



ATELI
ERCON
CORDE

18 JUN 2016
09H – 13H



“A moment of surprise and wonder that united the audience...”



*Joaquim Baptista
Altran/Thales*

*Daniel Bofill
SISCOG*

*João Lourenço
FCT/UNL*

*Paulo Ribeiro
OutSystems*

The 10th Report

Contents

Invitations	3
First invitation (6-Jun)	3
Second invitation (16-Jun)	4
What happened?	5
Joaquim Baptista	5
Daniel Bofill	5
Intermission	6
Eunice Gonçalves Duarte	6
Paulo Ribeiro	7
João Lourenço	8
Lunch	10
Joaquim Baptista	11
Technical Writing for Portuguese Product Companies	12
Daniel Bofill	14
About SISCOG	14
5 Essential Features to Build User Manuals	15
Eunice Gonçalves Duarte	18
Low tech movie	19
Paulo Ribeiro	21
Do-it-yourself Technical Writing	22
João Lourenço	26
About DI-FCT/UNL	26
LaTeX for MSc and PhD thesis	27
Public notes	36
Daniel Bofill	36
Laura Barros	37
Marta Leocádio	37
Paulo Ribeiro	37
Rogério Cardoso	38
Anonymous #1	38
Institutional support	39
About EuroSIGDOC	39
About APCOMTEC	40
About Atelier Concorde	41

Invitations

First invitation (6-Jun)

Greetings to all technical writers, and to everyone interested in technical communication!

In informal meetings, we have talked for some time about exploring the diversity of tools used in the community. We are excited to announce that our 10th formal meeting will cover three very different kinds of tools, by people that actually use them.

- **Saturday, June 18th, between 9h00 and 13h00** (be sharp).
- **Atelier Concorde**, www.atelierconcorde.org.
- Rua Leite Vasconcelos 43A, 1170-198 Lisboa.

Tools will shape you writing in surprisingly deep ways. Most companies just write with what “came with the box”, usually Word. However, every tool makes some things easy, some hard, and some impossible.

The perfect tool for some situation may be the impossible tool for another situation. Writers often praise and curse their tools, often in the same sentence, always with passion. Not surprisingly, innovative companies will often find themselves off the beaten path.

Joaquim Baptista, Technical Writing for Portuguese Product Companies

The economic crisis in Portugal is stimulating the creation of product companies that sell worldwide. Over time, these companies accumulate a capital of technical knowledge, domain knowledge, and user knowledge. Joaquim will show how technical writing helps product companies manage and engineer their knowledge.

Daniel Bofill, RoboHelp: 5 Essential Features to Build User Manuals

SISCOG’s clients require user manuals that can help them keep up with the complexity and high level of customization of their software. Daniel will look into some of the features RoboHelp provides that aid authors be more efficient such as user defined variables, conditional build tags, CSS editing, single source layouts, and more.

Paulo Ribeiro, Do-it-yourself Technical Writing

Paulo will report on the organic introduction of tools and processes into a company, as the needs of the company developed. He mostly used open source technologies that incurred small or no costs to the company.

João Lourenço, LaTeX for MSc and PhD thesis

João will argue that students should write their thesis using LaTeX instead of a common word processor such as Word. João will introduce his LaTeX template to write MSc and PhD thesis, so that the output follows the official guidelines

automatically. João will also talk about his experience in creating the template, and curating its community of users.

The participation is free, but refreshments will be on your own. Some of us will probably stay for lunch afterwards, and you are welcome to join us.

Please extend this invitation to friends and other interested parties. More interesting participants will improve the learning experience for everyone. Please publicize the [EuroSIGDOC site](#), the [Google group](#), and the [Meetup group](#)!

Special thanks to [Eunice Gonçalves Duarte](#), our new sponsor, for graciously offering the room and the projector. And thanks to the long-time sponsors [APCOMTEC](#) (marketing) and [EuroSIGDOC](#) (site).

— Alexandra Albuquerque, APCOMTEC, info@apcomtec.org

— Carlos Costa, EuroSIGDOC chair, carlos.costa@acm.org

— Joaquim Baptista, EuroSIGDOC vice-chair, px@acm.org

PS: By the end of his engineering course, Joaquim was known as “The Parker Man”.

PPS: Eunice is also a performer, and she was asked to perform at the meeting. Stay tuned.

Second invitation (16-Jun)

This is a gentle reminder for our meeting next Saturday, starting at 9h.

This next meeting will feature three tales from the trenches, by people that lead the evolution of tools and processes in their daily jobs.

During the coffee break, Eunice Gonçalves Duarte (aka "semáforo"), will also demonstrate and comment on her performance techniques. Eunice has graciously offered the room for the meeting.

I look forward to meet you on Saturday,

— Joaquim Baptista

PS: Did the Greeks start technical writing, like everything else, 2000 years ago?

http://www.theregister.co.uk/2016/06/15/antikythera_mechanism_inscriptions_deciphered/

What happened?

Come Saturday morning, it was surprisingly hard to park next to Atelier Concorde, quite unlike the time that I had visited the before. The meeting was in the project room of Atelier Concorde, fresh out of an exhibition. Three of the walls were covered with drawings. The drawings created a cheerful mood, quite different from the feeling of clean white room in my previous visit.



Thirteen people attended the meeting, including eight people that stayed for lunch. Mariana doubled as the event photographer, which means that I got photographed by a real camera while speaking.

Joaquim Baptista

Most people arrived after 9h, and I started my presentation at 9h25 with eleven people in the room. While the presentation was aimed at people new to the group, most persons had not seen the presentation at CAPSI, the Portuguese conference on information systems.

My presentation had three parts. First I showed how a startup developing a product will eventually face growing issues in effectively capturing and using its own knowledge. These issues will initially be tackled by one of the existing departments of the company.



Then, I explained the skills that technical writers bring into a company, starting with the ability to gather knowledge consistently, and then transferring that knowledge into different artifacts.

Finally, I presented the organizations that advocate technical writing in Portugal, namely APCOMTEC, EuroSIGDOC, and our own Technical Writers @ Lisbon.

Daniel Bofill

SISCOG imported its Word content into RoboHelp shortly before Daniel was hired. I knew that Daniel had outgrown RoboHelp, so I was surprised as Daniel described its major features.

He started with master pages, which provide structure to topics, but not to the body of topics. They seem to just take care of the boilerplate. On the other hand, after you write topics you are limited in how you can change its master page.



On larger topics, SISCOG found that users appreciate mini table of contents.

RoboHelp is strong at editing CSS, hiding the complexity behind dialogs and combo-boxes.

Conditional build tags can hide topics or parts of topics. However, sometimes hidden topics are included in CHM help files and can be found through search. The editor paints conditional areas, but fails when several tags apply to the same text.

User-defined variables are used only to include versioning information in the cover page, and to have the name of the application. However, RoboHelp has the interesting concept of sets of related variables, where a set of variables changes together.

Singe-source layouts generate several different outputs from the same source, but a better name would be repurposing. You can buy RoboHelp plugins to generate outputs in more formats.

Daniel must have a RoboHelp project for each application, instead of a single master repository to generate several helps from subsets of topics. SISCOG is working on compensating this by simulating a repository that uses scripts whereby topics can be shared among projects. He has a different layout for each customer, with customized conditions and CSS.

During questions and answers, Daniel acknowledged that SISCOG has RoboHelp 8, while the current version is 15. Still, he believes that RoboHelp is way behind Madcap Flare. Daniel longs for the flexibility of DITA. For example, SISCOG sells 136 plugins that customers can buy individually to add functionality.

Intermission

We had coffee and cookies, upstairs by the entrance, offered by Aline Lopes. Which means that we had all the intermission time to talk, without the logistic issues of moving to a coffee house and back.

Eunice Gonçalves Duarte

Eunice had set up a table in the corner of the project room, with pieces of cork and a few toys. With the room lights dimmed, two small lamps drew the attention onto the table.

Eunice explained the process: toys, props, a portable web camera that can focus really close, and a laptop to record everything. After talking about her experiences, she just invited everyone to play while she blew soap bubbles into the stage.

After a few moments of hesitation, magic happened. People started moving the toys, and then improvised a story, while someone else moved the camera around.



The footage captured will require extensive processing before it can be released.

Paulo Ribeiro

Vision-Box was in a phase of vigorous growth when Paulo was hired, together with Rui and Helena. Bruno joined them later to extract 2D snapshots from 3D CAD models.

They quickly figured out that they needed to move beyond Word. Lacking the time to explore alternatives, Paulo decided to improve on what was he had used at Altitude Software. He adopted DITA, the DITA Open Toolkit, and Apache FOP.

He fought against XSLT and XSL-FO to get good-looking PDFs, a process that took two or three months. He recommended the tutorial book DITA for Print by Leigh W. White.

As XML editor, they initially used the unsupported freeware Syntext Serna. Later, they settled with oXygen XML Author, which Paulo recommends.



