

In Search for a Personal Assistant

A Quest in Managing Our
Electronic Junk

Dr. Ir. Budi Rahardjo
Dr. Ir. Richard Mengko

Electrical Engineering
PAU Mikroelektronika
Institut Teknologi Bandung

Bits and pieces

- ? Newest document will be available
<http://dma.paume.itb.ac.id/rahard/nedo>
- ? E-mail: budi.rahardjo@vlsi.itb.ac.id
- ? Main issues
 - Personal Homepage
 - Intelligent Agents as Personal Assistants
 - The need for new user interface

Electronic Chaos

- ? Electronic communications (e.g. Internet) produce a vast amount of information
- ? E-mail, the most popular application, generates Mbytes of data daily
 - personal communication
 - mailing lists
 - bulk / junk mails / spam

Electronic Chaos

- ? Other Internet applications: WWW
- ? Electronic Chaos!

**How Do We Manage Our
Information?**



*If this is your
desktop there is
no hope for your
electronic desktop.*



Three Issues

- ? Basis of information system: database
 - Personal HomeBase
- ? Intelligent Agents as Personal Assistants
- ? New User Interface to view our electronic lives

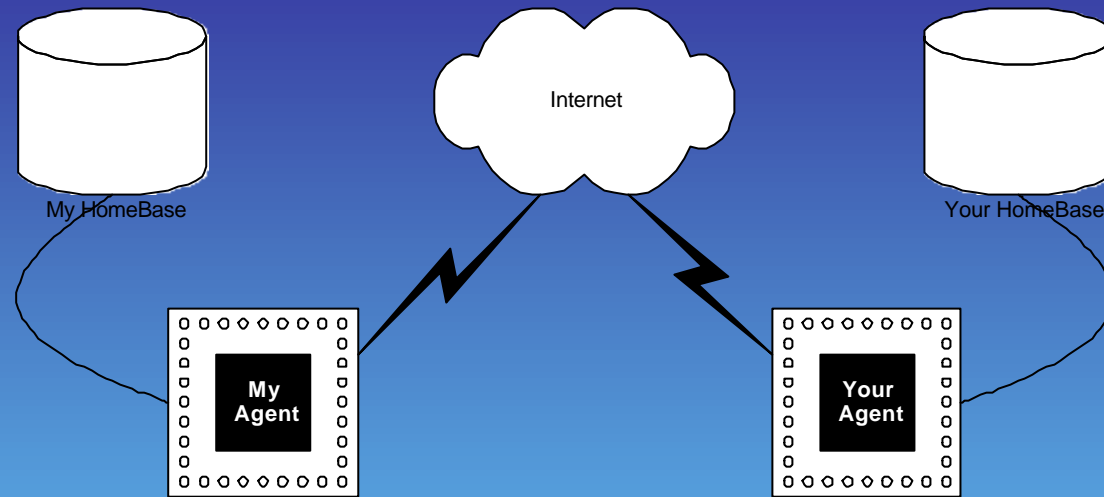
Personal HomeBase

- ? Extend the notion of “home directory”
- ? Add management capabilities
- ? Current systems:
 - store documents (e-mails) as files into folders
 - works for small number of documents
 - cannot handle multimedia objects
 - documents are not accessible remotely

Personal HomeBase (cont.)

- ? personal multimedia database
- ? users don't have to know the internal "just store this!"
- ? information can be recalled later on from a Network Computer (NC)
- ? suitable applications can be launched (downloaded as Java applets)

Personal Assitants



? intelligent agents

? implemented as Java Applications and Applets

Some tasks that can be done

- ? Manage documents e-mails
- ? Exchange information with other agents
- ? Prepare reports (as web pages updated daily)
- ? Explore networks for specific topics

New User Interface

- ? The death of desktop metaphor
- ? inability to cope with a vast amount of information (e.g. high volume e-mail)
- ? Open our minds for new methods

