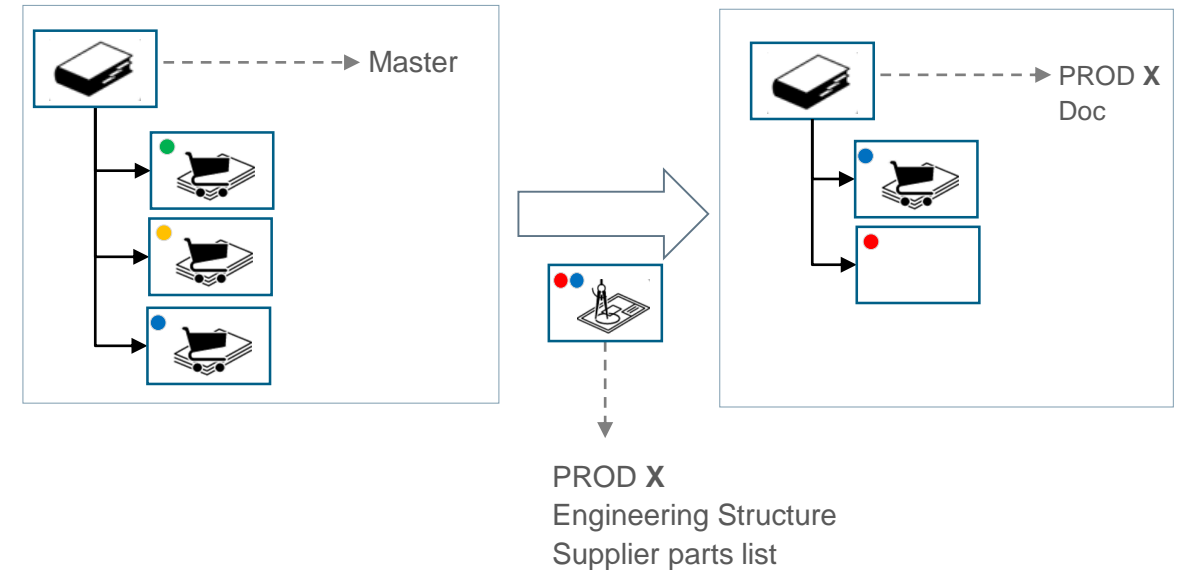
Replace Reference by Copy

- An object can be referenced in more than one place. If the content is updated, it changes in all places
- The feature is to simplify multiple steps into one single step

