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# OpenOffice.org

Conference 2008 Beijing  
世界开源大会

# ODF Perspectives Panel discussion

OASIS ODF Adoption TC

About...



# OASIS ODF Adoption TC



- 
- “Collaborating to increase the demand for and availability of products that conform to the OpenDocument Format”
- 
- <http://www.oasis-open.org/committees/odf-adoption>

# ODF Interop and Conf.TC



- 
- “Supporting the creation of interoperable ODF applications”
- 
- <http://www.oasis-open.org/committees/oic>

# Agenda



# Agenda



- 17:45 – Intro (Don Harbison)
- 17:50 – Theoretical view (Rob Weir)
- 18:05 – Practical view (Bart Hanssens)
- 18:20 – Panel self-intro
- 18:30 – Break / thinking time
- 18:45 – Q&A (audience and panel)
- 19:15 – Closing remarks
- 19:30 – End of session

# Panelists





# Jeremy ALLISON



- Linux Evangelist @ Google
- SAMBA
- <http://tuxdeluxe.org/taxonomy/term/21>

# Bart HANSSENS



- Interoperability expert @ Fedict, Belgium
- Tests with ODF plug-ins for MS-Office
- Chair OASIS ODF Interop. and Conf.TC
- <http://www.fedict.belgium.be>

# Don HARBISON



- Program Director @ IBM
- Open source and open standards
- Linux strategy
- Chair OASIS ODF Adoption TC
- <http://www.ibm.com>

# Jun MA



- Beijing RedFlag2000
- <http://www.redoffice.com.cn>

# Florian REUTER



- Novell
- <http://florianreuter.blogspot.com>

# Malte TIMMERMAN



- Tech.Architect @ Software Engineering, Sun
- StarOffice / Sun MS-Office plug-in:
- Accessibility
- Architecture
- Online Help
- Performance
- Security
- <http://blogs.sun.com/malte>

# Rob WEIR



- ODF Architect, IBM
- Co-Chair OASIS ODF TC
- US delegate ISO/IEC JTC1/SC34
- Member INCITS v1 & INCITS Executive Board
- <http://www.robweir.com/blog>



# Thanks!

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# ODF Interoperability - Theory

Rob Weir

IBM

# What is Interoperability?



“Interoperability means the ability of information and communication technology (ICT) systems and of the business processes they support to exchange data and to enable the sharing of information and knowledge.”

IDABC's “European Interoperability Framework”  
<http://ec.europa.eu/idabc/servlets/Doc?id=19529>

