Open Formats
ODF vs OOXML

Italo Vignoli

De Jure vs De Facto Standards

- A **de facto** standard refers to a significant market share
- A **de jure** standard is based on a collective agreement
- As such they are innately different, as are their value and effect on the market
- **De jure standards for document formats**
  - Foster interoperability, create network externalities, prevent lock-in, cut transaction costs, create a transparent market and reduce variety
- **De facto standards for document formats**
  - Tend to be the exact opposite, to increase supplier-dependence and create an obfuscated market

Definition of Open Standard

- Promotes a healthy competitive market (the existence of Open Standards reduces the risk and cost of market entry, and so encourages multiple suppliers)
- Reduces the risk to an organisation of being technologically locked-in
- Is a basis for interoperability, which supports systems heterogeneity, thereby increasing options for organisations
- Offers a basis for long-term access and reuse of digital assets, and in particular when supported by Open Source Reference Implementations

FOSS and Open Standards

- Support open standards wherever possible
  - When given an alternative, prefer the most open standard that solves the problem
- Use open standards in every project activity
- Get involved in standards committees
- Help to develop and promote new standards

Open Format

- **Independent** from a single product: anyone can write a software that handles an open format
- **Interoperable**: allows the transparent sharing of data between heterogeneous systems
- **Neutral**: it does not force the user to adopt – and often buy – a specific product, but leaves a wide choice based on quality/price ratio
- **Perennial**: protects user developed contents from the “evolution” based obsolescence of technology

Proprietary Format

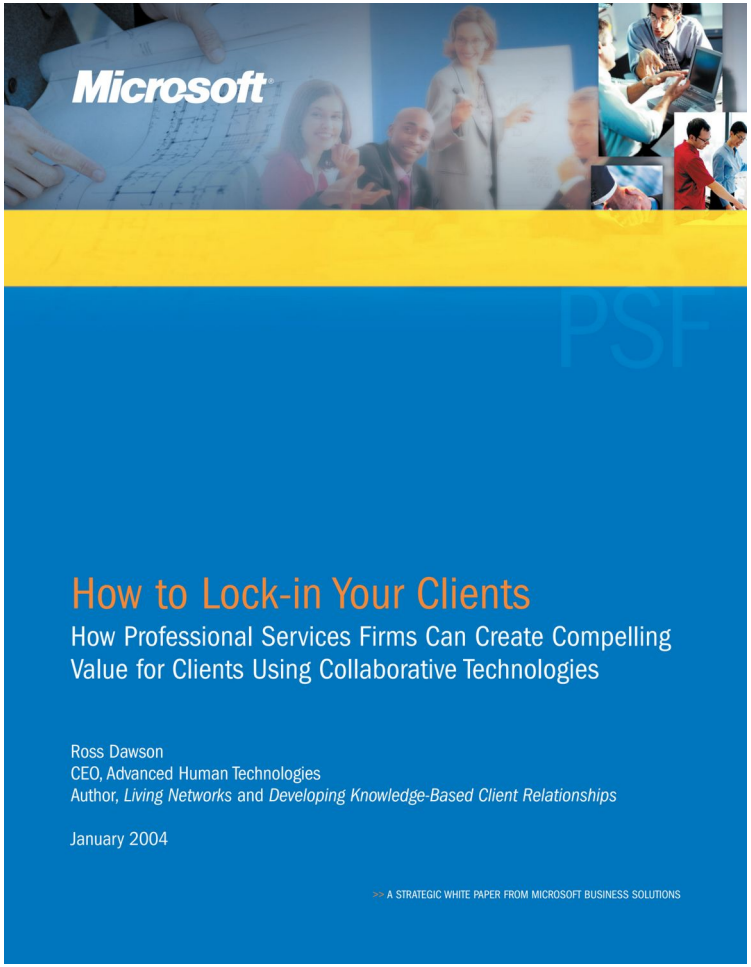
- Designed to be manipulated by a single software
- Evolves over the years based on commercial strategies and not on user needs
- Often, a direct serialization of data structures in memory
- The software is the format!
- Users borrow content from vendors through the format End User License Agreement (EULA)

Lock In

WE CANNOT READ YOUR DOCUMENTS

DOCUMENTFREEDOM.ORG

Manual for Professionals

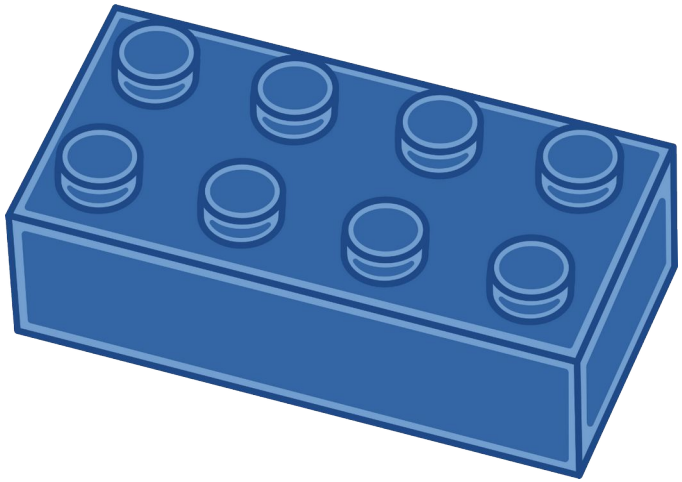


Interoperability

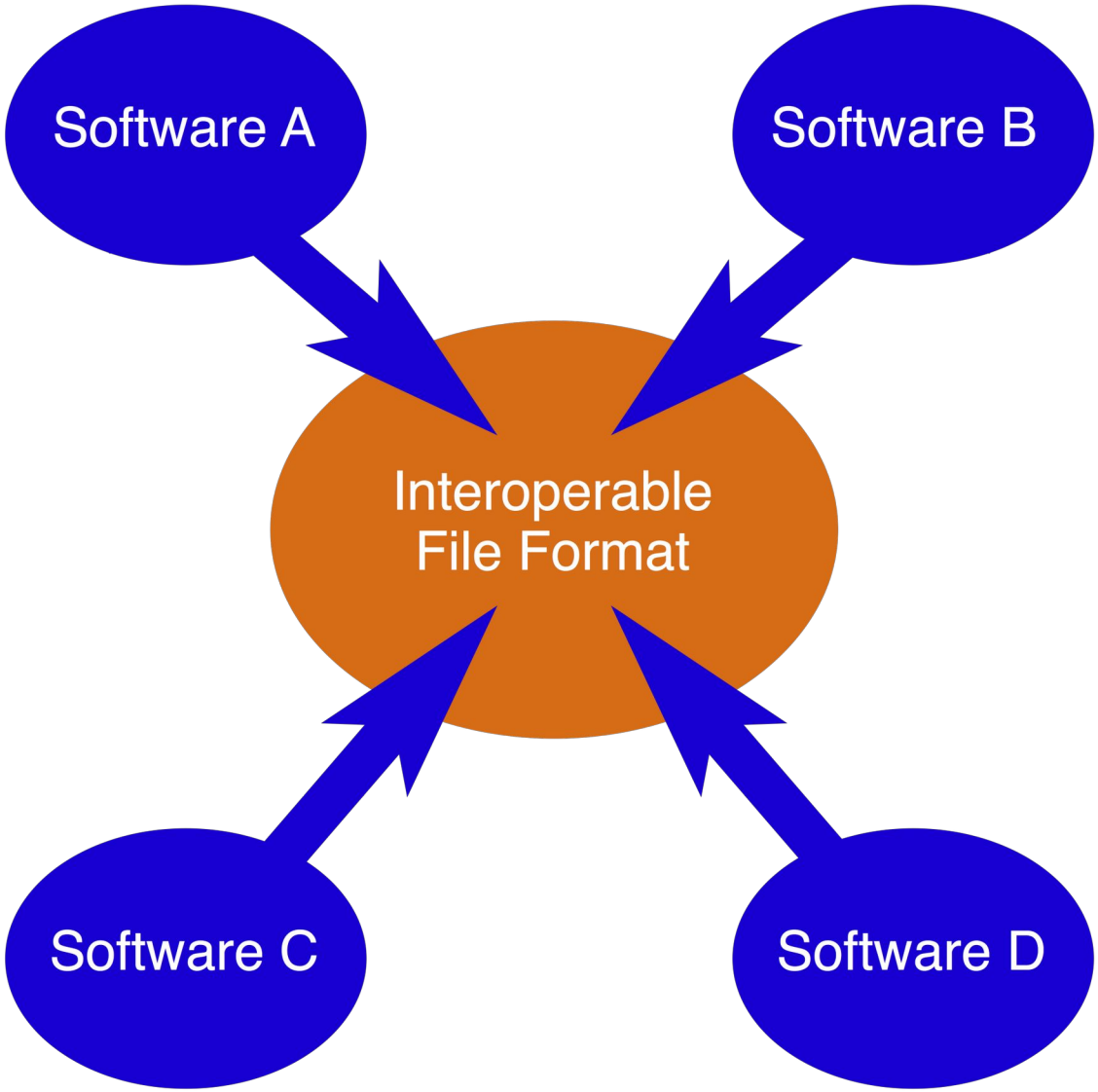
Interoperability

Interoperability means the ability of information and communication technology (ICT) systems, as well as, of the business processes they support in order to exchange data and enable the sharing of information and knowledge.

European Interoperability Framework, IDABC



Legacy Interoperability


Software A
Software B
Interoperable
File Format
Software C
Software D

Benefits of Interoperability

- **FINANCIAL**
- Cost savings for users
- Reduced operation costs for owners
- Vendor lock-in avoidance for owners
- Facilitate reuse, sharing & adoption

- **TIME**
- Owner time savings
- User time savings

- **QUALITY**
- High service satisfaction for users
- Improved compliance for owners
- Better data quality for owners
- Better data availability for users
- Improved security for owners

- **OTHER**
- Foster innovation
- Increase transparency
- Protection of user’s rights
- Furthering public policy goals
- Reduced CO2 emissions

Interoperability Costs (1)

NIST GCR 04-867

U.S. Department of Commerce
Technology Administration
National Institute of Standards and Technology

Advanced Technology Program
Information Technology and Electronics Office
Gaithersburg, Maryland 20899

Cost Analysis of Inadequate Interoperability in the U.S. Capital Facilities Industry

Michael P. Gallaher, Alan C. O'Connor, John L. Dettbarn, Jr., and Linda T. Gilday

Interoperability Costs (2)

Table 6-5. Costs of Inadequate Interoperability for Architects and Engineers

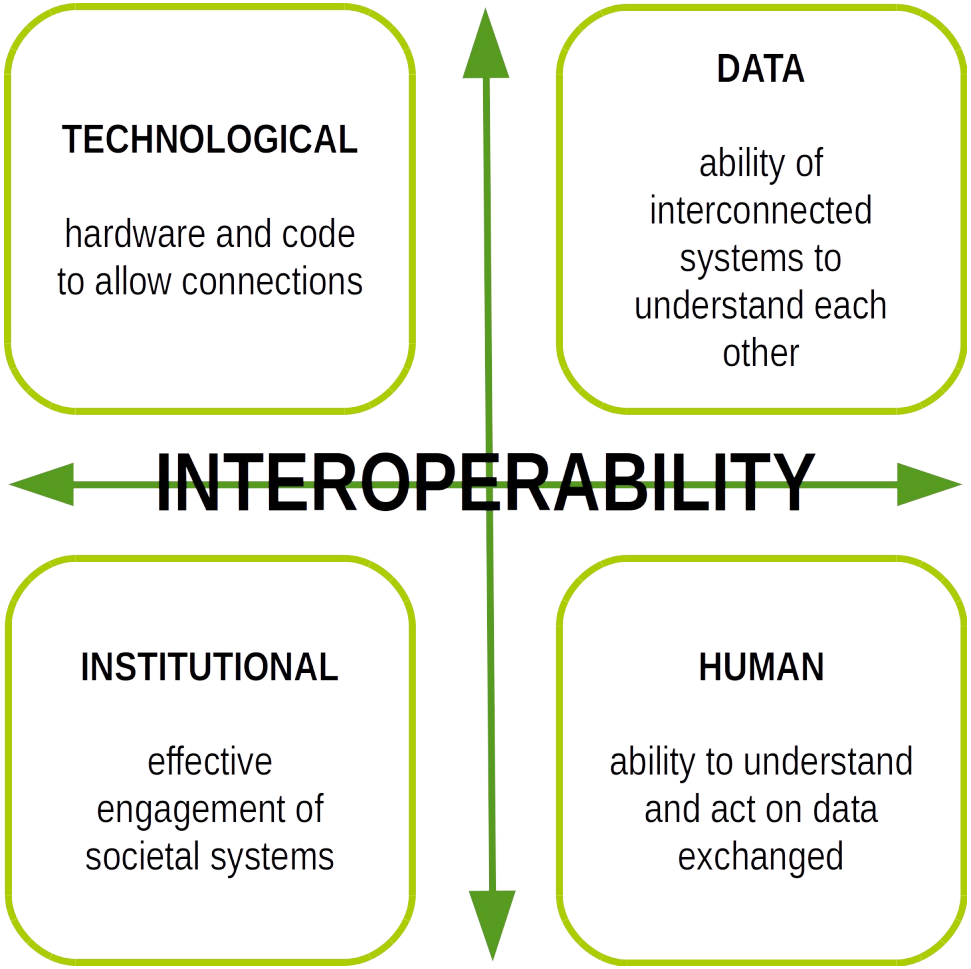
Life-Cycle Phase	Cost Category	Cost Component	Average Cost per Square Foot	Average Cost per Square Meter	Inadequate Interoperability Cost Estimate ($Thousands)
Planning, Engineering, and Design		Inefficient business process management costs	0.31	3.37	356,126
		Redundant CAx systems costs	0.0001	0.001	158
		Productivity losses and training costs for redundant CAx systems	0.04	0.45	47,947
		Redundant IT support staffing for CAx systems	0.0004	0.005	501
	Avoidance Costs	Data translation costs	0.002	0.02	2,139
		Interoperability research and development expenditures	0.02	0.21	22,234
	Mitigation Costs	Manual reentry costs	0.41	4.38	462,734
		Design and construction information verification costs	0.10	1.08	114,342
		Reworking design files costs	0.0009	0.009	968
		Avoidance costs	0.38	3.85	429,106
		Mitigation costs	0.51	5.47	578,044
	Subtotal	**Subtotal**	**0.89**	**9.32**	**1,007,150**

Interoperability Costs (3)

