

# From zero to DITA-OT hero

- a story of a DITA-OT implementation in a small documentation team

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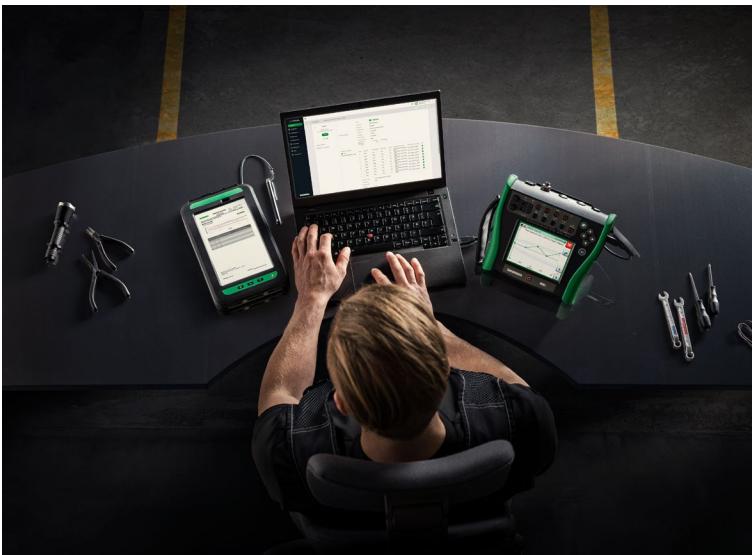
# INTRODUCTION



From zero to DITA-OT hero

Justyna Hietala

# BEAMEX



# beamex

From zero to DITA-OT hero

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# THE BEGINNING



NO CMS??!!



# SCRIPTORIUM COURSE



Customizing DITA OT plugins is difficult

plugins

and XSL-FO. For this reason, most companies hire an expert

3. Type the following command:

**On Windows:**

```
bin\dita -i [filepath]/sources/ducks  
/m_ducks.ditamap -f pdf2 -o out/ducks_output -v
```

**On Mac:**

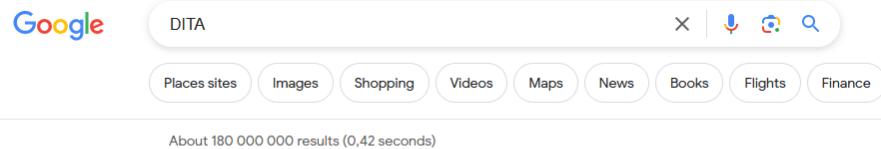
```
./bin/dita -i [filepath]/sources/ducks  
/m_ducks.ditamap -f pdf2 -o out/ducks_output -v
```

Special knowledge is required to customize

such as knowledge of Ant, XSL, and DTDs

XHTML, JavaScript,

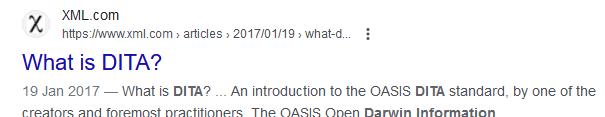
# THE INTERNET RESOURCES - "DITA" SEARCH



A screenshot of a Google search results page for the query "DITA". The search bar at the top contains "DITA". Below the search bar are several navigation links: "Places sites", "Images", "Shopping", "Videos", "Maps", "News", "Books", "Flights", and "Finance". The main search results area shows the following entries:

- Wikipedia**  
https://en.wikipedia.org/wiki/Darwin\_Information...  
**Darwin Information Typing Architecture**  
The Darwin Information Typing Architecture (DITA) specification defines a set of document types for authoring and organizing topic-oriented information, ...  
Features and limitations · Creating content in DITA · Publishing content written in...
- Oxygen XML Editor**  
https://www.oxygenxml.com/dita/specs  
**Darwin Information Typing Architecture (DITA) Version 1.3 ...**  
The Darwin Information Typing Architecture (DITA) specification defines a set of document types for authoring and organizing topic-oriented information, ...
- DITA Europe**  
https://ditaeurope.infomanagementcenter.com  
**DITA Europe**  
DITA Europe is a dual-track conference of 40-minute sessions. Total of 24 sessions, 12 Sessions in the Technology Test Kitchen, content management ...

About 180 000 000 results (0,42 seconds)



A screenshot of a search results page from XML.com for the query "What is DITA?". The results are as follows:

- XML.com**  
https://www.xml.com/articles/2017/01/19/what-d...  
**What is DITA?**  
19 Jan 2017 — What is DITA? ... An introduction to the OASIS DITA standard, by one of the creators and foremost practitioners. The OASIS Open Darwin Information ...



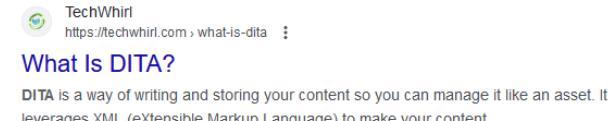
A screenshot of a search results page from OASIS Open for the query "OASIS Darwin Information Typing Architecture (DITA) TC". The results are as follows:

- OASIS Open**  
https://www.oasis-open.org/committees/dita/faq  
**OASIS Darwin Information Typing Architecture (DITA) TC**  
The Darwin Information Typing Architecture (DITA) is an XML-based, end-to-end architecture for authoring, producing, and delivering readable information as ...



A screenshot of a search results page from Author-it for the query "What is DITA ? | Author-it | CCMS Platform". The results are as follows:

- Author-it**  
https://www.author-it.com/blog/what-is-dita  
**What is DITA ? | Author-it | CCMS Platform**  
DITA (Darwin Information Typing Architecture) is a method of writing and storing content using a set of structuring rules that tell machines how to interpret ...



A screenshot of a search results page from TechWhirl for the query "What Is DITA?". The results are as follows:

- TechWhirl**  
https://techwhirl.com/what-is-dita  
**What Is DITA?**  
DITA is a way of writing and storing your content so you can manage it like an asset. It leverages XML (eXtensible Markup Language) to make your content ...

