

ETHWorld

Entry Points Project

RESEARCH GROUP FOR

*Distributed
Systems*

Entry Points into the ETH World Infostructure

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■ Objective

- Creation a virtual campus

- Environment for cooperation of research groups and teaching and learning communities

■ Design

- International competition for design concept

- Winner: Beyond Luxury

■ Realization

- Individual projects, developing

- e-learning,
- research tools,
- information management,
- infrastructure elements and
- community building

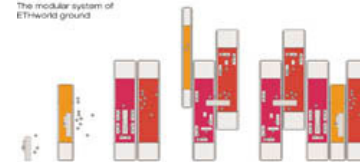


ETHworld grounds are global places where ETHworld manifests itself in physical space and allows people to meet and establish contact in a relaxed and comfortable ambiance.

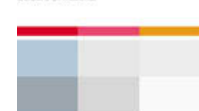
The ETHworld ground is a kind of lounge in which community members can come together. It provides an interface for the interaction of the members present using their ETHworld presence card. The ETHworld ground strengthens the physical presence of the ETH in a global context.



The modular system of ETHworld ground



Colours of material



Colours of light



Interaction
The ETHworld ground is an interface to the ETH presence.

The ETHworld ground reacts to data that the user has released on his ETH presence. In an initial phase, we will provide for a light concept to provide a visualization of this data flow. The user profile will be translated into a colour code, which will be controlled through the ETHworld presence.

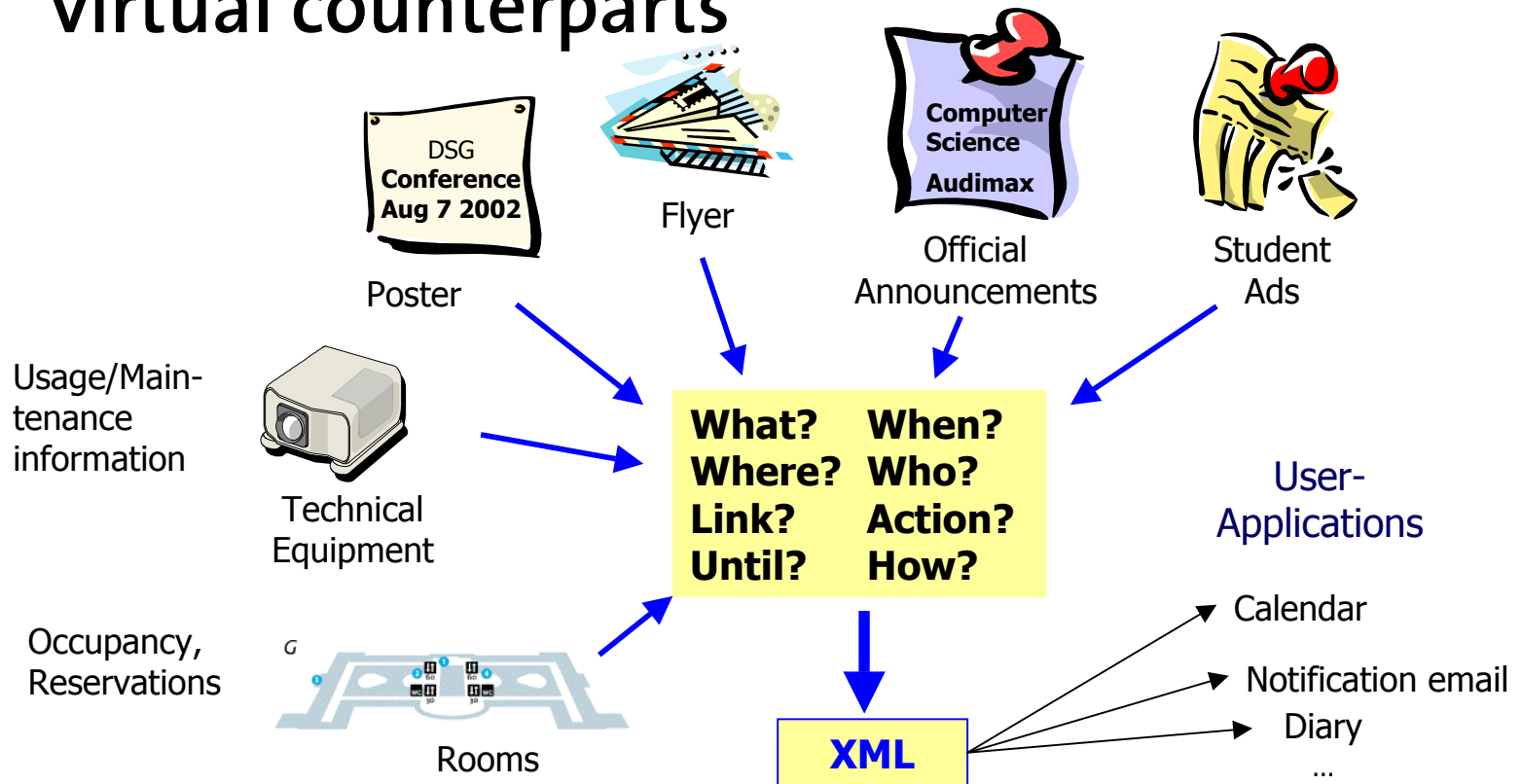
Entry Points Project

Entry points into the ETH World infostructure

1. Interweaving the **info**structure of ETH World with the physical **infra**structure of ETH
2. Provision and utilization of **location** information
3. Investigation and evaluation of **privacy** and **acceptance** aspects

