Bauhaus-Universität Weimar

CML://

PRIMI POM

Platform for Research on Instant Messaging Infrastructures

POM stands for **Persistence of Memory** and is the name of a project of the PRIMI-series. The aim of the project is to deal with aspects of persistence of information in the context of instant messaging. This means in how far memory and information are persistent and how memorizing of information works. The great challenge is how human memory behavior could be mapped on machines or how computers could compensate the weak points of human memory. Another challenge is to determine the value of a piece of information in context of actuality and content.

The approach of this project to the topic is realized as a GUI plug-in for the **PRIMIBase 4.0** infrastructure (see figure 1). The project extends the infrastructure by a history service that provides the communication with a central storage server, which is a Sens-ation 3 server. The data is send via **XML-RPC** to the server and is retrieved by using **RMI**.

The main functionality of POM is based on retrieving user data from wherever one starts the application and logs in. All needed data is loaded on the fly from the Sens-ation server.

The other functionality to support **nonlinear** and **topic based communication** is adapted from the possibility to store information persistently. This means that the user has the possibility to refer with one message to any other - to do so the user sets references manually (see figure 2). The user can explore these references (see figure 3). POM stages convenient functionalities to work with topics in a nonlinear way.

Further more the POM application provides a **search function**, which enables the user to find messages by key words in his personal history. The result of a search gets presented in a result window that organizes the messages according to the topics the messages belongs to. The user can get more information about the context of a message by using the history visualization window, which describes the environment of a message. The results can also be explored as well (see figure 4).

Another feature that is built in the plug-in is the **fading functionality**. This functionality provides an easy visual differentiation of messages. The look and feel of a message changes as it ages. In fact the appearance simulates a fading out of the message (see figure 5).

For further information see:
http://cml.medien.uni-weimar.de/primi

Prof. Dr. Tom Gross
Christoph Oemig, M.Sc.