# THE INTERNET RESOURCES - "DITA" SEARCH

Google

DITA

Places sites Images Shopping Videos Maps News Books Flights Finance

About 180 000 000 results (0,42 seconds)

DITA Eyewear  
<https://dita.com> ::

Perfecting the Art of Eyewear - Official DITA Worldwide -  
DITA ...

DITA sunglasses capture a singular moment of inspiration that will endure a lifetime.

Official DITA Online Worldwide

DITA Eyewear - A Category of One - Men's, Women's and Unisex ...

DITA Sunglasses

DITA Sunglasses, hand-crafted and designed from exclusive ...

More results from dita.com »

Dita.net  
<https://dita.net> ::

Dita Von Teese

Expanding into her own distinctive brands, her namesake lingerie collection debuted at Bloomingdales, and has since expanded to Nordstrom, David Jones, Glamuse ...



OnlyLens  
<https://onlylens.com> › collections › dita ::

DITA @ Sunglasses and Eyewear for Men and Women

Shop the latest DITA Sunglasses with Free Shipping! DITA Sunglasses are Hand made in Japan with high quality materials like titanium, leather, ...

Amazon.com  
<https://www.amazon.com> › Dita-Glasses , k=Dita+Glas... ::

Dita Glasses

Amazon.com: Dita Glasses.

People  
<https://people.com> › Entertainment › Music ::

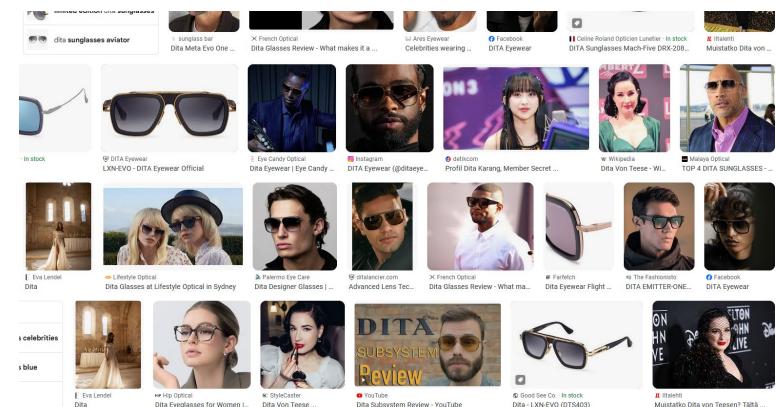
Dita Von Teese Says Working with Taylor Swift Is the 'Best ...

2 days ago — Dita Von Teese spoke about working with Taylor Swift on an episode of 'Allison Interviews.'

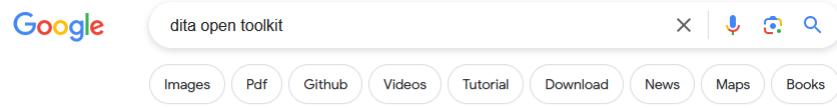
Shades Shop  
<https://www.shades.net.au> › collections › dita ::

DITA Sunglasses

With over 25 years in design and partners at the highest levels of manufacturing, DITA's expertise is unparalleled, earning a coveted reputation as a true ...



# THE INTERNET RESOURCES - "DITA-OT" SEARCH



About 432 000 results (0,37 seconds)

 [DITA Open Toolkit](https://www.dita-ot.org)  
<https://www.dita-ot.org> ::

## DITA Open Toolkit

DITA Open Toolkit · Features. **DITA Open Toolkit** is a publishing tool used to process DITA content and convert it to other formats. · Download. Install DITA Open ...

### Documentation

DITA Open Toolkit, or DITA-OT for short, is a set of Java-based ...

### Installing DITA-OT

The DITA-OT distribution package can be installed on Linux ...

### Download DITA-OT

The open-source publishing engine for content authored in ...

### DITA-OT Plug-ins

Transforms DITA to speech in the form of an audiobook. It uses ...

[More results from dita-ot.org »](#)

 [Adobe](https://help.adobe.com/using/frm_structauthdita_sd)  
[https://help.adobe.com/using/frm\\_structauthdita\\_sd](https://help.adobe.com/using/frm_structauthdita_sd) ::

## DITA Open Toolkit

DITA Open Toolkit. The **DITA Open Toolkit** (DITA-OT) is a set of Java-based, open source tools that provide processing for DITA maps and topic content.

 [Wikipedia](https://en.wikipedia.org/wiki/DITA_Open_Toolkit)  
[https://en.wikipedia.org/wiki/DITA\\_Open\\_Toolkit](https://en.wikipedia.org/wiki/DITA_Open_Toolkit) ::

## DITA Open Toolkit

DITA Open Toolkit (DITA-OT) is an open-source publishing engine for content authored in the Darwin Information Typing Architecture (DITA).

 [Oxygen XML Editor](https://www.oxygenxml.com/doc_ug-editor_topics.html)  
[https://www.oxygenxml.com/doc\\_ug-editor\\_topics.html](https://www.oxygenxml.com/doc_ug-editor_topics.html) ::

## DITA Open Toolkit Project

The **DITA Open Toolkit** project file allows you to define all your DITA map input and filter pairs and to produce the desired output formats by applying the ...

