

Migration to DITA – The Atmel Story

Morten Haaker, Senior Project Manager | [Atmel Corporation](#)

Introduced by Les Burnham, CEO | [Stilo](#)

Atmel



Housekeeping

- ▶ All attendees will be **muted** for the duration of the webinar
- ▶ Questions can be submitted using the **Q&A** panel in the meeting window
- ▶ Questions will be addressed during the **Q&A session**
- ▶ If you experience any **technical difficulties**, send a **chat** to **Helen Owens-Pope**
- ▶ We will be running a **survey** at the end to gather feedback on the webinar
- ▶ **Today's webinar is being recorded** and a link will be emailed to attendees





Morten Haaker

Senior Project Manager

- ▶ Project manager for the Technical Documentation project at Atmel
- ▶ 12+ years at Atmel Corporation in Norway
- ▶ Holds a Master of Computer Science from the Norwegian University of Science and Technology
- ▶ Heads up the Nordic SDL LiveContent User Group



Migration to DITA – the Atmel Story

Morten Haaker



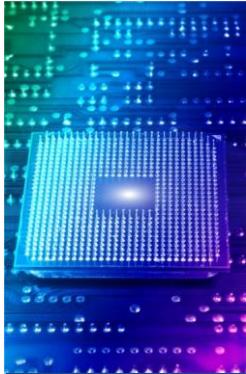
My Project Roles

- My Background
 - Software Developer (a long time ago...)
 - No knowledge of DITA when we started the discussions in 2013
- Project Roles
 - Project Manager
 - Information Architect
 - Layout specification
 - DITA Information model
 - I had product knowledge, but had to learn our content in detail
 - Change management

Atmel

- Global semiconductor company
 - DITA users in 15 locations on 3 continents

MCU/MPU



Touch/Sensor



Automotive



Security



Wireless




Memory, Smart Energy, LEDs, etc....

The Internet of Things and more...



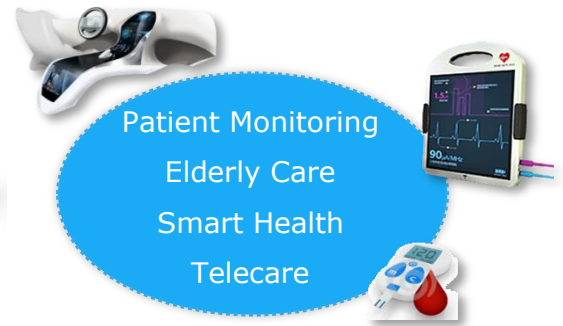
Fitness & Wellness
Wearable
Gaming
Connected TV/STB

Lifestyle



Automotive

Car Access
Power Train
Safety
BUS Controller



Patient Monitoring
Elderly Care
Smart Health
Telecare

Healthcare


“By 2020, there will be over 40 billion connected devices.”

- Source: ABI Research, June 2014



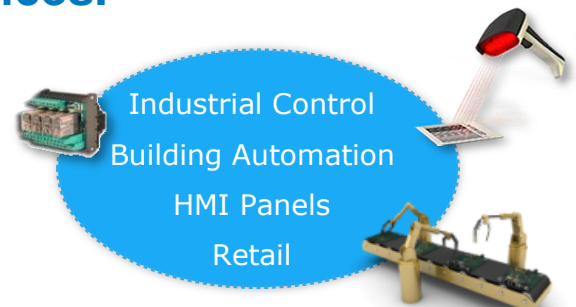
White Goods
Smart Lighting
Home Automation
Alarm Systems
Automated Chores