Tobias Pohl
Christian Prüfer
Julian Seifert

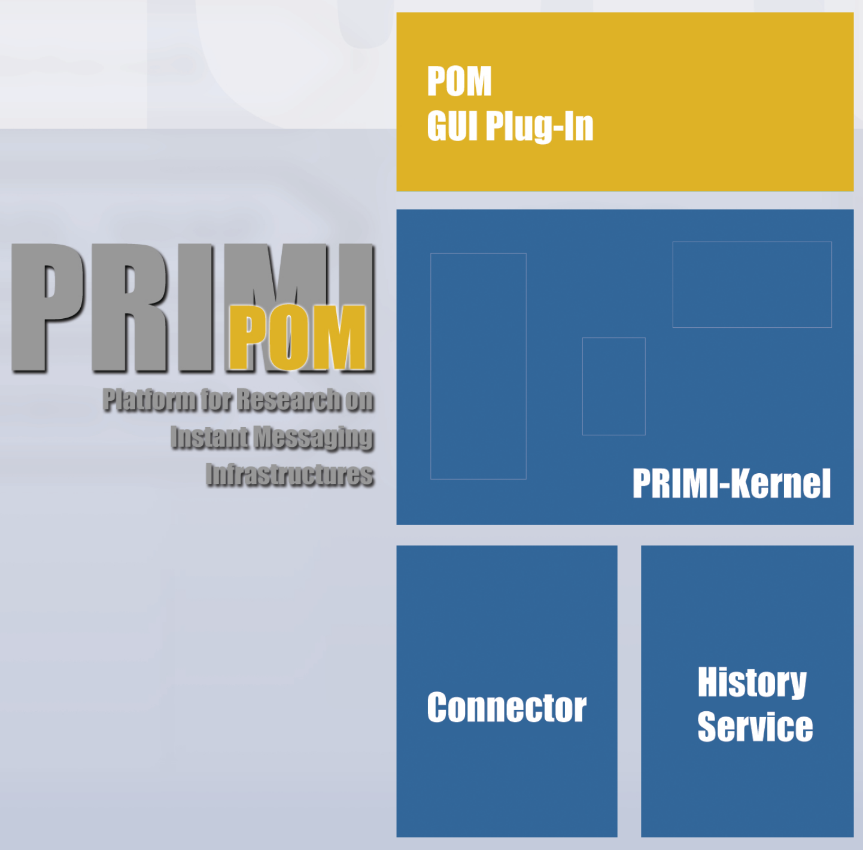


Figure 1. An overview of PRIMI POM client components based on the PRIMI platform. The graphic