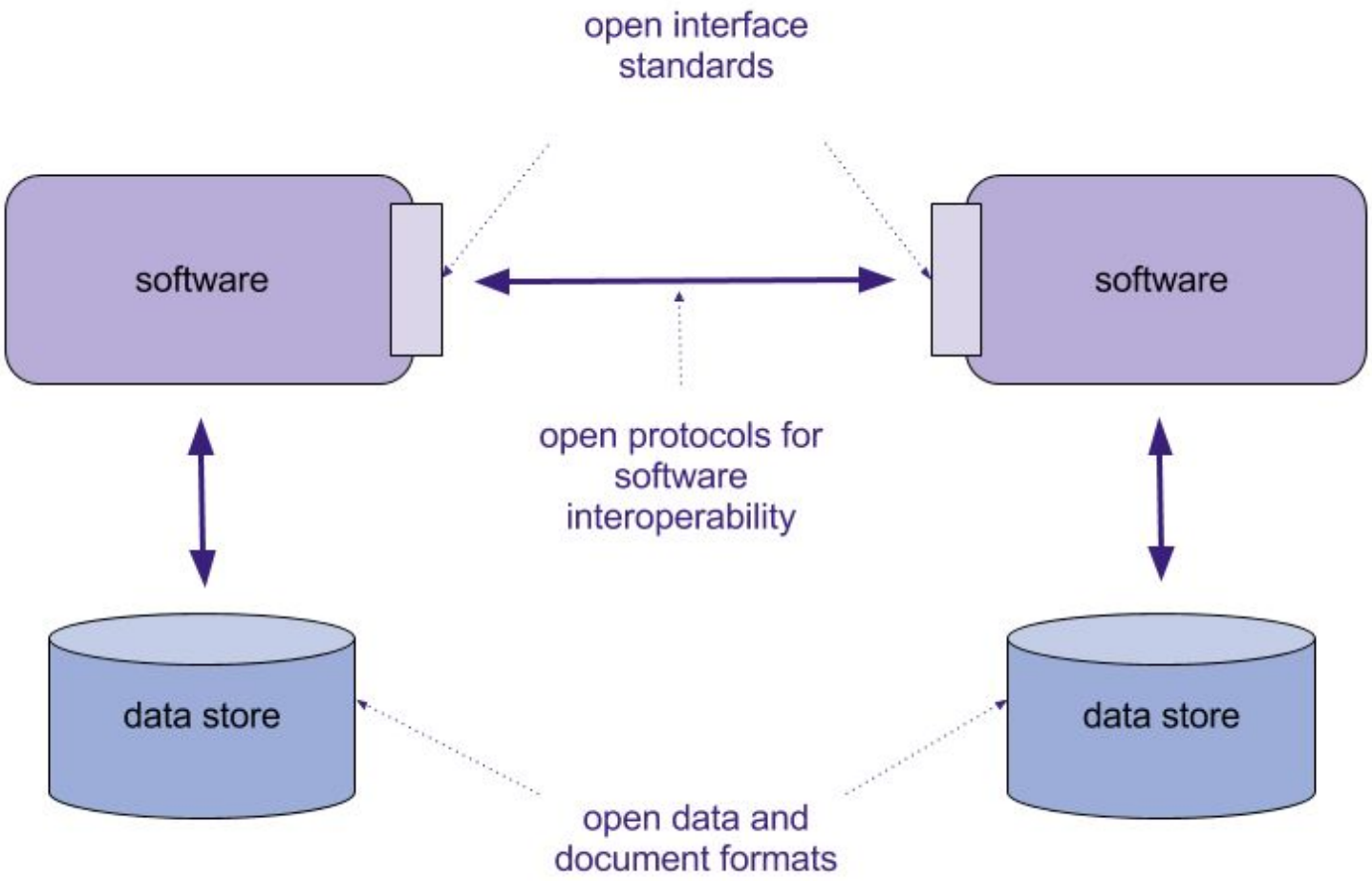
Construction	**Avoidance Costs**	Inefficient business process management costs	0.04	0.41	43,290
		Redundant CAx systems costs	0.00003	0.0003	28
		Productivity losses and training costs for redundant CAx systems	0.007	0.08	8,461
		Redundant IT support staffing for CAx systems	0.00008	0.0008	88
		Data translation costs	0.0003	0.004	378
		Interoperability research and development expenditures	0.003	0.04	3,924
		Manual reentry costs	0.024	0.26	27,750
	Mitigation Costs	Design and construction information verification costs	0.006	0.07	7,377
		RFI management costs	0.05	0.53	55,656
	Subtotal	Avoidance costs	0.05	0.49	56,169
		Mitigation costs	0.08	0.86	90,783
		Subtotal	**0.13**	**1.35**	**146,952**
Operations and Maintenance	**Mitigation Costs**	Post-construction redundant information transfer costs	**0.01**	**0.15**	**15,660**
Total Cost					**1,169,762**

Source: RTI estimates; totals may not sum correctly due to rounding.

Summary of Interoperability



Openness & Interoperability



Open Document Format
the true document standard
which offers freedom of choice

ODF is an Open Standard

- **Open and collaborative development**
- Transparent access to the minutes of all meetings
- Ease of implementation in any software
- Freedom from patents and licensing restrictions
- No reliance on proprietary features or single vendor owned technologies
- Interoperability with any system designed to be ODF compatible

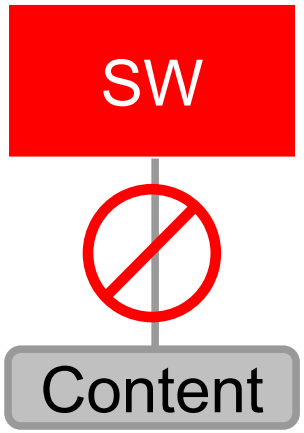
What is ODF? (1)

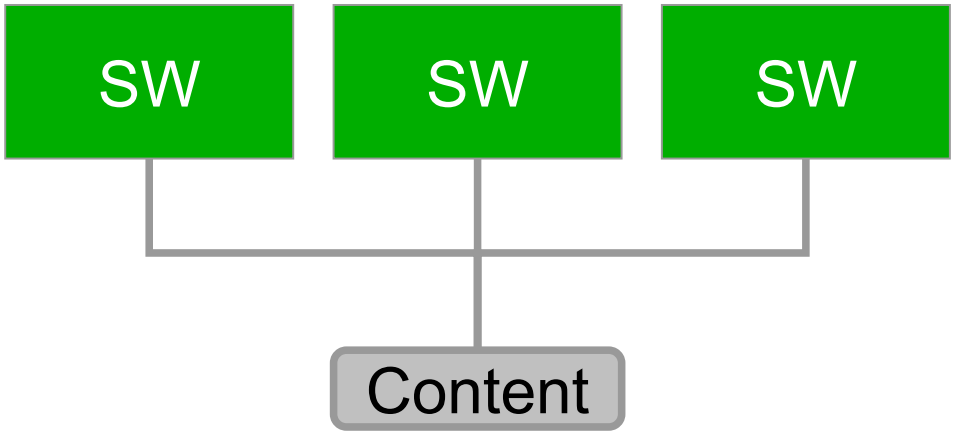
- OpenDocument Format (ISO / IEC 26300)
  - ISO: International Organization for Standardization
  - IEC: International Electrotechnical Commission
- Open file format based on XML, to create, view, edit and store Office documents
  - Text documents, spreadsheets, and presentations

What is ODF? (2)

- Defined with an open and transparent process by OASIS
- Approved by the Joint Technical Committee 1 (JTC 1) of the IEC as International Standard (IS) in May 2006
- Available for deployment and use with no license, royalty payments or other restrictions

ODF Based Interoperability





OLD STYLE

Content closely related to a specific application

Developers and not users control the application

NEW STYLE

Content represented through an open standard which is not controlled by a single vendor, and supported by many applications

Users are in full control of their contents

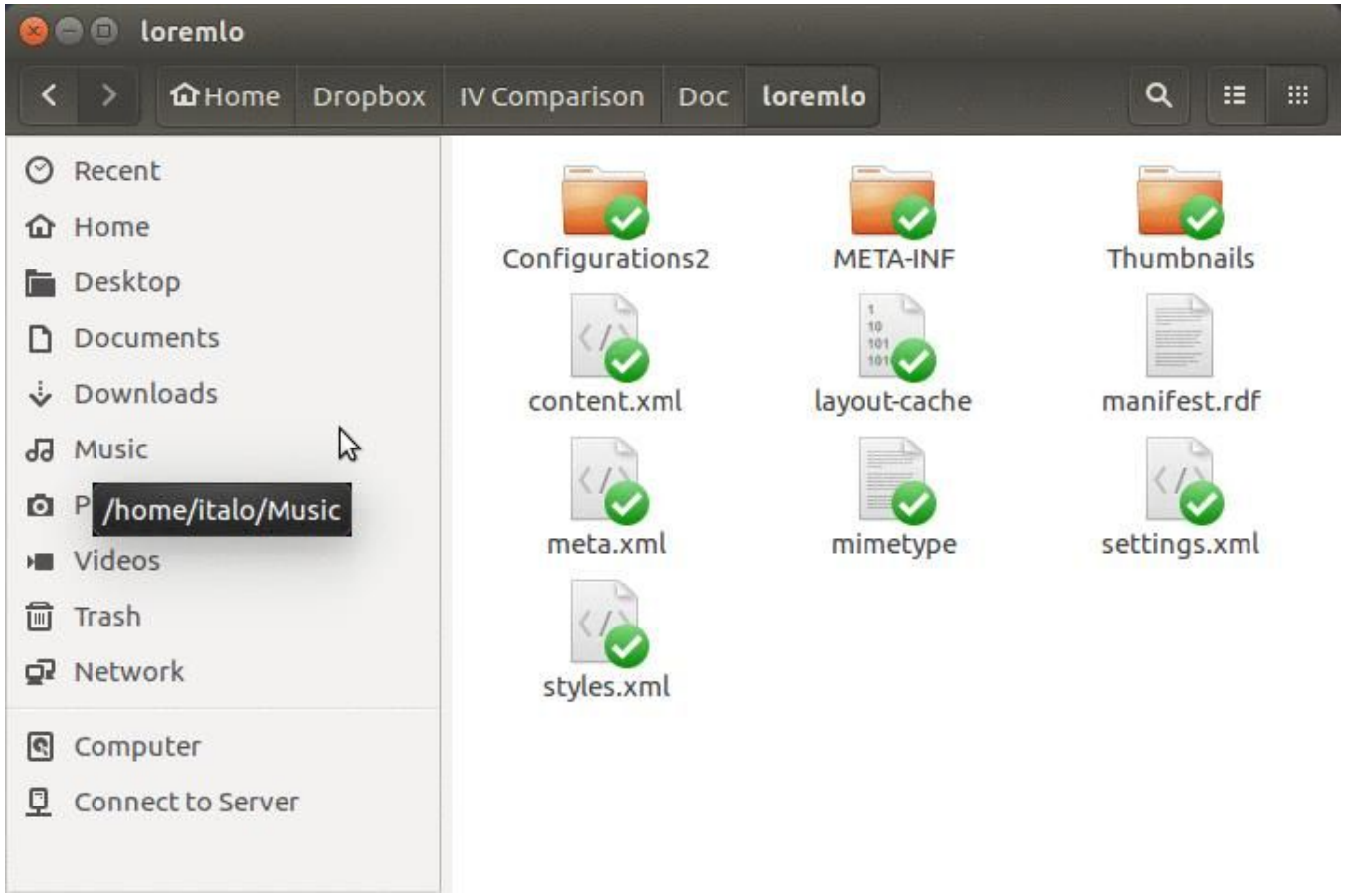
ODF is Standard

- France
- Portugal
- Sweden
- Taiwan
- UK

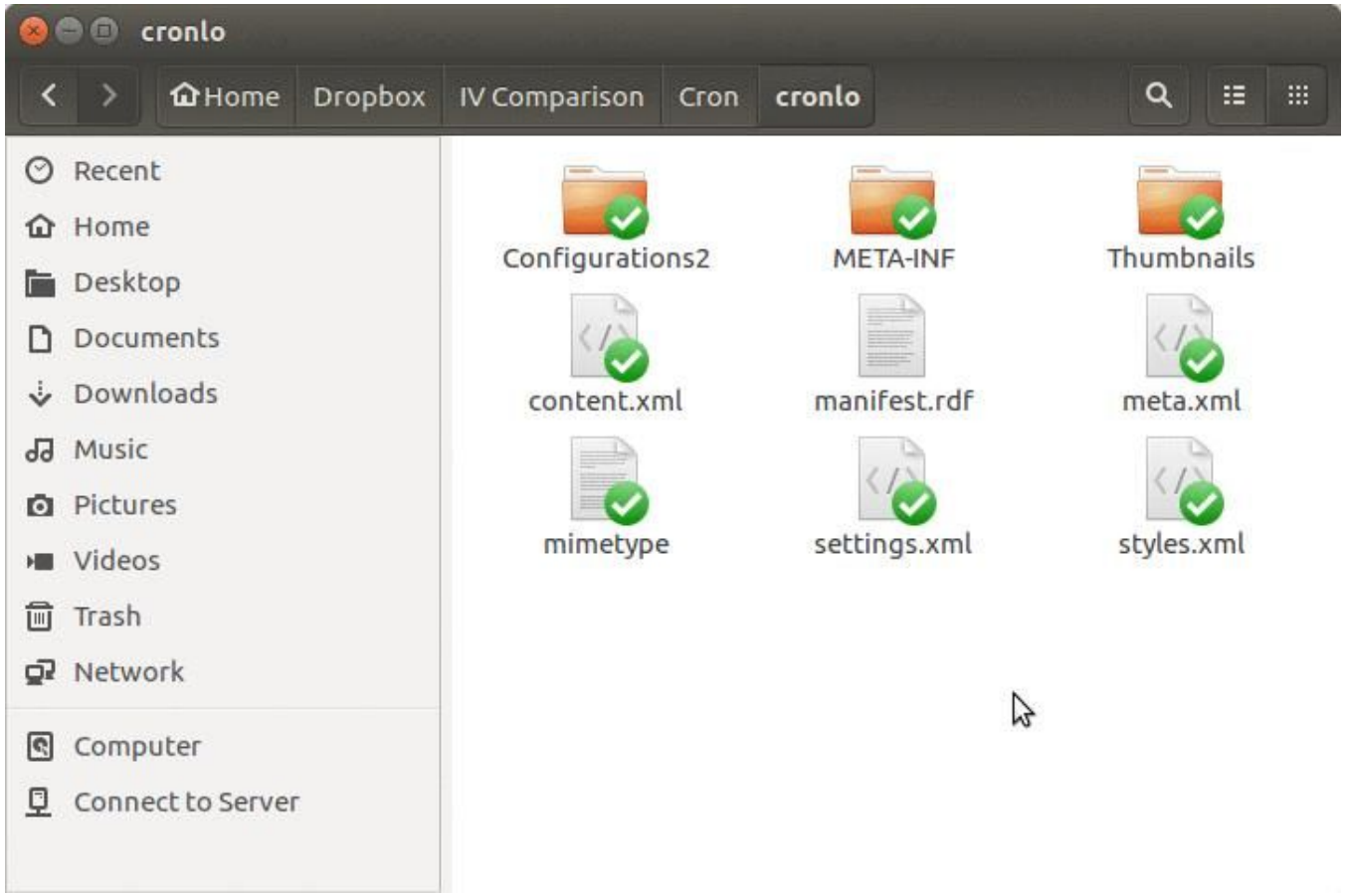
ODF Document Extensions

Document	Extension
Text	ODT
Spreadsheet	ODS
Presentation	ODP
Graphics	ODG
Business **C**hart	ODC
Image	ODI
Database	ODB
Math **F**ormula	ODF