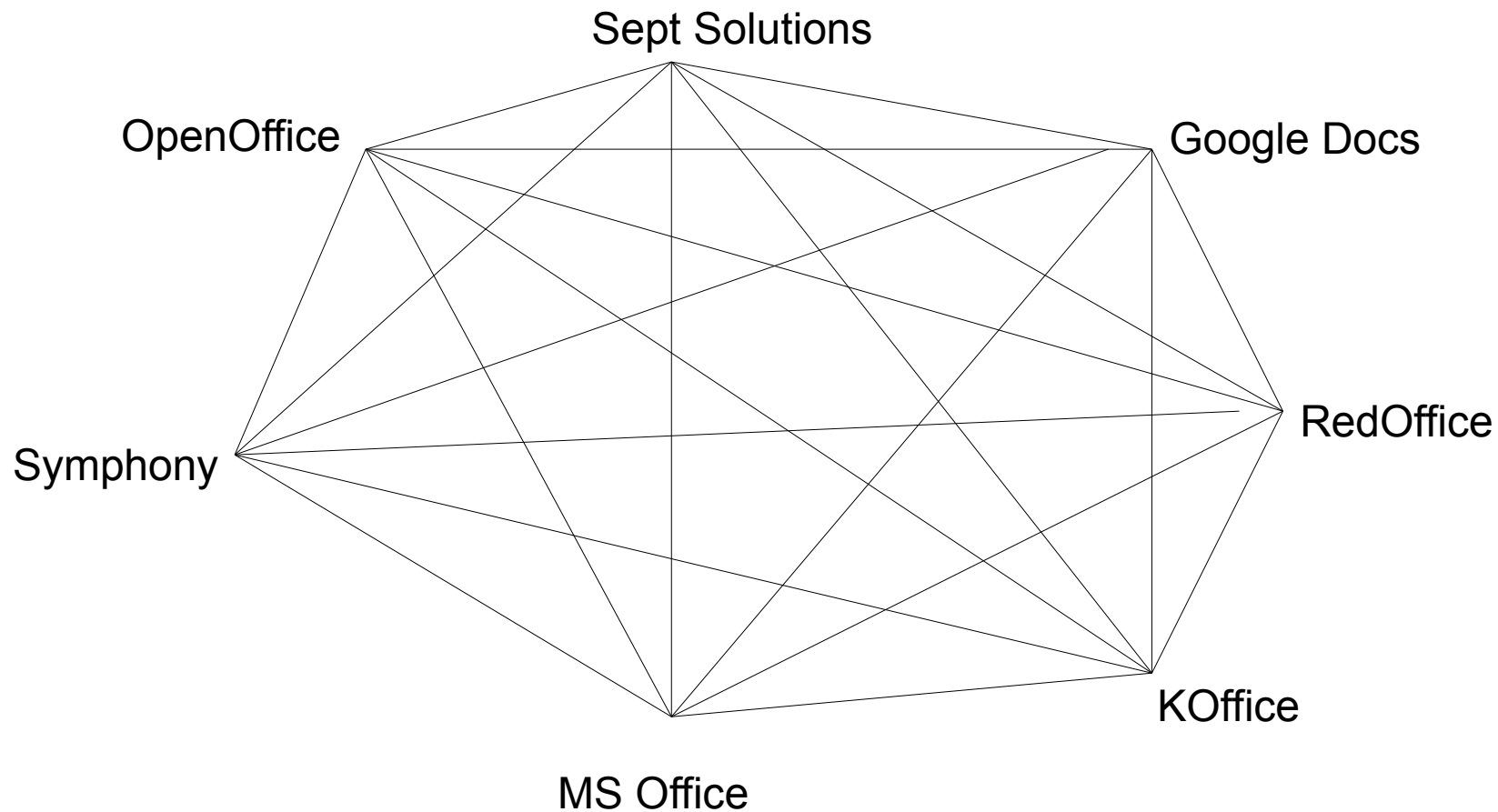
# Problem #1



Complexity of Application-to-Application  
interoperability

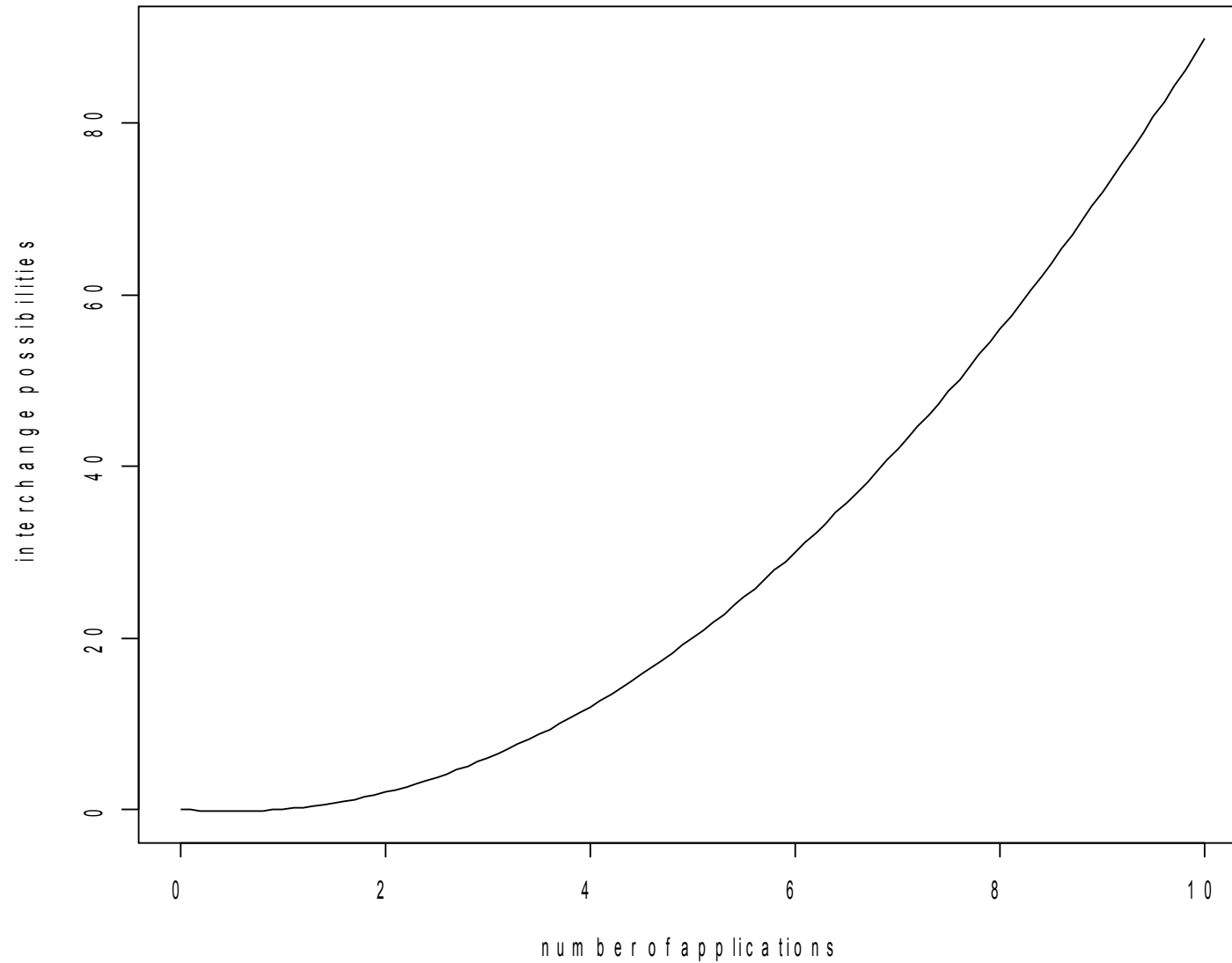


# Many ODF Implementations

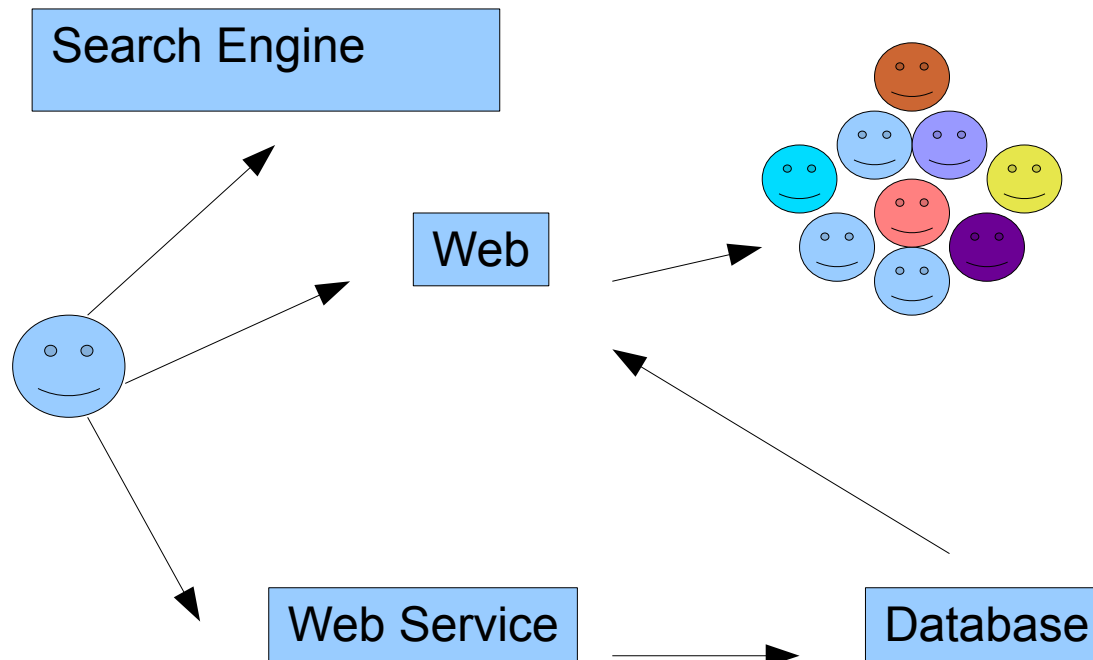
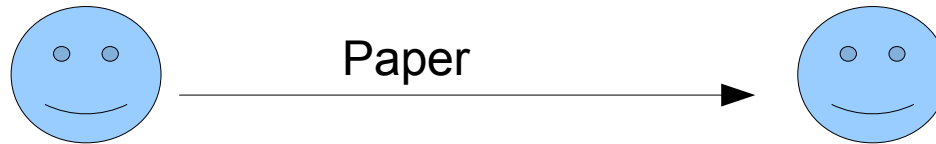


With N editors, there are  $N*(N-1)$  interoperability paths

# App2App interop doesn't scale



# And don't forget the non-editors



A single document can easily be touched by a dozen different applications from different vendors during its lifetime.

The ultimate destination of your document is unknown to you and likely unknowable.

# Problem #2

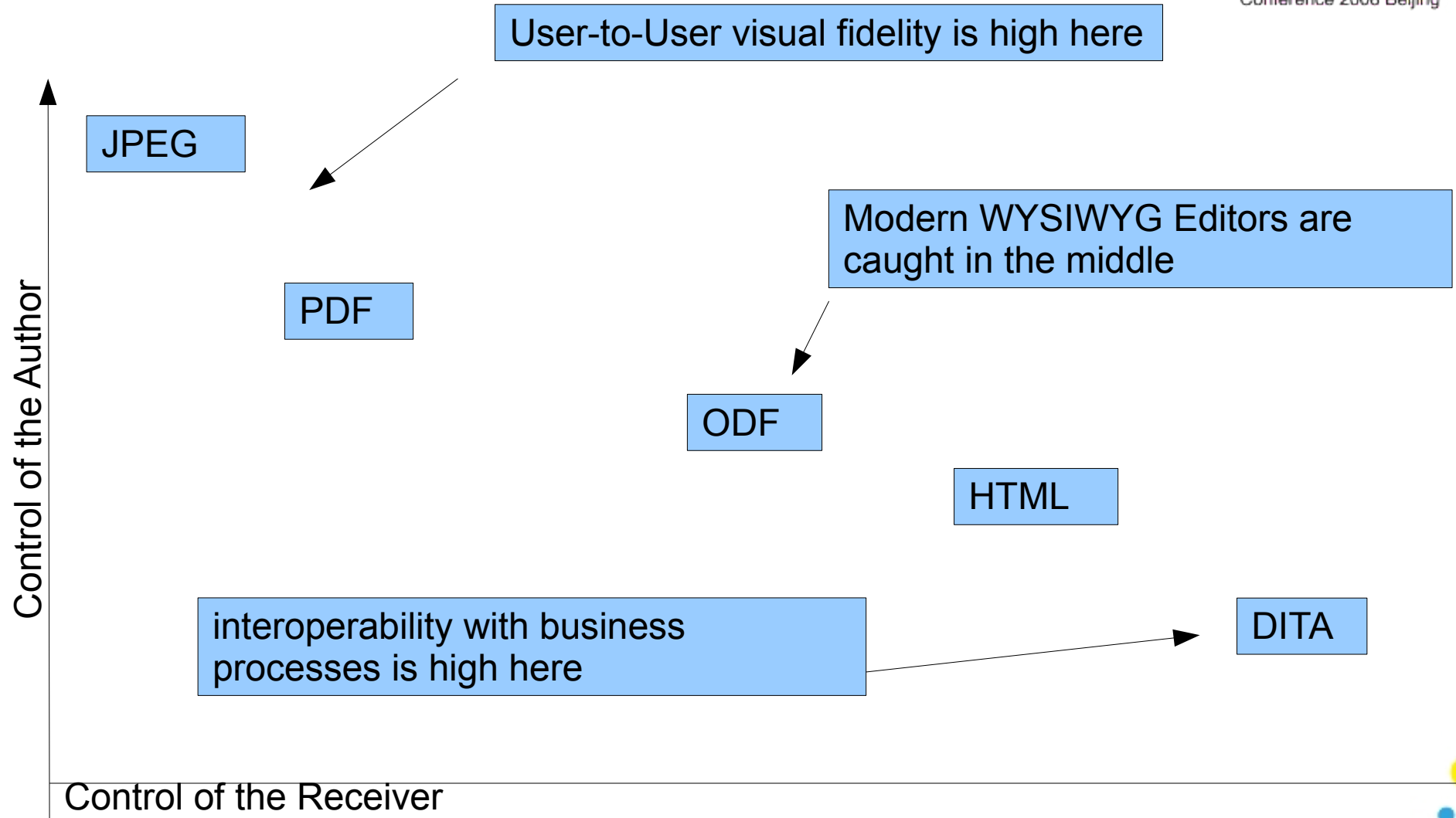


Interoperability means different things  
to different people.