Residential



Smart Meters
Data Collectors
Thermostats
Security

Energy

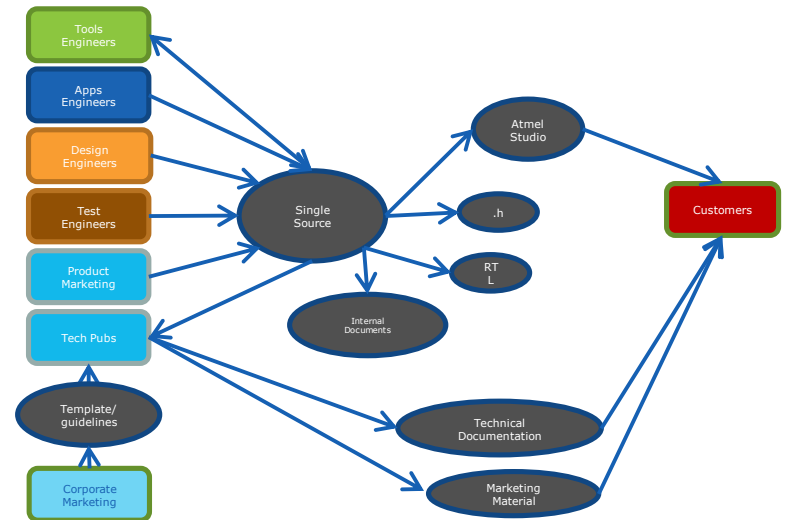
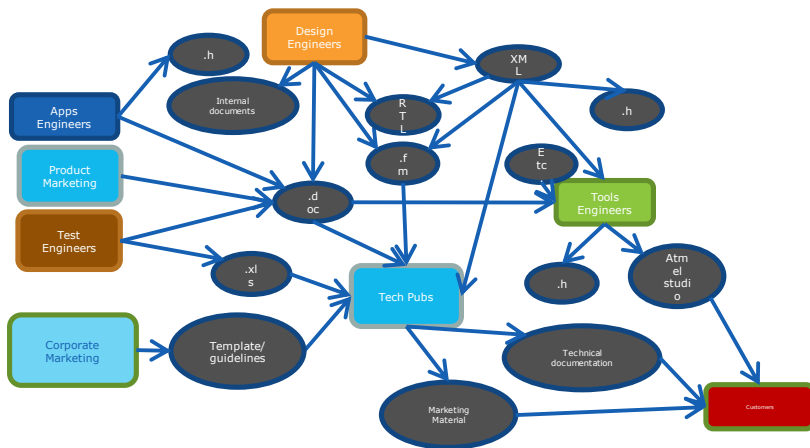


Industrial Control
Building Automation
HMI Panels
Retail

Industrial

Where We Started

- Complex technical documents.
 - Datasheets up to more than 2000 pages
 - Semiconductor specific content
- Several thousand documents
 - FrameMaker, Word, DocBook, etc
- Every group and product line was different



Our Project

- Project Objectives
 - Operational Efficiency
 - Customer experience
- Project Tracks
 1. SDL LiveContent Implementation
 2. Engineering systems integration
 3. Migration
- Innovation Process Journey - It takes time to get to the project
 - Idea -> discussions and meetings -> stakeholder buy-in -> management decision -> vendor evaluation -> project
 - Education, change management



Documentation Project - What Do You Need?

- CCMS – Component Content Management System
 - This is a must have!
 - One example: our datasheet for SAM L21
 - 1 231 pages in the PDF
 - 2 446 components (maps, topics, images)
 - Version 9 of the publication
 - All topics, maps, images have several versions
 - Images have several resolutions
 - Topics, maps, images versions may be translated
- Resources with skillsets
 - DITA, Structured documentation, IT
- Management support – Change Management
- Migration Plan



How to Prepare for the Migration?

- Content Audit
 - What do we have?
- Content Migration Strategy
 - What do we migrate? When and in which order?
- Our choice of migration strategy
 - Reuse
 - Migrate into DITA what we need to build new documentation
 - Identify multi-source elements, and unify
 - Customer interest
 - More outputs