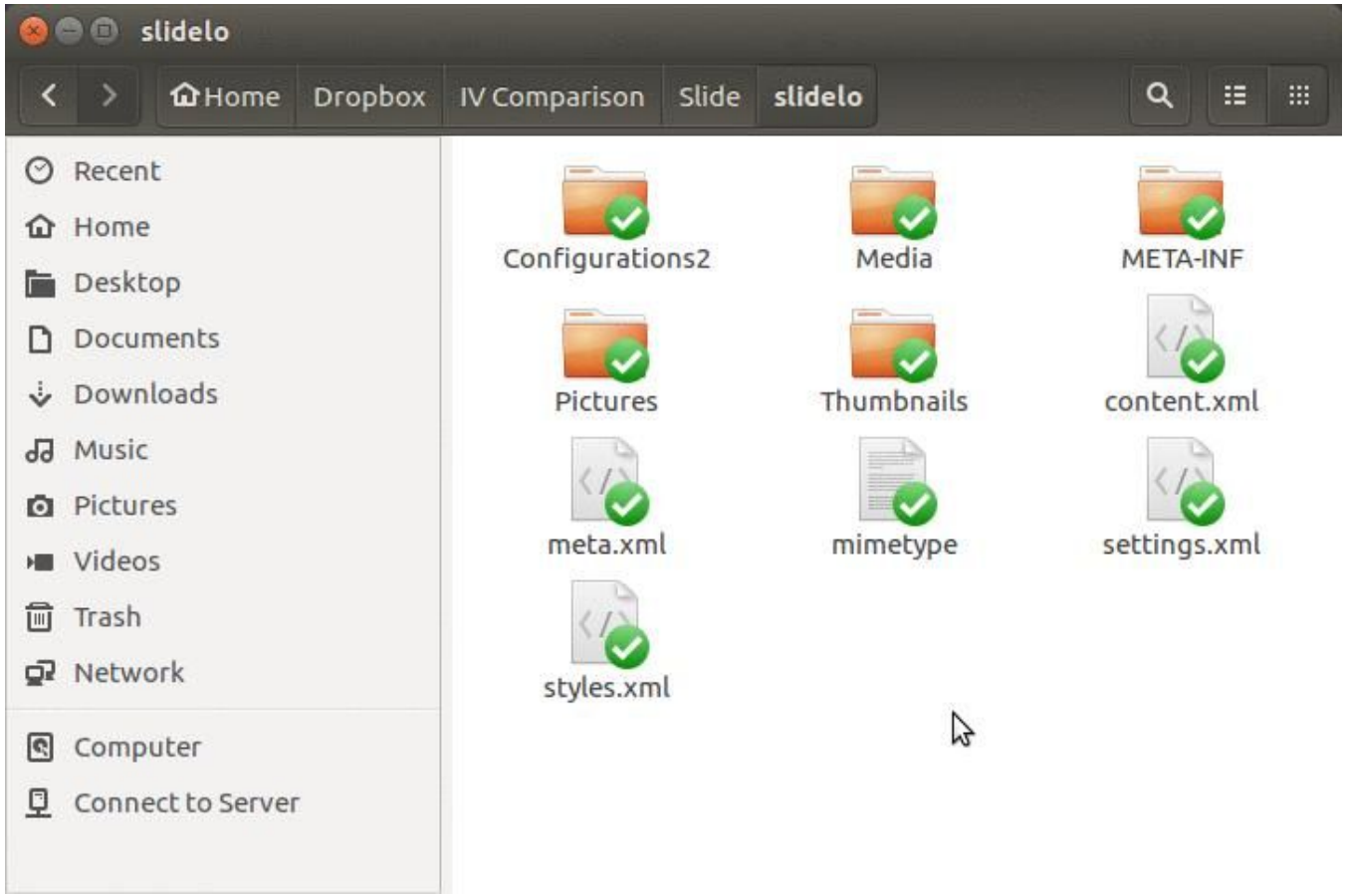
Inside ODT


loremlo
Home
Dropbox
IV Comparison
Doc
loremlo
Recent
Home
Desktop
Documents
Downloads
Music
/home/italo/Music
Videos
Trash
Network
Computer
Connect to Server
Configurations2
META-INF
Thumbnails
content.xml
layout-cache
manifest.rdf
meta.xml
mimetype
settings.xml
styles.xml

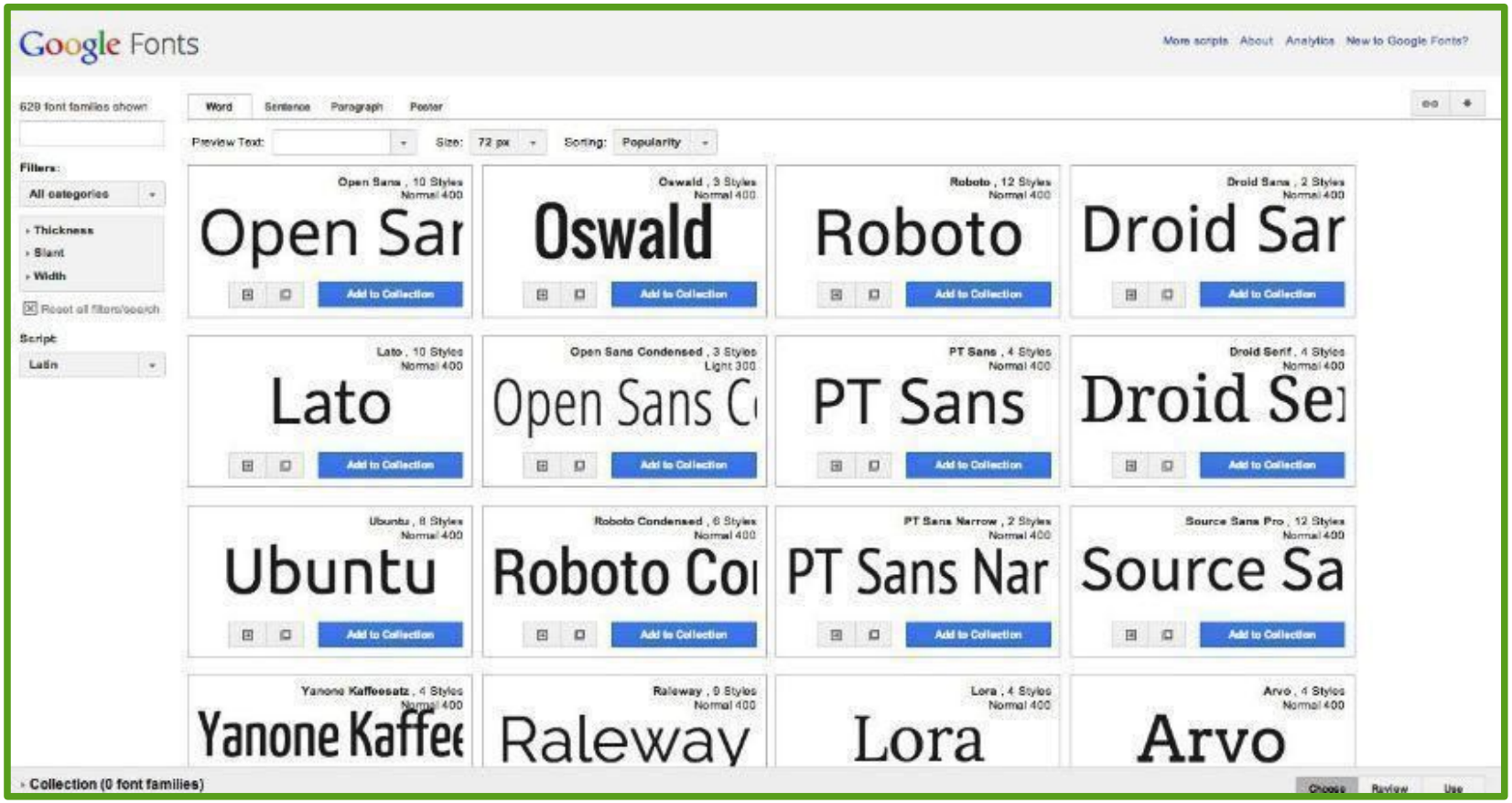
Inside ODS


cronlo
Home
Dropbox
IV Comparison
Cron
cronlo
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Network
Computer
Connect to Server
Configurations2
META-INF
Thumbnails
content.xml
manifest.rdf
meta.xml
mimetype
settings.xml
styles.xml

Inside ODP


slidelo
Home
Dropbox
IV Comparison
Slide
slidelo
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Network
Computer
Connect to Server
Configurations2
Media
META-INF
Pictures
Thumbnails
content.xml
meta.xml
mimetype
settings.xml
styles.xml

Free Fonts


Google Fonts
More scripts
About
Analytics
New to Google Fonts?
629 font families shown
Word
Sentence
Paragraph
Poster
Preview Text:
Size:
72 px
Sorting:
Popularity
Filters:
All categories
Thickness
Slant
Width
Reset all filters/search
Script:
Latin
Open Sans , 10 Styles
Normal 400
Open Sar
Add to Collection
Oswald , 3 Styles
Normal 400
Oswald
Add to Collection
Roboto , 12 Styles
Normal 400
Roboto
Add to Collection
Droid Sans , 2 Styles
Normal 400
Droid Sar
Add to Collection
Lato , 10 Styles
Normal 400
Lato
Add to Collection
Open Sans Condensed , 3 Styles
Light 300
Open Sans C
Add to Collection
PT Sans , 4 Styles
Normal 400
PT Sans
Add to Collection
Droid Serif , 4 Styles
Normal 400
Droid Se
Add to Collection
Ubuntu , 8 Styles
Normal 400
Ubuntu
Add to Collection
Roboto Condensed , 6 Styles
Normal 400
Roboto Co
Add to Collection
PT Sans Narrow , 2 Styles
Normal 400
PT Sans Nar
Add to Collection
Source Sans Pro , 12 Styles
Normal 400
Source Sa
Add to Collection
Yanone Kaffeesatz , 4 Styles
Yanone Kaffee
Raleway , 9 Styles
Normal 400
Raleway
Lora , 4 Styles
Normal 400
Lora
Arvo , 4 Styles
Normal 400
Arvo
Collection (0 font families)
Choose
Review
Use

ODF vs OOXML

Battle of 2 Standards

Standardization Process

ODF

- Based on OOo XML format
- Dec 12, 2002: document format presented to OASIS
- May 1, 2005: ODF released by OASIS
- Nov 16, 2005: ODF presented to ISO/IEC JTC1 based on Publicly Available Specification (PAS)
- May 3, 2006: ODF approved as ISO/IEC IS 26300 standard
- Review: 720 paged in 1239 days

OOXML

- Based on Microsoft Office 2003 XML format
- Dec 15, 2005: document format presented to ECMA
- Dec 31, 2006: ECMA standard approved by General Assembly
- Jan 31, 2007: OOXML presented to ISO/IEC JTC1 based on Fast Track
- Mar 31, 2008: OOXML pseudo standard approved
- Review: 7200 pages in 838 days

OOXML: a pseudo-standard

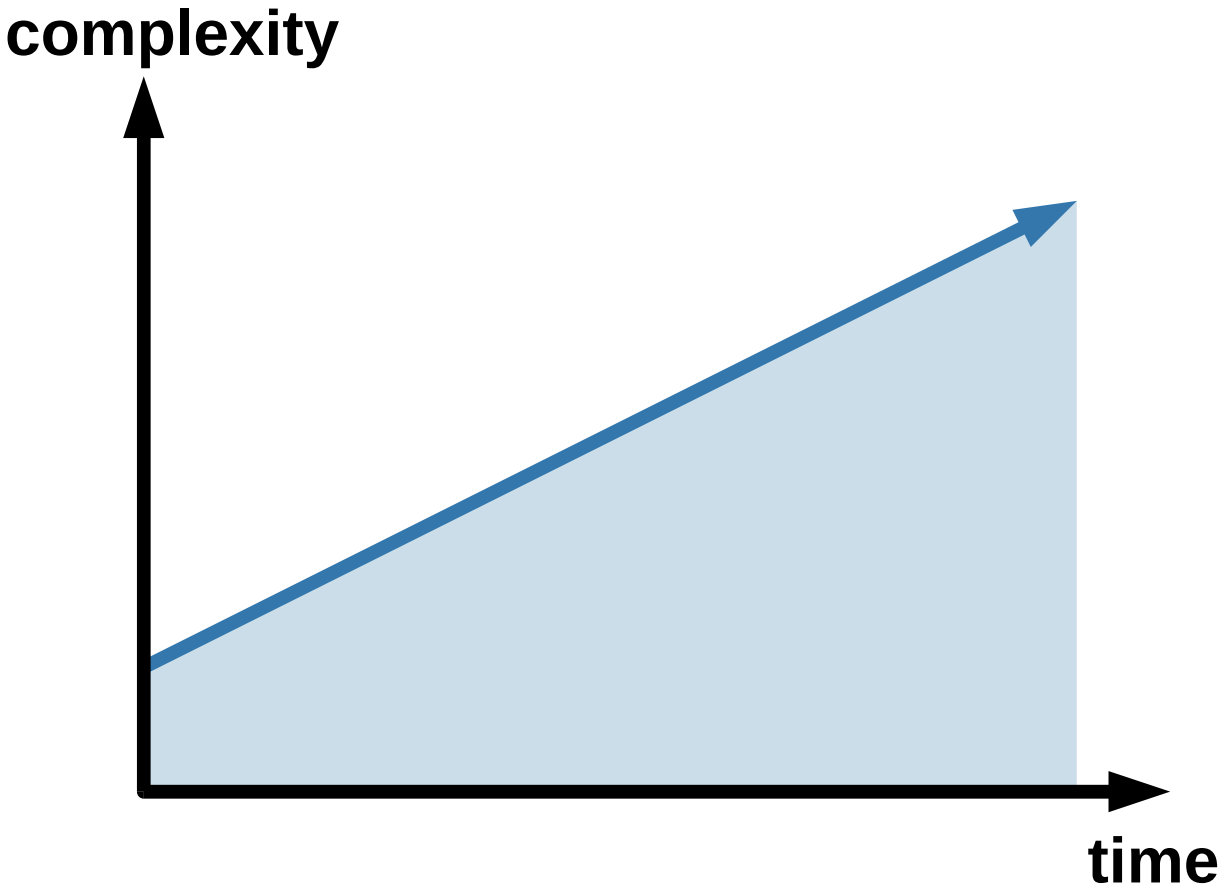
OpenXML was designed from the start to be capable of faithfully representing the pre-existing corpus of word-processing documents, presentations, and spreadsheets encoded in binary formats defined by Microsoft Corporation

