



**Adobe<sup>®</sup>** Using DITA XML for  
Instructional  
Documentation

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# Publishing & localization at Adobe

- **Direct localization of software, documentation, marketing materials, and web site into 14 languages**
- **Simultaneous announce and 2-week delta between English and French, German, and Japanese (T1) ship for most releases**
- **Simultaneous ship of English and T1 for some releases**



# Pre-DITA: Content sharing issues

- **Single-sourced Help, and PDF documentation since 1995**
  - FrameMaker and in-house scripts and plug-ins
- **Management of shared content across products**
  - Manual process resulted in minimal sharing of only very large blocks (e.g., entire chapters)
  - Content inevitably rewritten in editing and review process for each new context
  - Higher development and localization costs, longer lead times, and lower overall quality and usability



# Business drivers

- **Introduction of product suites**
  - Precluded multiple writers, reviewers on shared content
  - Integrated UI and user experience critical to success of suites
- **Need to share content authored by different groups (documentation, support, training)**
- **Need for customized help systems for different target audiences**



# Other challenges

- **Manual localization handoffs**
  - Handoffs had to be entire docs or large portions
- **Print DTP added approximately two weeks to schedules**
  - Handoffs had to be almost final and changes made in multiple places
  - Required early completion of English content



# Why DITA XML?

- **Open standard and built-in with OpenTopic**
- **Very specific schema**
  - Helps clarify documentation
  - Easy to understand semantics
- **Modular content creation**
  - Topic-based, not book-based
  - Facilitates re-use of content
  - Allows content to be shared across products



# Conversion from Unstructured FrameMaker to DITA

- **Mapped Frame paragraph styles and character formats to XML Elements**
  - FrameMaker has a conversion mechanism that allows this mapping to be specified
- **Although Frame's conversion mechanism is powerful, it did not get us all the way**
  - Concepts and references were easier than tasks
  - Post-processed the files using XSLT scripts to get the final output
- **Files had to be extensively edited**
  - remove overrides and apply correct paragraph styles and character formats in all cases
  - ensure editorial guidelines were followed
- **Marks such as [Reference], [Task], [Concept] were inserted to provide information to the XSLT scripts how the topics should be converted.**
- **A lot of iterations were made until the conversion was about 90% accurate**
- **After conversion, minor fixes had to be made manually to the files**
- **FrameMaker conditions were mapped to attributes**
  - Very complex to convert conditions automatically
  - Resorted to marking the content with square brackets where conditions existed, and re-inserting after conversion



# DITA Usage

- **Conversion to DITA from unstructured FrameMaker files**
- **Core DITA DTDs left alone, except for ditabase.dtd**
- **Modified EDD to apply further constraints for authors to follow specific structure guidelines**
  - For example, for elements that allowed <TEXT> as well as <p>, we removed <TEXT>
- **Just 1 map file per product used to group chapter topics**
- **Nested topics to preserve hierarchy**
- **Metadata stored within topics (such as help and print outputs)**
- **Created Adobe domain for Adobe specific specializations**





# DITA Challenges

- **Conditionality**
  - Try to enforce conditionality at the topic level
  - For more granular conditionality, specialize <ph> tag
  - Try to avoid conditionality using select attributes - limited set
- **Translation**
  - xml:lang only allows specification of single languages
  - Sort order for index and glossary elements missing



# Process/management challenges

- **Training and acceptance**
- **Information architecture: defining structure and scope**
- **Shared content requirements management**
- **Customization management**
- **Need for Japanese-specific changes (adaptations)**



# Successful Strategies

- **Previous doc structure maintained to enable gradual transition**
  - Review, localization handoffs in chapter units
- **No modifications to shared topics (100% common at topic level)**
- **Evangelists identified from each functional team**
  - Piloted system and features
  - Wrote and managed specs for functional team (editorial, design, production, localization)
- **System/new features adopted by larger team only when they resulted in no significant slow-down**



# Authoring advantages using CMS with DITA

- **XML files accessed through GEP Explorer**
- **Easy management of structural files**
  - DTDs, EDD, etc.
  - Content validated
- **Cross References / Content References**
  - Can be placed to any topic in the repository
  - Referential integrity can be verified
- **Previews can be generated on any file**



# Localization advantages using WorldServer with DITA

- **Localization process fully integrated with domestic authoring process**
- **Segmentation filter allows us to leverage DITA translate attribute**
- **Translators have the same access to PDF generation as domestic team (great linguistic context)**



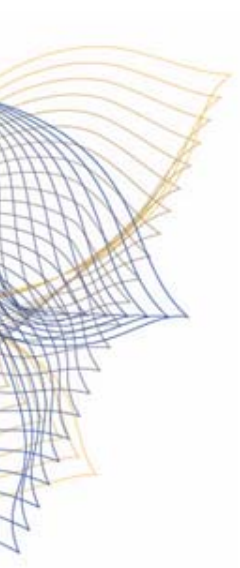
# Benefits for future releases

- **Schedule flexibility**
  - Smaller, more frequent handoffs
  - More time for writers/content developers
- **Improved quality/user experience**
  - 100% shared content: learn once
  - Reinforcement of cross-product workflows
- **Enablement of future content reuse/sharing scenarios (customized Help, training, support, etc.)**



# Where we want to go with DITA

- **Maps, maps, maps**
  - More re-use of topics
  - Metadata at map level (instead of current topic level)
  - Flexible loc handoffs
  - Iterative authoring process (to integrate better with more iterative software dev. cycle)
- **Implement retables**
  - More re-use (especially with shared content)
- **Better conditionality**
  - Implement DITA val attributes
  - Adding attributes without breaking DITA (looking for enhanced standard)
- **Conreffing software strings directly with documentation**



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