 [DITA Open Toolkit](https://dita-ot.sourceforge.net/)  
<https://dita-ot.sourceforge.net/> ... ::

## DITA Open Toolkit 1.8 Documentation

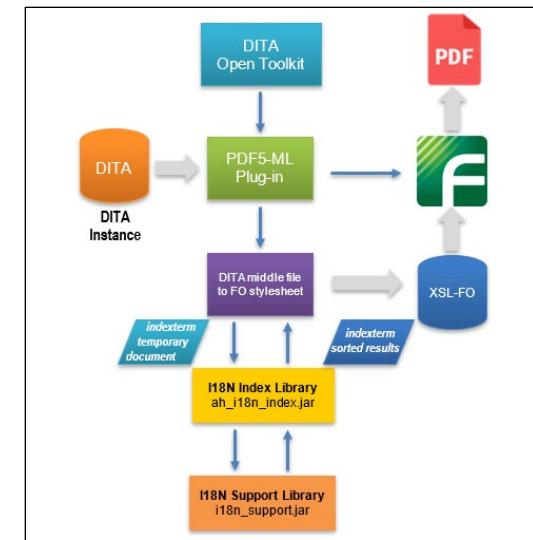
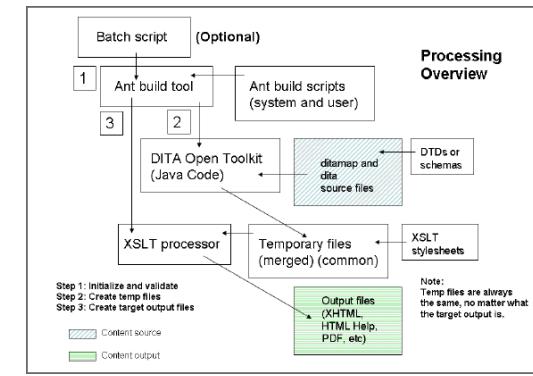
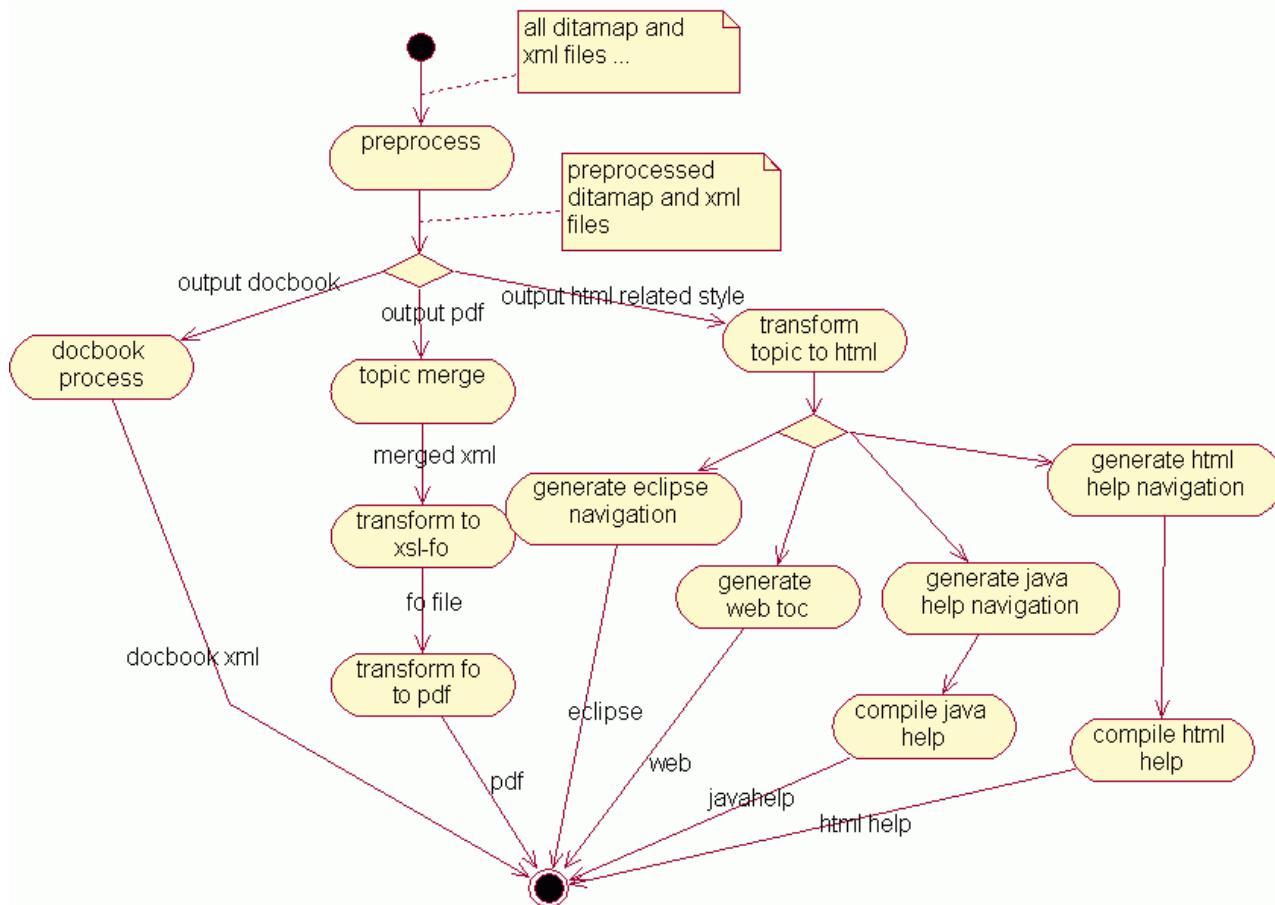
The **DITA Open Toolkit**, or DITA-OT for short, is a set of Java-based, open source tools that provide processing for DITA maps and topic content. You can download ...