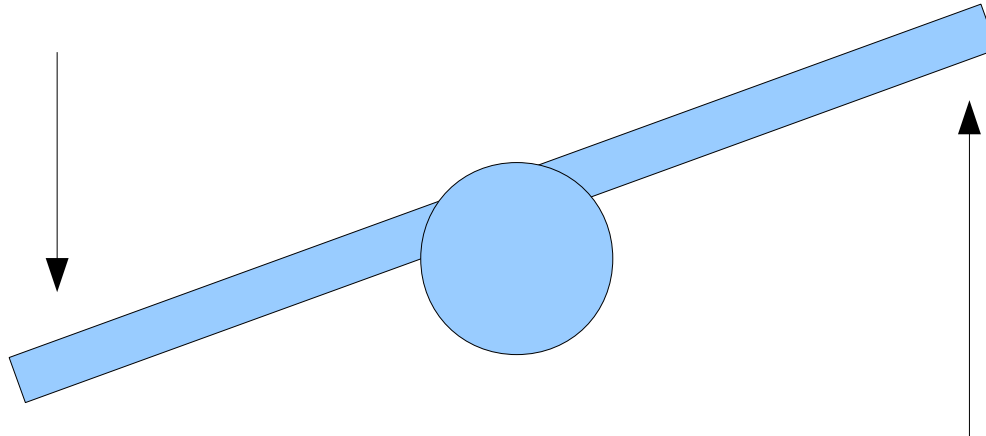


# Thinking in terms of control



# Traditional Trade-offs

- Visual Richness of authoring environment
- Power
- Ability to say anything
- Pixel Perfection
- High Fidelity



- Accessibility
- Universality
- Ability of everyone to understand
- Structure
- Semantic richness

Not a Law of Nature, but a tendency. The glory goes to those who can solve both problems at once.

# Two Big Challenges



- Many ODF Implementations
- Need for ODF to provide interoperability in two dimensions:
  - Ad-hoc, traditional, visual fidelity
  - Structured, data-oriented, business process

# Things that cause problems



- Application issues
  - Implementation defects
  - Functional subsets
  - Functional supersets (extensions)
- Standard issues
  - Specification errors
  - Undefined behaviours
  - Implementation-defined behaviours

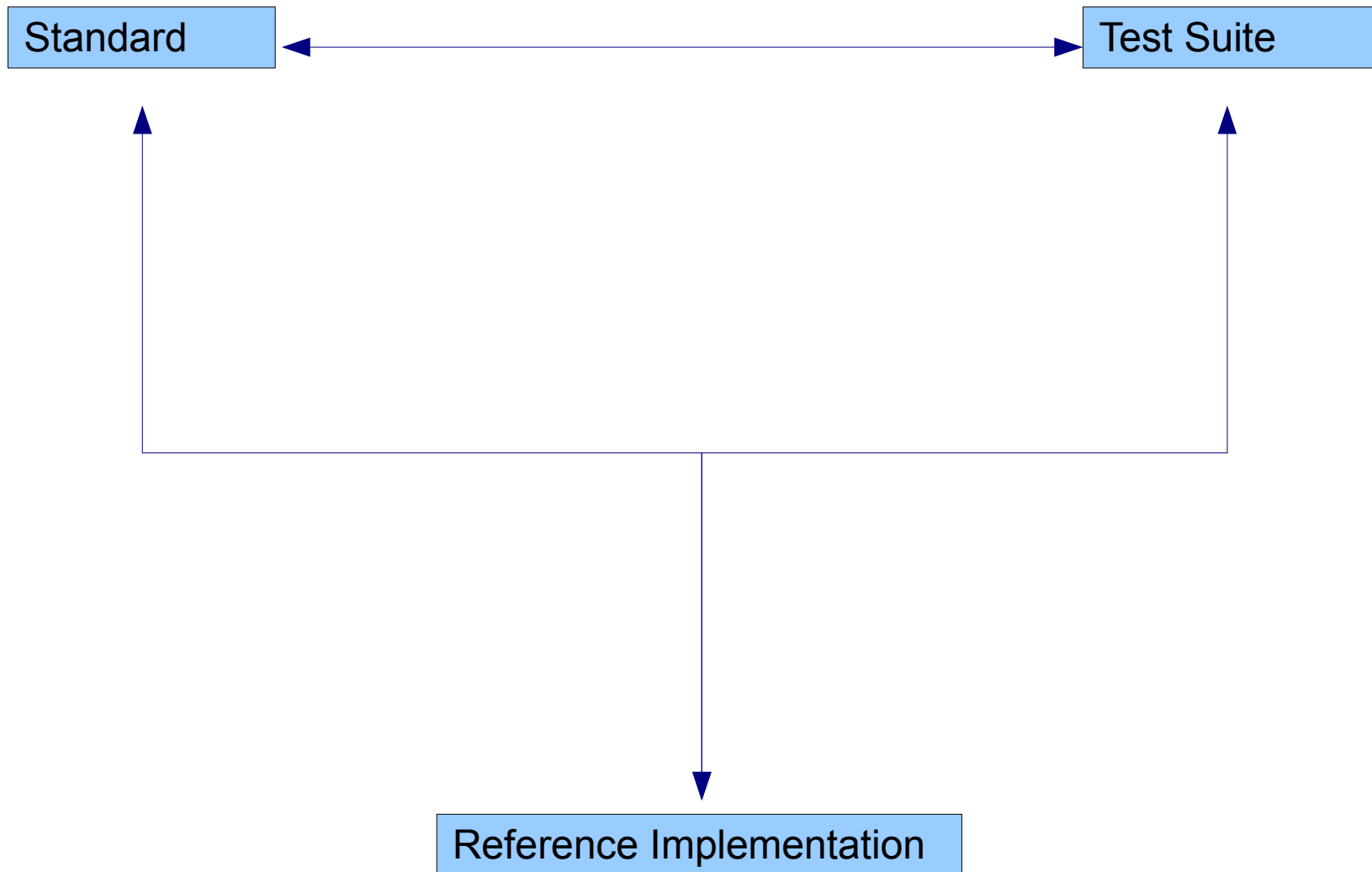
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# The Solution?