Office Open XML Overview
ECMA International, December 2006

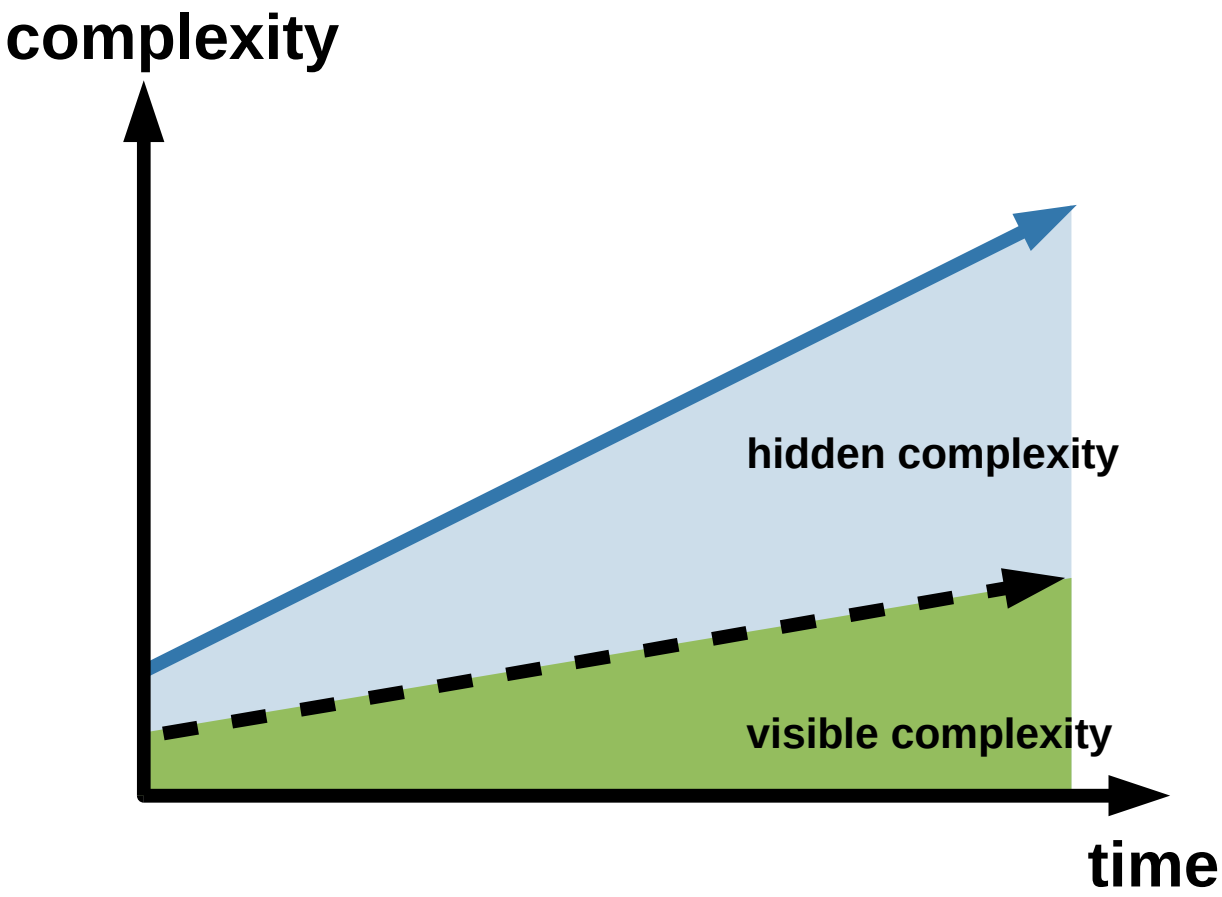
Document Complexity

- **OBJECTS** - Typography, bitmap and outline images, colour, business rules, text, steganography, and much more are used to make up documents, however the management and approval process of these objects are also key to ensuring the correctness, and value of each individual document.
- **DATA** - You need to understand the structure of data, storage locations and techniques, extraction, backup, transmission methods, normalisation, consolidation, translation, manipulation, and sorting, plus security, privacy, and data governance.

Complexity of IT Systems



Hidden Complexity



Reuse of Existing Standards

ODF

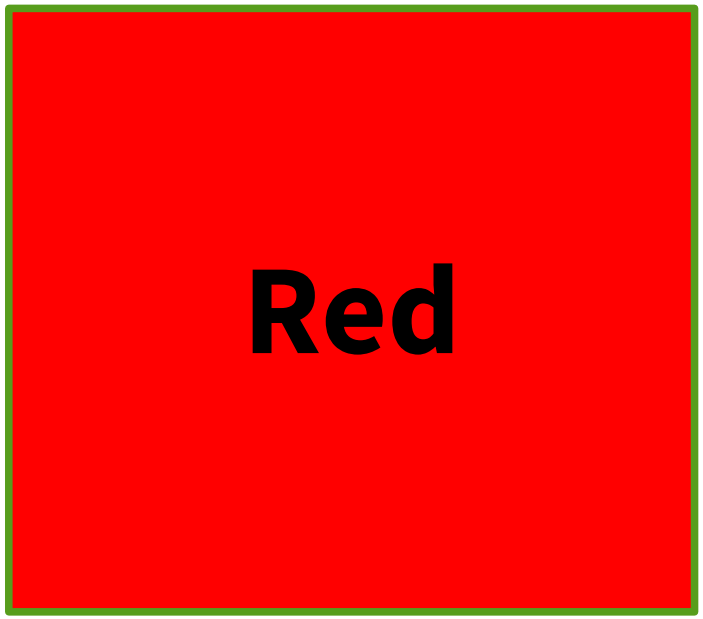
- Dublin Core
- XLS:FO
- SVG
- MathML
- XLink
- SMIL
- XForms

OOXML

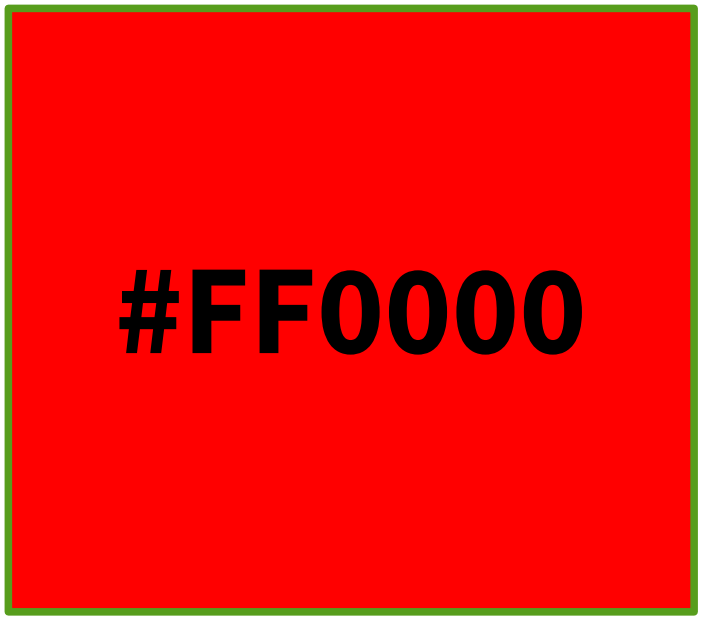
- Dublin Core

Brain and Computer

- Brain



- Computer



Description of Colours

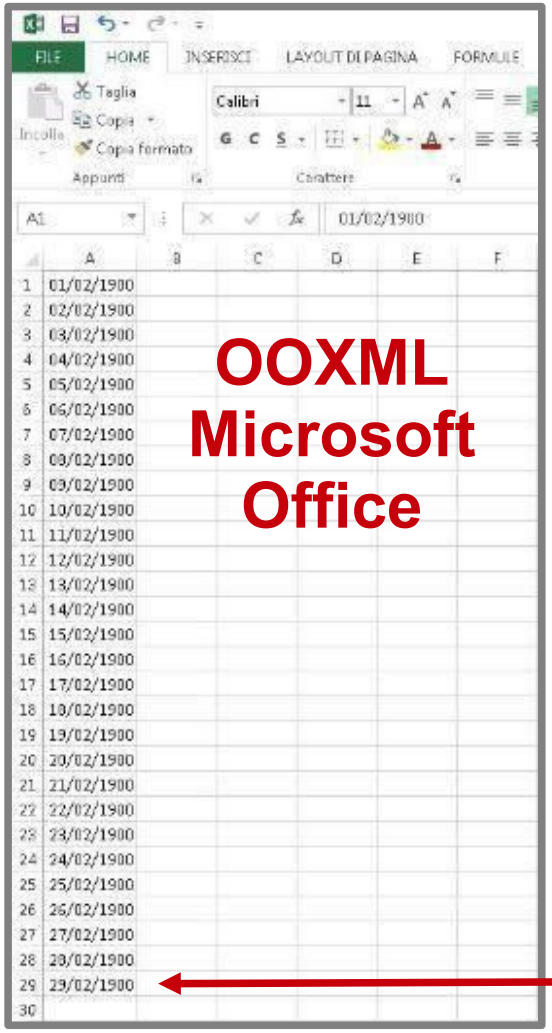
ODF (LibreOffice)

- Writer
  fo:color="#FF0000"
- Calc
  fo:color="#FF0000"
- Impress
  fo:color="#FF0000"

OOXML (MS Office)

- Word
  w:color w:val="FF0000"
- Excel
  color rgb="FFFF0000"
- PowerPoint
  a:srgbClr val="FF0000"

Creative Handling of Calendar



OOXML
Microsoft
Office

ODF
LibreOffice

Real Dates vs Excel Dates

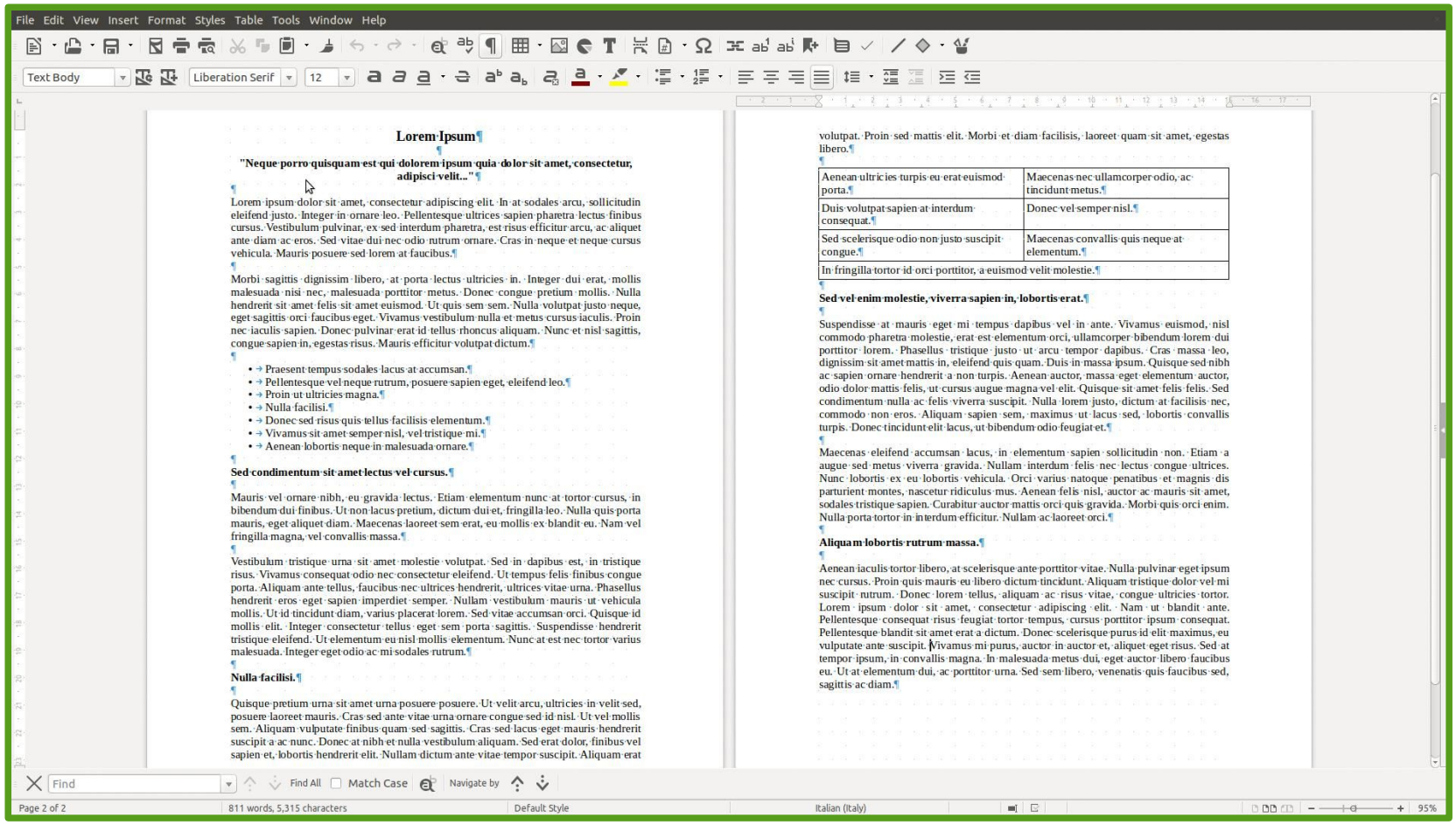
Event	Calc	Excel
Italo Vignoli Birthday	12/08/1954	19948
Italo Vignoli Graduation	19/11/1978	28813
Italo Vignoli First Job	01/10/1981	29860
Italo Vignoli First PC	01/09/1983	30560
Italo Vignoli Wedding	08/09/1984	30933
Italo Vignoli Installs OOo	02/01/2003	37623
Italo Vignoli Launches LibreOffice	28/09/2010	40449

Other OOXML Issues

- OOXML does not consider Jewish and Muslim users, who use a different calendar
- OOXML uses its own proprietary list of numbers instead of the ISO 639 standard for language names (English = EN)
- OOXML adopts the VML vector format, which conflicts with ISO/IEC 8632/W3C SVG standard (VML was deprecated by Microsoft before the development of OOXML)
- OOXML adopts Math for mathematical notation instead of W3C MathML (Math is intentionally incompatible with the standard MathML)

File Comparison
ODF vs OOXML

Comparison ODF/OOXML



Length of Content XML

Version	XML Lines
ODF 1.2 (any version of) LibreOffice	222
OOXML 2010 Transitional (MS Office Windows)	1040
OOXML 2011 Transitional (MS Office MacOS)	12854
OOXML 2013 Transitional (MS Office Windows)	1590
OOXML 2016 Transitional (MS Office Windows)	11667
OOXML 2016 Transitional (MS Office MacOS)	11646
OOXML 2019 Transitional (MS Office Windows)	7085

Seasonality of Content XML

Version	XML Lines
Windows OOXML 2013 Transitional Summer 2017	1590
Windows OOXML 2013 Transitional Winter 2018	13515
Windows OOXML 2016 Transitional Summer 2017	11667
Windows OOXML 2016 Transitional Winter 2018	969
Windows OOXML 2016 Transitional Fall 2018	11288
Windows OOXML 2016 Transitional Spring 2019	7085
MacOS OOXML 2016 Transitional Summer 2017	11646
MacOS OOXML 2016 Transitional Fall 2018	854
MacOS OOXML 2016 Transitional Spring 201	7731

