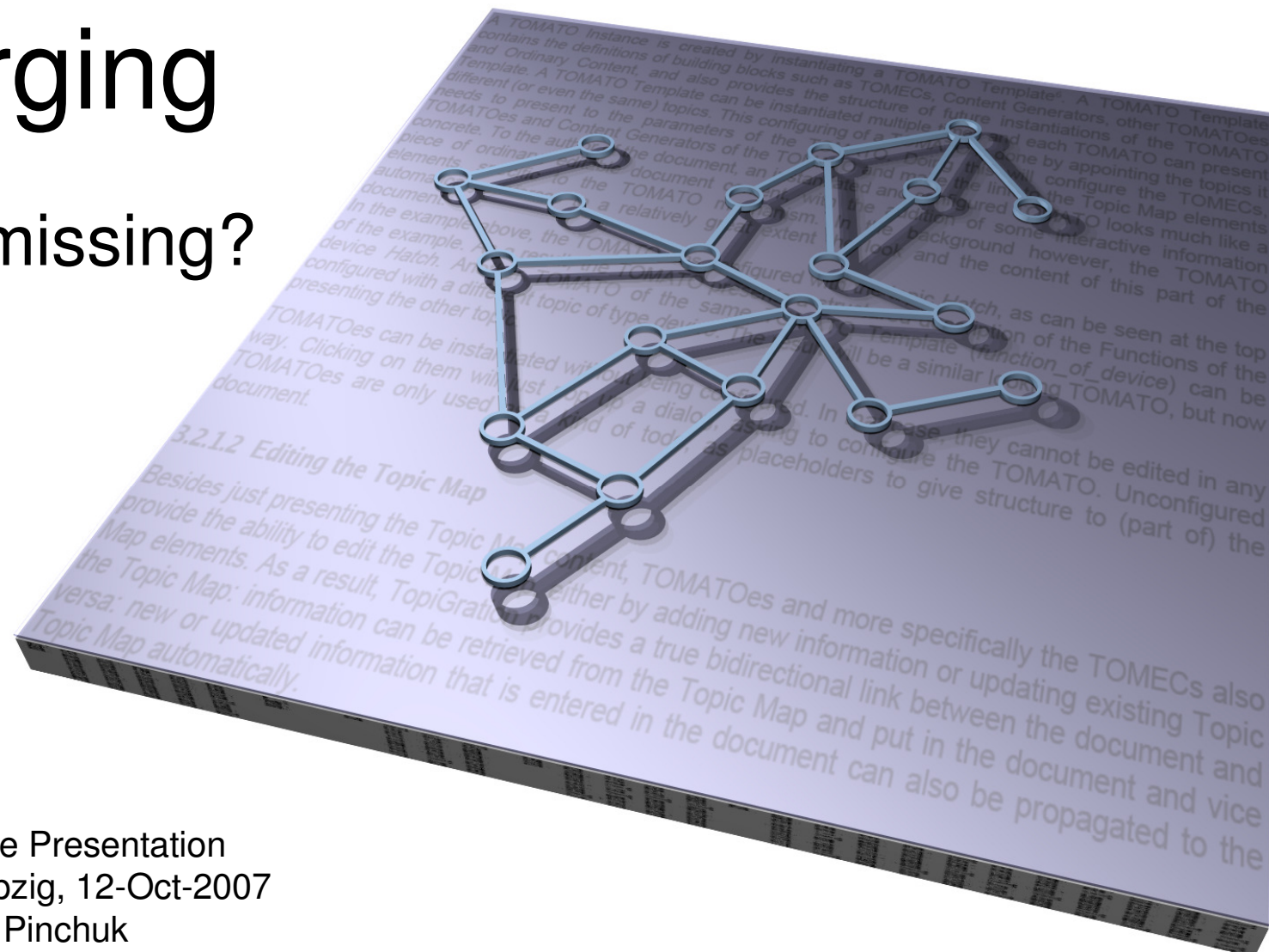


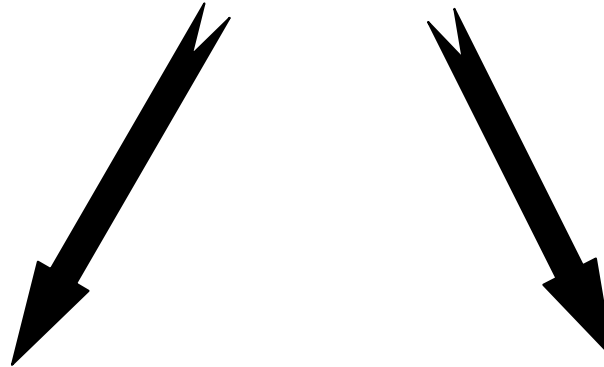
Merging

What is missing?



Open Space Presentation
TMRA'07, Leipzig, 12-Oct-2007
Rani Pinchuk
Space Applications Services

So what's wrong with merging?!?



How can two users **edit the same topic map** and then merge the results?

- What will happen to deletions?
- What will happen to changes?

