

# *The usage of Java in SMASH*

Ronald M. Tol  
Philips Research



---

*Storage for Multimedia Application Systems in the Home*

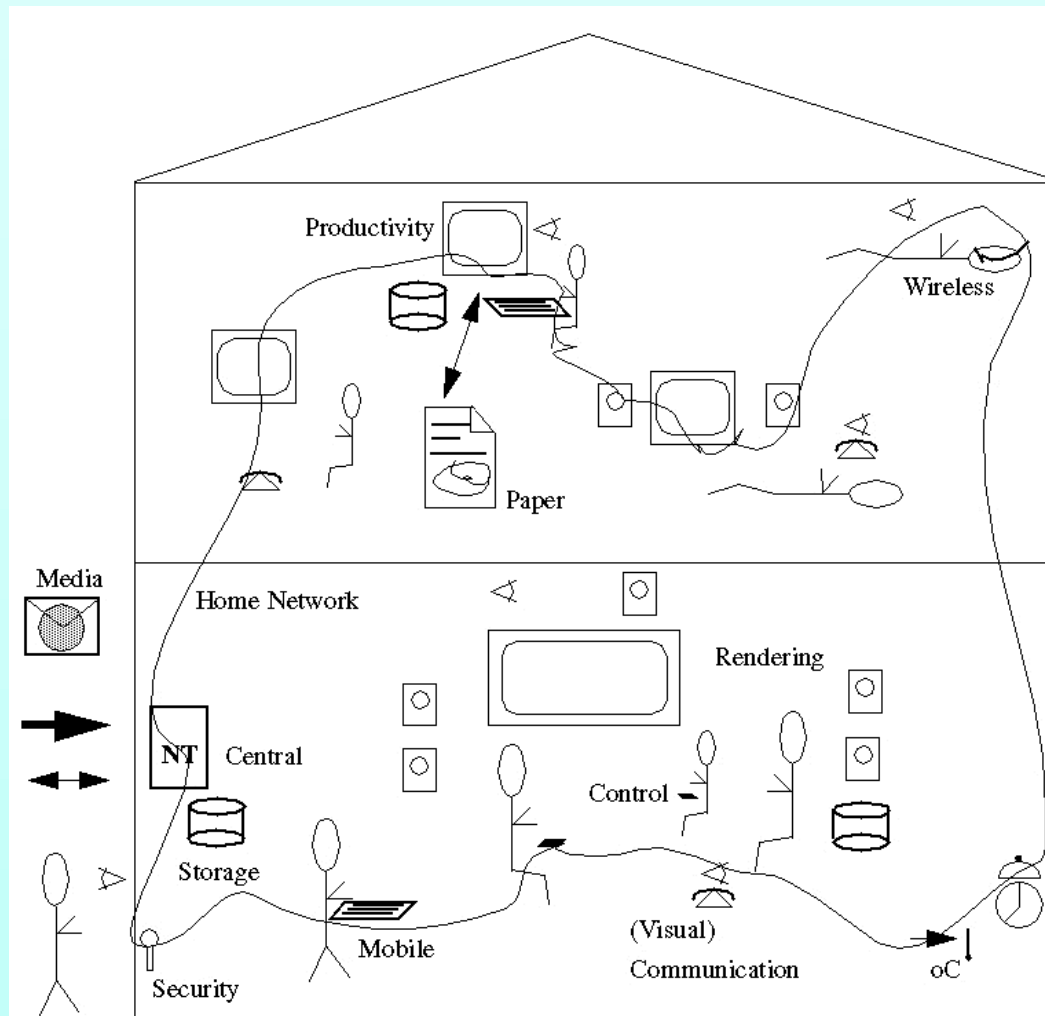
Combination of tape drive and HDD in one device gives *fast access to a large amount* of data.