ODT by LibreOffice

<start text>**To be, or not to be, this is the question.**<end text>

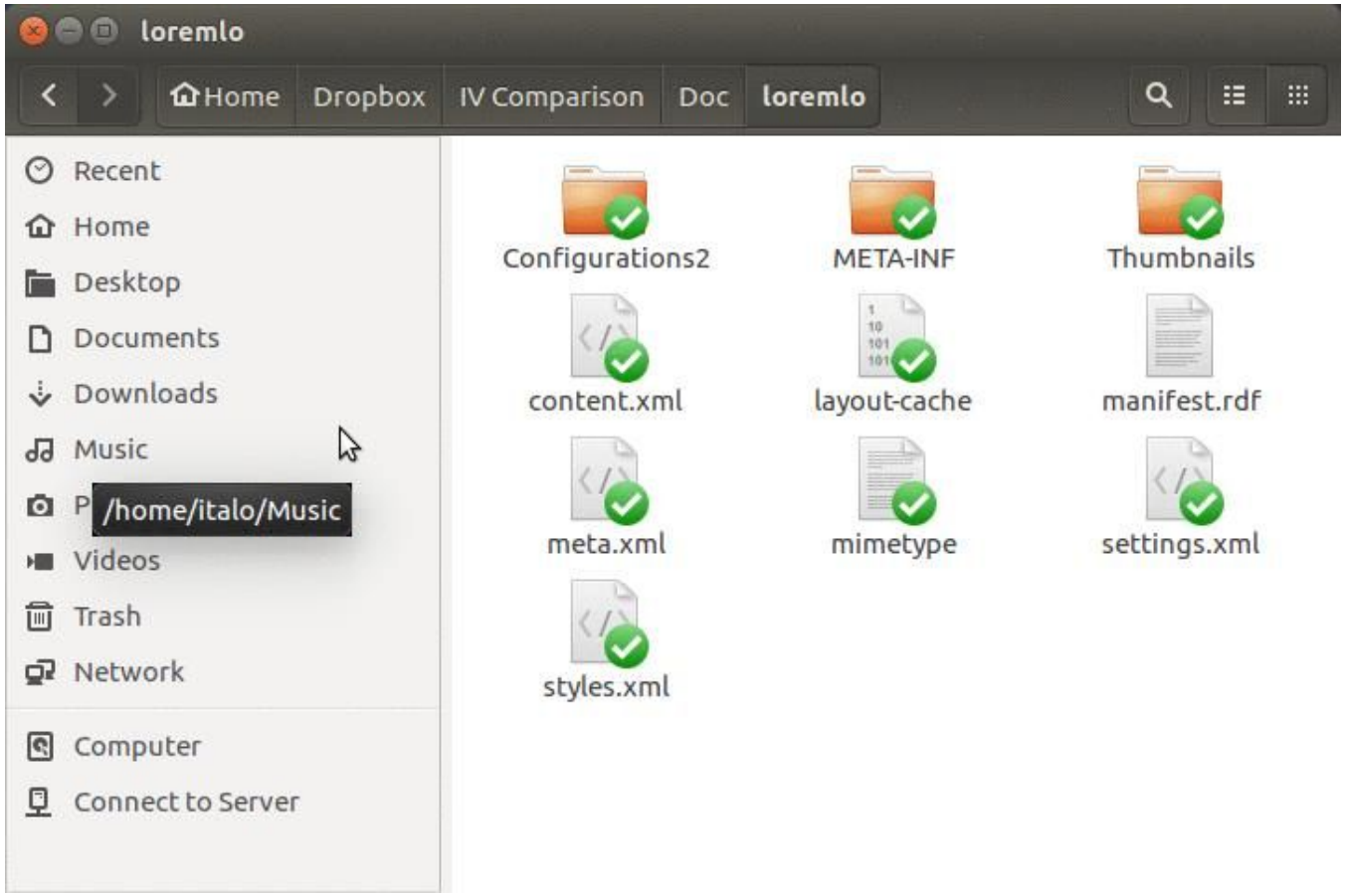
DOCX by Microsoft Office

<start text>**To**<end text>
<keep together>
<start text>[space]<end text>
<start text>**be**<end text>
<start text>**,**<end text>
<keep together>
<start text>[space]<end text>
<start text>**or**<end text>
<keep together>
<start text>[space]<end text>
<start text>**not**<end text>
<keep together>
<start text>[space]<end text>
<start text>**to**<end text>
<keep together>
<start text>[space]<end text>
<start text>**be**<end text>
<keep together>
<start text>**,**<end text>
<keep together>
<start text>[space]<end text>
<start text>**this**<end text>
<keep together>
<start text>[space]<end text>
<start text>**is**<end text>
<keep together>
<start text>[space]<end text>
<start text>**the**<end text>
<keep together>
<start text>[space]<end text>
<start text>**problem**<end text>
<start text>**.**<end text>

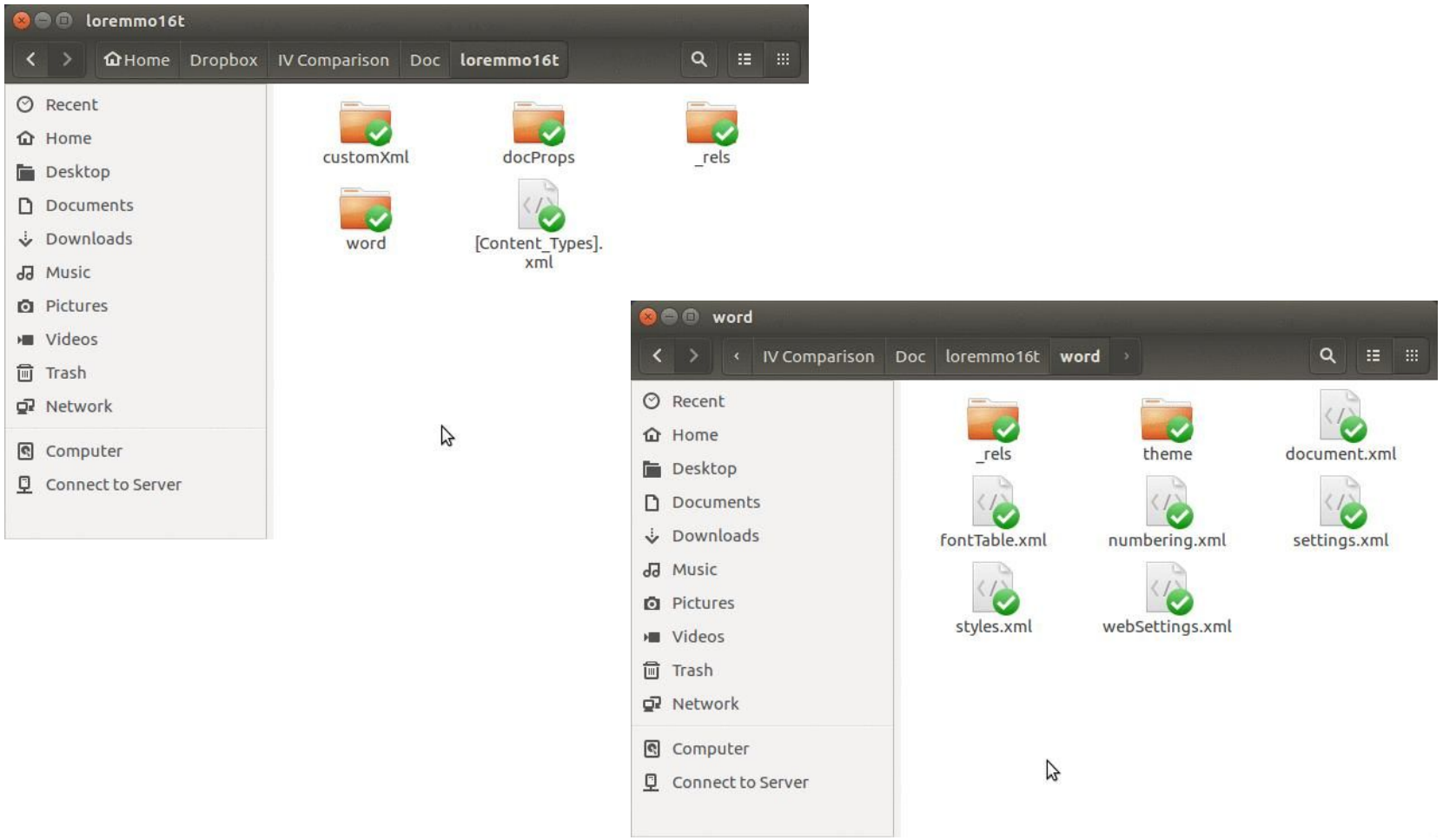
Simplicity vs Hidden Complexity

- ODT by LibreOffice
  - Low or no hidden complexity
  - Same approach when writing OOXML
  - Files are human readable (security)
- OOXML by Microsoft Office
  - Highest option of hidden complexity
  - Same approach when writing ODT
  - Files are not human readable

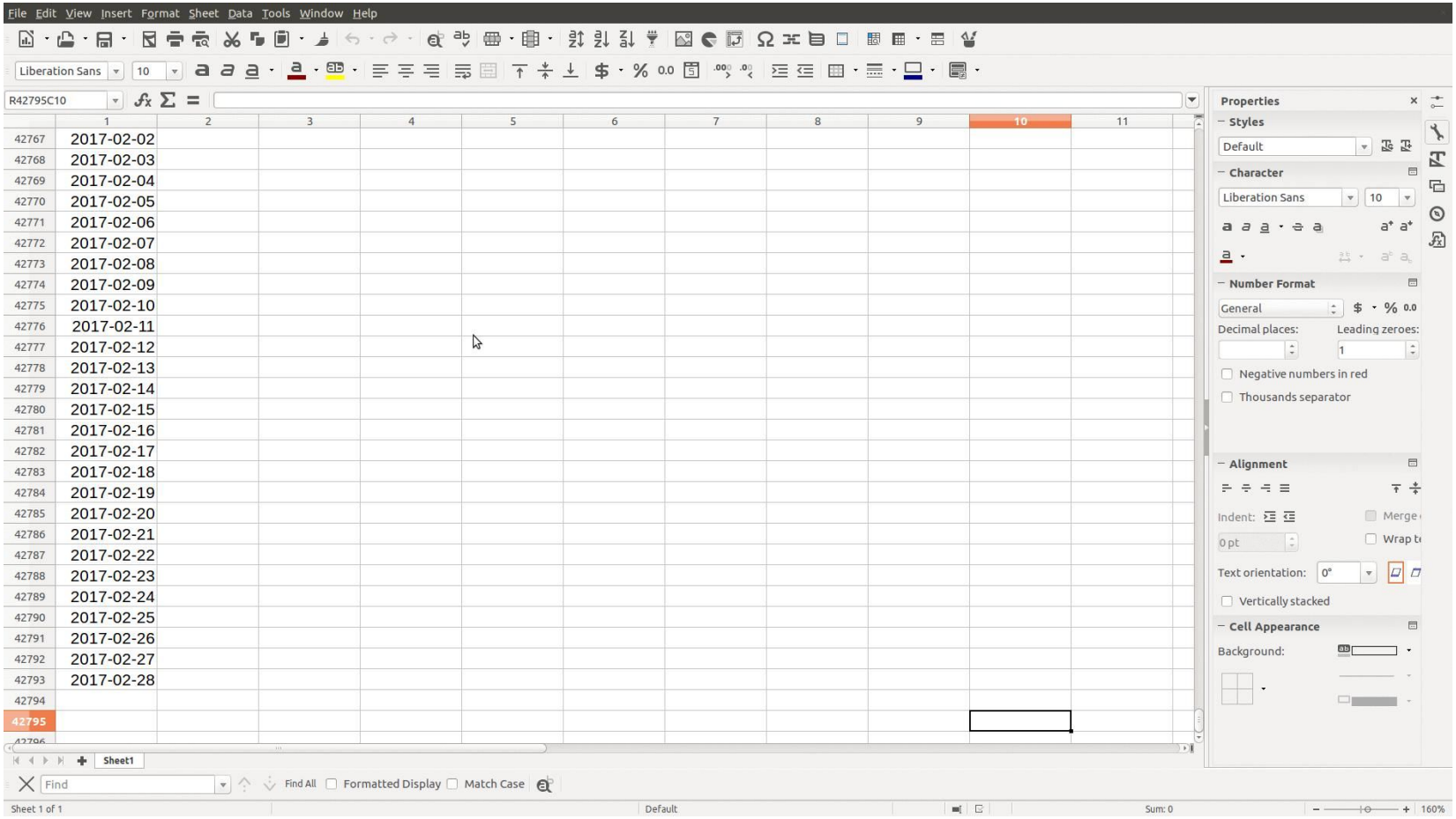
Inside ODT


loremlo
Home
Dropbox
IV Comparison
Doc
loremlo
Recent
Home
Desktop
Documents
Downloads
Music
/home/italo/Music
Videos
Trash
Network
Computer
Connect to Server
Configurations2
META-INF
Thumbnails
content.xml
layout-cache
manifest.rdf
meta.xml
mimetype
settings.xml
styles.xml

Inside DOCX

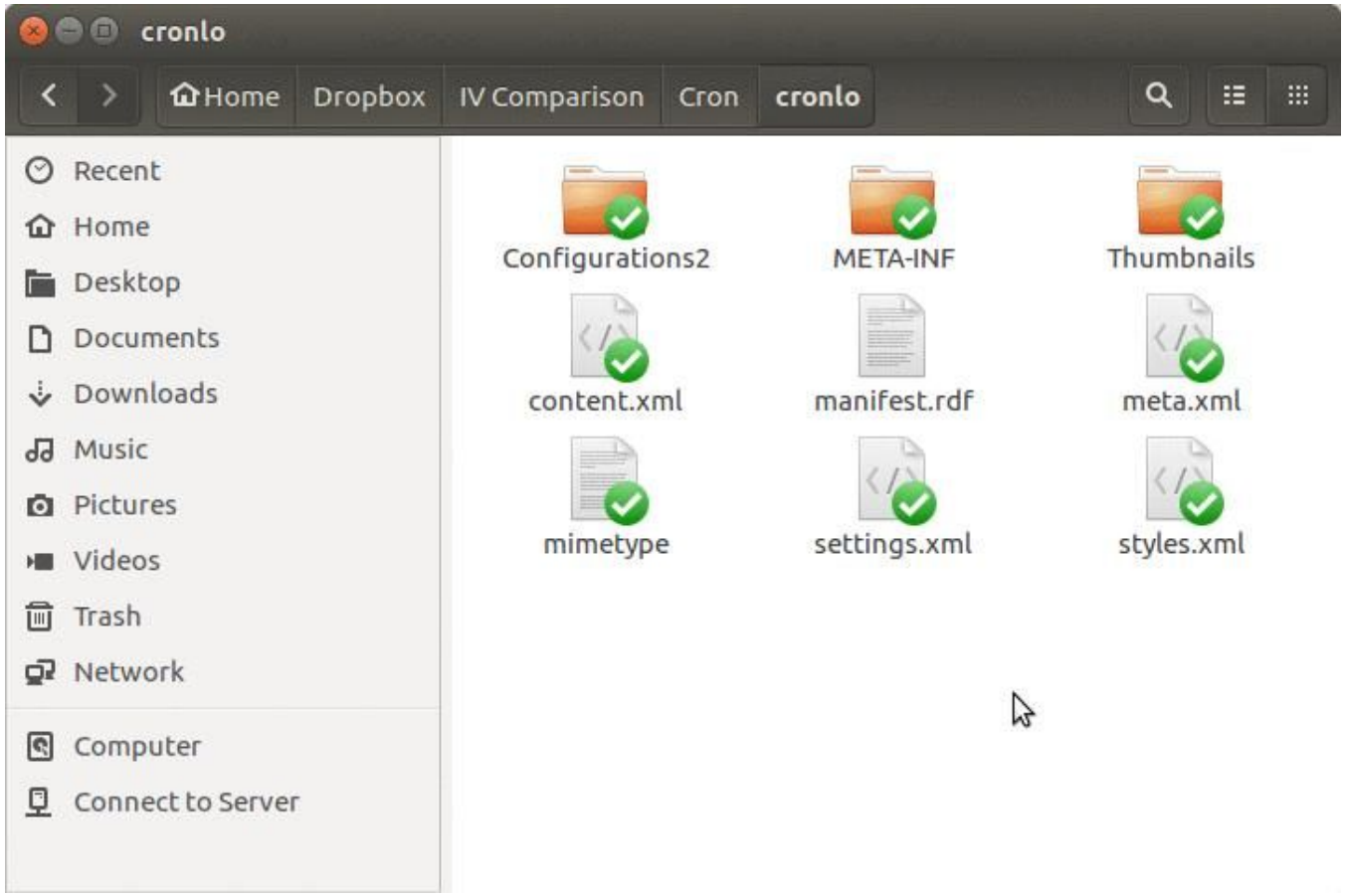

loremmo16t
Home
Dropbox
IV Comparison
Doc
loremmo16t
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Network
Computer
Connect to Server
customXml
docProps
_rels
word
[Content_Types].xml
word
IV Comparison
Doc
loremmo16t
word
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Network
Computer
Connect to Server
_rels
theme
document.xml
fontTable.xml
numbering.xml
settings.xml
styles.xml
webSettings.xml