 [GitHub](https://github.com/dita-ot/dita-ot)  
<https://github.com/dita-ot/dita-ot> ::

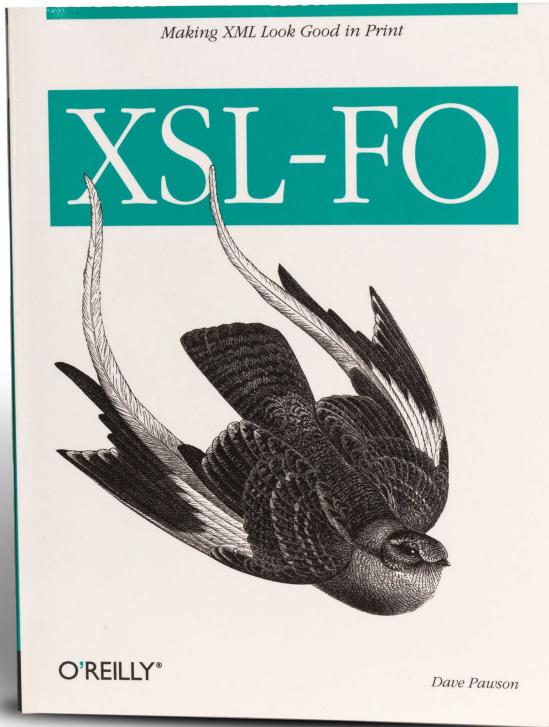
## DITA Open Toolkit

DITA Open Toolkit, or DITA-OT for short, is an open-source publishing engine for content authored in the Darwin Information Typing Architecture. Visit ...

# THE INTERNET RESOURCES - "DITA-OT" SEARCH



# BOOKS

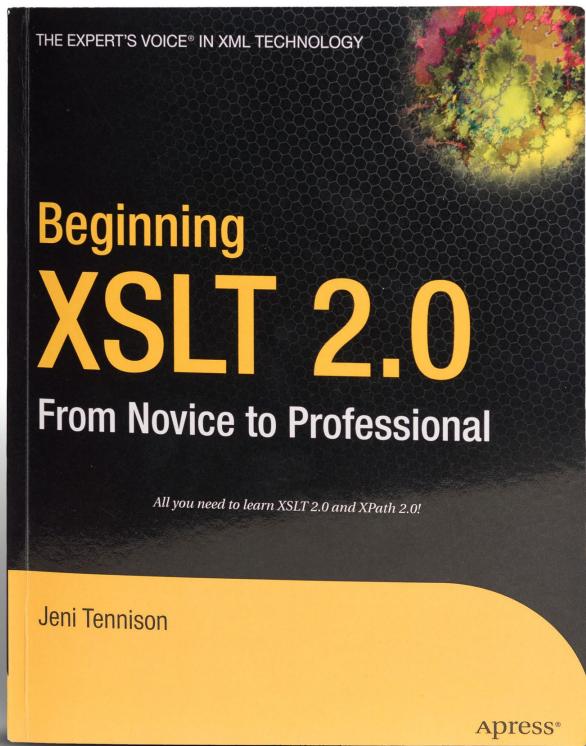


From zero to DITA-OT hero

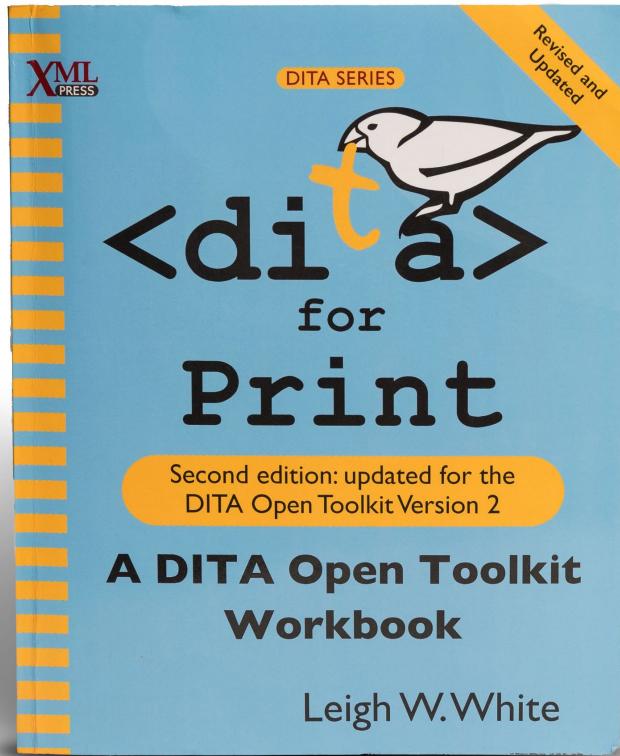


Justyna Hietala

# BOOKS

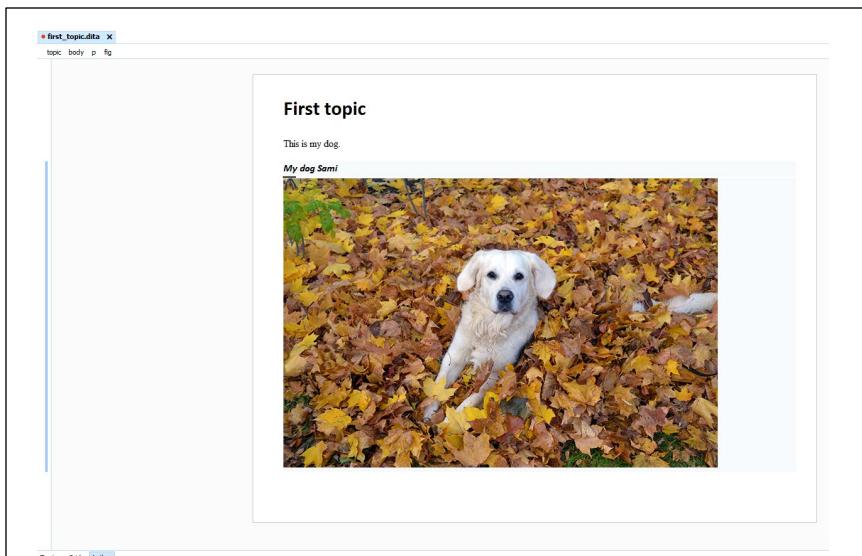


# BOOKS



Book for anyone who wants to learn how to create PDFs using DITA Open Toolkit without learning everything there is to know about XSL-FO, XSLT or Xpath, or even about the DITA Open Toolkit itself.