# A powerful pattern



# A powerful pattern



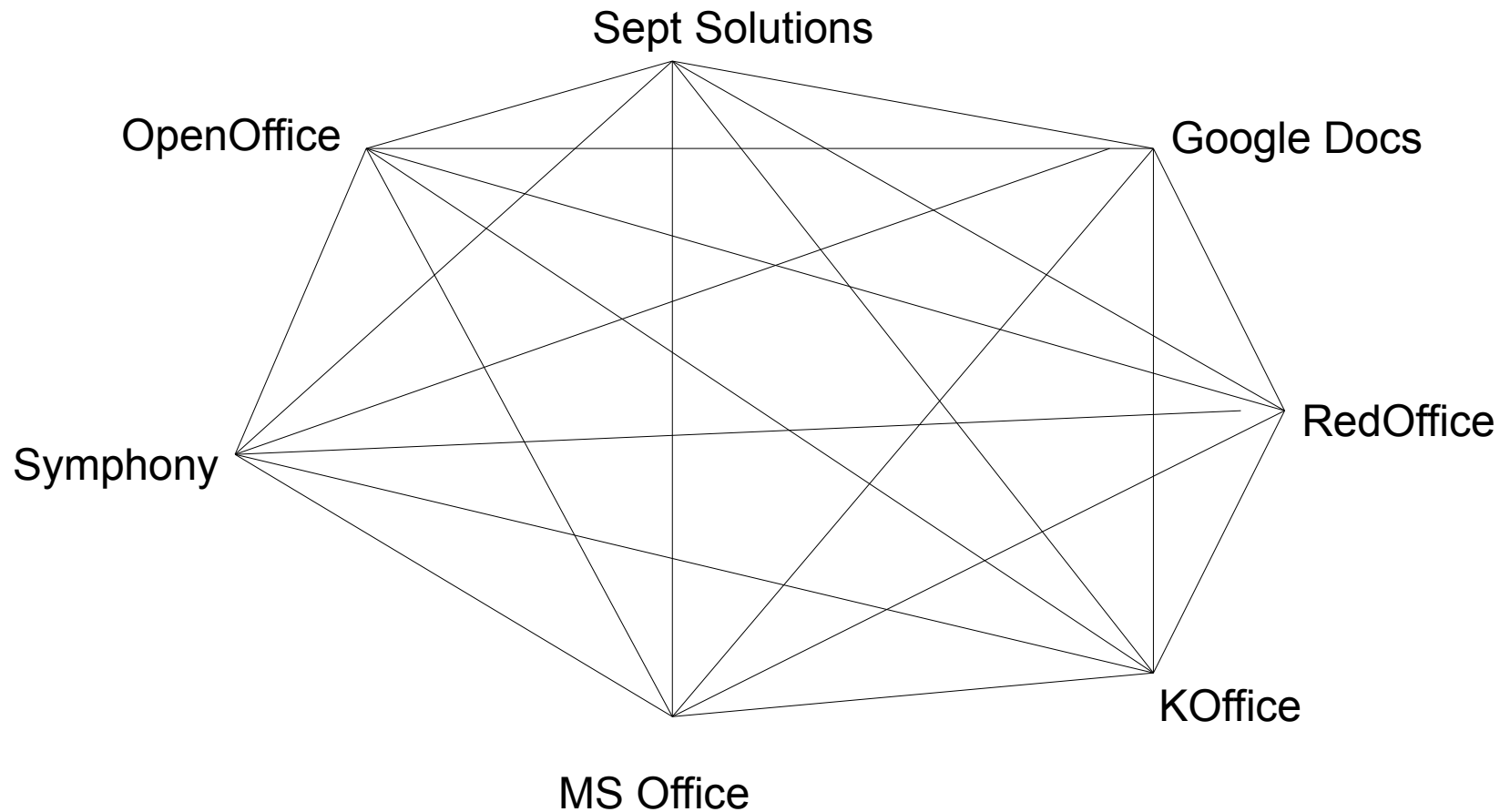
- The standard contains the definition of a conformant document
  - (but the standard may have errors or ambiguities)
- The test suite exercises and validates each feature of the standard
  - (but the test suite may have errors or omissions)
- The reference implementation is written to the standard, and tested with the test suite
  - (but the implementation may have errors or missing functionality)

# Checks and Balances

- A test case fails. What is the cause?
  - An error in the application?
  - Is it an error in the test suite?
  - An error in the standard?
- Identify the cause of the failure
- Fix
- Continue until you have a complete test suite and a reference implementation that passes all of the test cases.

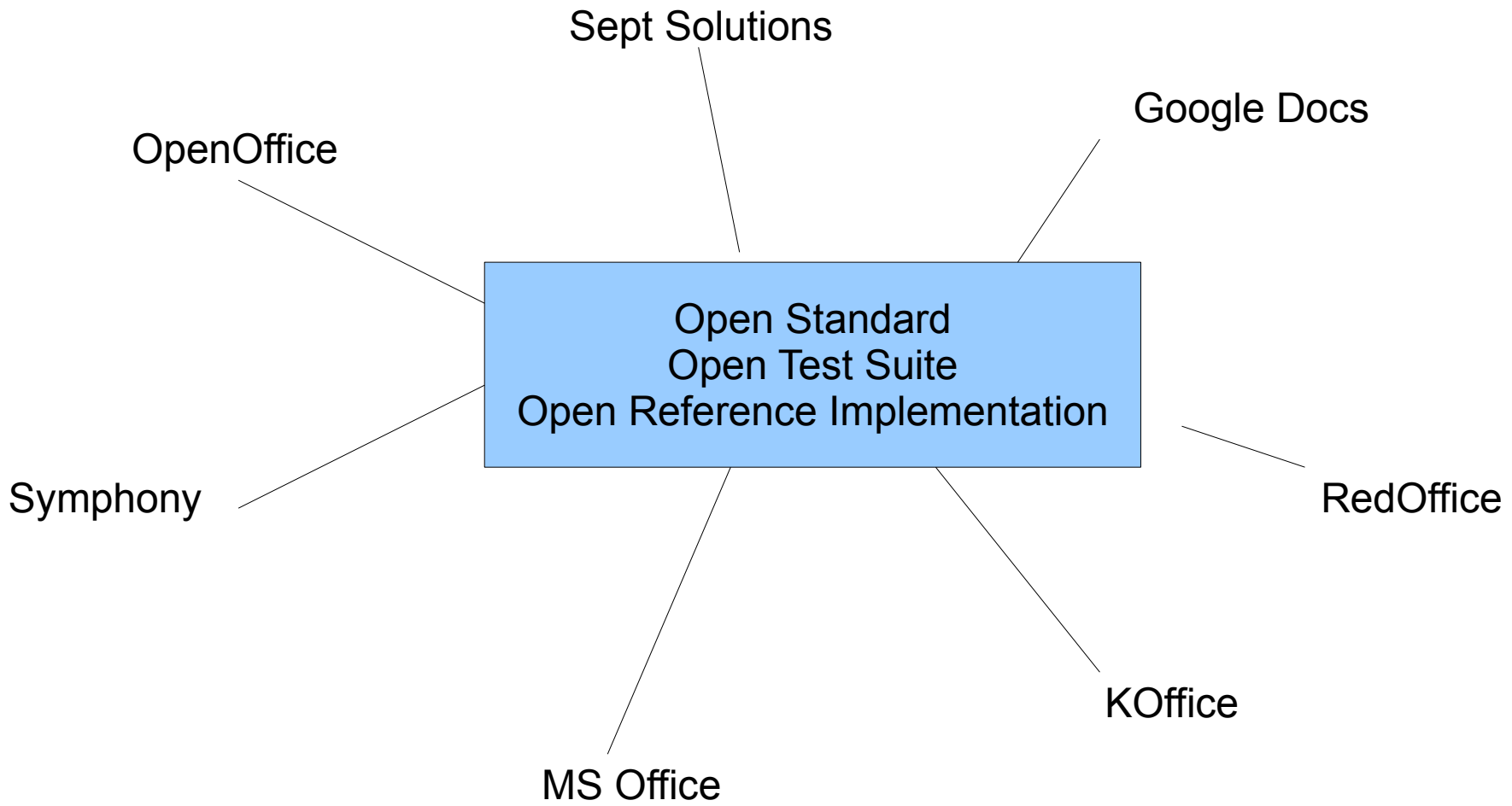


# This can move us from this...

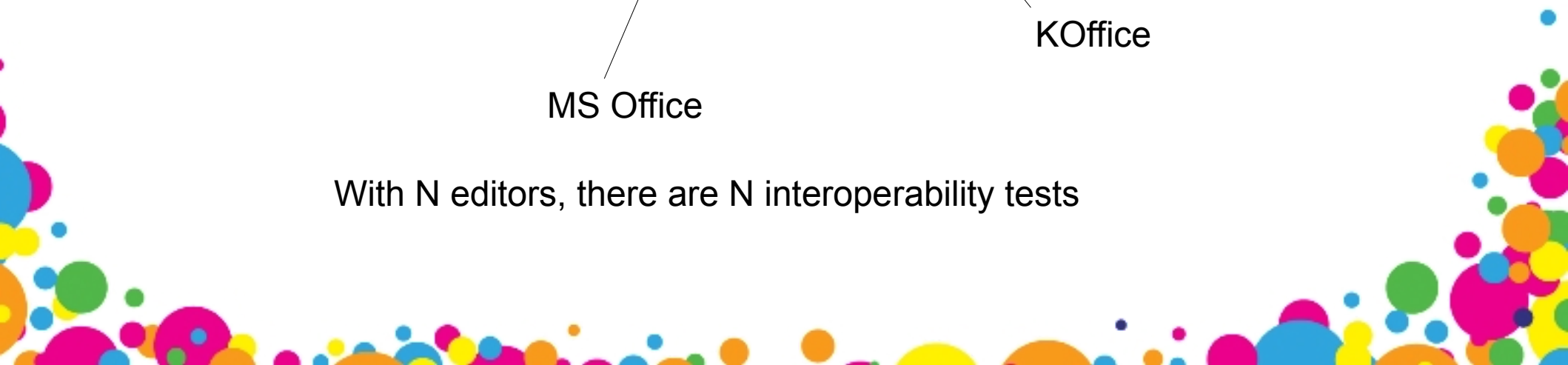


With N editors, there are  $N*(N-1)$  interoperability paths

# ...to this



With N editors, there are N interoperability tests





# Thanks!

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# ODF Interoperability in Belgium