Paulo considered using a CCMS (component content management system), but ultimately felt that these fell into two camps: either limited and cheap, or complete and way too expensive. Paulo felt that a CCMS would not be a good fit to a team of four, and that he would be trapped inside the tool. Instead, the temporary Subversion repository that they set up while choosing a CCMS became the

definitive solution.

At the end of 2015, they had 150 ditamaps, 2500 topics, 380k words, and 5000 images. Most topics are composed of images with just a little text.

Three months after they started, they were already lost in their own directory structure. They regained balance by focusing reuse on the more stable topics. Topics that frequently changed in each project were just copied and modified. Most manuals documented unique combinations of existing hardware designs, requiring unique drawings while sharing a

common structure and some text. However, they often had no access to the actual hardware.

Over time they invested in automation, typically using Python. They started by automating the process of watermarking images, saving the Human designer some serious time. They also created scripts to validate DITA sources, alleviating the need for a CCMS.

Paulo and Helena feel that success happened because the team was small and cohesive, and Vision-Box gave them the time to experiment. They took about an year to put all the pieces together.

Helena had the most doubts at the beginning but, in her own words, became fan #1. In Paulo's words, the major lesson is that good enough is best.

João Lourenço

In his own words, João “earns his living doing this”, meaning presenting. And he proved his point with a mature presentation, which leads the audience through a large number of carefully constructed slides that provoke the audience and then the ensuing psychological wave.

He started with a challenge: why would Word not be good enough for a writing a thesis? He immediately presented the analogy of buying a car to conclude that “it depends”: there is no perfect car for every driving situation, and there is no perfect tool for every writing need.

Then he illustrated some advantages of LaTeX over word, namely spacing (between letters and between words) and justification by paragraph.

João used a graph to show that Word excels for simple documents, while LaTeX requires a larger investment up-front that pays off as documents grow larger and more complex.

So, should a thesis be considered a simple document or a large and complex document? Thesis are complex documents because they have chapters, sections, appendixes, annexes, figures, tables, lists of the above, cross-references, bibliography citations, and glossary... all regulated by strict University publishing rules governing fonts, margins, line spacing, covers, and spine... and further complicated by the need to establish working workflows with advisors, where the thesis gets reviewed and revised.

João told one episode: three days before a deadline, one of his students using Word got into a situation where he could neither print nor save his theses. It took a divide and



conquer approach, deleting parts of the thesis in sequence, to identify the culprit, which was a specific cross-reference. The student had stumbled into a bug in Word.

This episode reflects my own experience. Every single student that I ever met that used Word to write his thesis (and sometimes paper or major work) had a “war story” to tell, usually weeks or days before the work was due. I knew a few students that just retyped the entire thesis from the last printout.

João has always been an evangelist for LaTeX, suggesting his MSc and PhD students to use it instead of desktop publishing alternatives. After this episode, however, he started to force students to use LaTeX. So far he had 30 MSc and PhD students.

How can students learn LaTeX? Google was a game changer, and João enumerated several sites that help with parts of LaTeX.

For me, it was quite significant that he **did not** mention TUG, the TeX Users Group. This group of experts gathered initially around the paper journal TUGboat, then embraced the Internet to create the Comprehensive TeX Archive Network (CTAN, following the footsteps of Perl’s CPAN). TUGboat still exists; its articles (often 2–3 pages long) can be esoteric, but also enlightening and inspiring. Then again, the average reader of TUGboat would probably be considered an expert by most standards.



Finally, João introduced his own LaTeX template, named “unlthesis”. Besides typesetting pages according to official requirements, the LaTeX template also creates the front matter and back matter pages, and even the spine of the final book.

Over time, communities of users has formed around a Google group (for more advanced users) and a Facebook group (for beginners, including beginners to LaTeX itself). João can no longer offer direct support by email, or he would do little else.

Why did João start the template? After forcing his students to use LaTeX, he felt obliged to help them. He ended up coding a template that, in his own words, does everything except writing the thesis. This “maximal” approach contrasts with most University LaTeX thesis,

which offer a “minimalist” starting point that still requires the student to encode in his document many formatting requirements.

João believes that this “maximal” approach is the reason for the wider use of his LaTeX template. The usage went beyond Computer Science students to other departments at FCT, then to other Schools at UNL. He knows that students from random foreign Universities have adopted and customized his LaTeX template.

How hard was it? João struggled to learn plain TeX. After having read the TeXbook myself and learning about the mind-bending macro `\expandafter`, I definitely sympathize with him. He also struggled to incorporate user requests, and felt the need to refactor code and to create his own “domain language” to define covers and front matter.

The template is currently maintained by two developers, with help from a few more contributors. He knows for certain that the template is used for a few hundred users per year at FCT/UNL, plus quite a few scattered around. He says that some users are happy...

He delivers LaTeX training at the UNL Doctoral School, where he meets students from all backgrounds. While some science students such as doctors will be hit or miss, Linguists just love LaTeX. I find it hardly surprising that Linguists would appreciate books and good typesetting.

At the Doctoral School, the real issue against LaTeX adoption have been the advisors, which are used to a Word-based workflow. João argues that students should author every single word in their thesis, lest they be caught off-guard while defending the thesis. Therefore, advisors should comment the thesis, but not write into it.

João has found the iPad to be the ultimate thesis revision tool. He takes draft PDF files from students, then used a virtual pen to scratch and hand-write extensively. However, the student must incorporate comments himself, ensuring sound authorship of the thesis.

At least two of the attendees pledged to try LaTeX for their thesis or papers.

This was our 10th formal meeting, and João was the 30th speaker. We could not have picked a better speaker to this auspicious moment.

Lunch

We finished close to 14h, and proceeded to stow that chairs and tables that we had used. But we did so while still talking, so Eunice had to kick us out of the basement.

Eight of us proceeded to lunch, which we had in a “tasca” found after a steep ramp and two corners. There was wine and beer to go along with bread, cheese, roast suckling pig, and other delicacies. The conversation considered the merits of an “autothesis” class, which will be left as an exercise for the reader.

We said our good-byes at 16h30, about 8h after the first of us arrived on site.

— Joaquim Baptista, px@acm.org

Joaquim Baptista

I draw on my extensive experience to offer effective documentation solutions, with the sophistication that would typically require a team of specialized consultants.

Currently, I am a senior consultant engineer at Altran Portugal, assigned as senior technical writer at Thales Portugal. I am working on software for passenger information at railroads.

I worked as a documentation manager and senior technical writer at Altitude Software, between 1997 and 2014. I was responsible for the documentation set (1200K words in 5400 unique pages, in 2014) aimed at supervisors, system administrators, integrators, and programmers. Since 2006, I was also responsible for the training materials (114 training hours in 8 courses, in 2014). I structured the courses into modular lessons with objectives, slides, exercises on virtual machines, and solutions.

I hired and coached 23 writers between 1998 and 2014. I used Agile principles to manage since 2004, adapting the practices to suit the needs of an evolving team and workload.

I wrote Python scripts to automate processes, saving two full-time positions. One script gathered comments and method signatures from C# source code, then used custom heuristics to generate API reference documents (since 2002). Another script used the structure and labels of the user interface to update screen references (since 2009).

I managed the localization of the documentation and software from English to Japanese in 1999–2000. Since then, I assisted others with localization processes and tools.

I created a proprietary solution for writing using XML in 2000, leading the customization of an XML authoring editor and the development of tools to generate outputs. I adopted the DITA XML standard in 2005, selecting and developing tools, and making the DITA standard usable by non-technical people.

I developed a company-wide content strategy that has served Altitude Software since 2004. The strategy organized the flow of information across the company (including foreign offices and top management) using a unified login, an open-source wiki, and several repositories.

Before tackling documentation, I worked as trainer, programmer, system administrator, and academic researcher.




Technical Writing for Portuguese Product Companies

Technical Writing for Portuguese Product Companies

Joaquim Baptista,
Senior Technical Writer



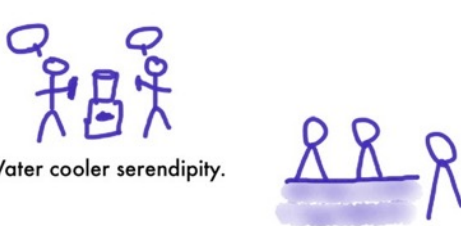
Startup in a room



Everyone knows what everyone else had for breakfast.

2

Random Talk



Water cooler serendipity.

Face-to-face meetings.

3

Distance

- Repetition.
- Volume.
- Turnover.



4

Emerging Solutions

- Marketing demonstrations, articles. 
- Service tutorials, training. 
- Support knowledge base. 
- Developer documents. 
- User interface. 
- Social tools. 

5

Professional

- Technical writer.
- Technical communicator.
- Trainer.
- Editor.
- Information developer.
- Knowledge manager.



6

Learn



Study + Enquire + Enumerate + Consolidate.
Facilitate. Survey. Ethnographic interview.

