Documentation of Eclipse Applications with DITA

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Agenda

- Challenges in Software documentation
- Single-source documentation with DITA
- DITAwoks as a tool option
- Software development and documentation hand in hand
- Demo
- Q&A
- More information
Challenges in Software Documentation
Agile Process Model

Changing market requirements

- Agile Manifesto
- Extreme Programming
- Crystal Clear

Project specifics

- changing requirements
- changing, incomplete targets
- small teams
- short release cycles
- more informal organisation
- flexibility, speed

✓ „Functioning programs more important than detailed documentation“
Traditional Documentation Toolset
Typical SW documentation deliverables:

- Printed documentation materials (manuals, references etc.)
- Application help
- Context sensitive help
- Documentation materials that should be published online (Online help)
- Training materials
- Reference documentation (API docs and s.o.)
- ... other documents

Most of these documents have quite a high potential for partial content reuse.
Challenges we are Facing in this Scenario are:

- Dealing with different source formats and redundant content
- Increasing Complexity of Documentation
- Globalization & Localization
- High Quality Expectations
- Different Target Media
- Need of Integration
- Shortening of Development Cycles
- Increasing Demand for Documentation Variants

Conclusion: Without consistent documentation methodology and appropriate tool support there is very less chance to manage all required deliverables efficiently
Solution: DITA

- Single source publishing as answer to these challenges.
- Single sourcing allows:
  - same content to be used in different documents or in various formats.
  - labor-intensive and expensive work of editing only to be carried out once, on one source document.
  - further transformations to be performed mechanically, by automated tools.
- One of the leading standards in XML single sourcing is DITA:
  - DITA stands for Darwin Information Typing Architecture
  - DITA was developed by IBM and donated to OASIS
  - DITA divides content into small, self-contained topics
  - DITA Topics can be reused in different deliverables.
  - Deliverables are modeled using special structure called map.
DITA Publication
DITA: Main features

- Topic-based DITA offers **flexibility in content organization**
- DITA is fairly **simple**. It uses about half as many tags as DocBook does
- DITA's modularity allows **reuse** (on **level of topic or single elements**)
- DITA allows **separation of content from presentation**
- DITA allows publishing into **different kinds of output formats**
- DITA enables use of **conditional content**
- DITA allows **process automation**
- DITA can be used **out-of-the-box**
- DITA allows you to **build on** solid base and saves time on:
  - New Infotype DTD/XML Schema development.
  - Style sheet development
- DITA is **extensible**. It enables new infotype development with backward compatibility to base DITA.
Documentation mit DITA
DITA works as a tool option
DITAworks Product Core Areas

**Modeling**

Provides meta information for all DITAworks tooling and enables efficient use of specialization.

- **Import** of existing specializations from DTD and XML Schema
- **Export** of managed specializations to DTD and XML Schema
- **Visual editors** for DITA base model: Specialization editing
- Model validations
- **Extended model:**
  - Settings for editorial tools
  - WYSIWYG Style sheets
  - Custom validation rules
  - Custom transformations
  - etc.
- Model refactoring

**Documentation Process**

Provides a set of integrated editorial model-driven tools for efficient content authoring.

- **Content Import**
- **Infrastructural project rules**
- **Visual editors** for DITA topics and maps
- **Link management**
- **Content validation**
- **Content refactoring** (e.g. rename, move, content extraction etc.)
- **Reuse block management**
- **Tag management**
- **Versioning**
- **Collaboration**

**Publishing & Export**

Provides means for delivery to end-user.

- **Integrated OT** with some important improvements.
- **Publishing configurations** including settings for variables, conditional processing etc.
- Extended support of Eclipse help
- **Export** of content (full or partial)
- **Publishing server** for running headless transformations.
Getting Started with DITAworks: Agile Approach
DITA works on Eclipse platform

Advantages:

✔ Easy integration with other Workspace-oriented tooling (e.g. SW development tools)

✔ Easy integration with other Eclipse projects and technologies (Example: version control, task management with Mylyn and s.o. )

✔ Functional blocks can be used independently
What does Eclipse offer in the area of documentation?

**Eclipse Help Subsystem:**
Eclipse Plug-ins for helps integrated in Eclipse / RCP

- Eclipse Help can be used for:
  - Application help
  - Context sensitive help
  - Web/Online help (Infocenter)

- Eclipse Help Format is based on an XML toc that is referring to HTML files

- Eclipse IDE contains Plug-ins supporting authoring processes
Eclipse Help Enhancements

- New specialized maps for modeling of Eclipse Help specifics like contexts, indexes, cheat sheets etc.
- **Import** of existing Eclipse Help Plug-ins
- **Tools for integration with development process** (Context IDs Management between development- and documentation teams)
  - Plug-in for Eclipse IDE
  - Wizards for ID Synchronizsation
- Support of dynamic **Context ID Mappings**
- Special **Validation** for Eclipse Help
Documentation Process for Eclipse Help

1. Developer
   - IDE + Doc plugin
   - Java source code
   - Generate and assign context IDs
   - Back sync of context IDs

2. Doc Team
   - DITAworks
   - Help sources
   - Document & assign

3. EclipseHelp generation
   - EclipseHelp context assignment plug-in
   - EclipseHelp plug-in
Summary

✓ DITAwoks addresses most of the challenges in the area of RCP application documentation as a ready out-of-the-box product
✓ DITAwoks enables single-source approach to the development of documentation under Eclipse
✓ DITAwoks can be easily integrated with other Eclipse based tools
✓ DITAwoks provides IDE tooling to optimize collaboration
✓ DITAwoks pays special attention to support of Eclipse help format
✓ DITAwoks is also a good starting point for custom solutions dealing with structured document generation
Demo
About *instinctools

*instinctools GmbH delivers Information Management solutions on Java technology since 2001, on Eclipse since 2007

- Eclipse Application Design and Implementation Services
- Eclipse Application Maintenance and Support
- Tools for Technical Documentation (single source strategies)

- Management Team in Germany, Software Lab near shore (Belarus)
- Successfully serving premium customers like Daimler, Hubert Burda Media, Garant, EnBW and SMEs
- Proven management processes and reliable project delivery infrastructure
- Member of tekom, Eclipse Foundation
More Information

- Informationen about DITAwoks
- Product videos on DITAwoks Product Site
- Details on documenting Eclipse DITAwoks Service Site and a Case Study on our Homepage
- You want to try it?
  Request a free of cost Evaluationlicense.
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