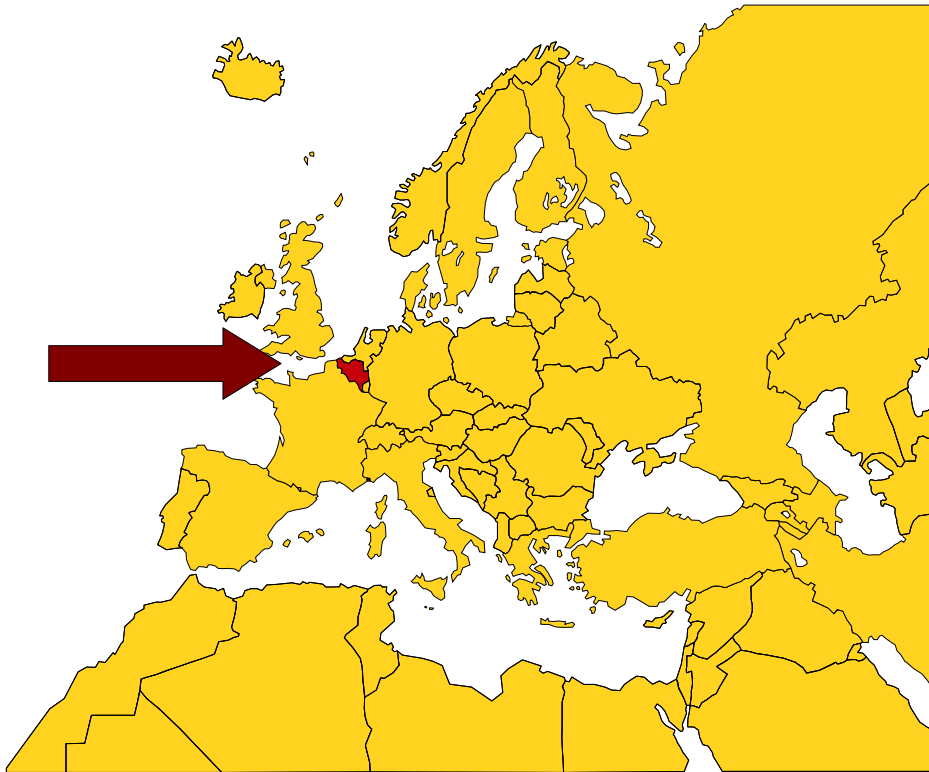
Bart HANSSENS

Interop Expert @ Fedict (BE)

About...



# Fedict in Belgium



Belgium:

- Brussels / EU

Fedict:

- Fed.Gover. ICT
- eGov projects

# ODF Guideline



Editable text / spreadsheet / presentations

Mandatory between departments

Optional:

- within departments
- towards citizens / other governments



# Goal: Interoperability



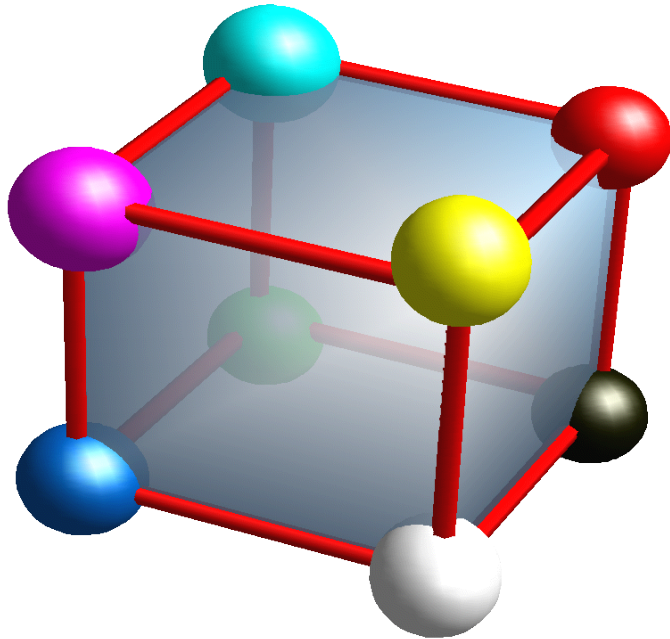
About:

- YOUR documents
- Working together
- Long term benefits

NOT just product hopping



# Our motivation



Different governments:

- federal
- regional
- local

Departments:

- suite of choice

# Challenges



Legacy formats  $\Leftrightarrow$  ODF

Different software:

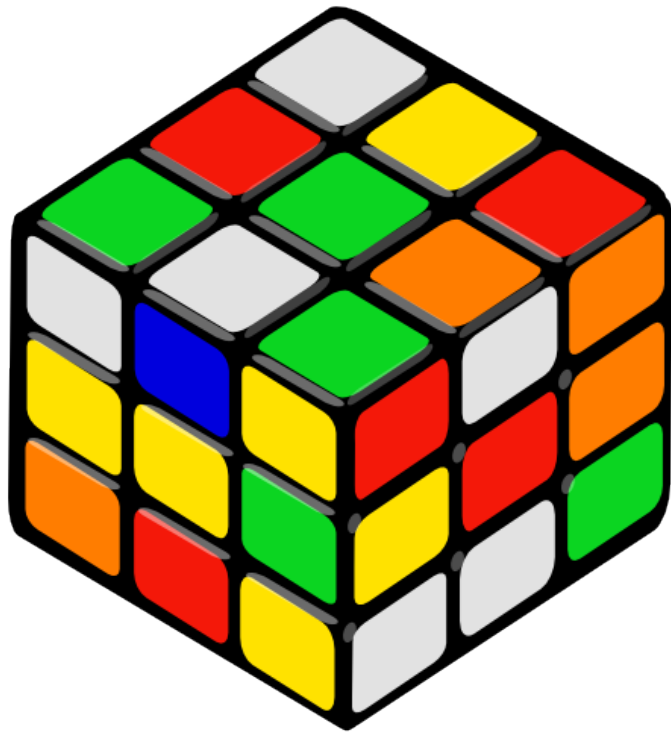
- different versions
- different feature sets

Users: Just Make It Work !

# Getting started



# A few ODF solutions



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MS-Office + plug-in:

- Sun
- MS / Clever Age

(MS-Office 2007sp2)

# Plug-ins



Sun :

- [http://www.sun.com/software/star/odf\\_plugin](http://www.sun.com/software/star/odf_plugin)
- Based upon OpenOffice.org

Microsoft, Novell, Clever Age, ... :

- <http://odf-converter.sourceforge.net>
- Based upon .NET & XSLT

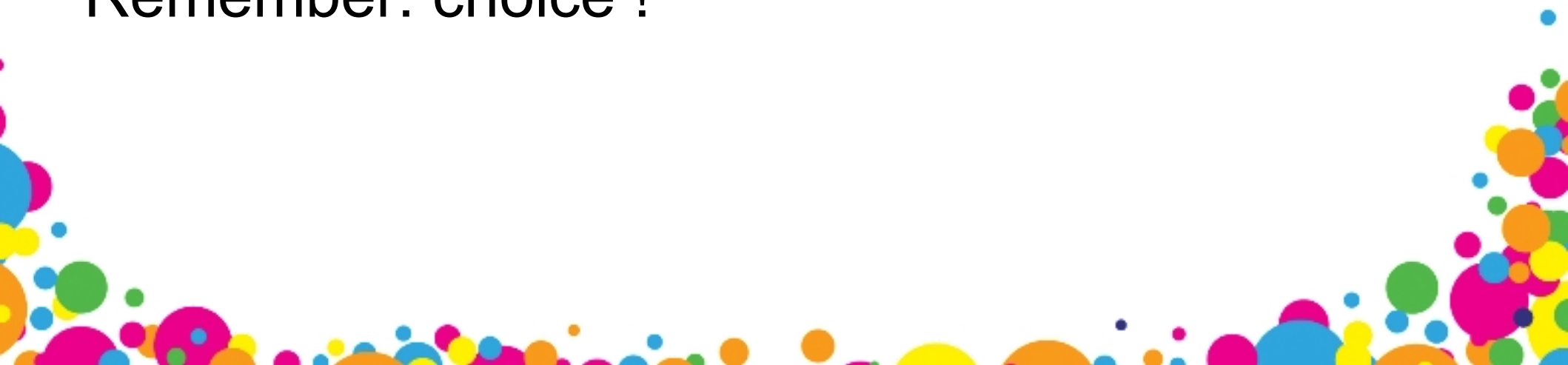
# Why focus on MSO-ODF ?