7

Explain



Write clear thoughts in clear words.
Create insightful examples.
Inspire with illustrations and comics.

8

Show



Create inspiring demos.
Create hands-on lessons or tutorials
with guaranteed learning objectives.

9

Structure



Structure for consumption and maintenance.
Have a place for everything.

10

Feedback!



- Product.
- Concepts.
- Users.
- Tasks.

11

Recommendations

- Mind the intellectual capital.
- Make people effective.
- Use experienced writers to audit, lead, guide others, start team.



12

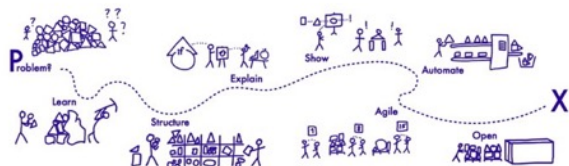
Technical Writers @ Lisbon



2013-2016	Meetings	Duration	Participants	Talks
Formal	9	35h	241	26
Informal	7	23h	60	-
Expedition	2	37h	7	-
Total	18	61h	308	26

- Also APCOMTEC, EuroSIGDOC.
Yearly events. International representation.

13



pxQuim.com

Joaquim Baptista

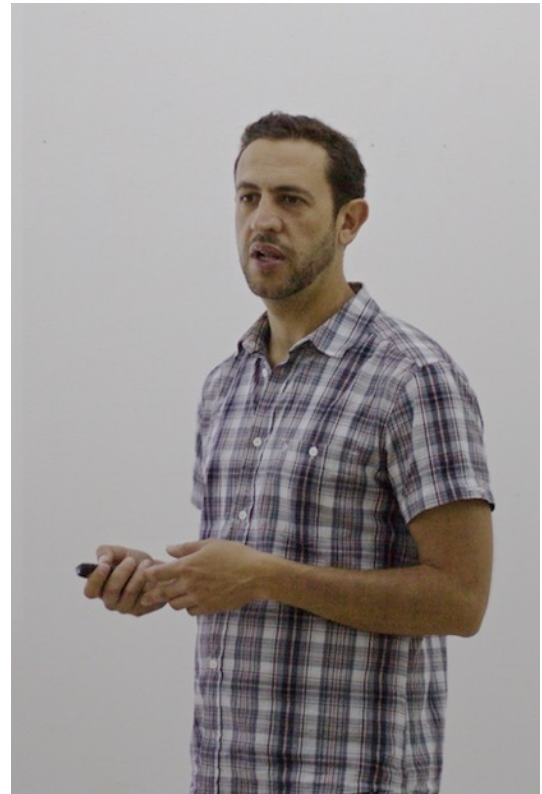
14

Daniel Bofill

Daniel Bofill is a technical writer at SISCOG.

Born and raised in South Africa, he moved to Portugal in 1994 and found that his knowledge of English created the perfect opportunity to learn and explore the new culture, meet new people and share and develop ideas while learning the new language.

Starting off as a technician for plastic card personalisation machinery, his enthusiasm for understanding why things work the way they do quickly led him to coordinate the production and logistics of smartcard loyalty programs. After a short incursion into home design and teaching, he returned to the technical world where he led a team of specialised technicians in taking care of card issuance centers for the banking industry and access control systems.



Having documented and translated countless machine and configuration manuals, he now works hard to create and deliver software user manuals. He continues to teach English and is always up for a game of tennis.

About SISCOG

SISCOG is a software company that provides decision support systems for resource planning and management in transportation companies, with special experience in the field of railways.



Founded in 1986, SISCOG uses a combination of Artificial Intelligence and Operational Research technologies, resulting in state-of-the-art optimisation software.

SISCOG addresses the biggest challenge of companies nowadays — productivity.

The business drivers for increased competitiveness and the more stringent customer demands for punctuality, product flexibility, and network expansion are the main issues for companies who are expected to meet these requirements while cutting operating costs and maximising revenues.

By understanding transportation companies needs, regardless of their size or complexity, and by speaking their language, SISCOG offers planners and company executives the tools to quickly, effectively, and accurately optimise their resources and daily work.

5 Essential Features to Build User Manuals

OPTIMISING THE RESOURCES OF THE WORLD

RoboHelp: 5 Essential Features to Build User Manuals

SISCOG SISTEMAS COGNITIVOS

18 July 2016

SISCOG

Software company

- Founded in 1986
- Working in the railway domain since 1988

Specialized in **planning and management of resources** (timetable, vehicles, staff)

- **Products**
- Systems based on products

Offering **powerful optimisers**

Helping **railway and metro operators** around the world

SISCOG SISTEMAS COGNITIVOS

18 July 2016

Our Clients

London Underground	Dutch Railways
Lisbon Metro	Finnish Railways
Suburban trains of Copenhagen	Norwegian Railways
	Danish Railways
	Canadian Railways
	Portuguese Freight Railways

Oldest international system has been in continuous operation since 1998

SISCOG SISTEMAS COGNITIVOS

18 July 2016

Solutions for the main resources

- ONTIME**
Planning and Management of Timetables (**Track & Time**)
- FLEET**
Planning and Management of **Vehicles**
- CREWS**
Planning and Management of **Personnel**

SISCOG SISTEMAS COGNITIVOS

18 July 2016

Complete integration, for all phases and resources

Phases: Future, Present, Past

Resources: ONTIME, FLEET, CREWS

SISCOG SISTEMAS COGNITIVOS

18 July 2016

Master Pages

- **About Master Pages?**
 - Previously known as Templates.
 - Used to create new topics or apply to existing topics.
 - Think of them as a default starter for a topic.
- **What can you put in a Master Page?**
 - Copyright information.
 - Corporate logos.
 - Legal notices.
 - Headers and footers.
 - Breadcrumbs.
 - Mini TOCs.
 - Default body content.

You can also attach a style sheet (CSS) to the Master Page.

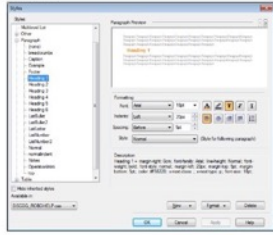
SISCOG SISTEMAS COGNITIVOS

18 July 2016

CSS (Cascading Style Sheets) Editing

- About CSS editing
 - RH CSS Editor: Access all CSS files of the project
 - RH Single Style Editor: Modify a single style.

- What can you do with CSS editing?
 - Edit characters, lists, multilevel lists, paragraphs, hyperlinks, and tables.
 - Edit size, colour, indenting, spacing, margins, etc...
 - Define next style classes on Enter.

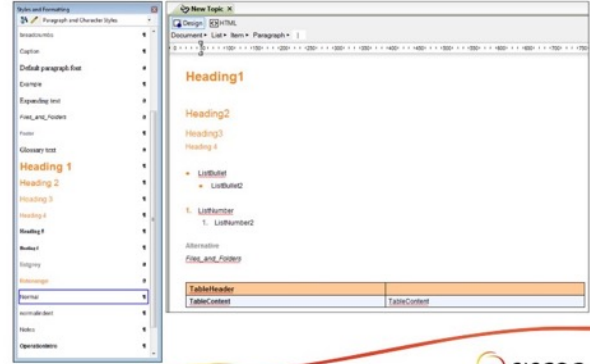


16

18 July 2016



CSS Editing

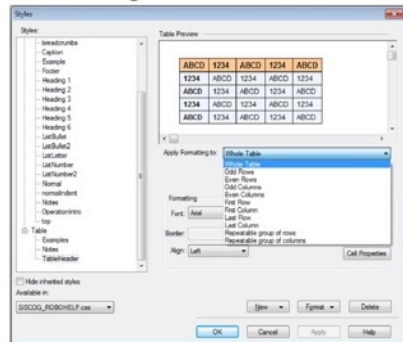


16

18 July 2016



CSS Editing



17

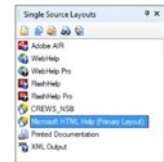
18 July 2016



Single Source Layouts

- About SSLs
 - Act as templates for different versions of project output.
 - Single-source layouts exist for each output type.

- What can you do with SSLs?
 - Generate different versions of the project using different settings for the output.
 - Create the layout, define output settings, generate, view, or publish output.
 - Single or batch outputs.
 - Define CBT and CSS for different outputs.