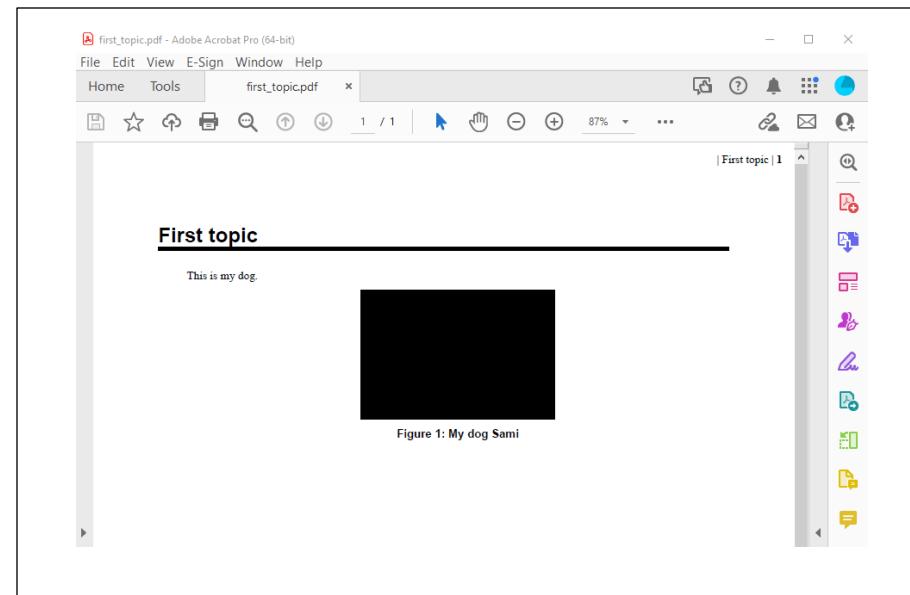
# FIRST ATTEMPTS - THE "DOG" STORY



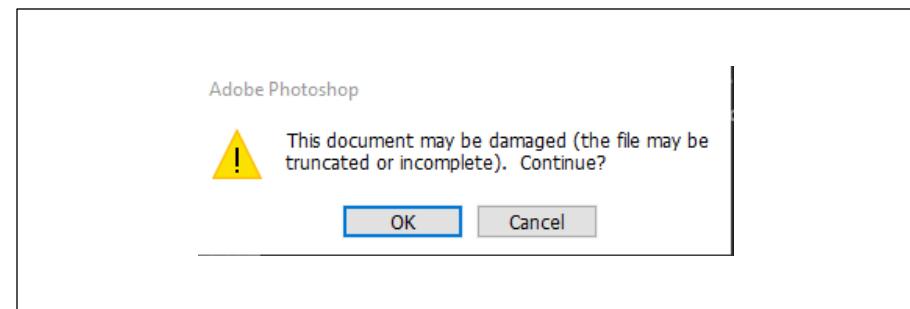
The screenshot shows the DITA-OT interface with a topic titled "First topic". The topic content includes the text "This is my dog." and a figure caption "My dog Sami" followed by a photograph of a white dog lying in fallen autumn leaves. The interface has tabs for "Text", "Grid", and "Author".

```
Results
244 [fop] C:\Users\ji\Desktop\DIITA_PRESENTATION\temp\topic-pdf\topic.fo -> C:\Users\ji\Desktop\DIITA_PRESENTATION\out\topic-pdf\first_topic.pdf
245
246 transform.fo2pdf;
247
248 transform.topic2pdf;
249
250 preview.topic.pdf;
251
252 dita2pdf2;
253
254 clean-temp;
255
256 The process finished with exit code: 0
257
```