Migration - Lessons Learned

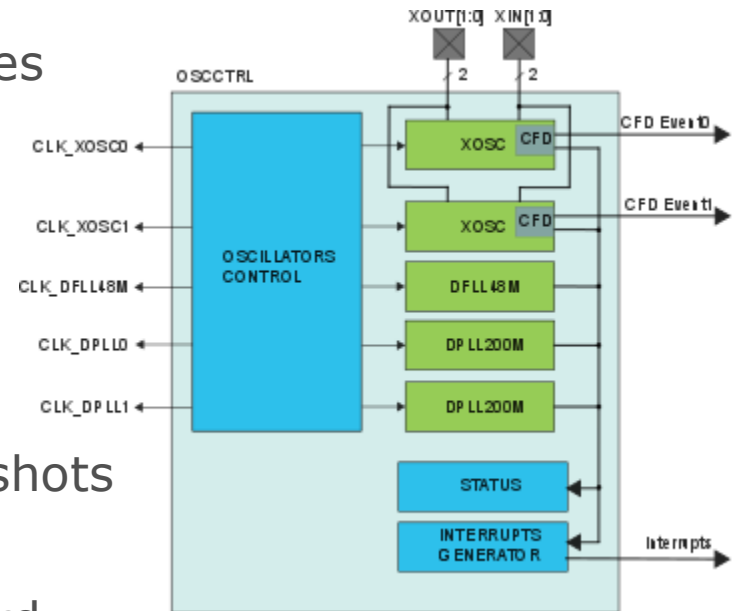
- So far we have converted >350 files in Stilo Migrate
- Stilo Migrate is always available
 - When we want/can
- Stilo has excellent support
 - You will see issues
- We need checklists
 - Pre- and post-conversion
 - Continuously updated
- Reusable content is more complex
- Images...
- Cross references...
- Equations...
- Conditions...
- Clean-up is easier in DITA

The image displays three screenshots related to the Stilo Migrate migration process:

- Top Screenshot:** A browser window showing the Stilo Migrate web interface. The page title is "MIGRATE <cloud content conversion>". It features a navigation bar with "ACCEPT CHANGES", "OWNER", and "DOWNLOAD" buttons. Below the navigation bar, there are sections for "DOCUMENTS" (showing 10 entries), "CURRENT BASKET", and "DOCUMENT FILTERS". A table lists various documents with columns for Document, Basket, Type, Rule Set, Target, Credits, Last Processed Time, Processing Time, and Status.
- Middle Screenshot:** A dialog box titled "SDL LiveContent Architect DITA2Tripp" with the subtitle "Set parameters". It contains fields for "Conversion input folder", "Language" (set to en-US), "Default resolution" (set to source), "Catalog", "Post conversion XSL", "CMS base folder path", "Conversion output / input folder", and "Translation report".
- Bottom Screenshot:** A technical document viewer showing a page titled "Multiplexed Signals". The page contains a table with columns for "PACKAGE", "PINOUT", and "TOPPINS-YES". The table has a header row for "PORT Function Multiplexing S4MC2xN" and a body row for "TBD". Below the table, there is a section for "PORT Function Multiplexing" with a table for "S4MC2xN".

Lessons Learned - Images

- When moving to DITA more resolutions are needed
 - High resolution for PDF
 - Low resolution for HTML and Help files
 - Source to keep the source file
- A lot of image types
 - Drawings like block diagrams, flow charts, charts, plots, etc
 - Photos and annotated photos
 - Screen shots and annotated screen shots
- A lot of image formats
 - A standard is not necessarily standard...
 - We decided to support SVG, JPG and PNG
- Conversion from e.g. Visio is painful
 - To SVG via PDF gives better text alignment
- Rendition plugin helps
- Migration of images is manual (Different resolutions)



Lessons Learned - Cross-References

- Existing cross-references in FrameMaker usually needs clean-up when migrated to DITA
- Direct inline links may not work with reuse of topics and maps
- We are reducing the number of links
 - See [Table 3-1](#) and the table is just below...
- We are using relationship tables when the link target is outside of the chapter
- Cross-references has to be reviewed and manually updated
- The publishing process in our CCMS helps to identify possible invalid hyperlinks

3. Signal Description

[Table 3-1](#) gives details on the signal names classified by peripheral.