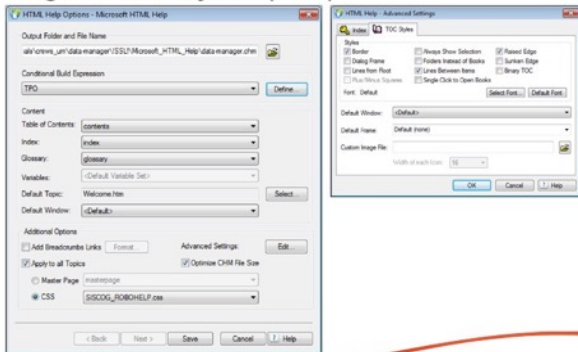


18

18 July 2016



Single Source Layouts (CHM)

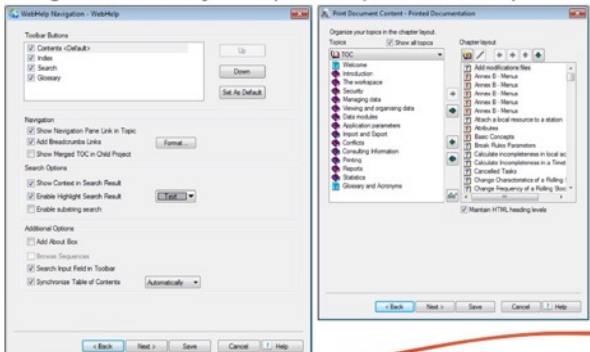


19

18 July 2016



Single Source Layouts (Webhelp and Printed)

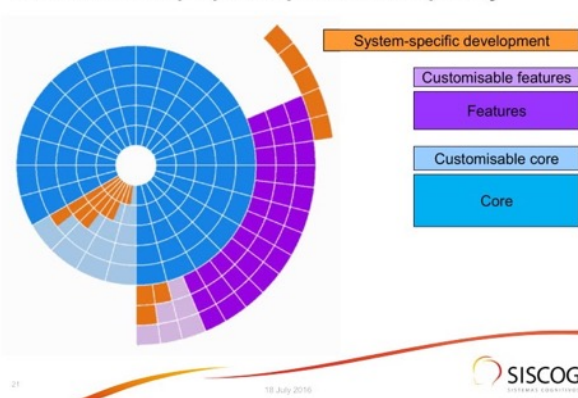


20

18 July 2016



Tools can't keep up with product complexity



21

18 July 2016



21

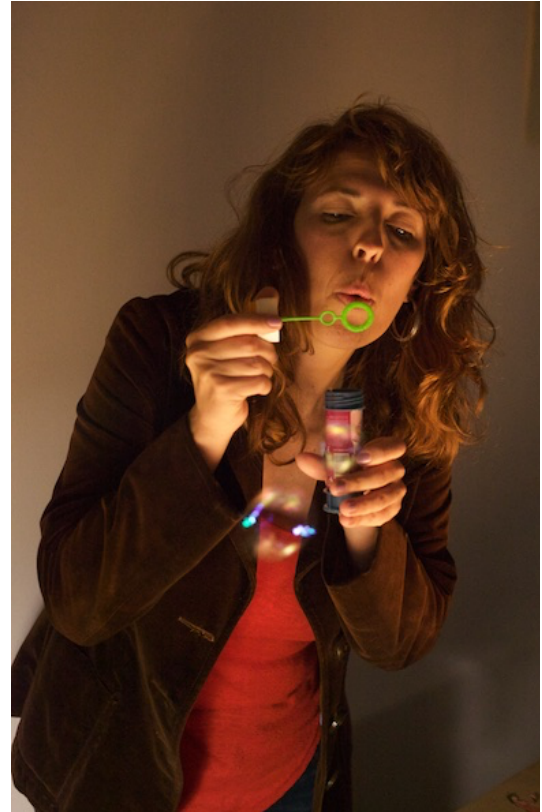
18 July 2016



Eunice Gonçalves Duarte

My name is Eunice Gonçalves Duarte, I'm a Portuguese performance artist and researcher on the uses of low tech and I work on the crossing of New Media Technology with theatre performance. I studied Communication and Culture Sciences and in 2002 completed the MA in Contemporary Drama Studies at University College Dublin (Ireland).

In 2003, I started to develop a few experiences with performance using new media technology (video and Internet). My interest encompassed to discover how the language of these new media could be used to create new performance work. My main goal was to understand how everyday technology devices (mobile phones, photo cameras, webcams, etc.) influence our current lives and how theatre can perform it. From those experiences I've developed a low tech method for performance creation.



Eunice explores in her artistic practice low tech image (poor image): A low-resolution image produced by mobile devices, not concerned with framing or editing, uses an aesthetic that is more common to be found on home videos, family photos or video chatting.

In addition to my artistic practice, I'm a lecturer in theatre and performance at Instituto Superior de Ciências Educativas (Lisbon) and currently I'm a PhD student at Universidade de Coimbra, developing a thesis on the aesthetics of digital performance.

semaforo.cc/about

Low tech movie





Paulo Ribeiro

Every work day, come rain or shine, Paulo Ribeiro rides his bike to OutSystems where he manages a team of technical writers.

It all started in 2005, after obtaining his Computer Science degree at Instituto Superior Técnico. After experiencing the joys and sorrows of working as a consultant, Paulo stepped into the unknown when he became a technical writer at Altitude Software. Stimulated by the complexity of the challenges at hand and inspired by the practices developed and followed by the Documentation team, he gradually developed a sense of awareness regarding how information is produced, processed, organized, communicated and consumed.

During 2014 and 2015 Paulo helped bootstrap a new Documentation team at Vision-Box. A strong technical mindset mixed with a good dose of pragmatism were crucial in defining the set of tools and processes that the team would use to produce documentation with increasingly higher standards of quality.

Since the beginning of 2016, while drinking proper amounts of tea, Paulo is focused on applying his experience to help a team of technical writers at OutSystems grow into maturity and transition to ever more efficient ways of managing information.



Do-it-yourself Technical Writing



Do-it-Yourself Technical Writing

No useless work, more fun!

Paulo Ribeiro

Technical writer for almost 10 years

- 7.5 years learning the trade
- ~2 years bootstrapping a new team
- 4 months managing an existing team

paulo@diffraction.pt
linkedin.com/in/prcristeiro



2/28

Agenda

Context

Tools and processes

Lessons learned

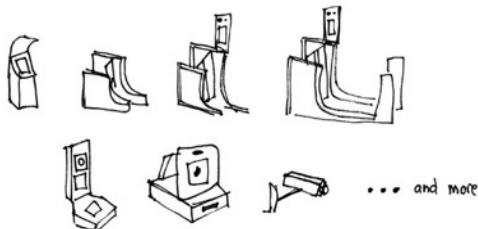
3/28

Context



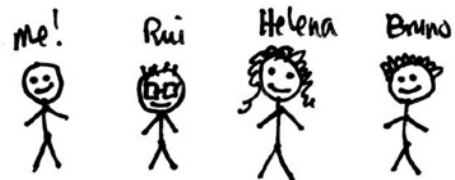
4/28

Business



5/28

Here come the technical writers



6/28

Challenge accepted!

- **Author** efficiently
- **Specialize** and **collaborate**
- **Reuse** content
- **Standardize** look and feel
- **Maintain** with ease
- **Automate**



...while producing manuals at the same time!

7/28

Tools and processes



8/28

DITA*

Darwin

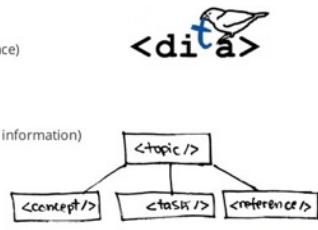
(specialization and inheritance)

Information Typing

(topics for different kinds of information)

Architecture

(extensible framework)



(* Not related with Dita Von Teese.)

9/28

DITA + DITA Open Toolkit

Open-source tools to publish DITA content

Built-in output formats:

- HTML
- CHM
- PDF
- ODT
- ...and more!

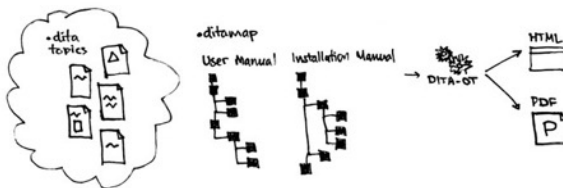


10/28

How does it work?

Reusable topics referenced in DITA maps

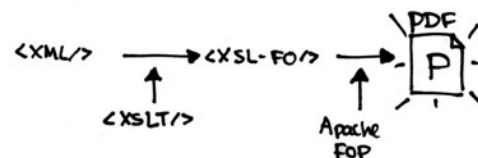
Single source, multiple output formats



11/28

Generating PDFs

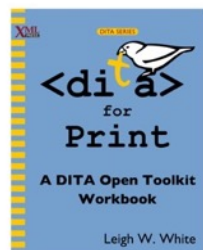
Lots of work to generate pretty PDFs!



12/28

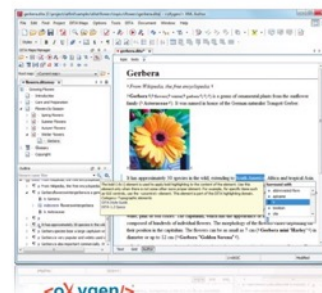
Generating PDFs

DITA for Print
by Leigh W. White



13/28

Authoring DITA



<oXygen/> XML Author

14/28

To CCMS or not to CCMS?



