

Why not use Microsoft Office documents?

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Background

- Microsoft Office is the most used combination of software to create documents in the world
- Large market saturation
- Alternatives are gradually getting support (costs, lack of viruses)
 - Sun StarOffice
 - Open Source version – OpenOffice

The temptations...

- Nice formatting and functions...
- Possibilities for interactions...
- Linking between different documents...
- “Everyone has it... (or should have it!)”
- Simple for the developer to create “flashy” functionalities...
- In some cases more quick development of solutions...

But there are two modes...

- Important difference between work / development formats and distribution formats
- Developing the learning materials using Office is a good idea...
- But when saving for distribution use *real* and *lasting* standards!

While developing the material...

- High demands of functionality of the tools...
- Easy to interact with external specialists and schools...
- Share the information in a relatively homogenous environment...
- Not only MS Office!

When distributing the materials...

- The computer setup of the users are unknown
 - Operating system, applications
 - Office versions...
- It is important to guarantee a long technical lifetime of the materials...
- Most users are not connected to high capacity networks...

Why not Office documents?

- What office-version?
- Vendor lock-in -> especially latest versions!
- Larger documents
- Basis for the distribution of viruses and trojans
- Limited life-span
- Contains tracking information -> risk for information leakage

Beware of the power users!

- Often quick to adapt and use new versions of Office...
 - And thus forcing others to upgrade
 - The major marketing channel for MS...
- Have often limited understanding of the larger context...
 - And thus limiting the offerings of the materials to a very few users globally...

Beware of future changes...

- Mechanisms for "lock-in" will be much stronger (Office Server etc)
 - All documents "controlled" by a Windows server system...
 - Risk that the documents only can be handled by certain "certified" computers
- Format fragmentation will increase!

Viruses and trojans...

- Office-based documents and files the largest carrier of viruses and trojans (tens of thousands)...
- Mostly based on macro programming and / or stand-alone executables...
- New versions are coming out at an increased rate...

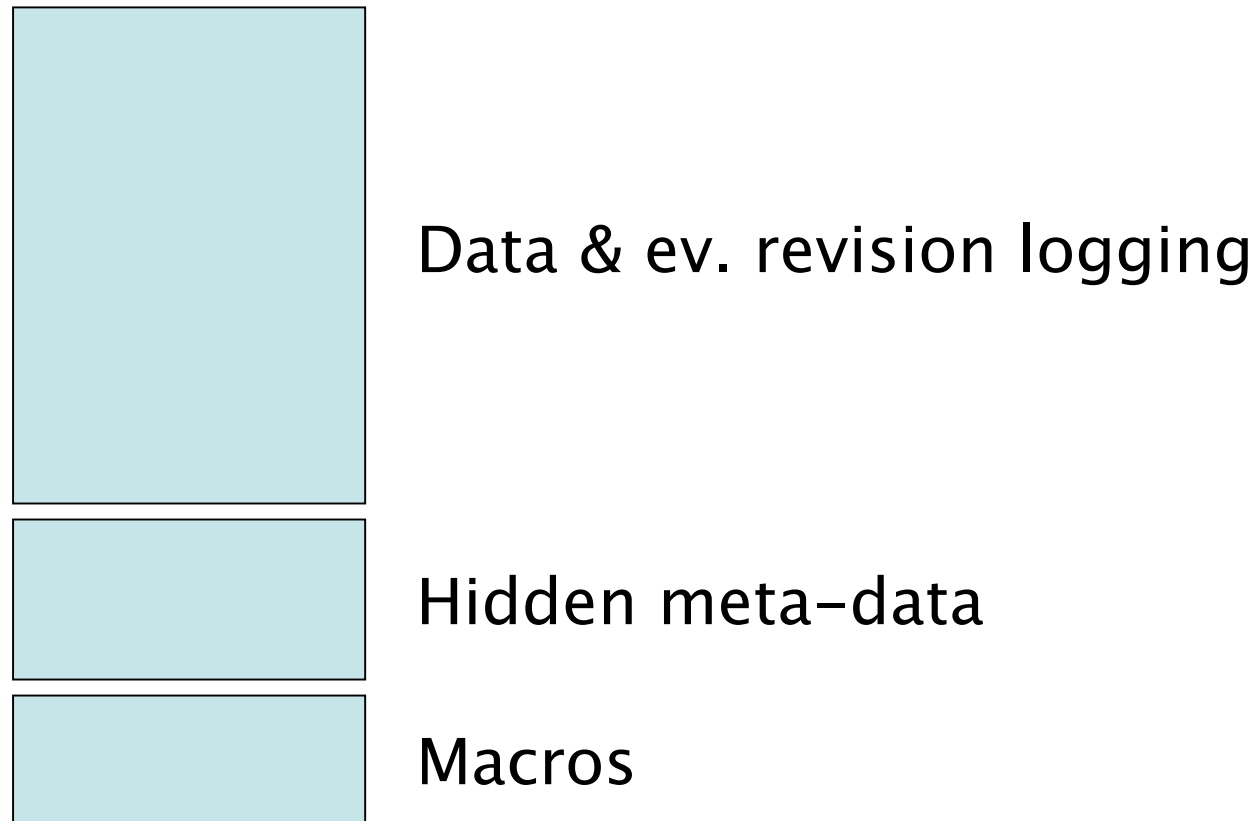
Countermeasures from "customers" ...

- Less installs of MS Office in future systems (not able to use the materials)
- Stronger security – less flexibility in receiving the materials...
- Inactivation of functionalities...
- Avoiding upgrades...

Consequences for the "vendor" ...

- No guarantees that the materials can be used as planned at the clients sites...
- Bad reputation if the materials contains viruses...
- More difficult revision / version management...
 - Support for different versions...

Structure of an Office document



Data and revision logging...

- Are you sure you want to give access to the revision information to the clients?
 - Downing Street 10...
- Issues on "readability" ...
 - Demands on certain versions to be able to use the document...

Meta-data in Office documents

- Risks for information leakage
 - Paths to storage
 - Who has modified the document?
 - And what got modified?
 - Increased risks for virus attacks
 - Structures of storage, paths to information etc...
 - Risks for information tracking
- Creates larger files
 - Big minus when accessed by many users...

Thoughts on document size...

- For few users large documents does not matter...
 - But think in terms of thousands of users...
- Most organisations has limited access to the Internet (per user)
- And most organisations does not use the latest software versions...
 - Do not want to download new versions...
 - Do not find the costs worth it...

But I need to use Office documents...

- Export as Office 95 if possible...
 - No meta-data is exported
 - But still risks for macro-based viruses...
- Warn the user of risks for viruses...
- Store the file in compressed form
 - ZIP