Comparison Spreadsheet

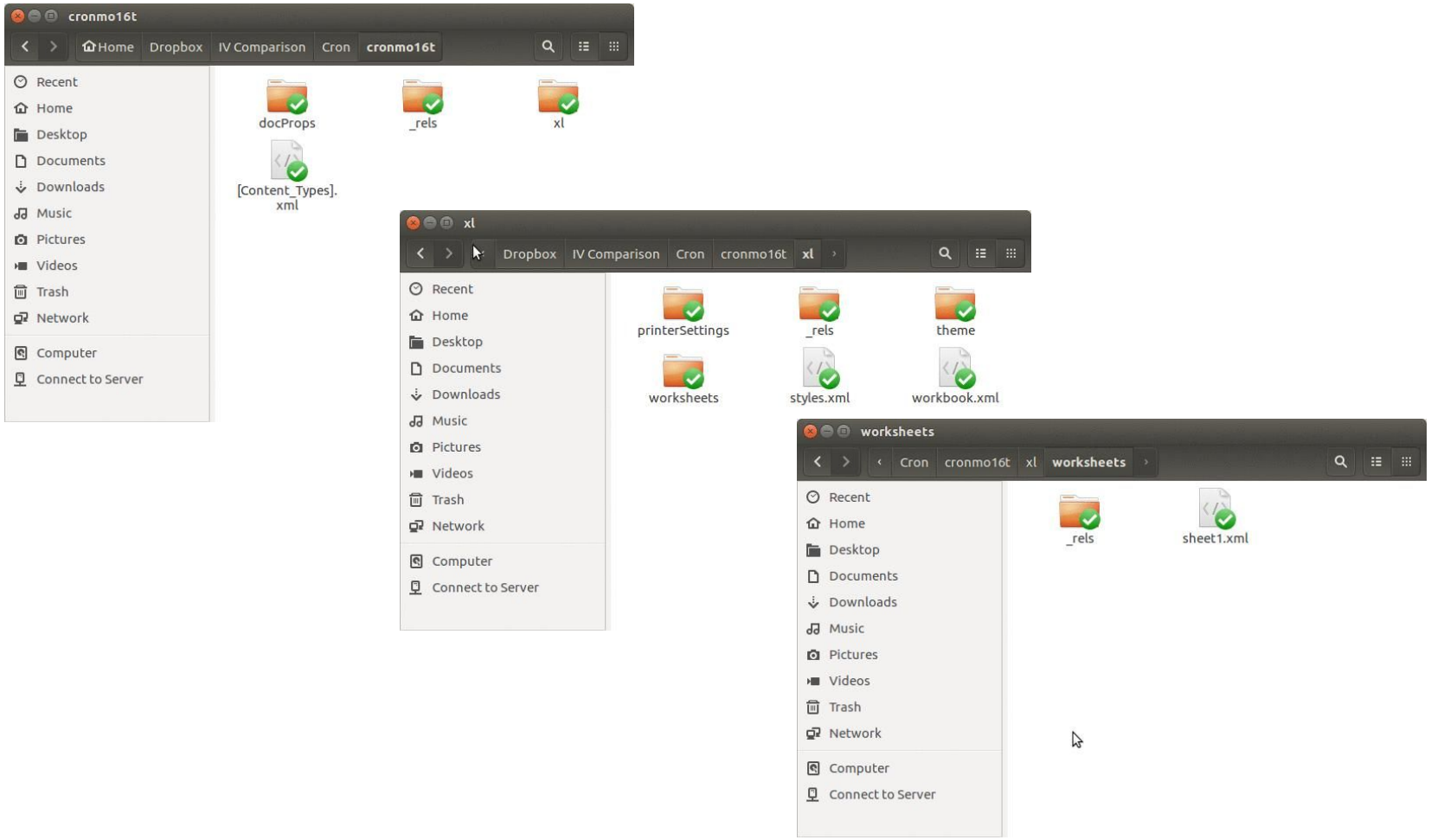


42767	2017-02-02
42768	2017-02-03
42769	2017-02-04
42770	2017-02-05
42771	2017-02-06
42772	2017-02-07
42773	2017-02-08
42774	2017-02-09
42775	2017-02-10
42776	2017-02-11
42777	2017-02-12
42778	2017-02-13
42779	2017-02-14
42780	2017-02-15
42781	2017-02-16
42782	2017-02-17
42783	2017-02-18
42784	2017-02-19
42785	2017-02-20
42786	2017-02-21
42787	2017-02-22
42788	2017-02-23
42789	2017-02-24
42790	2017-02-25
42791	2017-02-26
42792	2017-02-27
42793	2017-02-28
42794	
42795	

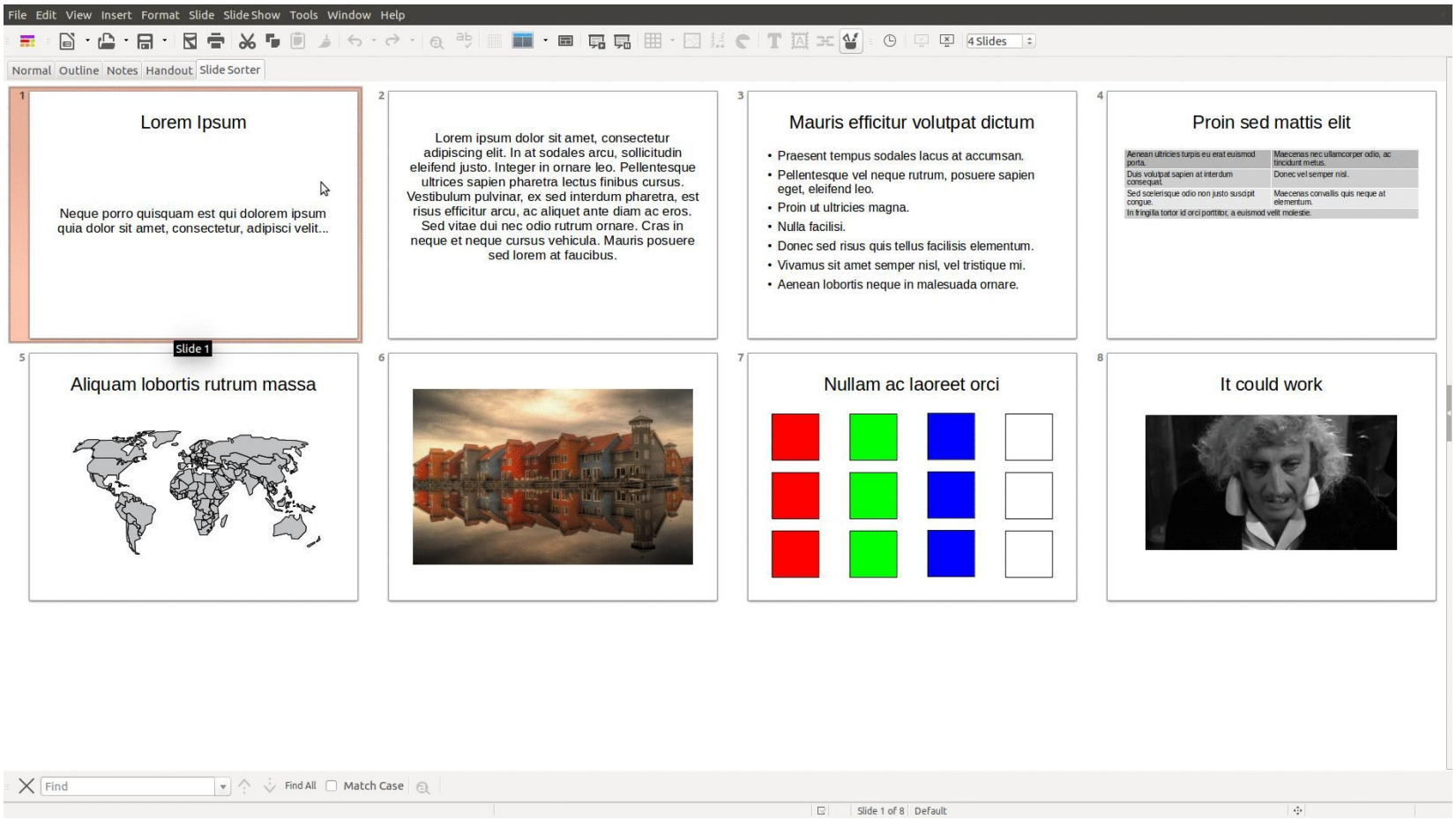
Inside ODS


cronlo
Home
Dropbox
IV Comparison
Cron
cronlo
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Network
Computer
Connect to Server
Configurations2
META-INF
Thumbnails
content.xml
manifest.rdf
meta.xml
mimetype
settings.xml
styles.xml

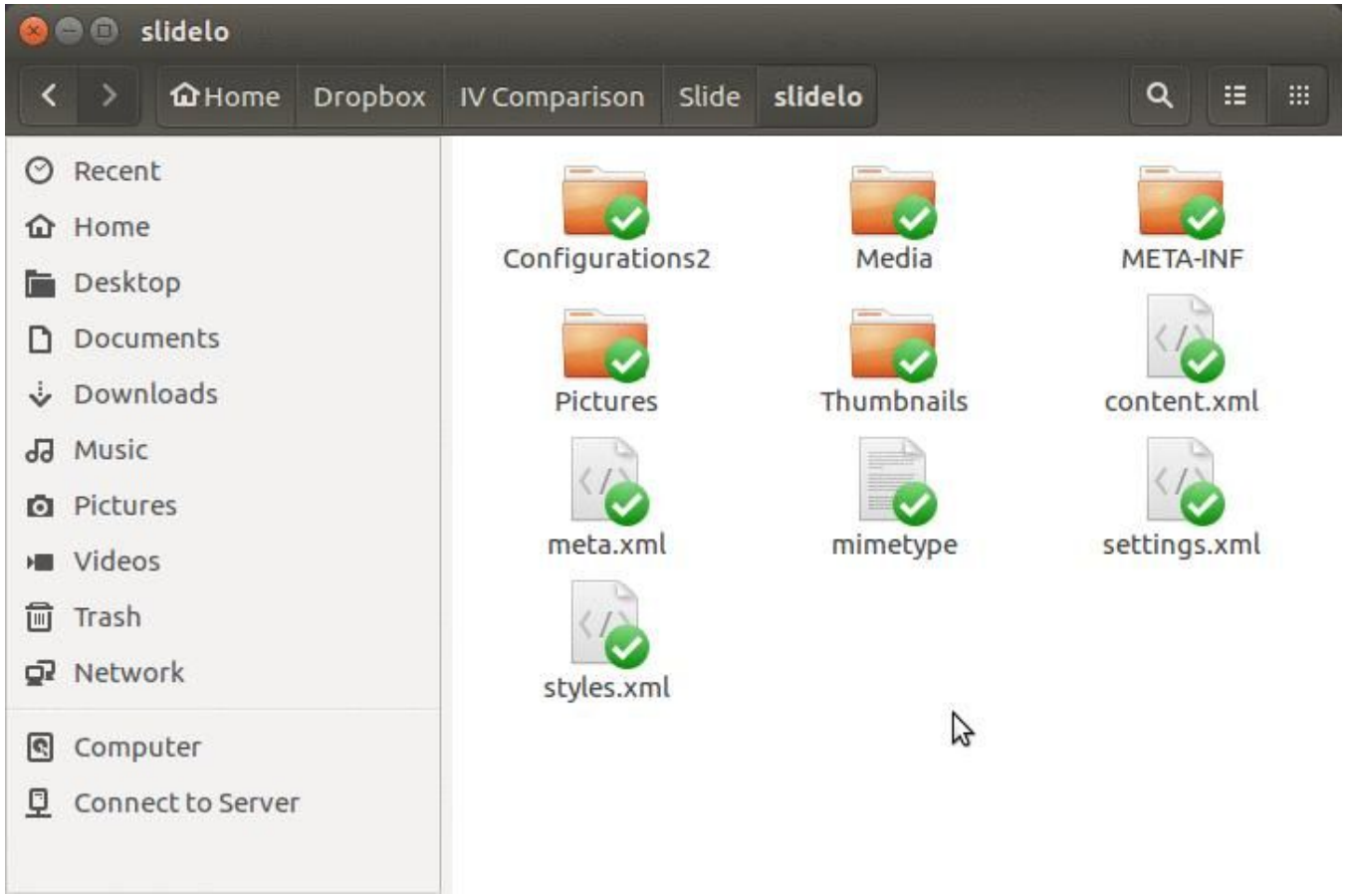
Inside XLSX


cronmo16t
Home
Dropbox
IV Comparison
Cron
cronmo16t
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Network
Computer
Connect to Server
docProps
_rels
xl
[Content_Types].xml
xl
Dropbox
IV Comparison
Cron
cronmo16t
xl
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Network
Computer
Connect to Server
printerSettings
_rels
theme
worksheets
styles.xml
workbook.xml
worksheets
Cron
cronmo16t
xl
worksheets
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Network
Computer
Connect to Server
_rels
sheet1.xml