DITA Component Content Management System

16/28

Keeping everything under control

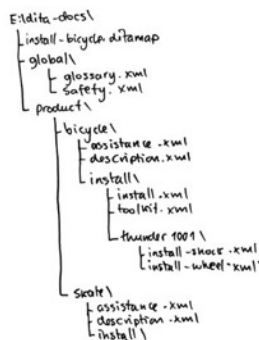
Organize thousands of resources:
DITA maps, XML topics, images, and more!



No *elunky* expensive CCMS needed!

17/28

Repository architecture



DITA maps: 150
Topics: 2 500
Words: 380 000
Images: 5 000

18/28

Automating with scripts

Machines do it better!
Automate as much as possible



```

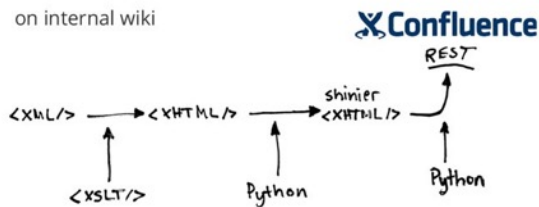
build-pdf.bat
check-ditamap.bat
check-images.bat
find-ditamaps.bat
find-topics.bat
trim-glossary.bat
watermark.bat
    
```



19/28

Publishing on Confluence

Make documentation available
on internal wiki

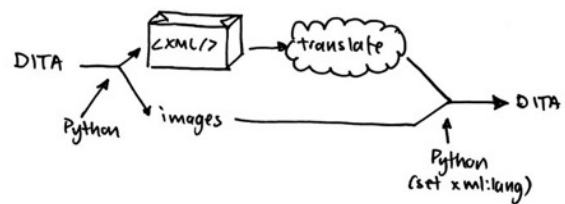


20/28

International -breathe- ization

(or I18N for short)

Good enough solution for one-time translations :P



21/28

Writing a new manual

A pragmatic and straightforward process:

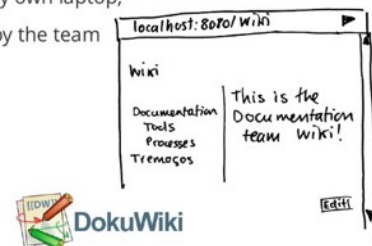
1. Clone existing DITA map and topics to act as templates
2. Gather information from developers or manipulate CAD from Engineering
3. Iteratively write the custom parts of the manual
4. Generate PDF and ask for review
5. Revise manual and publish.



22/28

Keeping track of it all

Wiki hosted on my own laptop,
quickly adopted by the team



23/28

Lessons learned



24/28

On the one hand...

- Small team with smart people
- Familiarity with the technology
- Time to learn, try... and fail
- Lots of room for improvement

25/28

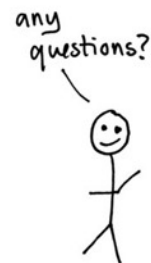
...on the other hand

- Successful adoption by all team members
- Less tinkering, more quality and consistency
- Good enough is best
- Effort that more than pays for itself

No useless work, more fun!

26/28

Thank you!



27/28

Resources

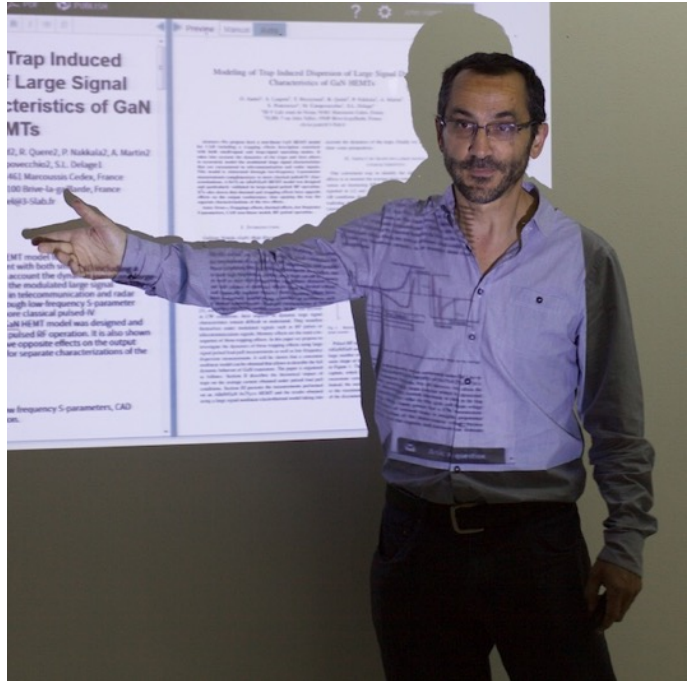
DITA OASIS Standard	http://dita.xml.org/standard
DITA Open Toolkit	http://www.dita-ot.org/
DITA for Print	http://xmlpress.net/publications/dita/dita-for-print/
<oxygen>- XML Author	https://www.oxygenxml.com/xml_author.html
SOLIDWORKS Composer	http://www.solidworks.com/sw/products/technical-communication/solidworks-composer.htm
Apache Subversion	http://subversion.apache.org/
TortoiseSVN	https://tortoisesvn.net/
Python	https://www.python.org/
Atlassian Confluence	https://www.atlassian.com/software/confluence
DokuWiki	https://www.dokuwiki.org/



28/28

João Lourenço

João Lourenço (docentes.fct.unl.pt/joao-lourenco) received his doctoral degree in 2004 from the NOVA University of Lisbon, Portugal, where he holds a position as Assistant Professor in the Computer Science Department. He is a member of the advisory board and steering committees of several International Conferences and Research Networks. He is a founding member of the NOVA Laboratory for Computer Science and Informatics (NOVA LINCS) and his primary research interests include in-memory data management for parallel and large-scale computing systems, and static and dynamic analysis of concurrent programs. He is co-author of more than 50 articles and papers, and received a Distinguished Paper Award in Euro-Par 2012 and the Best Paper Award in HVC 2012. He was a visiting researcher at IBM Research Laboratory at Haifa, IL, in Sep-Dec 2011; at University of S. Paulo (at S. Carlos), BR, in Feb 2014; and at University of Brno, CZ, in Feb 2015. He is the author of the popular LaTeX thesis template "unlthesis" (joaomlourengo.github.io/unlthesis).



About DI-FCT/UNL

The Department of Informatics is a pioneer institution in advanced education and research in Computer Science in Portugal, and has already graduated thousands of informatics engineers and computer scientists. We currently host around 800 students enrolled in various programs and courses. Several of our academic staff are associated to the development of computer science and IT in Portugal, for instance, in the first national connection to the Internet in the 80s, in the graduation of the first PhD degrees, and in the development and consolidation of research and innovation in informatics and computer science.


The Department research unit NOVA LINCS is involved in many international and national projects and collaborations, several with companies and other knowledge users. NOVA LINCS hosts about 50 researchers and 70 PhD students, and was awarded the grade of EXCELLENT in the most recent FCT/MEC national evaluation exercise.

LaTeX for MSc and PhD thesis

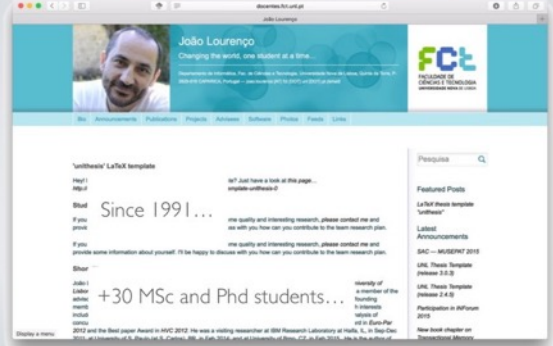
**Writing your dissertation?
You should try L^AT_EX!**

Technical Writers @ Lisbon
June 18, 2016

João M. Lourenço
joao.lourenco@fct.unl.pt




Who Am I?