Table 3-1. Signal Description List

Signal Name	Function
Clocks, Oscillators and PLLs	
XIN	Main Oscillator Input
XOUT	Main Oscillator Output
XIN32	Slow Clock Oscillator Input

Lessons Learned - Equations

- We have many Equations in some of our documents.
- We are using MathML, an addition to DITA
 - It requires a 3rd party plugin to be usable
- Migration is a bit tricky since different vendors use different notations
- Stilo has been very helpful

$$f_{BAUD} \leq \frac{f_{REF}}{16}$$

$$\sum_{\substack{0 \leq i \leq m \\ 0 < j < n}} P(i, j)$$

$$\sqrt{1 + \sqrt{1 + \sqrt{1 + \sqrt{1 + \sqrt{1 + \sqrt{1 + x}}}}}}}$$

$$\left\{ \overbrace{a, \dots, a}^{ka's}, \overbrace{b, \dots, b}^{\ell b's} \right\}_{k+\ell \text{ elements}}$$

Lessons Learned - Conditions

- Some of our documents use a lot of FrameMaker conditions
- The CCMS we are using have a proprietary condition syntax
- Importing conditions through Stilo works well now
- It still requires manual review and update
 - The conditions in our CCMS are more flexible
 - The conditions in our CCMS are global

Table 1-2. Conditional Text Used

Name	Definition
DMAC	USART is only connected to a DMAC (
PDC	USART is only connected to a PDC (S/ SAM9G10/G20, SAM7, SAM3, SAMG,
DMAC_AND_PDC	USART is connected to a PDC and a D
DMAC_LINK_RTS	Connection between DMAC and USAR v401 and forward; not true for XDMA - DMAC_LINK_RTS (SAMA5D3, SAM9N12/CN12, SAM9G/
Reserved_Reg	Reserved Address Space—Show in pr datasheet
Version_Reg	Version Register—Show in IP block prc
USART_MODEM	USART features modem signals
USART_NO_MODEM	USART does not feature modem signal
MODEM_PCK	PCM PCK clock source (CANOPUS)
MODEM_EXCEPTION	Only fully equipped w/all modem signal Show if not all USARTs are fully equip variable.)

Migration Issues

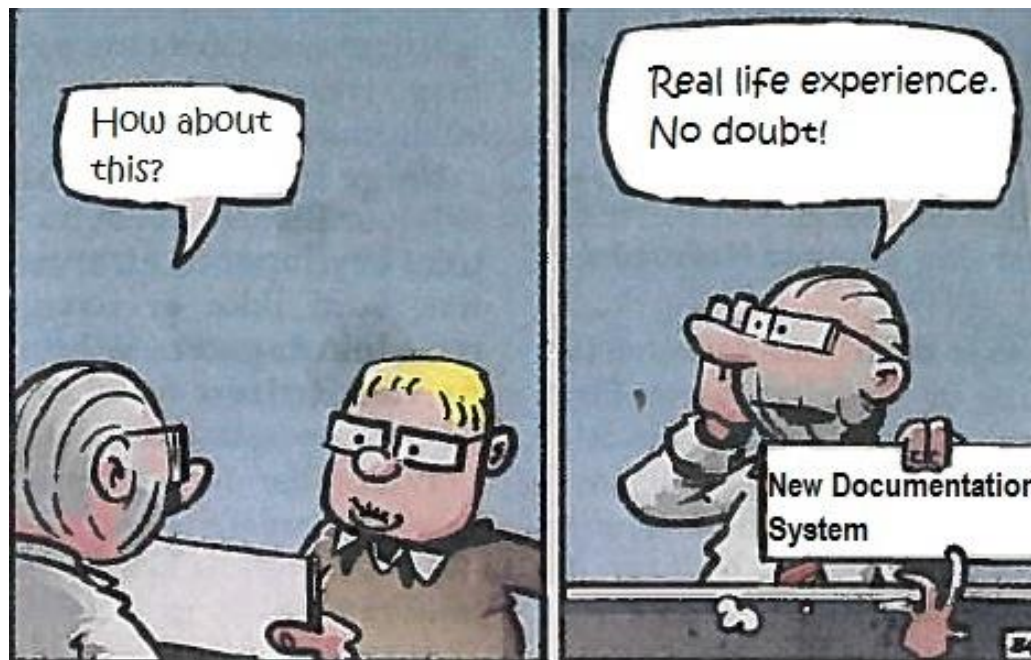
- Complexity and Variation
 - Creating DITA and SIDSC is structured
 - Identifying the correct information in an unstructured FrameMaker document is a challenge
 - We had a FrameMaker template
 - The template has changed over time
 - The template was more or less followed
 - Local adaptations
- Content updates are needed for the content to be reusable
- SDL LiveContent specifics
 - Import tool
 - Proprietary conditon notation
 - MathML variations
- The rule set editor is really flexible
 - Learning curve
 - Excellent support