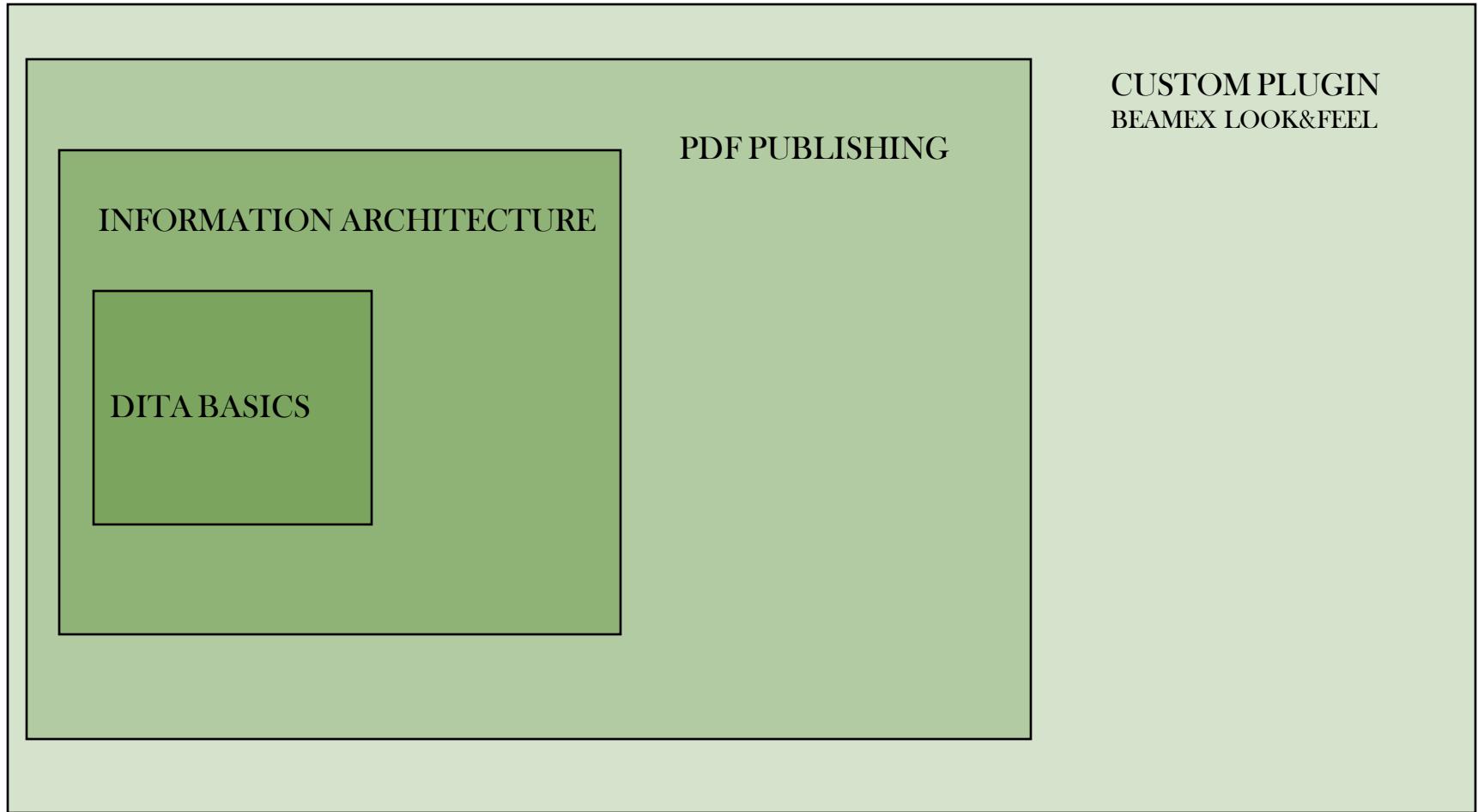
DITA-OT [DITA PDF - based on XSL-FO] X



The screenshot shows the Adobe Acrobat Pro interface with a PDF document titled "first\_topic.pdf". The document contains the text "First topic" and "This is my dog.". Below the text is a large black rectangular placeholder where the dog image would be. A caption "Figure 1: My dog Sami" is present below the placeholder.



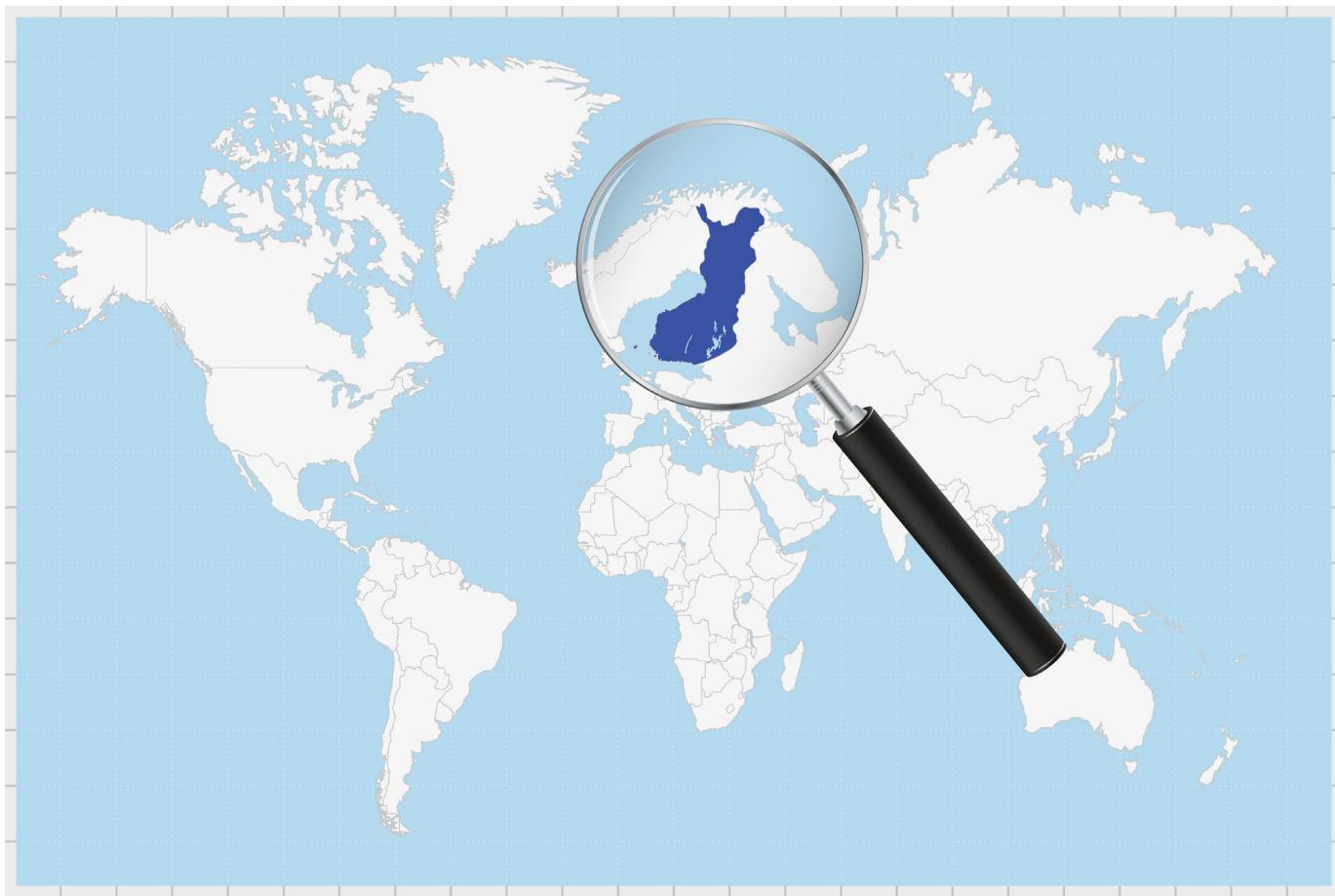
# THE BIG PICTURE



# COMPLEXITY



# SEARCH FOR THE TRAINING PROVIDER



# FIRST TRAINING

## Days 1-2 – DITA XML and Information Architecture

## Days 3-4 – XSLT and XPath training

- Getting started with XSLT stylesheet development
- How to use XPath to access any node in the XML node tree
- How to create and call templates
- Creating output
- XSL-FO for PDF output
- Centralized maintenance through property sets
- Reuse: variables; named templates; functions
- How to use conditions to control flow in templates
- Techniques for grouping, sorting and recursion
- How to include/import other stylesheets
- Advanced topics: numbering; analyzing strings; keys