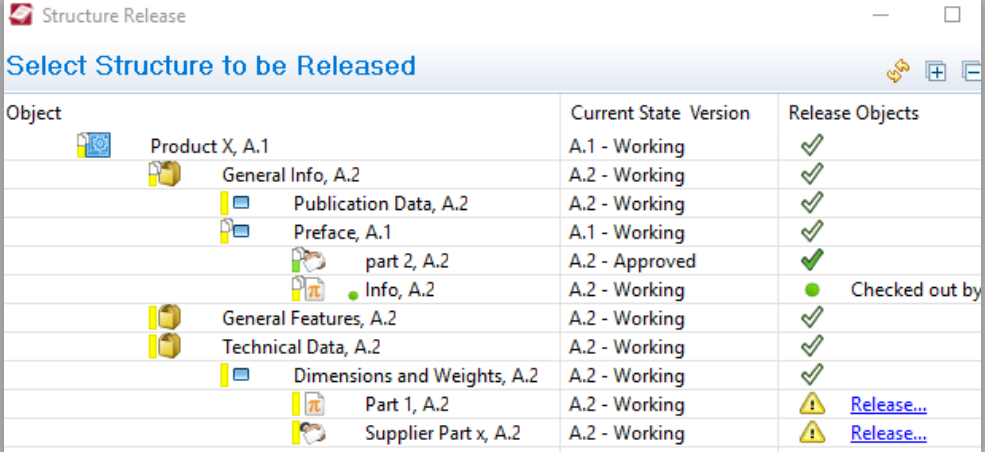M. Geuder, R. Vaidya – GS IT
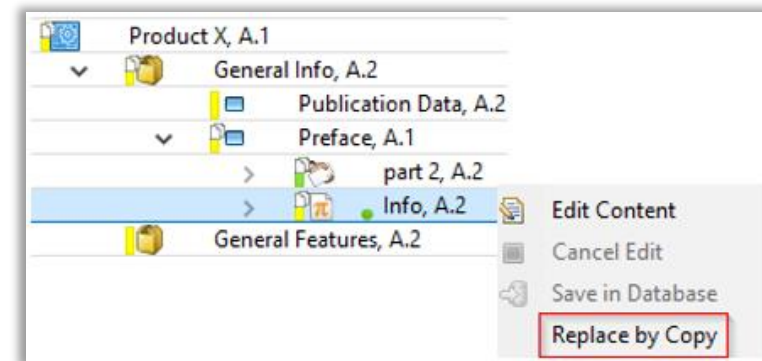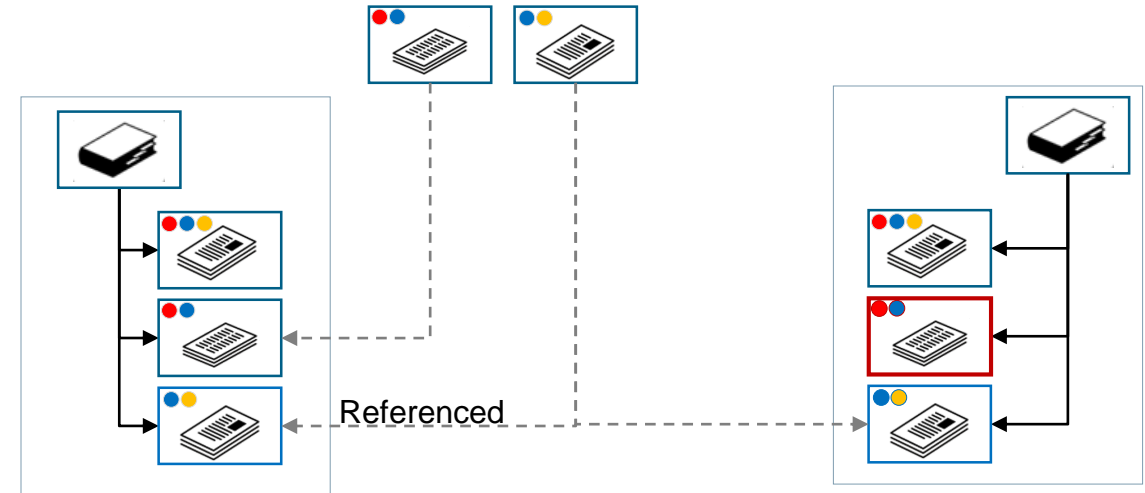
Content Review