How can we know what the source of information is after a merge?

The problem is demonstrated by the needs of TopiWriter

A document of TopiWriter is always associated with a topic map. Actually the topic map is saved within the .doc file.

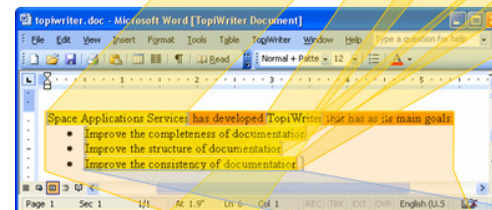
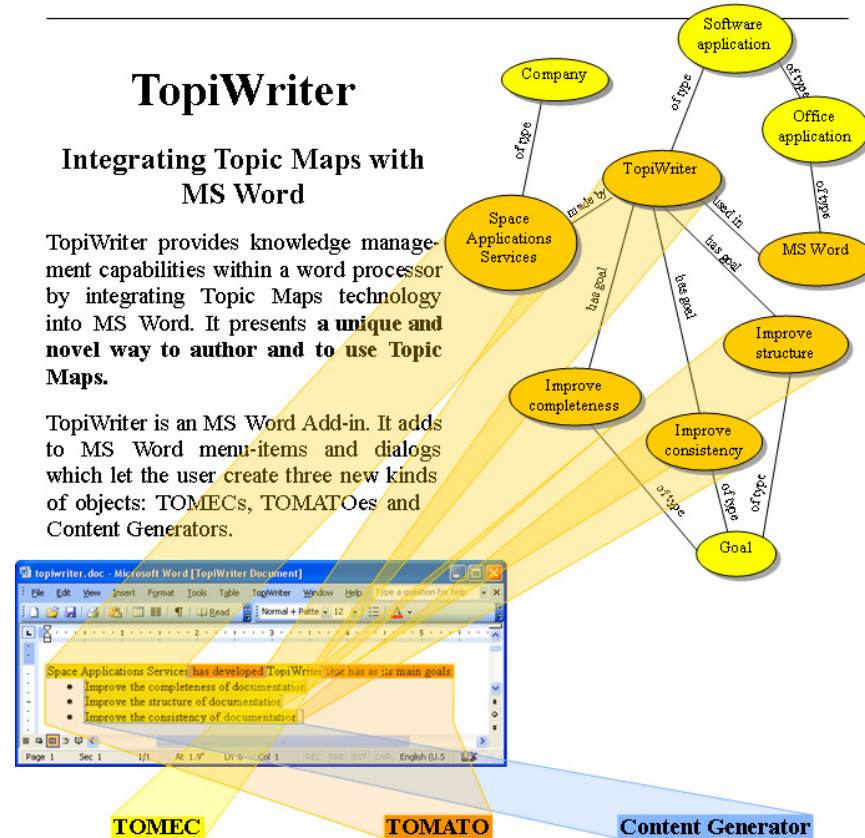
→ When the document is edited by two different people, there should be a mechanism to mark what was changed, when and by whom.

TopiWriter

Integrating Topic Maps with MS Word

TopiWriter provides knowledge management capabilities within a word processor by integrating Topic Maps technology into MS Word. It presents a **unique and novel way to author and to use Topic Maps**.

TopiWriter is an MS Word Add-in. It adds to MS Word menu-items and dialogs which let the user create three new kinds of objects: TOMECS, TOMATOes and Content Generators.



TOMECE

TOMATO

Content Generator

A TOMECE (Topic Map Embedded Content) is a placeholder for content of the Topic Map. A TOMECE represents Topic Map data such as names or occurrences of topics. The TOMECE is configured by defining one or more parameters (for example, the topic whose name is displayed). A TOMECE is a bidirectional object meaning that a modification in the Topic Map automatically propagates to the document and vice versa.

A TOMATO (Topic Map Template Object) is a container object and can contain TOMECS, Content Generators, other TOMATOes or ordinary document content. A TOMATO provides a structure that can be reused and lets the user configure all the contained objects at once. In the illustration above, text about a product having different goals and developed by another company could be generated by reconfiguring the TOMATO.

A Content Generator facilitates the automatic insertion of Topic Map content in documents. It displays and represents sequences of Topic Map data. The bulleted list TopiWriter goals, in the screenshot above, is an example. A Content Generator is similar to a TOMATO where one of its parameters can be configured as a sequence. For each value in that sequence, the content of the Content Generator is re-configured and inserted in the document.

Why a solution for the problem should be standardized ?

- Currently there are **different approaches** to solve the problem (see other TMRA'07 Open Space entries as well as TMSync).
- All those solutions do not extend the TMDM but instead introduce reifying topics which means added complexity to the topic map.
- Therefore, the topic map structure is no longer human friendly unless those reifying topics are filtered out when the topic map is viewed by the user.
- And, in order to filter out (or present in a user friendly manner) the reifying topics in an automatic way, the topic map browsers have to know in advance which **approach** is used.
- Moreover, if **different approaches** are used, it is impossible to take into account the extra information given while merging.