## Day 5 – Fundamentals of Dita Open Toolkit

- Programming Skills Needed (ANT, XSLT, XSLT-FO, CSS)
- Architecture (ANT, build files, plugins)
- XHTML pipeline & modifying output (XSLT, CSS)
- PDF pipeline & modifying output (XSL-FO)
- Scoping and Planning Development Projects
- Introduction to DITA Open Toolkit skills, versions, and installation
- Overview of the DITA Open Toolkit including output types, architecture, languages, configuring, extending and customizing the DITA Open Toolkit
- Customizing the DITA Open Toolkit covering extension points, parameters, creating new plugins and coding conventions and limitations
- An introduction to ANT, XSLT and CSS programming required for the DITA Open Toolkit
- A hands-on look at the XHTML plugin pipeline

# THE FIVE STAGES OF DITA-BASED PDF PUBLISHING

## The five stages of DITA-based PDF publishing

- ◆ “How hard could it be?”
- ◆ “Why is this so \$#@!\$#@ hard??”
- ◆ “Maybe I can get this to work with different tools/people...”
- ◆ “At least I got our logo on the front page and nobody knows that I did this.”
- ◆ “It looks adequate and it publishes in seconds.”

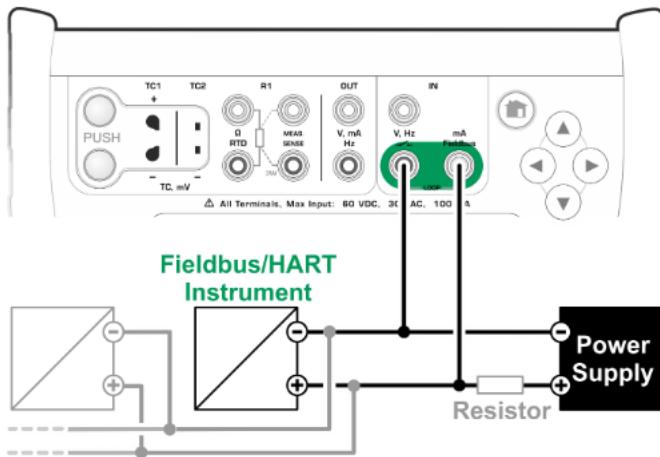


Demystifying DITA to  
PDF publishing

by Sarah O'Keefe  
Scriptorium Publishing

# FIRST SUPPORT TICKETS

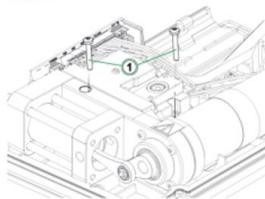
When **Communicator** is started, a list of communication protocols available for MC6 is shown. See [Figure 2: Communication protocols](#). on page 6.