- Review based on PDF Markups
  - Responsible
  - Reviewers
  - Validity
- Use Active Workspace Client to review and Markup creation (user without Rich Client)
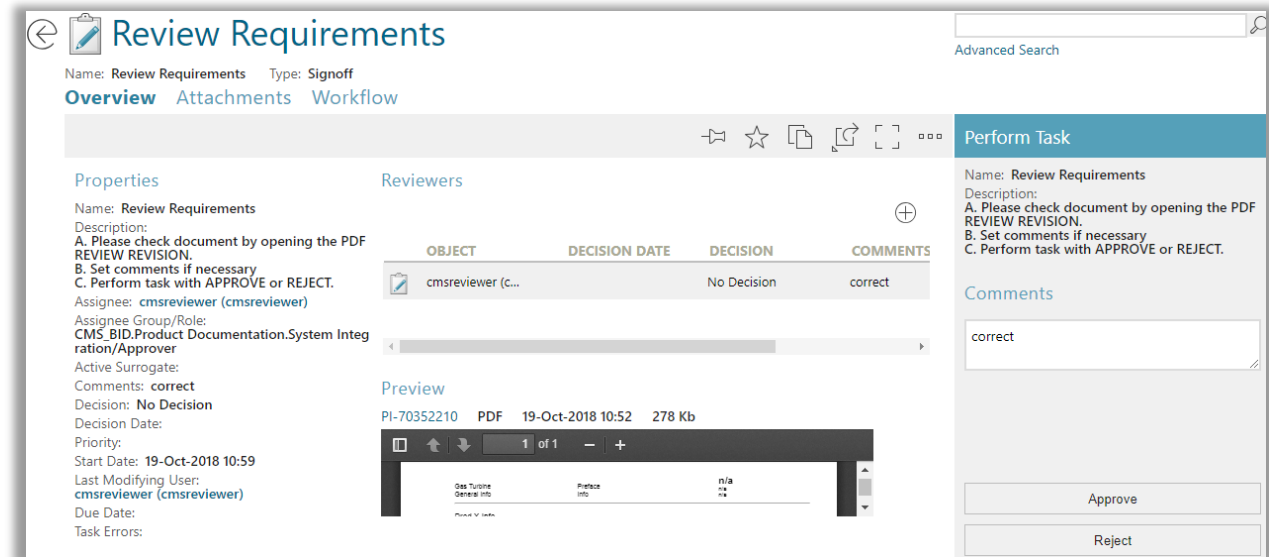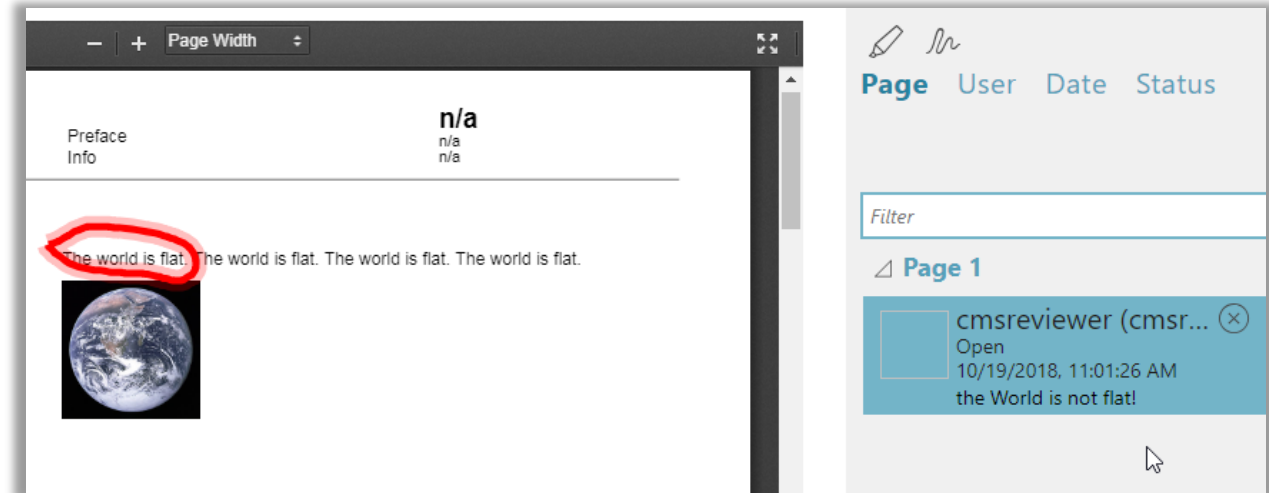
Release Process

- Two-stage Release Process
  - Structure can be released only after the content is released
  - Objects are released bottom-up
- Control on who can release what
  - *Author*: can release content modules
  - *Approver:* can release upper level content
  - *Manager:* can release complete structure

- Find Non-released objects

- Fixed link: Structure Update

- Minor Edit
  - Content and Metadata

Object	Current State Version	Release Objects
Product X, A.1	A.1 - Working	✅
General Info, A.2	A.2 - Working	✅
Publication Data, A.2	A.2 - Working	✅
Preface, A.1	A.1 - Working	✅
part 2, A.2	A.2 - Approved	✔
Info, A.2	A.2 - Working	● Checked out by
General Features, A.2	A.2 - Working	✅
Technical Data, A.2	A.2 - Working	✅
Dimensions and Weights, A.2	A.2 - Working	✅
Part 1, A.2	A.2 - Working	⚠ Release...
Supplier Part x, A.2	A.2 - Working	⚠ Release...

✅	Module is ready to be released.
✔	Module has already been released and will be skipped.
🔒	Module is checked out and has to be checked in first.
⚠	Content module not yet released, has to be released separately or replaced by a released version.