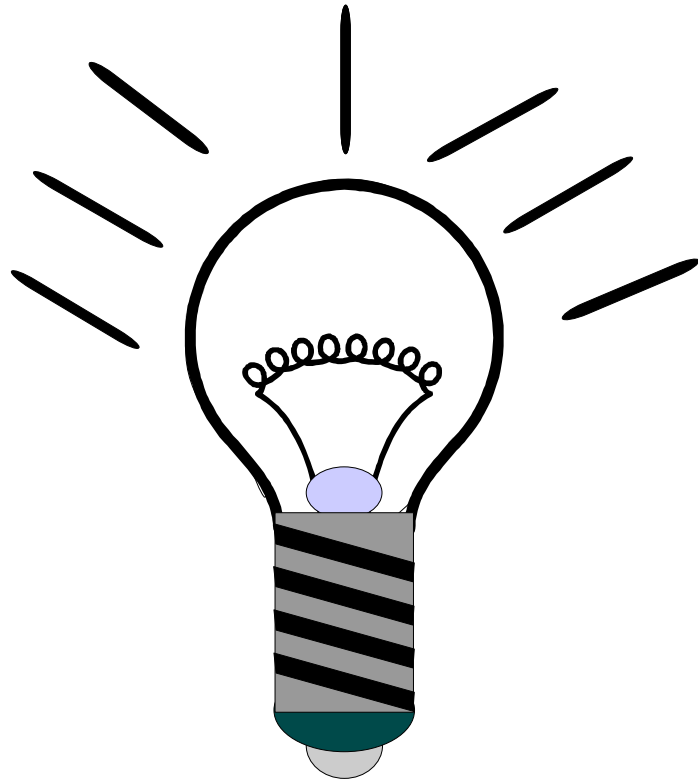
## Reality check:

- most users are using MS-Office
- even with plug-in (some) conversion is done

Remember: choice !



# The plan



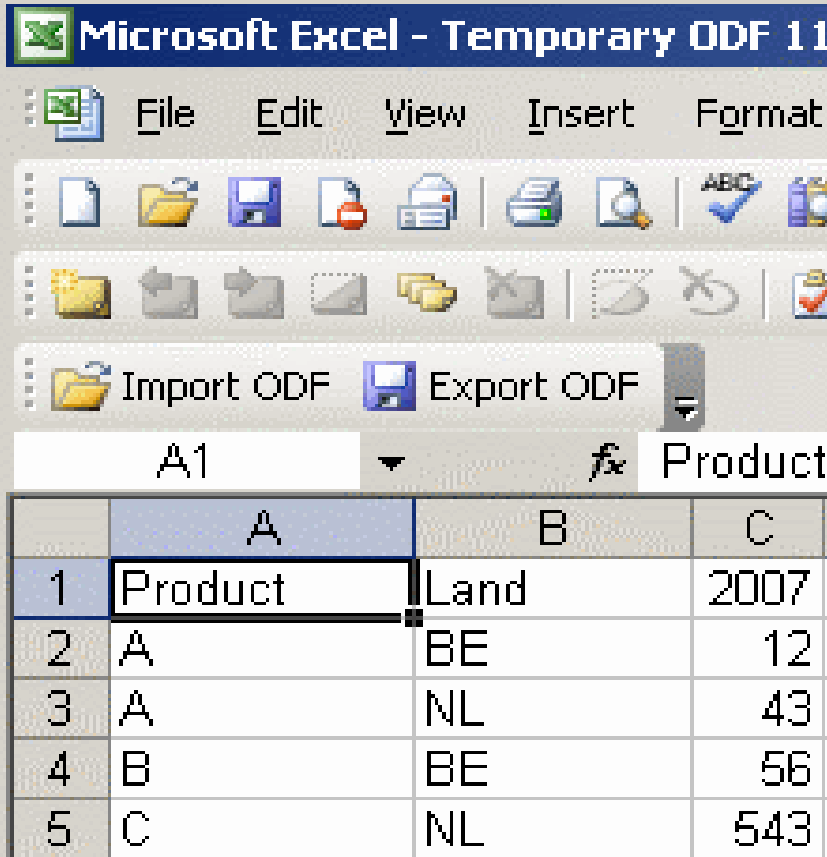
- 1 – test real documents
- 2 – file bug reports
- 3 – ...
- 4 – profit !



# Results



# Plug-ins



Microsoft Excel - Temporary ODF 11

File Edit View Insert Format

Import ODF Export ODF

A1 Product

	A	B	C
1	Product	Land	2007
2	A	BE	12
3	A	NL	43
4	B	BE	56
5	C	NL	543

## Benefits:

- no additional suite

## To be improved:

- performance
- interop issues

# The Good



Interoperability is increasing:

- feature set (ODF templates, ...)
- usability (open with double-click)
- lots of bug fixing

Reading OK for most documents

# The Bad



Round-tripping needs to improve

Tables-in-tables

Forms:

- data types => string
- some controls are gone

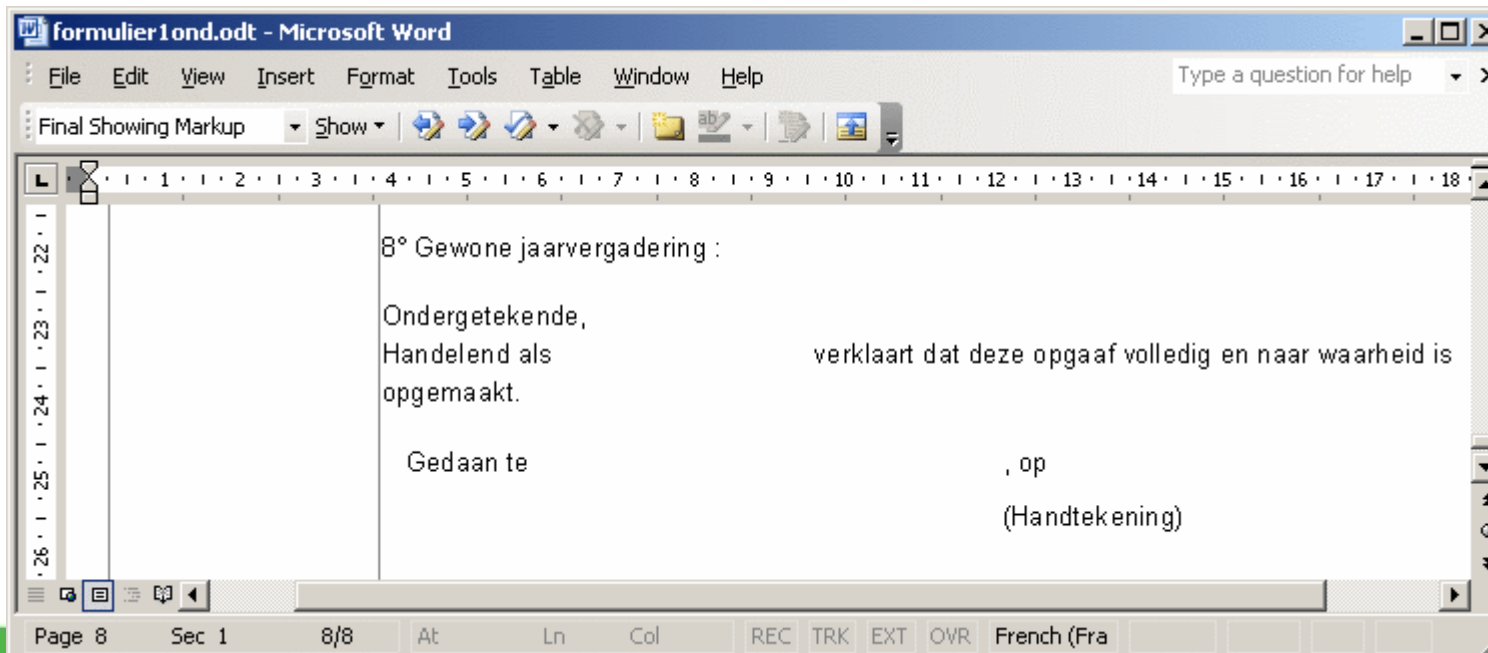
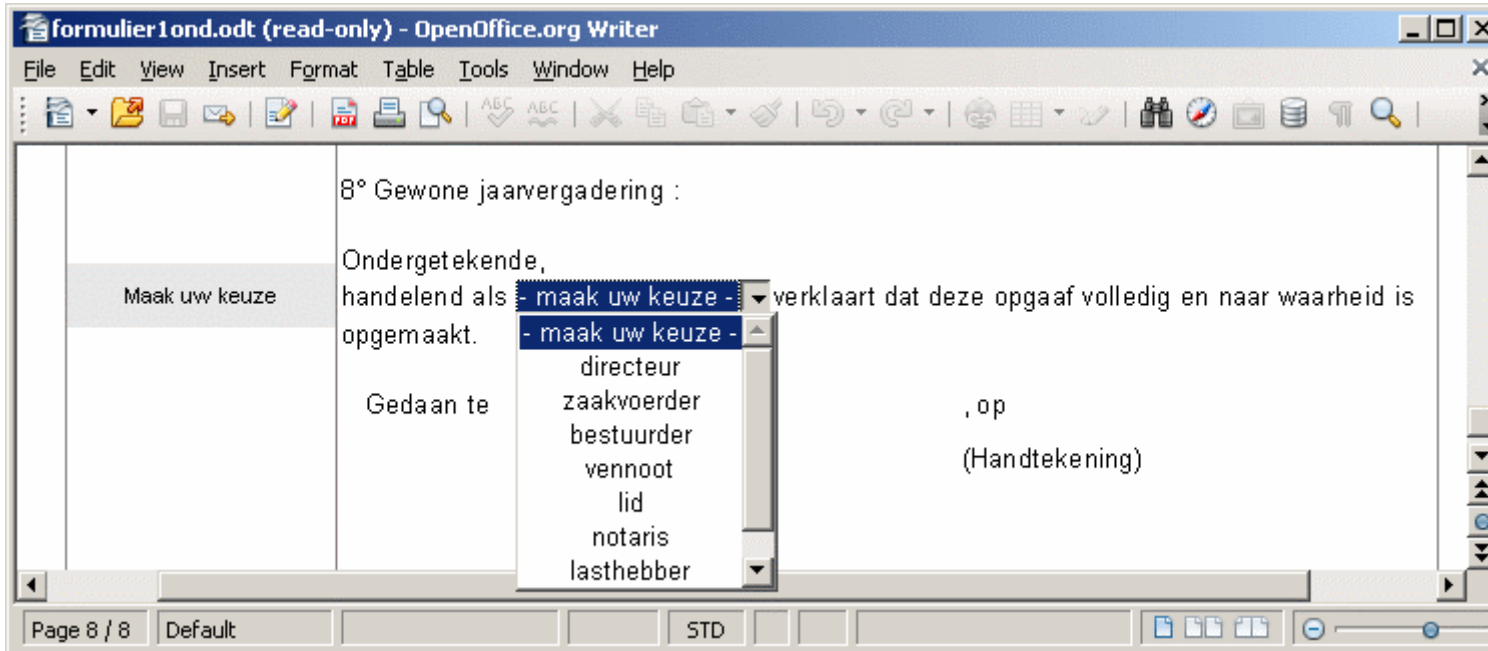
# The Ugly

Formula exchange

Needs work:

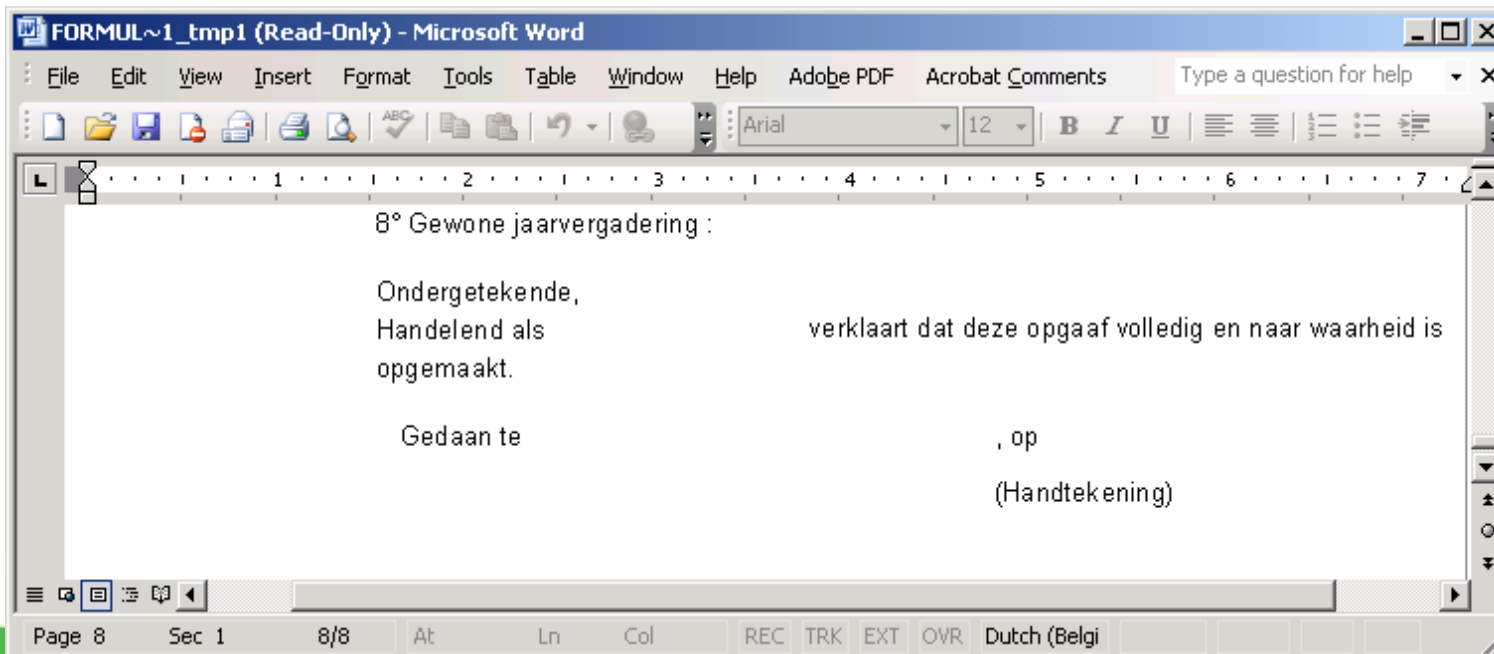
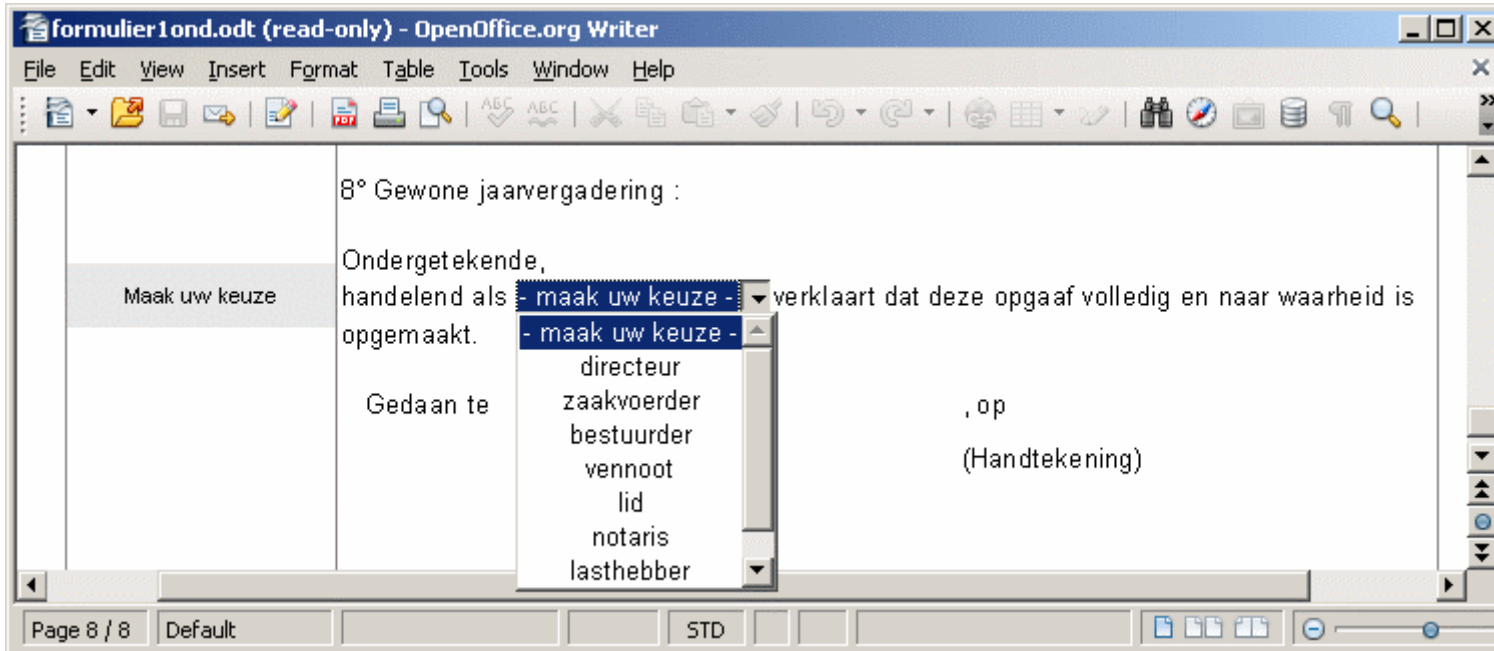
- Complex pivot tables
- Complex charts
- Gradients