shows the components around the PRIMI kernel: The GUI component, the protocol and the history service.

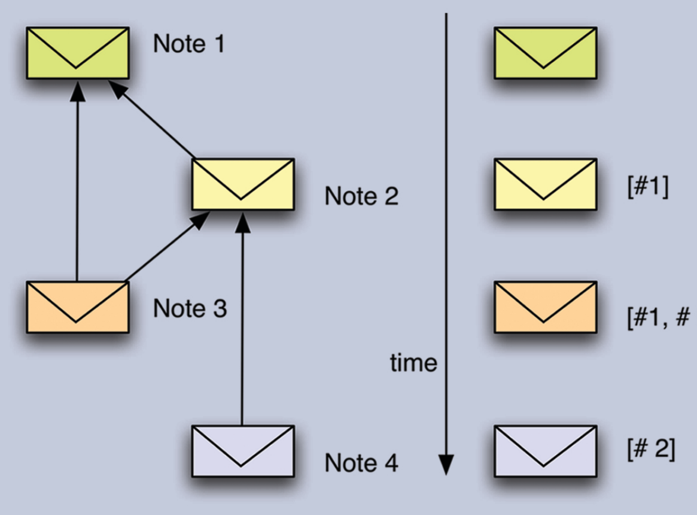
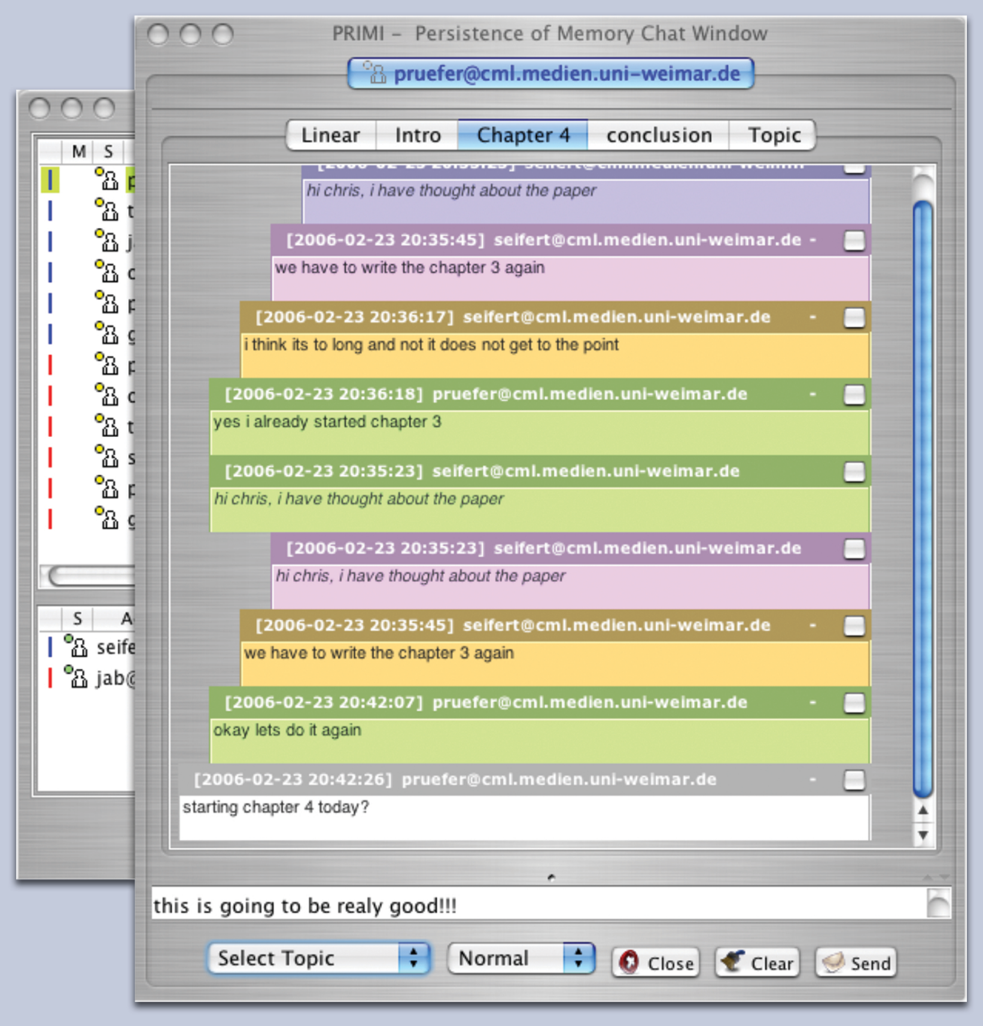