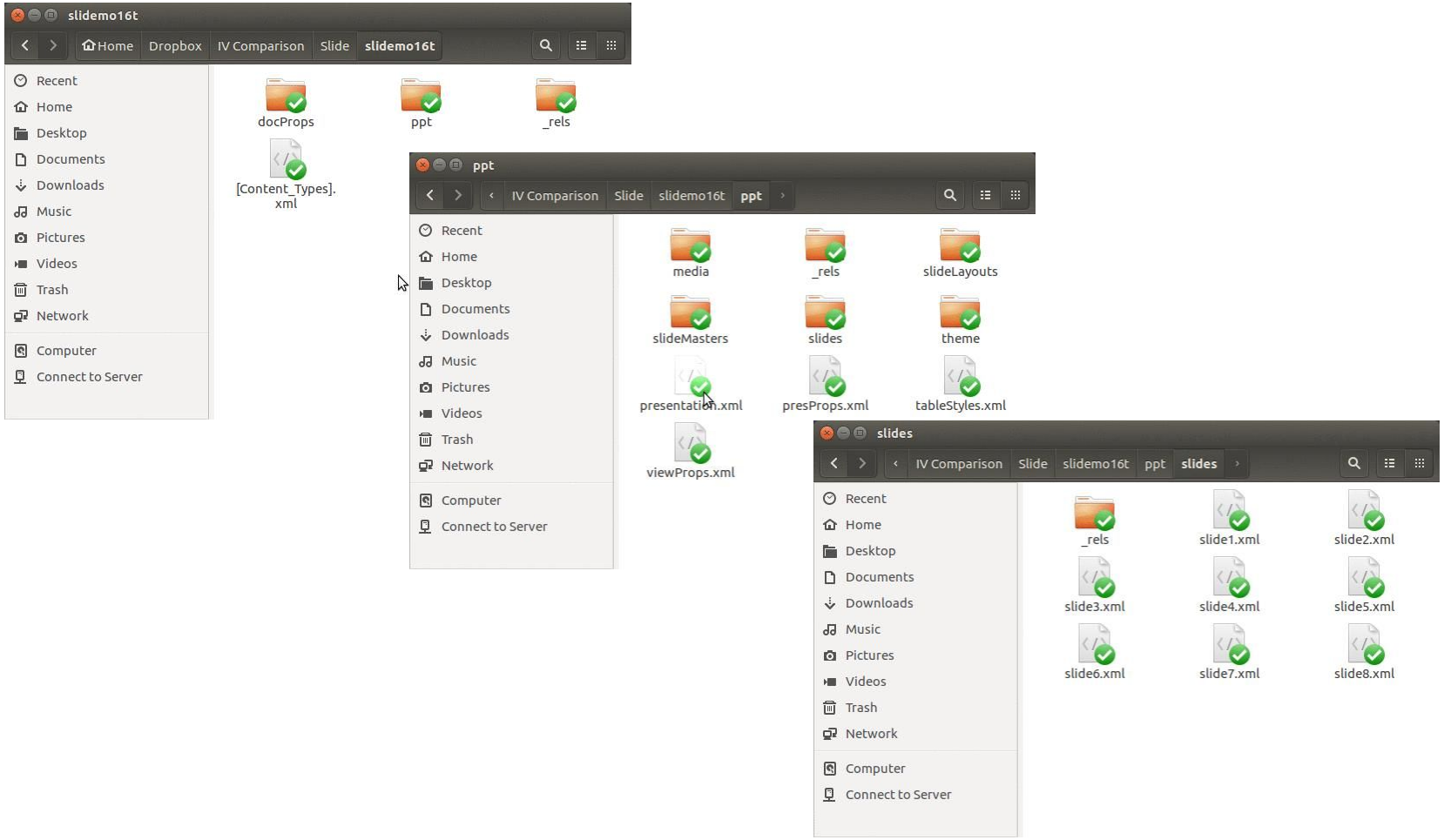
Comparison Presentation



Inside ODP


slidelo
Home
Dropbox
IV Comparison
Slide
slidelo
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Network
Computer
Connect to Server
Configurations2
Media
META-INF
Pictures
Thumbnails
content.xml
meta.xml
mimetype
settings.xml
styles.xml

Inside PPTX


slidemo16t
Home
Dropbox
IV Comparison
Slide
slidemo16t
Recent
Home
Desktop
Documents
Downloads
Music
Pictures
Videos
Trash
Network
Computer
Connect to Server
docProps
ppt
_rels
[Content_Types].xml
ppt
IV Comparison
Slide
slidemo16t
ppt
media
_rels
slideLayouts
slideMasters
slides
theme
presentation.xml
presProps.xml
tableStyles.xml
viewProps.xml
slides
IV Comparison
Slide
slidemo16t
ppt
slides
_rels
slide1.xml
slide2.xml
slide3.xml
slide4.xml
slide5.xml
slide6.xml
slide7.xml
slide8.xml

Deductions of a Stupid Me

- LibreOffice developers are a bunch of geniuses
- Microsoft Office developers are a bunch of *****

  unless
- Microsoft Office XML files are artificially stuffed with useless contents to reduce the chances that software other than Microsoft Office can open them properly
- Microsoft has a vested interest in killing standard based interoperability to protect a captive market still valued at over 25 billion dollars

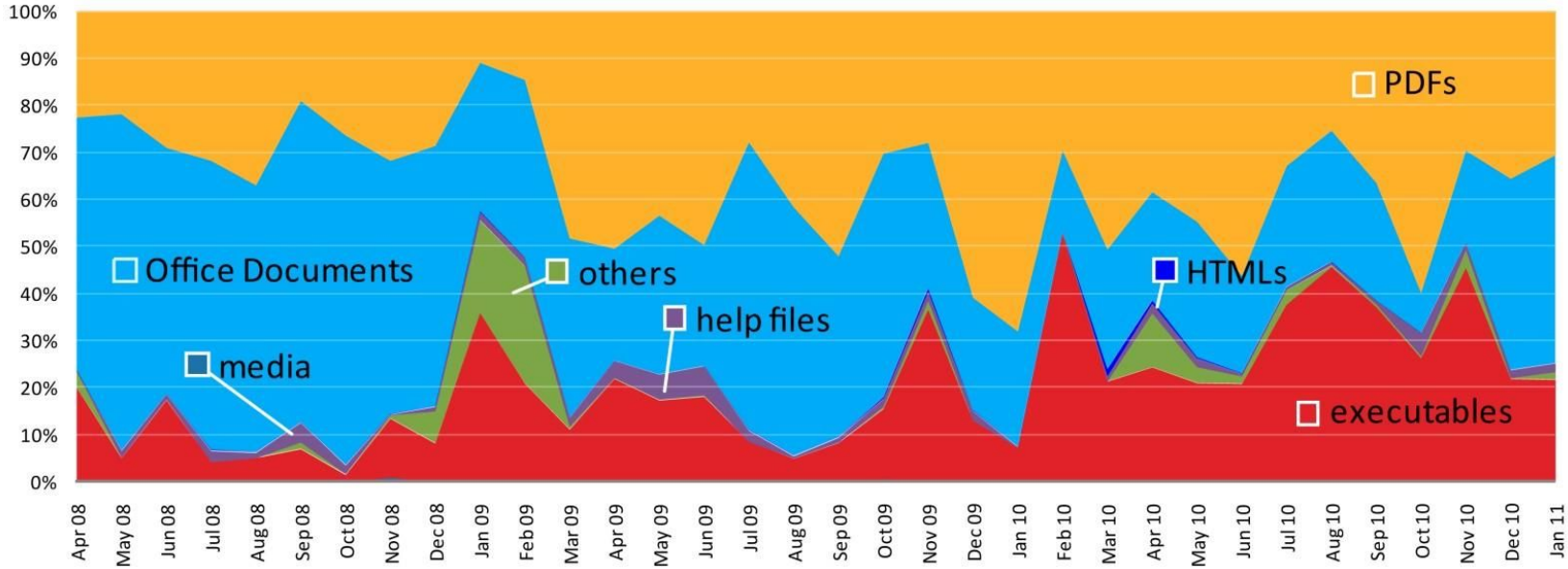
Complexity of Document Formats

Document Format	# Elements
Office Open XML	1792
WordprocessingML	780
OASIS Open Document	530

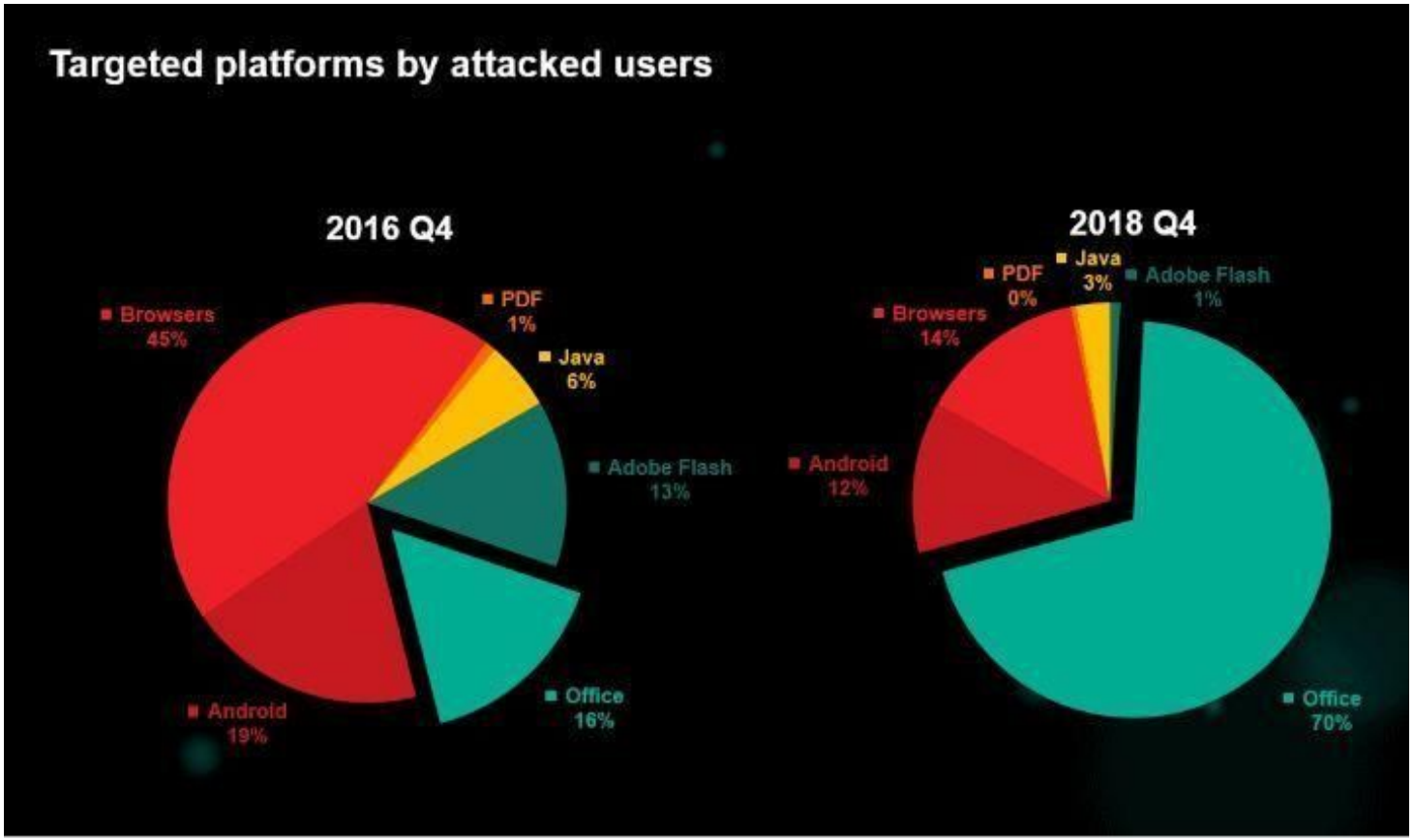
AS OF 2006

File Types Used in Attacks

Source: Symantec MessageLabs Intelligence, February 2011 Intelligence Report

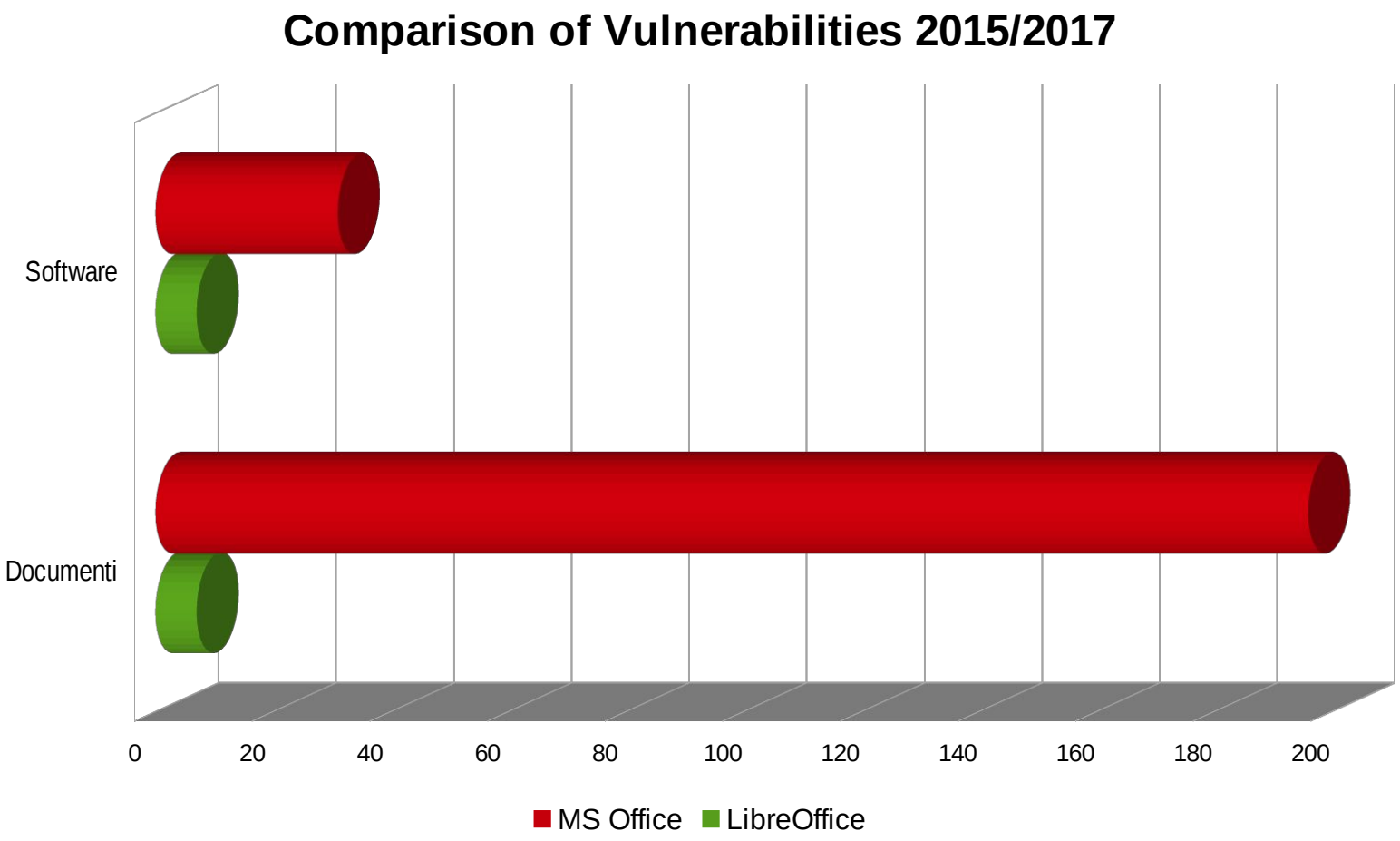


File Types Used in Attacks



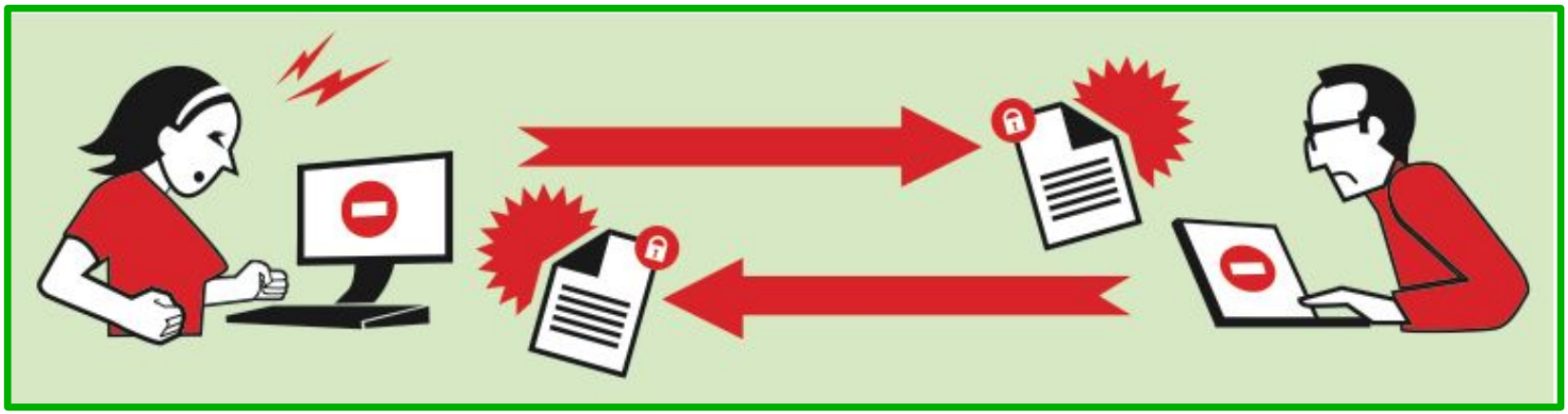
Source: Kaspersky Labs, Spring 2019 Worldwide Meeting