**Writing your dissertation?
You should try L^AT_EX!**

Technical Writers @ Lisbon
June 18, 2016


João M. Lourenço
joao.lourenco@fct.unl.pt

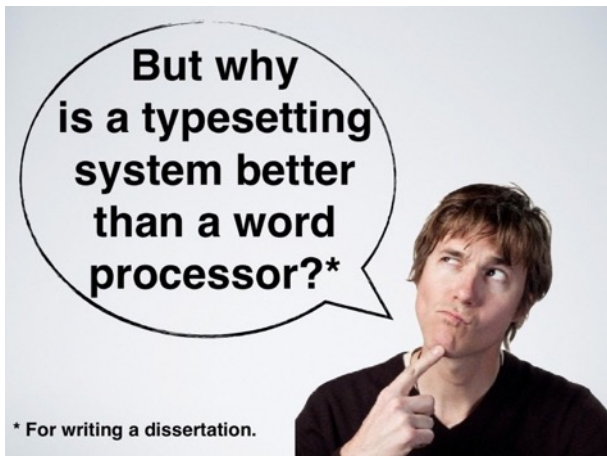
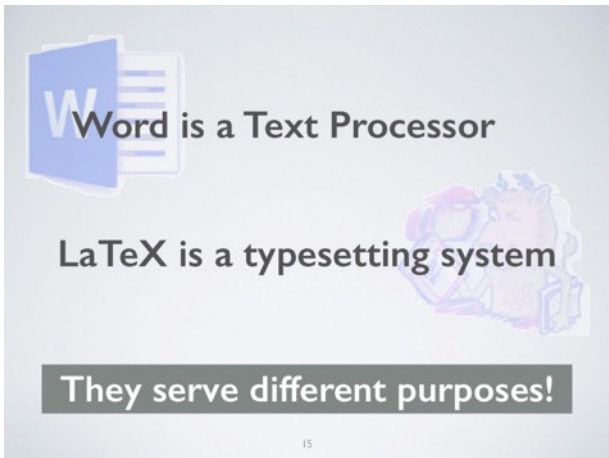
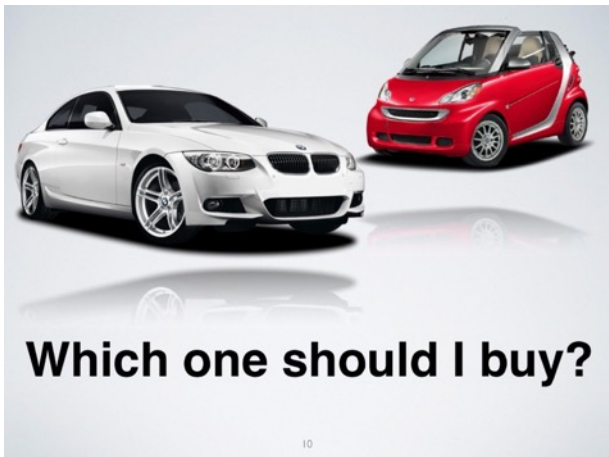


**LaTeX??
But is Word not
good enough?
Why?**



Let's buy a car!





* For writing a dissertation.

MacWord 2013

Call me Ishmael. Some years ago - never mind how long precisely - having little or no money in my purse, and nothing particular to interest me on shore, I thought I would sail about a little and see the watery part of the world. It is a way I have of driving off the spleen, and regulating the circulation. Whenever I find myself growing grey about the mouth, whenever I am a little blue, or sickly, or overgrown in spirit, whenever I find myself involuntarily pausing before coffin warehouses, and bringing up the rear of every funeral I meet, and especially whenever my hypos get such an upper hand of me, that I require a strong moral principle to prevent me from deliberately stepping into the street, and methodically knocking people's hats off - then, I account it high time to get to sea as soon as possible. With a philosophical flourish, I fired myself upon the globe; I wafted my soul into the air, and I said, Give or take. It is, almost all men in their degree, some time or other, almost very nearly the same feelings towards the ocean with me.

pdfTeX 3.14159265

Call me Ishmael. Some years ago - never mind how long precisely - having little or no money in my purse, and nothing particular to interest me on shore, I thought I would sail about a little and see the watery part of the world. It is a way I have of driving off the spleen, and regulating the circulation. Whenever I find myself growing grey about the mouth, whenever I am a little blue, or sickly, or overgrown in spirit, whenever I find myself involuntarily pausing before coffin warehouses, and bringing up the rear of every funeral I meet, and especially whenever my hypos get such an upper hand of me, that I require a strong moral principle to prevent me from deliberately stepping into the street, and methodically knocking people's hats off - then, I account it high time to get to sea as soon as possible. With a philosophical flourish, I fired myself upon the globe; I wafted my soul into the air, and I said, Give or take. It is, almost all men in their degree, some time or other, almost very nearly the same feelings towards the ocean with me.

Justification line-by-line

Justification by paragraph

24

Letter Spacing

MS Word (wrong default kerning for the "Ta" letter pair):

Table

[Adobe Garamond Pro, 48pt] pdf doc

LaTeX (correct kerning for the "Ta" letter pair):

Table

[Adobe Garamond Pro, 48pt] pdf tex

25

Word vs. LaTeX

Letter spacing

Affordable AVAST firewall
Feline Table
Affordable AVAST firewall
Feline Table

27

Word vs. LaTeX

Letter spacing

Affordable AVAST firewall
Feline Table
Affordable AVAST firewall
Feline Table

28

Word vs. LaTeX

Ligatures

Affordable AVAST firewall
Feline Table
Affordable AVAST firewall
Feline Table

29

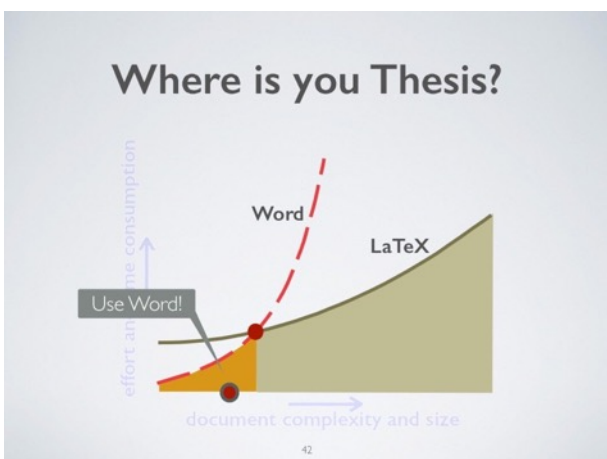
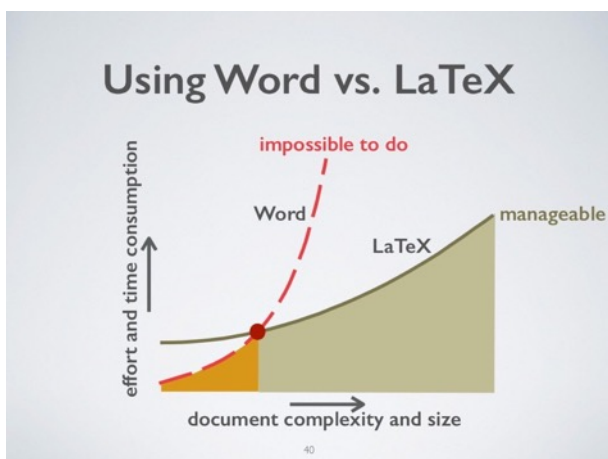
Word vs. LaTeX

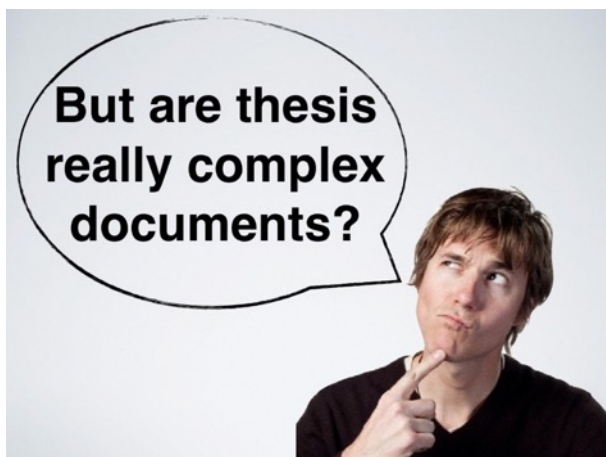
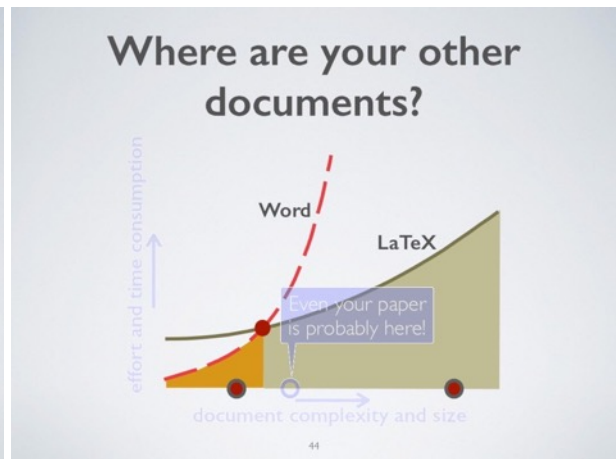
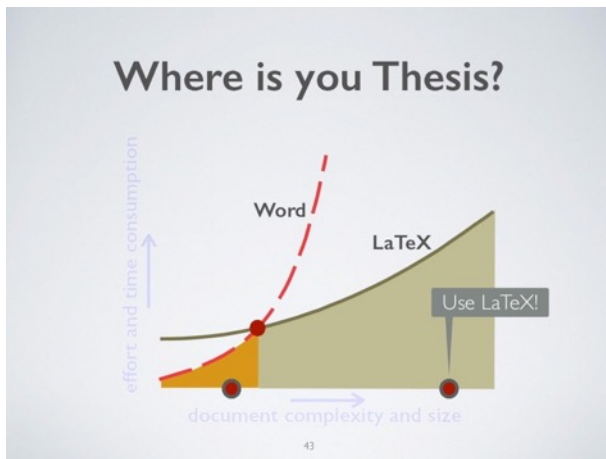
LaTeX