Figure 2. Messages can refer to other messages to create nonlinear links and references.


PRIMI – Persistence of Memory Chat Window
pruefer@cml.medien.uni-weimar.de
Linear
Intro
Chapter 4
conclusion
Topic
M
S
A
Select Topic
Normal
Close
Clear
Send

hi chris, i have thought about the paper

[2006-02-23 20:35:45] seifert@cml.medien.uni-weimar.de
we have to write the chapter 3 again

[2006-02-23 20:36:17] seifert@cml.medien.uni-weimar.de
i think its to long and not it does not get to the point

[2006-02-23 20:36:18] pruefer@cml.medien.uni-weimar.de
yes i already started chapter 3

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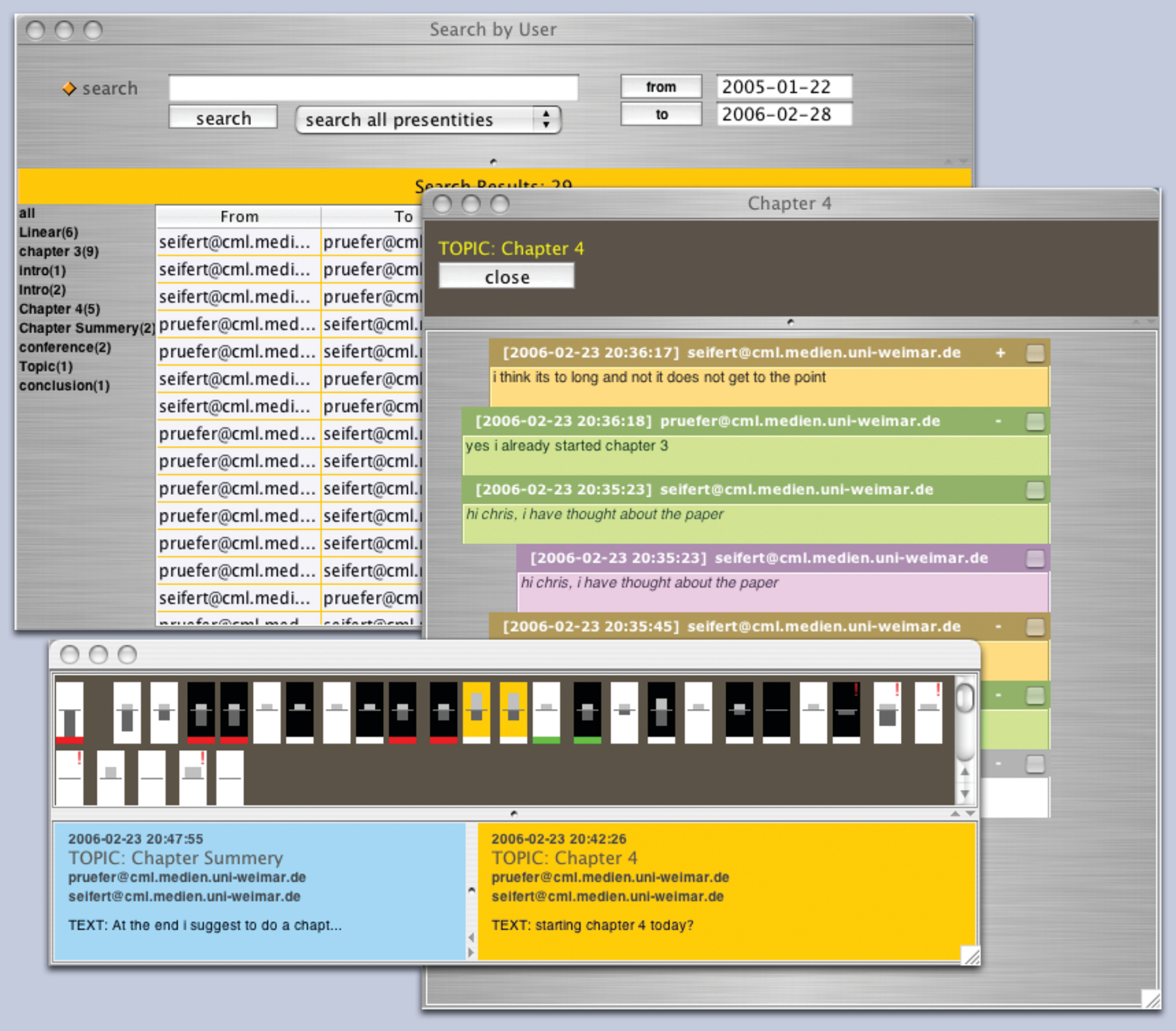
we have to write the chapter 3 again

[2006-02-23 20:42:07] pruefer@cml.medien.uni-weimar.de
okay lets do it again

[2006-02-23 20:42:26] pruefer@cml.medien.uni-weimar.de
starting chapter 4 today?

this is going to be realy good!!!

Figure 3. The chat window for handling users and topics, exploring references (referred messages are colored) as well as editing messages.



from 2005-01-22
to 2006-02-28

all
Linear(6)
chapter 3(9)
Intro(1)
Intro(2)
Chapter 4(5)
Chapter Summery(2)
conference(2)
Topic(1)
conclusion(1)

From	To
seifert@cml.medi...	pruefer@cml
seifert@cml.medi...	pruefer@cml
seifert@cml.medi...	pruefer@cml
pruefer@cml.med...	seifert@cml.
pruefer@cml.med...	seifert@cml.
seifert@cml.medi...	pruefer@cml
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pruefer@cml.med...	seifert@cml.
pruefer@cml.med...	seifert@cml.
seifert@cml.medi...	pruefer@cml

TOPIC: Chapter 4

[2006-02-23 20:36:17] seifert@cml.medien.uni-weimar.de
i think its to long and not it does not get to the point