Publish Management

- Outputs: PDF, Word and HTML

- Single and multiple document publication

- Publish configuration (Stylesheet Module)
 - Coversheet
  - Header, Footer
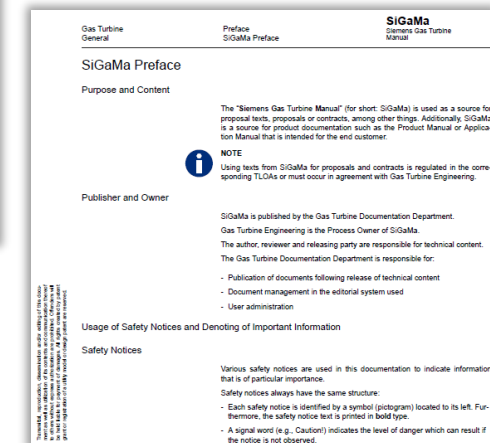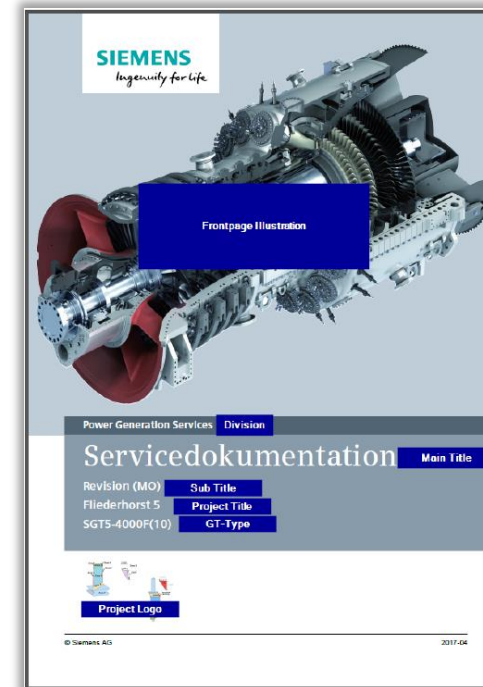
Publish Management
Option Handling

- Objects are classified appropriately
  - *Option, basis, n/a*
- A list in a structure specifies parts options of a product
- Filter is created automatically to be used in a publication

	B	C	D	E
	Version	XML Nummer	Titel	
	AT	PI-79336985	Deliverable	
	Options	Behaviour	Checked	The following values can be used for the column "Behaviour"
	Fuel system	n/a		- basis
	Fuel Intake	option		- option
	Dual Fuel	n/a		- n/a
	Compressor	basis		

Thank You!

2018-10-30   M. Geuder, R. Vaidya – GS IT

Contact
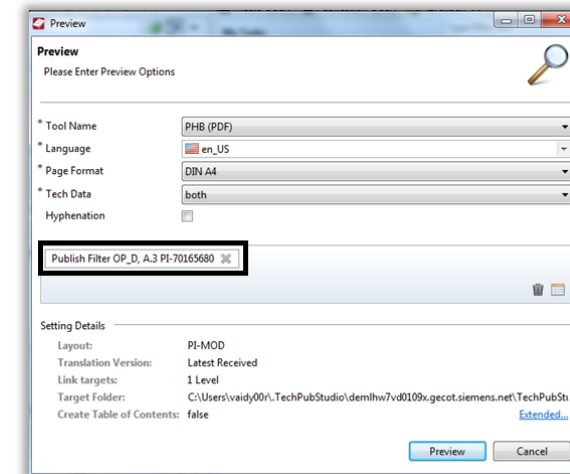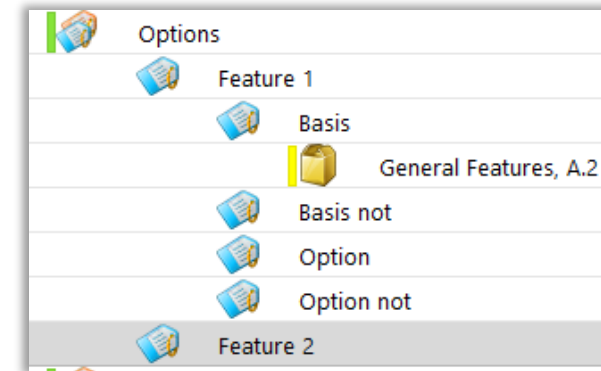
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