Inter-Word Spacing

Word

30





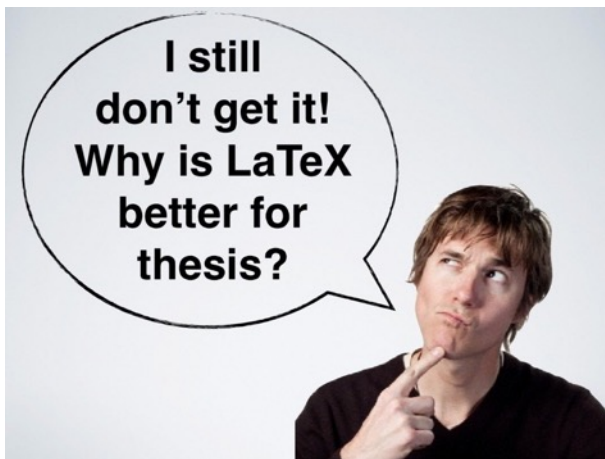
- ### Complexity
- Chapters, sections, subsections, ...
 - and Appendixes and Annexes
 - and Figures... many figures!
 - and Tables... many many tables!
 - and Lists of Contents, of Figures, of Tables, of Equations, ...
 - and Cross References to chapters, sections, figures and tables...
 - and Bibliography and Citations
 - and Glossary and List of Abbreviations and Index
 - and a Front-Cover, a Book-Spine, and sometimes a Back-Cover
 - and regulations on Fonts, Margins, Line Spacing, ...
 - and Collaboration with the adviser(s) and Versioning
- Complex documents
- Publishing Workflow
- 45

Your thesis is **Yes!** a complex document!!



- ### Documents have Structure
- Chapters, Sections, subsections, sub-subsections, ...
 - Bulleted lists, enumerated lists, ...
 - Numbered objects: Theorems, Lemmas, Equations, ...
 - Floating objects: Tables, Figures, Code Listings, ...
 - ...
- 46

- ### The LaTeX State of Mind
- Chapters, Sections, subsections, sub-subsections, ...
 - Bulleted lists, enumerated lists, ...
 - Numbered objects: Theorems, Lemmas, Equations, ...
 - Floating objects: Tables, Figures, Code Listings, ...
 - ...
- Focus on the Text Structure
- and not on How it Looks!
- 46



Why Word is good?

- Easy to use for beginners
- Highly productive (for individual small docs)

Why Word sucks?

- Does not scale
 - With the size of the document
 - slow, unfriendly
 - With the number of objects in the document
 - Referencing, Visual consistency
 - With the team size
- And there are bugs... lots of them!


Word vs LaTeX

	Word	LaTeX
Chapters, sections, subsections, ...	😊	😊
Appendixes and Annexes	😊	😊
Figures... many figures!	😞	😊
Tables... many many tables!	😞	😊
Lists of Contents, of Figures, of Tables, of Equations, ...	😞	😊
Cross References to chapters, sections, figures, tables, ...	😞	😊
Bibliography and Citations	😞	😊
Glossary and List of Abbreviations and Index	😞	😊
Front-Cover, a Book-Spine, and sometimes a Back-Cover	😞	😊
Regulations on Fonts, Margins, Line Spacing, ...	😞	😊
Collaboration, Versioning	😞	😊



LaTeX Resources

- Google (<https://www.google.com>)



LaTeX Resources

- TeX - LaTeX Stack Exchange (<http://tex.stackexchange.com>)



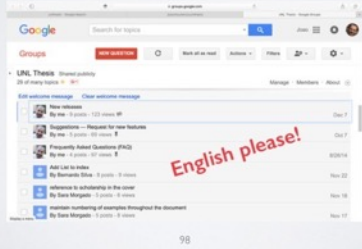
LaTeX Resources

- My own story... (<http://tex.stackexchange.com>)



unlthesis First Aid!

- unlthesis Google Group (<https://groups.google.com/forum/#!/forum/unlthesis>)



unlthesis First Aid!

- unlthesis Google Group (<https://groups.google.com/forum/#!/forum/unlthesis>)



unlthesis First Aid!

- unlthesis Facebook Group (<https://www.facebook.com/groups/unlthesis/>)



unlthesis First Aid!

- unlthesis Facebook Group (<https://www.facebook.com/groups/unlthesis/>)



Please!!! Don't email me!
Use the supporting groups!

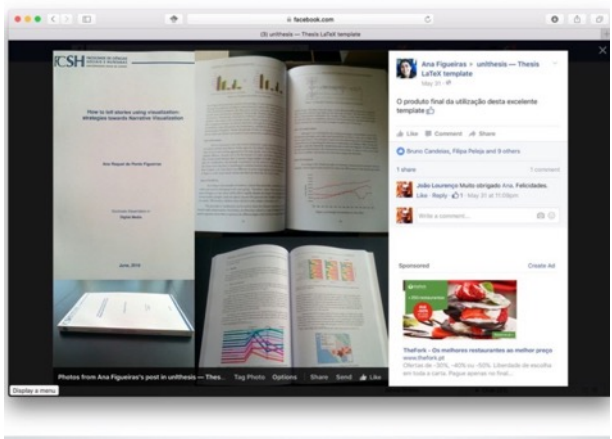


Challenges

- Learning TeX (just enough...)
- Incorporating user requests
- Customisation to different schools
- Avoiding the template to grow too much in size

Summary

- Template active
- Two active developers, a few more contributors
- Hundreds of users per year at FCT-UNL
- Dozens of users scattered on Earth
- (Some) Users are happy! :)





License

This work is Licensed under
CC BY-NC-SA 4.0
(Attribution-NonCommercial-ShareAlike 4.0 International)

<https://creativecommons.org/licenses/by-nc-sa/4.0/>

108

Public notes

All participants received a questionnaire with the following questions:

- Ideas, doubts, comments, reflexions?
- What did you like the most?
- How could we improve? What could we do differently?

The participants were promised that their answers would be published in a final public report.

The following pages have the notes returned by 6 participants, transcribed or translated to English.

The anonymous notes correspond to participants that did not check the “publish?” box.

Daniel Bofill

Email? dbofill@siscog.pt

Comments?

- Paulo Ribeiro, Do-it-yourself Technical Writing. Myself being involved in a content strategy project, I could identify easily with Paulo’s presentation. He presented the decision making process and the different routes taken to implement a DITA solution. Paulo was clear in explaining the reasons for the implementation of the various solutions and showed a deep understanding of the technologies involved. A very clear presentation with a touch of humour.
- João Lourenço, LaTeX for MSc and PhD thesis. João’s enthusiasm for LaTeX is quite contagious. In a very practical way, he outlined the major differences between MS-Word and LaTeX without ever implying that one was “better” than the other. It was refreshing to see that the comparative efficiency and effectiveness of the two tools depends not on the tool itself but on the desired outputs. A fun presentation to see, if just a bit long towards the end.

Like? The room was very nice. Surrounded by art while speaking about technical issues may sound out of place, but I suppose everything is an art in its own right. Quite fitting. The mid-session art lesson was also very interesting. Thank you Eunice!

Improve? Probably the issue of time, although I've gotten used to the idea that the meetings extend a little beyond the planned schedule in benefit of the discussions and interactions between sessions. It's definitely worth the time.

Technical Writers
professional writers helping to save everyone's time @Lisbon

Name (optional): Rogério CARDOSO
Publish?

Email: cardoso.rogerio@hotmail.com
Publish?

We will contact you through email.
We will publish your name and email if you say so.
We will publish your notes below as part of the public report.

public notes

Ideas, doubts, comments, reflections?

Foi a minha primeira interação com a Technical Writers. O meu objetivo foi o de contactar os conteúdos, mas a minha busca e a escrita, não se fez por de fizes.

A segunda apresentação foi muito educativa e trouxe reflexões ao meu interesse. Na próxima apresentação apresentarei apenas o final no modo em que cheguei tarde.

Por fim, fiquei satisfeito e a minha curiosidade foi atendida. Espero que as próximas próximas apresentações sejam também de uma ajuda.

Para qualquer assunto, estou permanentemente disponível para qualquer contribuição ou dúvida do meu conteúdo. De qualquer das vezes, procurei mais de escrita em si do que as ferramentas utilizadas.

What did you like the most?

Conhecer que há pessoas a trabalhar continuamente nestes áreas de escrita.

How could we improve? What could we do differently?

Thanks!

Laura Barros

Comments? All presentations were very interesting with dynamic exposition of subjects very related to technical writing. The several tools advantages and drawbacks were widely discussed in the scope of the different firms and university represented.

The audience was very interested and participated actively. The artistic/ludic interaction was a good “team” building and ice breaker event if there was no ice in reality. It was a very pleasant moment and initiative. Thanks!