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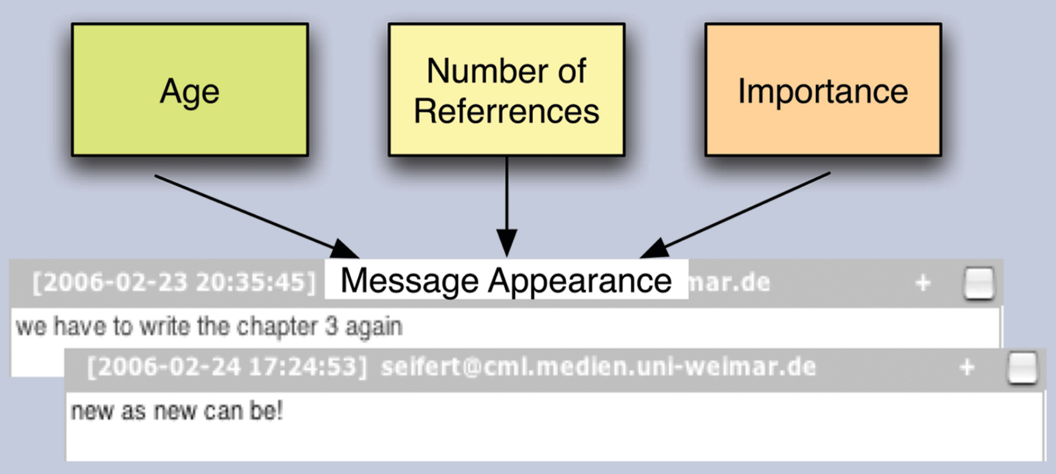
hi chris, i have thought about the paper

[2006-02-23 20:35:45] seifert@cml.medien.uni-weimar.de

2006-02-23 20:47:55
TOPIC: Chapter Summery
pruefer@cml.medien.uni-weimar.de
seifert@cml.medien.uni-weimar.de
TEXT: At the end i suggest to do a chapt...

2006-02-23 20:42:26
TOPIC: Chapter 4
pruefer@cml.medien.uni-weimar.de
seifert@cml.medien.uni-weimar.de
TEXT: starting chapter 4 today?

Figure 4. The search window providing editing the search, the history visualization window gives an idea on the context of a message and the result window provides exploring of message's references.



[2006-02-23 20:35:45] ...mar.de
we have to write the chapter 3 again

[2006-02-24 17:24:53] seifert@cml.medien.uni-weimar.de
new as new can be!

Figure 5. The fading of messages gives a visual idea of the state of a message. Three parameters are considered.

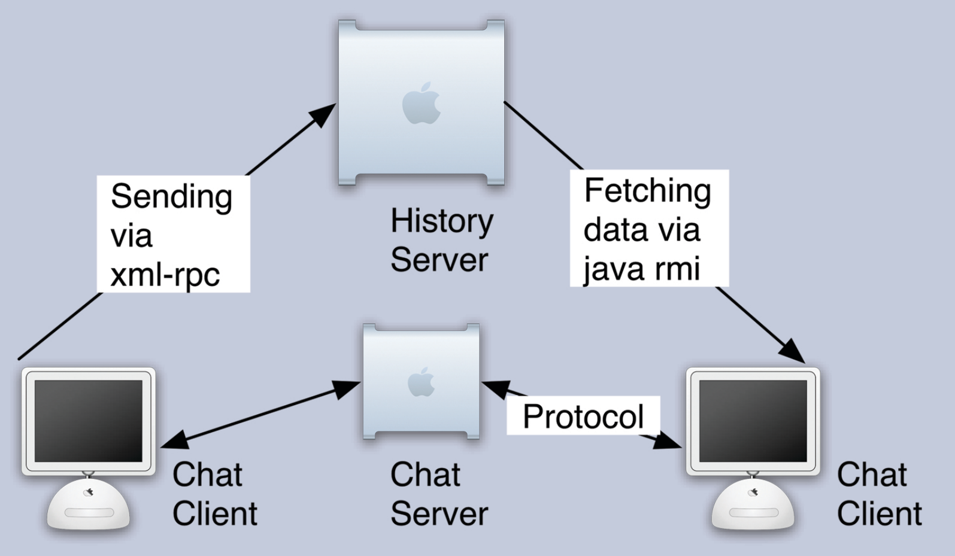


Figure 6. Messages that are send, get stored on the History Server and send to the chat partner via a chat protocol (like XMPP). The stored messages on the History Server can be retrieved using the technology remote method invocation (RMI).

Bauhaus-University Weimar, Faculty of Media, Cooperative Media Lab

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