**Figure 5: Using an external power supply.**

3. Unscrew the following two screws (1) from the pump mechanism and lift the whole mechanism slightly up.

#### Step 3

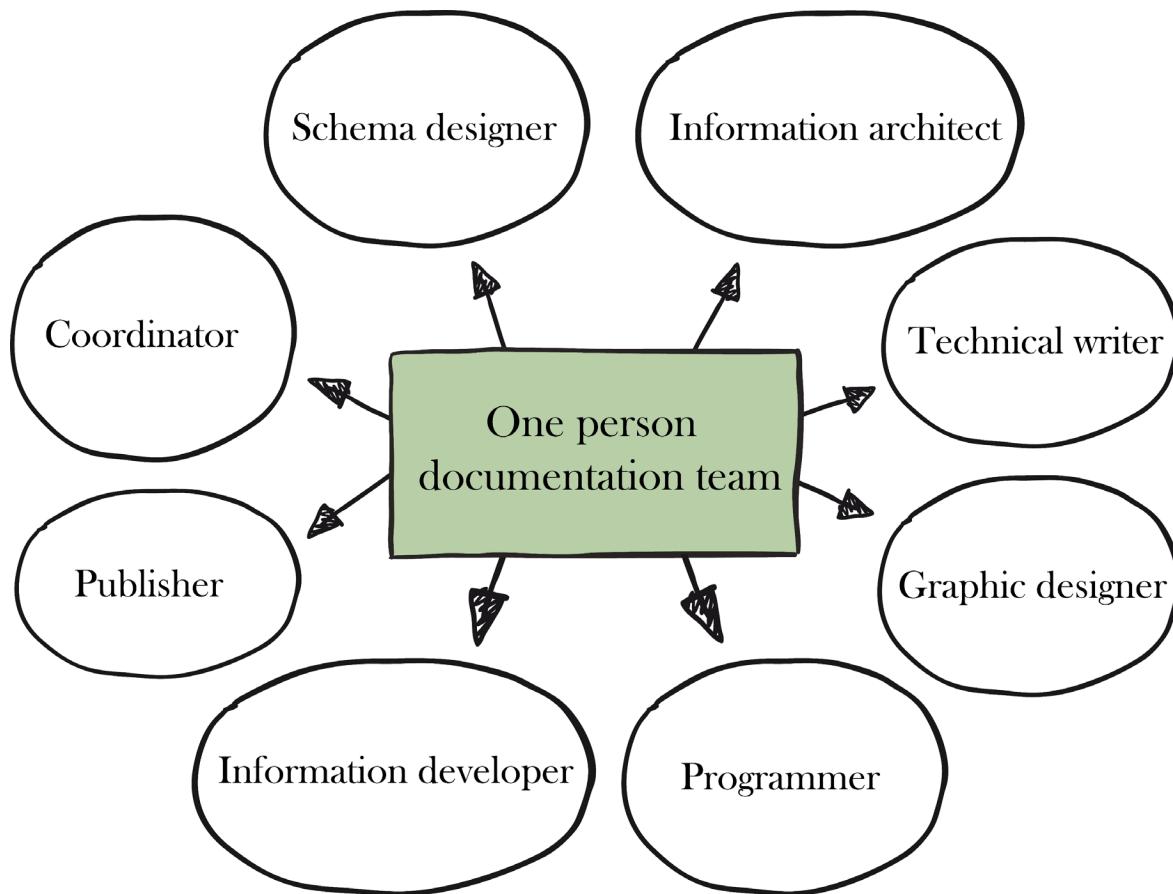


4. Unscrew the four screws holding the cylinder ends together. When reassembling, tighten the screws with 2.5 N

# THE "FIGURE TITLE" ISSUE AGAIN

```
<!-- Output the corrected string -->
<xsl:call-template name="removeFinalFullStop">
<xsl:with-param name="inputString" select=".">
```

# MULTIPLE ROLES



# FIRST MODIFICATIONS AND MY FIRST PLUGIN



DITA_clean_version	File folder
DITA-OT_old	File folder
dita-ot_original	File folder
<input type="checkbox"/> dita-ot-3.1.2	File folder
dita-ot-3.2	File folder

# WORKSHOP



# FIRST TRAINING

## Days 1-2 – DITA XML and Information Architecture

## Days 3-4 – XSLT and XPath training

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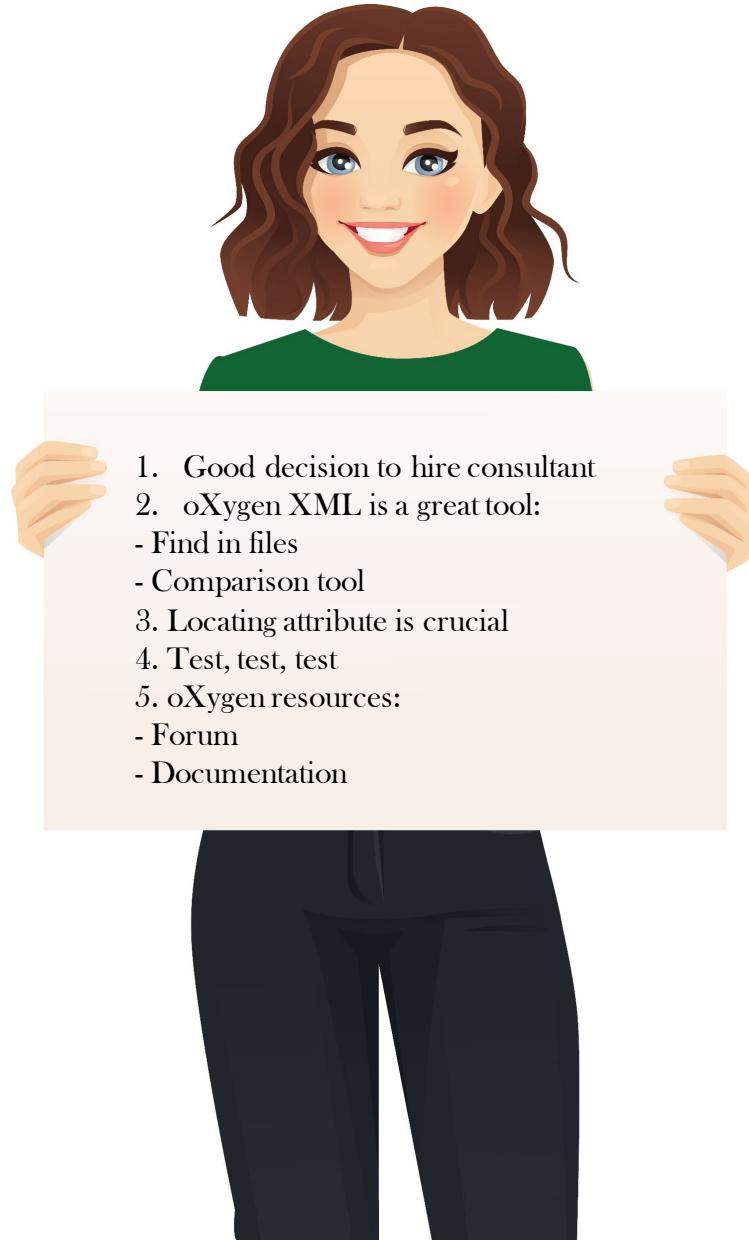
## Day 5 – Fundamentals of Dita Open Toolkit

- Programming Skills Needed (ANT, XSLT, XSL-FO, CSS)
- Architecture (ANT, build files, plugins)
- XHTML pipeline & modifying output (XSLT, OWS)
- PDF pipeline (modifying output – XSL-FO)
- Scoping and Planning Development Projects
- Introduction to DITA Open Toolkit skills, versions, and installation
- Overview of the DITA Open Toolkit including output types, architecture, languages, configuring, extending and customizing the DITA Open Toolkit
- Customizing the DITA Open Toolkit covering extension points, parameters, creating new plugins and coding conventions and limitations
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- A hands-on look at the XHTML plugin pipeline

# WHERE ARE WE NOW



# IN RETROSPECT



# FINAL CONCLUSIONS



# THANK YOU

QUESTIONS?