- file server
- easy retrieval using meta data
- multi-stream video
- client/server operation in IHDN

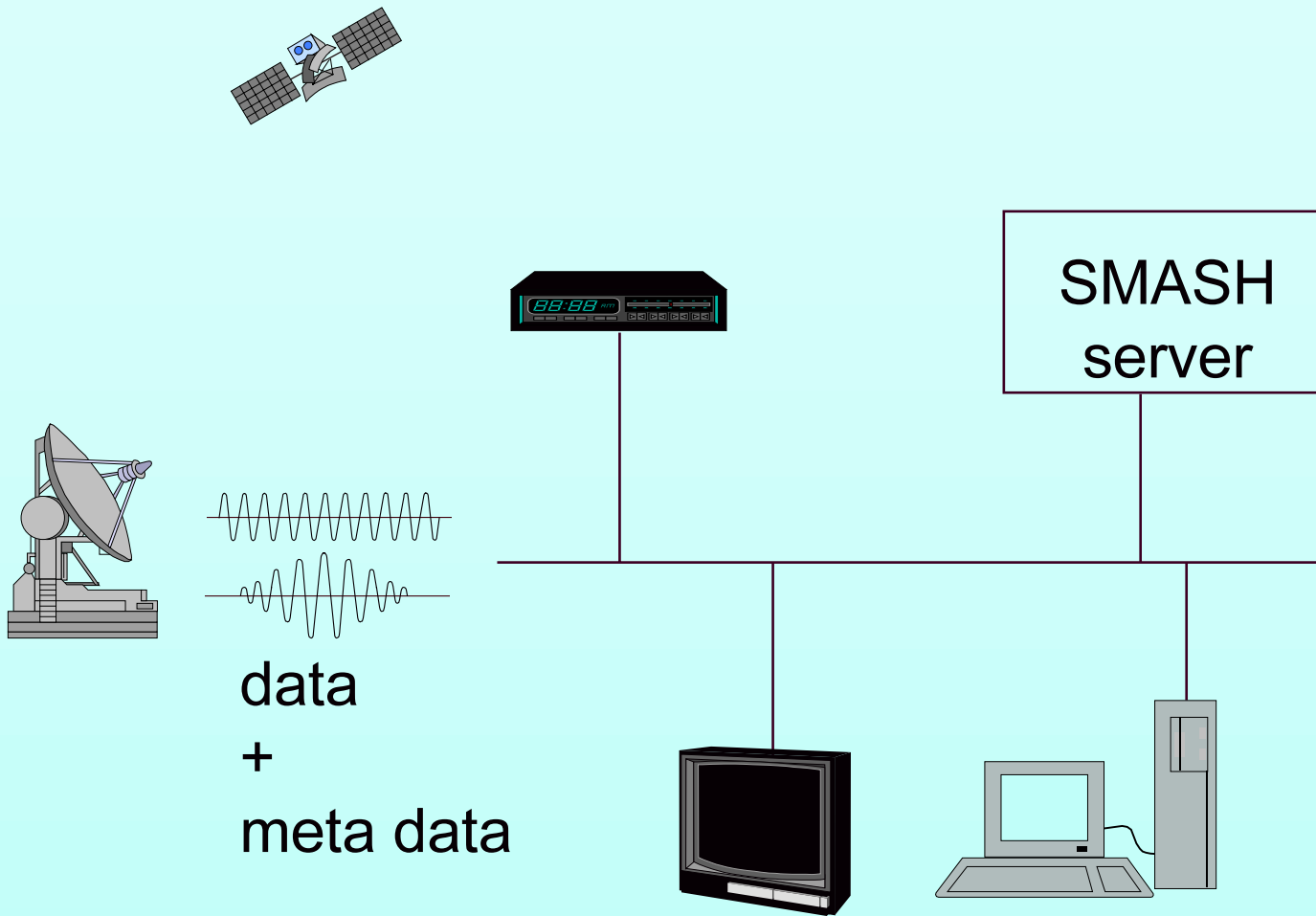


---

*SMASH project*

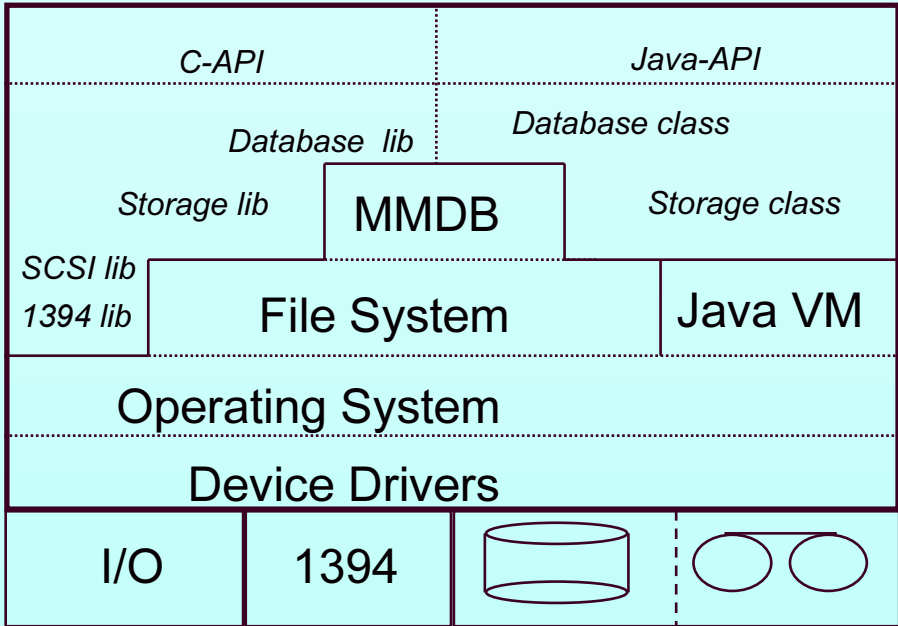


## *SMASH in a home network*



*Prototype set-up*

# Application



## Advantages

- Object-Oriented Programming
- Portable code (virtual machine)
- Platform independent (standard APIs)
- Dynamic loading of compiled code (network)