LibreOffice vs MS Office

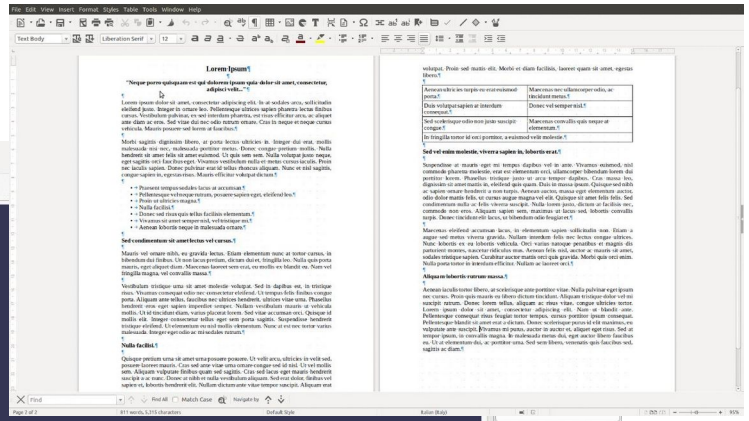


Non Standard: Circa 2000 AC

No Interoperability



Non Standard: Circa 2000 DC



*document.xml

```
<w:proofErr w:type="spellEnd"/>
<w:r w:rsidRPr="00215734">
<w:rPr>
<w:rFonts w:ascii="Times New Roman" w:hAnsi="Times New Roman" w:cs="Times New Roman"/>
<w:sz w:val="24"/>
<w:szCs w:val="24"/>
</w:rPr>
<w:t xml:space="preserve"></w:t>
</w:r>
<w:proofErr w:type="spellStart"/>
<w:r w:rsidRPr="00215734">
<w:rPr>
<w:rFonts w:ascii="Times New Roman" w:hAnsi="Times New Roman" w:cs="Times New Roman"/>
<w:sz w:val="24"/>
<w:szCs w:val="24"/>
</w:rPr>
<w:t>ac</w:t>
</w:r>
<w:proofErr w:type="spellEnd"/>
<w:r w:rsidRPr="00215734">
<w:rPr>
<w:rFonts w:ascii="Times New Roman" w:hAnsi="Times New Roman" w:cs="Times New Roman"/>
<w:sz w:val="24"/>
<w:szCs w:val="24"/>
</w:rPr>
<w:t xml:space="preserve"></w:t>
</w:r>
<w:proofErr w:type="spellStart"/>
<w:r w:rsidRPr="00215734">
<w:rPr>
<w:rFonts w:ascii="Times New Roman" w:hAnsi="Times New Roman" w:cs="Times New Roman"/>
<w:sz w:val="24"/>
<w:szCs w:val="24"/>
</w:rPr>
<w:t>diam</w:t>
</w:r>
<w:proofErr w:type="spellEnd"/>
<w:r w:rsidRPr="00215734">
<w:rPr>
<w:rFonts w:ascii="Times New Roman" w:hAnsi="Times New Roman" w:cs="Times New Roman"/>
<w:sz w:val="24"/>
<w:szCs w:val="24"/>
</w:rPr>
<w:t>.</w:t>
</w:r>
</w:p>
<w:sectPr w:rsidR="009B5C2D" w:rsidRPr="00215734" w:rsidSect="00215734">
<w:pgSz w:w="11906" w:h="16838"/>
<w:pgMar w:top="1985" w:right="1701" w:bottom="1701" w:left="1701" w:header="709" w:footer="709" w:gutter="0"/>
<w:cols w:space="708"/>
<w:docGrid w:linePitch="360"/>
</w:sectPr>
</w:body>
</w:document>
```

Insert Sibling

Insert Entity

amp
apos
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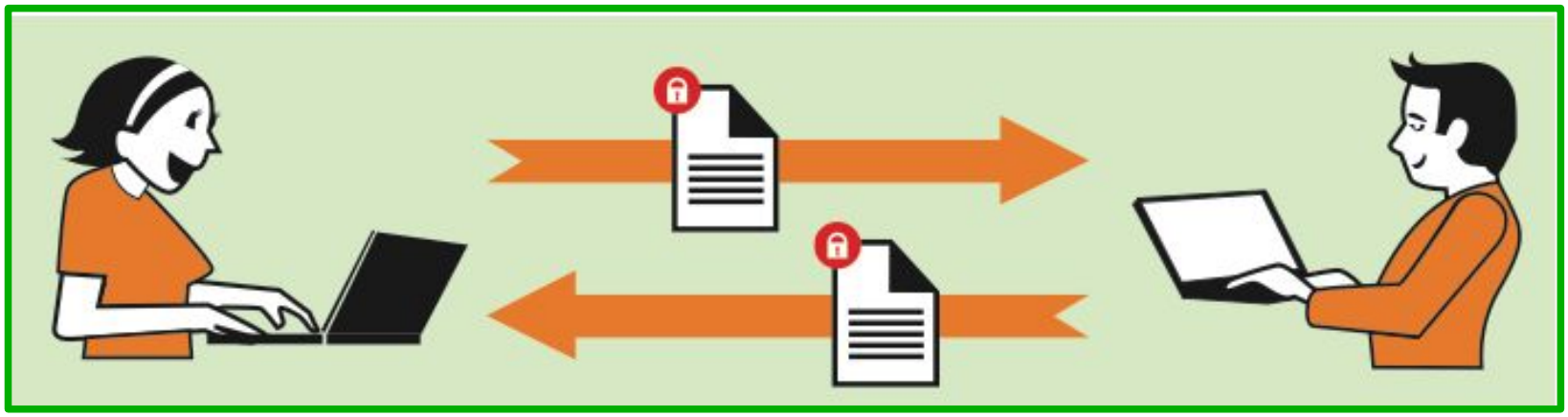
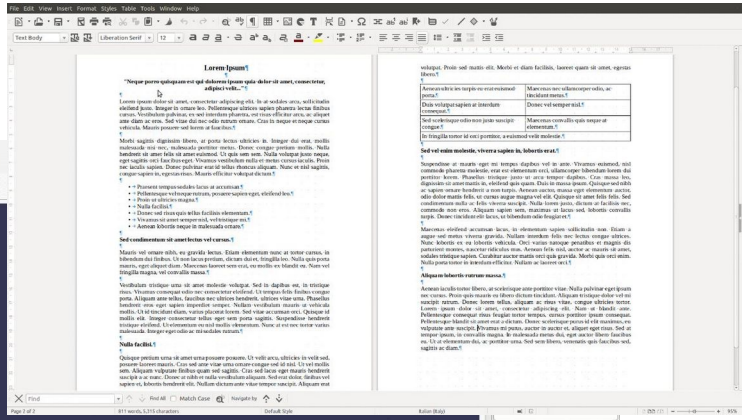
Modified Ln 11668 Col 1

False Interoperability



Standard: Circa 2000 DC



*content.xml

```
<table:table table:name="Table1" table:style-name="Table1">
 <table:table-column table:style-name="Table1.A" table:number-columns-repeated="2"/>
 <table:table-row>
  <table:table-cell table:style-name="Table1.A1" office:value-type="string">
   <text:p text:style-name="P8">Aenean ultricies turpis eu erat euismod porta.</text:p>
  </table:table-cell>
  <table:table-cell table:style-name="Table1.B1" office:value-type="string">
   <text:p text:style-name="P8">Maecenas nec ullamcorper odio, ac tincidunt metus.</text:p>
  </table:table-cell>
 </table:table-row>
 <table:table-row>
  <table:table-cell table:style-name="Table1.A2" office:value-type="string">
   <text:p text:style-name="P8">Duis volutpat sapien at interdum consequat.</text:p>
  </table:table-cell>
  <table:table-cell table:style-name="Table1.B2" office:value-type="string">
   <text:p text:style-name="P8">Donec vel semper nisl.</text:p>
  </table:table-cell>
 </table:table-row>
 <table:table-row>
  <table:table-cell table:style-name="Table1.A2" office:value-type="string">
   <text:p text:style-name="P8">Sed scelerisque odio non justo suscipit congue.</text:p>
  </table:table-cell>
  <table:table-cell table:style-name="Table1.B2" office:value-type="string">
   <text:p text:style-name="P8">Maecenas convallis quis neque at elementum.</text:p>
  </table:table-cell>
 </table:table-row>
 <table:table-row>
  <table:table-cell table:style-name="Table1.B2" table:number-columns-spanned="2" office:value-type="string">
   <text:p text:style-name="P8">In fringilla tortor id orci porttitor, a euismod velit molestie.</text:p>
  </table:table-cell>
  <table:covered-table-cell/>
 </table:table-row>
</table:table>
<text:p text:style-name="P5"/>
<text:p text:style-name="P3">Sed vel enim molestie, viverra sapien in, lobortis erat.</text:p>
<text:p text:style-name="P7"/>
<text:p text:style-name="P7">Suspendisse at mauris eget mi tempus dapibus vel in ante. Vivamus euismod, nisl commodo pharetra molestie, erat est elementum orci, ullamcorper bibendum lorem dui porttitor lorem. Phasellus tristique justo ut arcu tempor dapibus. Cras massa leo, dignissim sit amet mattis in, eleifend quis quam. Duis in massa ipsum. Quisque sed nibh ac sapien ornare hendrerit a non turpis. Aenean auctor, massa eget elementum auctor, odio dolor mattis felis, ut cursus augue magna vel elit. Quisque sit amet felis felis. Sed condimentum nulla ac felis viverra suscipit. Nulla lorem justo, dictum at facilisis nec, commodo non eros. Aliquam sapien sem, maximus ut lacus sed, lobortis convallis turpis. Donec tincidunt elit lacus, ut bibendum odio feugiat et.</text:p>
<text:p text:style-name="P5"/>
<text:p text:style-name="P5">Maecenas eleifend accumsan lacus, in elementum sapien sollicitudin non. Etiam a augue sed metus viverra gravida. Nullam interdum felis nec lectus congue ultrices. Nunc lobortis ex eu lobortis vehicula. Orci varius natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aenean felis nisl, auctor ac mauris sit amet, sodales tristique sapien. Curabitur auctor mattis orci quis gravida. Morbi quis orci enim. Nulla porta tortor in interdum efficitur. Nullam ac laoreet orci.</text:p>
<text:p text:style-name="P5"/>
<text:p text:style-name="P4">Aliquam lobortis rutrum massa.</text:p>
<text:p text:style-name="P9"/>
<text:p text:style-name="P9">Aenean iaculis tortor libero, at scelerisque ante porttitor vitae. Nulla pulvinar eget ipsum nec cursus. Proin quis mauris eu libero dictum tincidunt. Aliquam tristique dolor vel mi suscipit rutrum. Donec lorem tellus, aliquam ac risus vitae, congue ultricies tortor. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nam ut blandit ante. Pellentesque consequat risus feugiat tortor tempus, cursus porttitor ipsum consequat. Pellentesque blandit sit amet erat a dictum. Donec scelerisque purus id elit maximus, eu vulputate ante suscipit. Vivamus mi purus, auctor in auctor et, aliquet eget risus. Sed at tempor ipsum, in convallis magna. In malesuada metus dui, eget auctor libero faucibus eu. Ut at elementum dui, ac porttitor urna. Sed sem libero, venenatis quis faucibus sed, sagittis ac diam.</text:p>
</office:text>
</office:body>
</office:document-content>
```

Insert Sibling

Insert Entity

amp
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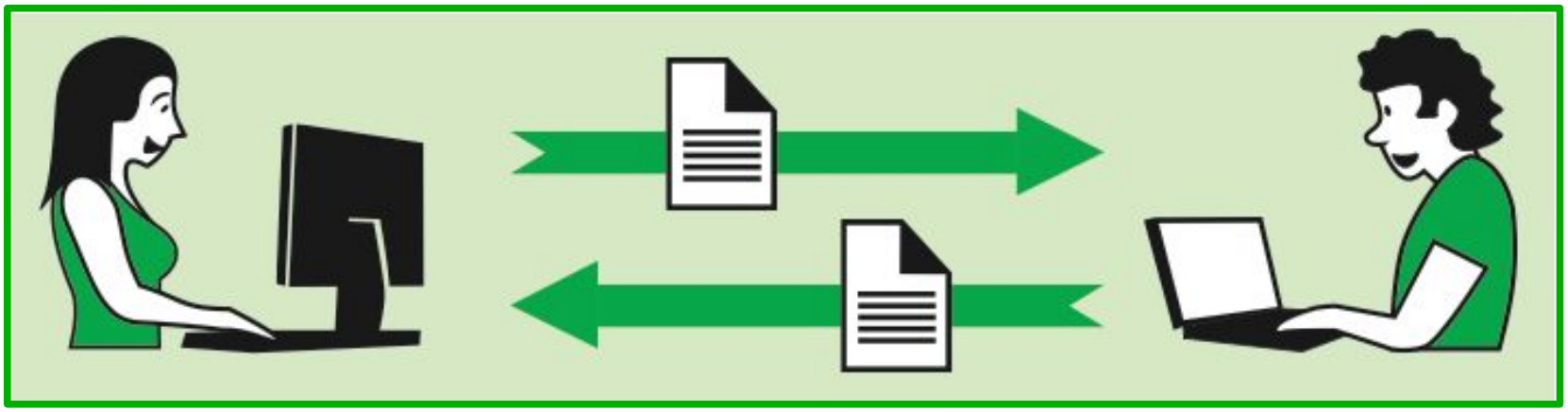
Modified Ln 223 Col 1

True Interoperability



Proprietary Fonts

Calibri – regular, *italic*, **bold**, ***bold italic***
Cambria – regular, *italic*, **bold**, ***bold italic***
Candara – regular, *italic*, **bold**, ***bold italic***
Consolas – reg, *it*, **bd**, ***bd it***
Constantia – regular, *italic*, **bold**, ***bold it***
Corbel – regular, *italic*, **bold**, ***bold italic***
Cariadings –

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