Advice

- Start small
- Know your content
- Know how you want to represent the content in DITA
- Manually build the expected DITA
- Vendor implementation support is absolutely key
- Naming convention
- Be flexible. You can change the content, the information model, the stylesheets, etc. It does not necessarily have to look exactly like the PDF from FrameMaker
- It takes a village (SMEs, authors, Tech writers, IA, etc)
- Get help from Stilo!







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STILO DITA KNOWLEDGE SERIES | MIGRATION TO DITA – THE ATMEL STORY



Questions



Stilo International (LSE:STL)

OMNIMARK
 <content processing language>

AUTHORBRIDGE
 <browser-based XML authoring for SMEs>



- ▶ Content conversion
- ▶ 1 million+ pages converted to DITA
- ▶ Ongoing IMPORT to CCMS

MIGRATE
 <cloud content conversion>



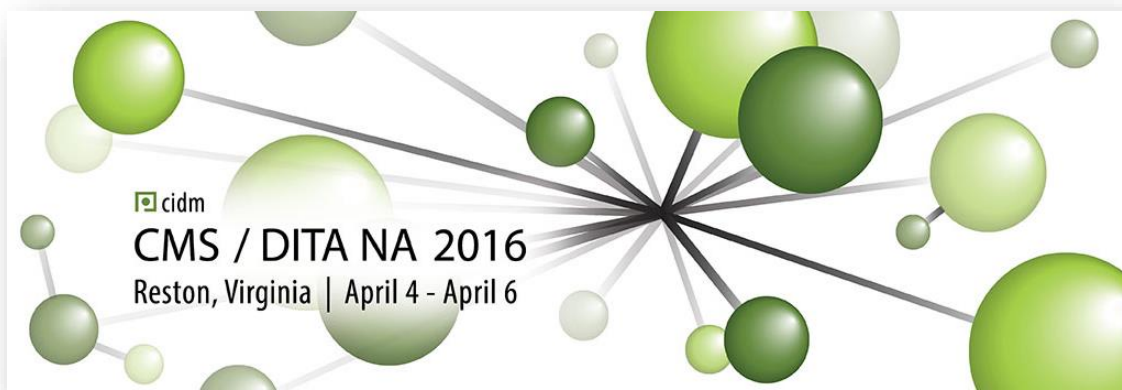
FREE DOCUMENT ANALYSIS AND CONVERSION OFFER

1. Provide sample document
(*up to 20 pages*)
2. Stilo will convert to DITA
using Migrate
3. Stilo will review the output with you
and share observations on content
4. You retain the DITA output
for evaluation and testing



stilo.com/migrate

Upcoming events



Monday, April 4 – 2.35-3.15pm

Intelligent Content Authoring for Everyone

Presented by Mike Iantosca, IBM and Patrick Baker, Stilo International

Wednesday April 6 – 10.35-11.15am

“Extreme” DITA Conversion: Lessons learned from doing it the hard way

Presented by Christina Mayr, Extreme Networks and Helen St. Denis, Stilo International



Thank you!

We welcome your feedback on today's webinar, please take a little time to complete the survey.