Like? The diversity of the contexts the presenters work firm/academic. The space where the event took place, the artistic/ludic interaction in concorde space. The good opportunity to meet colleagues of technical writing, interact and talk. Meet new colleagues and points of view.

Improve? Maybe let a few presentations for after lunch to reduce a bit the intensive “sprint” and start at 10h.

Marta Leocádio

Comments? In this meeting I had the opportunity not only to learn new things from Joaquim, Daniel and João, but also enjoy seeing my husband Paulo in action.

Although I don't have any background in technical writing or computer science engineering I always look forward to these meetings. I always learn about new realities in what is the technical writers' trade and work day.

It's very nice to see such a diverse gathering of people around technical writing, some familiar faces, and some new ones as well.

The introduction to a moment of performance with Eunice was really a joy. A moment of surprise and wonder that united the audience in a “homemade video” session, enabling everybody to participate and give a bit more to the technical writing ambience.

Like?

- The great content of all the presentations.
- The cultural space where the meetings happened.
- The Danish singer cookies, of course! ö

Improve? Diversify the times and places of the meetings, maybe try to schedule one to the afternoon or night on weekends and perhaps in a garden.

Paulo Ribeiro

Comments? It would be interesting if we can publicize these events to a broader audience to attract more people. The presentations could also be targeted to interest more people in

the technical writing trade — for example, by showcasing multiple aspects and concerns of technical writing.

I really liked the informal atmosphere of this meeting as well as the out of the ordinary physical space where we gathered. It was rather inspiring watching the presentations surrounded by cool works of art.

Like?

- The passion demonstrated by the two other presenters about their daily work and how they use technology to their advantage.
- The experimental interlude with Eunice was also pretty cool.

Improve? Perhaps the meetings could start a little bit later (for example at 9:30).

Rogério Cardoso

Email? cardoso_rogerio@hotmail.com

Comments? It was my first interaction with Technical Writers. My objective was to know the contents, but my search is about writing, whether technical or fiction.

The second presentation was very specific and barely woke up my interest. In the first presentation I only benefited from the end because I arrived late.

For now I was satisfied and my curiosity was raised. I hope that the next meetings have an agenda.

I am available to contribute in my area of knowledge. Anyway, I seek to know more about writing, and not computer tools.

Like? To learn that there are people sharing knowledge in this area of writing.

Anonymous #1

Comments? Make a session about technical English, and other about writing for scientific purposes, like research articles.

It would also be interesting to present tools for graphical presentations, like infographs, posters and slides.

The presentations about user manuals were good, but it would also be good to have a presentation for who needs to create user manuals but does not know how to work with XML or HTML/CSS, only to generate PDFs.

It would also be interesting to create a debate about career paths for technical writers, how to enter the field of technical writing, and if it is amenable to freelancing.

Institutional support

About EuroSIGDOC

EuroSIGDOC is an ACM SIGDOC European chapter.

SIGDOC is the Association for Computing Machinery's Special Interest Group (SIG) on the Design of Communication (DOC).

EuroSIGDOC is a group of researchers and practitioners wanting to pursue the SIGDOC mission in a European context.

Like SIGDOC, EuroSIGDOC focuses on the design of communication as it is taught, practiced, researched, and conceptualized in various fields, including technical communication, software engineering, information architecture and usability.

Since 2010, EuroSIGDOC sponsored the following events:

- OSDOC 2010 — Workshop Open Source and Design of Communication (eurosigdoc.acm.org/osdoc2010);
- OSDOC 2011 — Workshop Open Source and Design of Communication (eurosigdoc.acm.org/osdoc2011);
- OSDOC 2012 — Workshop Open Source and Design of Communication (eurosigdoc.acm.org/osdoc2012);
- OSDOC 2013 — Workshop Open Source and Design of Communication (eurosigdoc.acm.org/osdoc2113);
- ISDOC 2012 — Workshop Information Systems and Design of Communication (eurosigdoc.acm.org/isdoc2012);
- ISDOC 2013 — International Conference on Information Systems and Design of Communication (eurosigdoc.acm.org/isdoc2013);
- ISDOC 2014 — International Conference on Information Systems and Design of Communication (eurosigdoc.acm.org/isdoc2014);

Several seminars were sponsored by EuroSIGDOC (eurosigdoc.acm.org/seminars.html), and now the TWL (Technical Writers @ Lisbon).



— EuroSIGDOC Board

About APCOMTEC

APCOMTEC: uma associação interdisciplinar

Desde a sua criação, em 2006, que a APCOMTEC, Associação Portuguesa para a Comunicação Técnica, com sede na UA, tem vindo a promover e divulgar a prática profissional, formativa e de investigação em Comunicação Técnica (CT), em Portugal. Nos últimos anos, procurou dar a conhecer o seu trabalho e divulgar esta área, recente em contexto nacional, tanto através da formação, da organização de eventos, das redes sociais e da Newsletter

Missão e objetivos

AAPCOMTEC tem por missão o desenvolvimento, a promoção e a representação da Comunicação Técnica em Portugal, bem como dos respetivos profissionais.

Dos objetivos dos atuais órgãos sociais fazem parte o diálogo próximo entre o meio académico e o meio empresarial, a promoção da interdisciplinaridade inerente à CT, nomeadamente com a Tradução, a Terminologia, a Engenharia Informática e a Divulgação de Ciência, bem como o fortalecimento da presença e o reconhecimento da CT a nível nacional e europeu. AAPCOMTEC é associada da TCEurope – associação que representa os interesses da comunidade de Comunicação Técnica a nível europeu.

O que temos feito

Enquanto agente divulgador e mediador de experiências, conhecimento, informação, produtos e serviços sobre e de Comunicação Técnica, a APCOMTEC tem dinamizado eventos de informação e formação em CT, nomeadamente através das suas Jornadas e do Colóquio Internacional de Comunicação Técnica 2012.

Foram três as **Jornadas** já organizadas em diferentes pontos do país, desde 2011: no DLC/UA, sobre Comunicação Profissional e Design de Informação, na ESTGA, dedicada à Comunicação Profissional e Planeamento na Documentação Técnica, e no ISCAP, coorganizada com o Centro Multimédia de Línguas (CML), sob o tema “Comunicação Técnica: como traduzir negócios em sucesso”.

O objetivo destas Jornadas consistia em reunir especialistas e profissionais, na área da Comunicação Técnica (CT), e dar a conhecer o seu trabalho a futuros especialistas, indo assim ao encontro dos próprios objetivos da APCOMTEC.

Quanto ao **Colóquio Internacional de Comunicação Técnica 2012**, constituído por um Pré-colóquio sobre «Sustentabilidade em Comunicação Técnica» e o Colóquio TCEurope 2012 «Technical Communication and Readership», este teve lugar no Departamento de Línguas e Culturas da U. Aveiro em abril de 2012.

O Pré-colóquio permitiu debater acerca da estreita relação entre a Comunicação Técnica, a Terminologia, a Tradução e a Engenharia Informática, que inegavelmente contribuiu para um desenvolvimento mais preciso, adequado e eficaz, assim como para a criação de documentação mais personalizada e intuitiva.

Quanto ao Colóquio TCEurope, o seu objetivo foi fornecer uma visão geral do estado-da-arte de um tópico tão vasto e desafiante como é o público-alvo em Comunicação Técnica, bem como explorar os diferentes e emergentes meios de comunicação aqui utilizados, trocar informação relativa à comunicação técnica e às suas aplicações, avaliar as vantagens e desvantagens dos diversos formatos de edição e produção, assim como as utilizações, as necessidades e as exigências provenientes da e-sociedade.

Este conjunto de eventos contribuiu certamente para o crescimento da associação, tanto a nível do número dos seus associados como da projeção que conseguiu dar a esta área recente do conhecimento, tendo-se este último facto refletido nos inúmeros contactos de qualidade que a APCOMTEC teve com as **empresas e instituições**, essencialmente a nível nacional.

Já a nível europeu, o esforço da associação em manter a ligação à **TCEurope** tornou-se particularmente profícuo aquando da organização conjunta do evento internacional antes mencionado, assim com nas reuniões de trabalho subsequentes, tendo a última acontecido em Bruxelas, em abril de 2013, onde a APCOMTEC esteve presente.



About Atelier Concorde

Atelier Concorde is a collective and interdisciplinary workspace, founded by a group of artists in January 2010. It currently houses sixteen artists and besides their studios has a project room for the Atelier's exhibitions and events, as well as occasional residencies. For information on these activities subscribe our newsletter.

The studios of Atelier Concorde occupy 700 m2, over 3 floors. The ground floor has six individual work spaces, five of them with double height ceiling, as well as a communal area with kitchen and library. On the first floor there are three individual studios and a work area with direct access to the street. The remaining studios are located in the basement. If you are interested in a studio send a portfolio to info@atelierconcorde.org.

The project room houses our programme of exhibitions and public events.

www.atelierconcorde.org/en/acerca/atelier