## Disadvantages

- Footprint
- Execution speed
- License costs

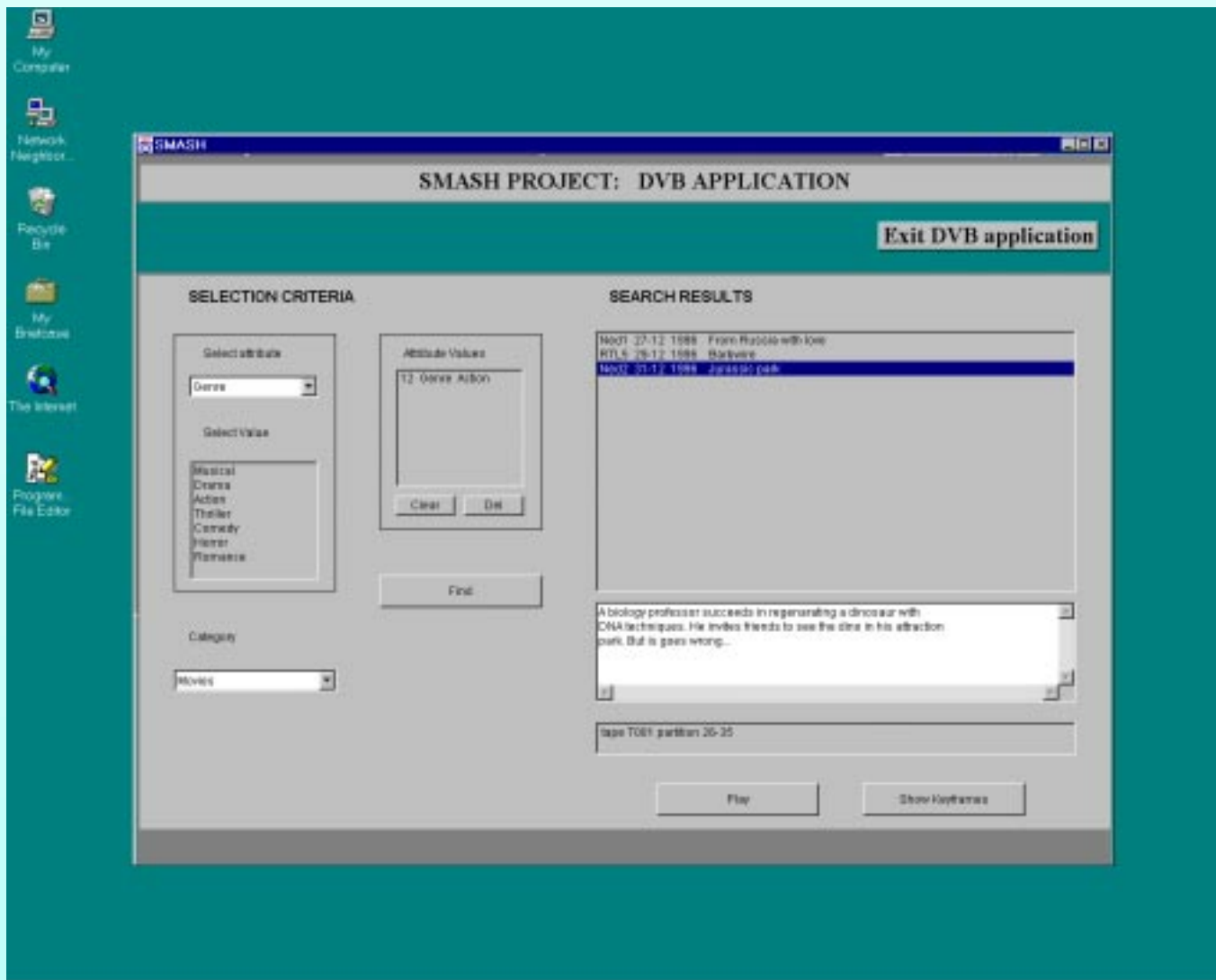


---

*Why Java*

- **Client applications or applets**  
(`java.lang`, `java.awt`, `java.applet`)
- **Client/Server communication, networking**  
(`java.net`)
- **Java DataBase Connection**  
(`java.sql`)
- **Operations on files**  
(`java.io`)
- **Remote Method Invocation (planned)**  
(`java.rmi`)
- **Java Beans (planned)**  
(`java.beans`)






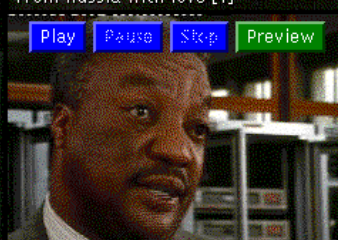







Netscape: SMASH combo multi-play demo

File Edit View Go Bookmarks Options Directory Window

|  |  |  |
|--|--|--|
| <p>Play Pause Stop Preview</p> <p><b>PREVIEW</b></p>  <p>Tape Preview</p> | <p>Play Pause Stop Preview</p>  <p>The dead can't lie</p>        | <p>Play Pause Stop Preview</p>  <p>Revenge of the Pink Panther</p>  |
| <p>Play Pause Stop Preview</p>  <p>30 Minutes (9) [2]</p>                 | <p>Play Pause Stop Preview</p>  <p>From Russia with love [1]</p> | <p>Play Pause Stop Preview</p>  <p>Hij is wel fit. Hij moet binnen 24 uur in Istanbul zijn.<br/>From Russia with love [2]</p>                 |
| <p>Play Pause Stop Preview</p>  <p>Cliffhanger [1]</p>                   | <p>Play Pause Stop Preview</p>  <p>Cliffhanger [2]</p>          | <p>Play Pause Stop Preview</p>  <p>Deze heftige dames gaan de productie in 'n autofabriek opvoeren.<br/>Monty Python's Flying Circus [1]</p> |
| <p>Play Pause Stop Preview</p>    | <p>Play Pause Stop Preview</p>                                 | <p>Play Pause Stop Preview</p>    |