OOo 3



Sun ODF  
plug-in

OOo 3



MS  
converter

# Sun and MS plug-ins

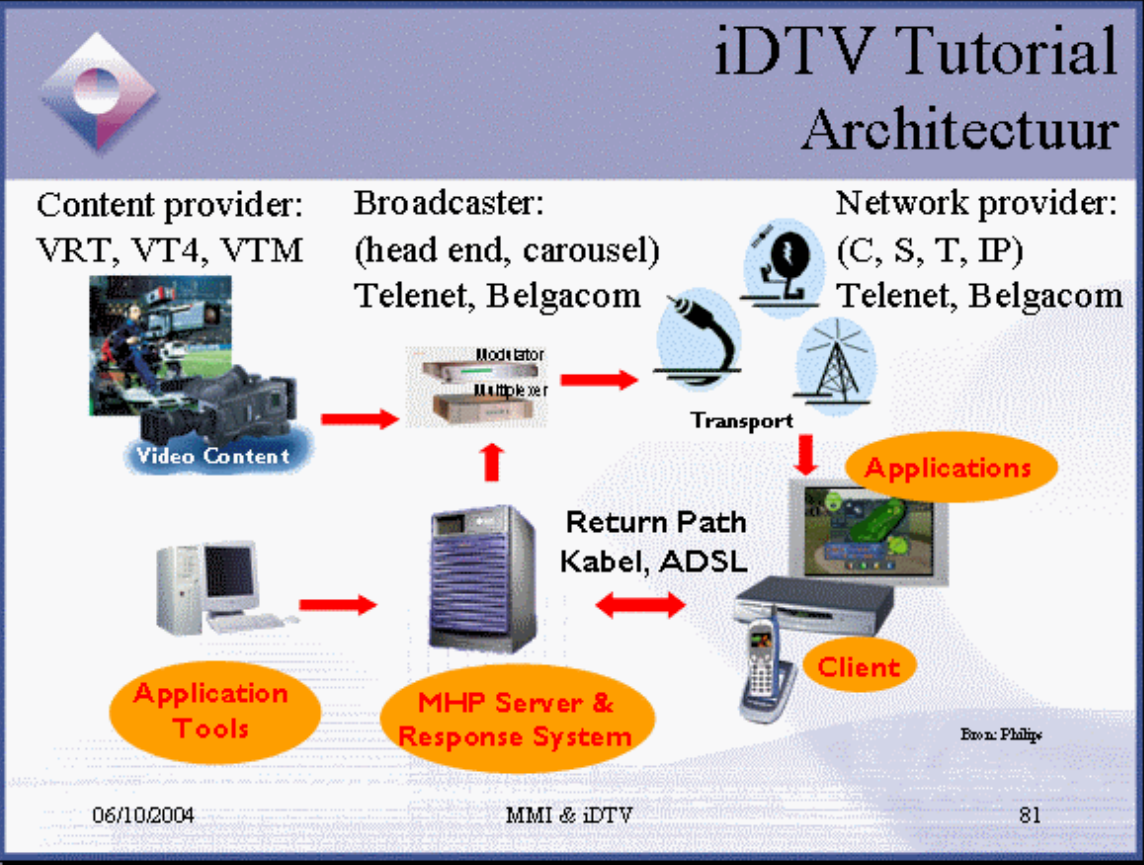
Microsoft PowerPoint - [Presentation3]

File Edit View Insert Format Tools Slide Show Window Help

Times New Roman 24 B I U S

Type a question for help

## iDTV Tutorial Architectuur



The diagram illustrates the iDTV architecture. It shows a flow from 'Content provider: VRT, VT4, VTM' (represented by a video camera icon) to a 'Modulator Multiplexer' box. From there, the signal goes to 'Transport' (represented by a satellite and antenna icon). The 'Network provider: (C, S, T, IP) Telenet, Belgacom' is shown with a tower icon. A 'Return Path' (Kabel, ADSL) connects the network to a 'Client' (represented by a computer and mobile phone icon). The client is also connected to 'Applications' (represented by a monitor icon). Below the main flow, 'Application Tools' and 'MHP Server & Response System' are shown connected to the client. The diagram is titled 'iDTV Tutorial Architectuur' and includes a logo in the top left corner.

Content provider: VRT, VT4, VTM

Broadcaster: (head end, carousel) Telenet, Belgacom

Network provider: (C, S, T, IP) Telenet, Belgacom

Video Content

Modulator Multiplexer

Transport

Applications

Return Path Kabel, ADSL

Client

Application Tools

MHP Server & Response System

06/10/2004

MMI & iDTV

81

Slide 81 of 84

Default Design

French (France)



# Formula exchange



Custom namespace

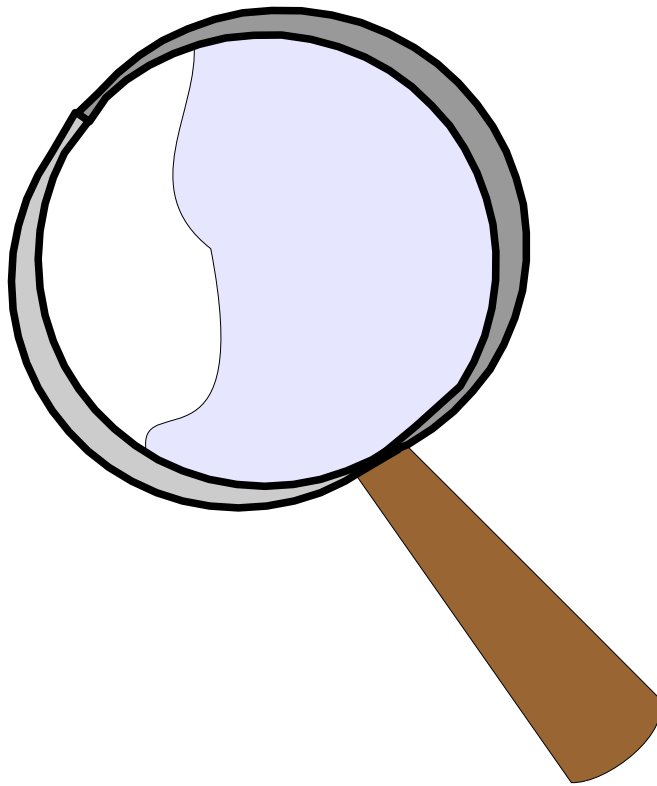
Example:

```
○○○C:=NOW()-DATE(1977;5;1)
```

What's next ?



# Open questions



Scripting / macros ?

Database files ?

(do we want this ?)

# Waiting for ODF 1.2



We want:

- digital signatures
- OpenFormula

We wait for:

- standardization
- multiple implementations

Conclusion ?



# Conclusion



It's about choice and YOUR documents

Implementations are getting better

Test with “real” documents





# Thanks!

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