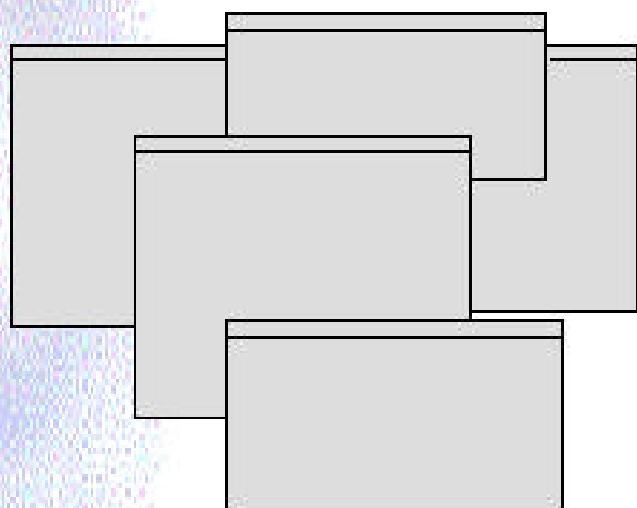
Lifestreams

- ? <http://www.mirrorworlds.com>
- ? Organize our electronic lives in time sequence manner
- ? Filenames are optional!
- ? Organization on demand
- ? Archiving is automatic
- ? Need ways to filter information

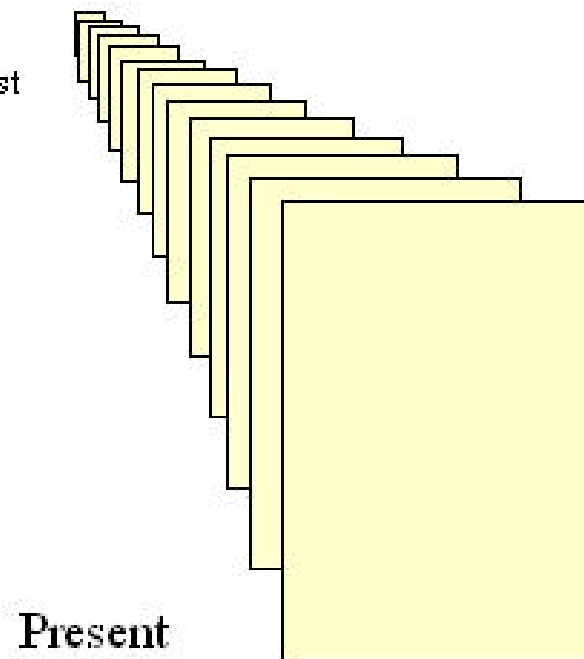
Windows

vs.

Streams



Past

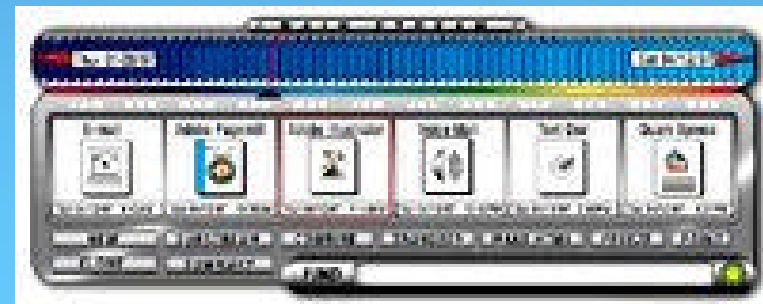
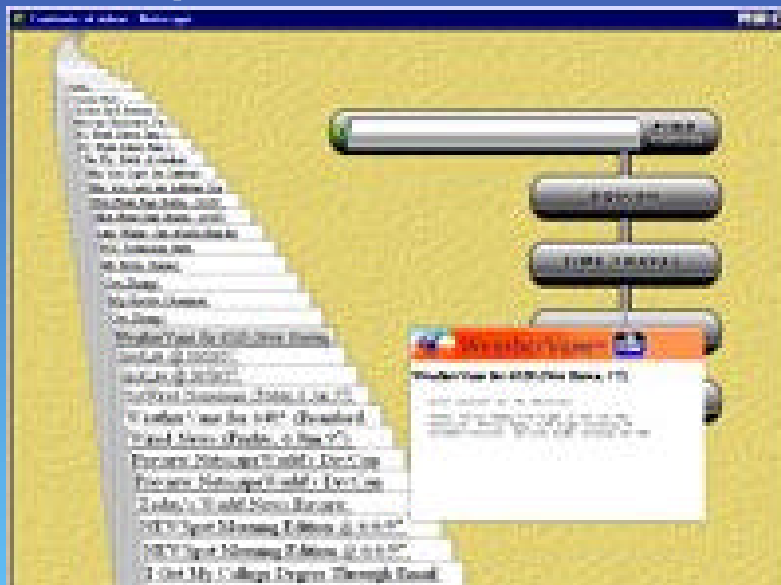


Filing cabinet metaphor

Time-based document stream

More LifeStreams

? <http://www.mirrorworlds.com>



Concluding Remarks

? Presented three issues to deal with high volume electronic documents

- personal homebase
- personal assistants
- new user interface

? Research are still needed

? Commercial spin offs