Entry Points to ETH World

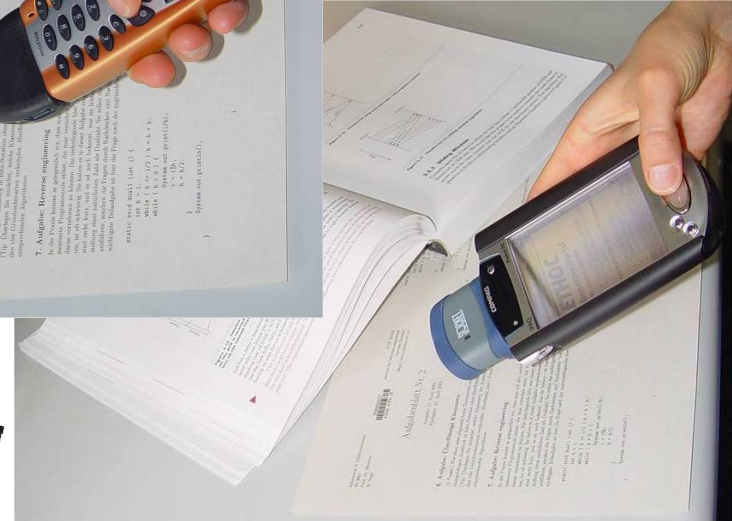
- Augment physical ETH entities with virtual counterparts



Prototype: ETHOC

- „Everything has online content“

- Simple creation of augmented documents via Web interface
- Easy access to virtual counterpart via multiple client devices



ETHOC

Prototype: ETHOC



- An objects tells something about itself
 - e.g., by displaying a dynamically generated homepage

- Content

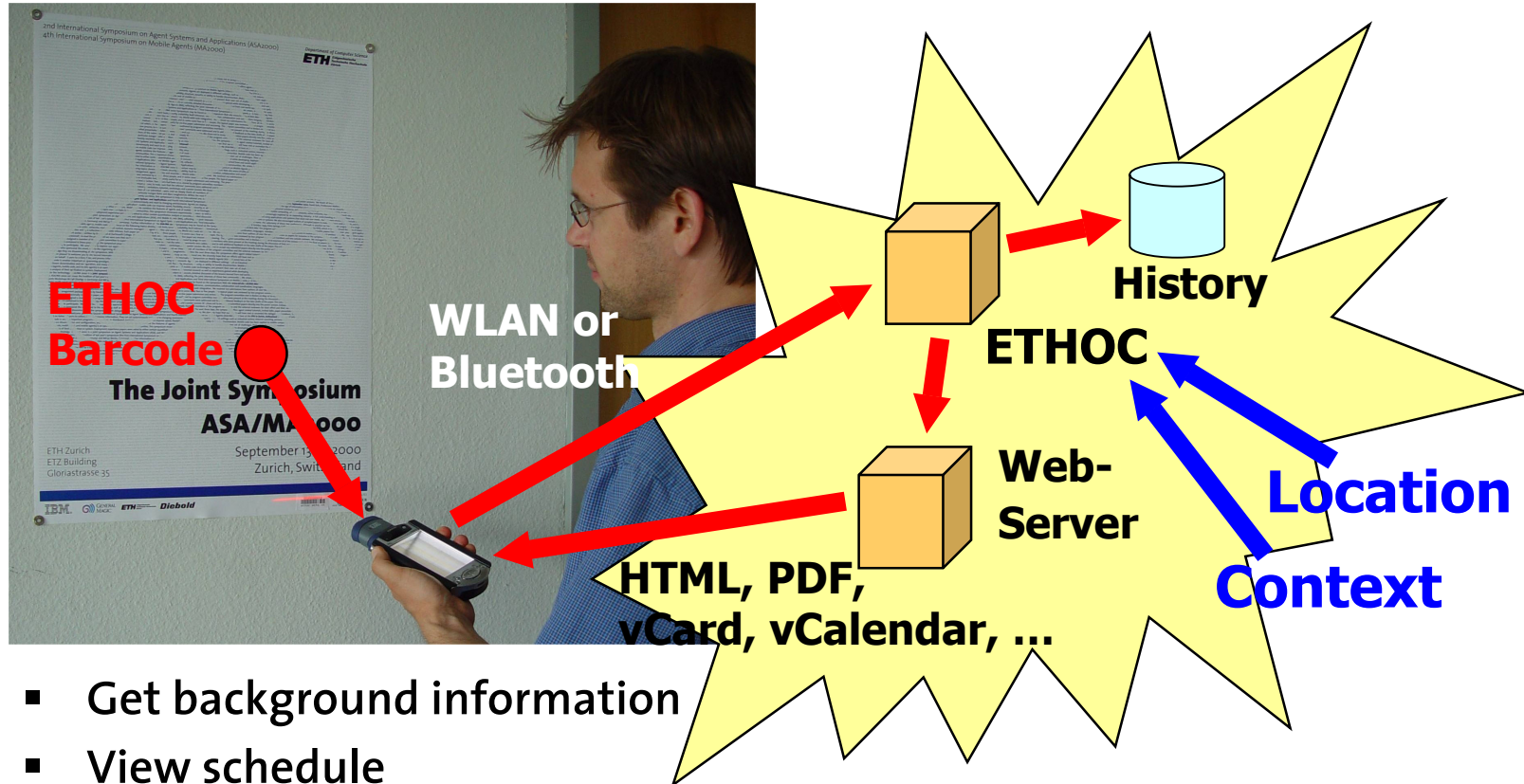
- depends on circumstances such as context, location and privileges



ETH

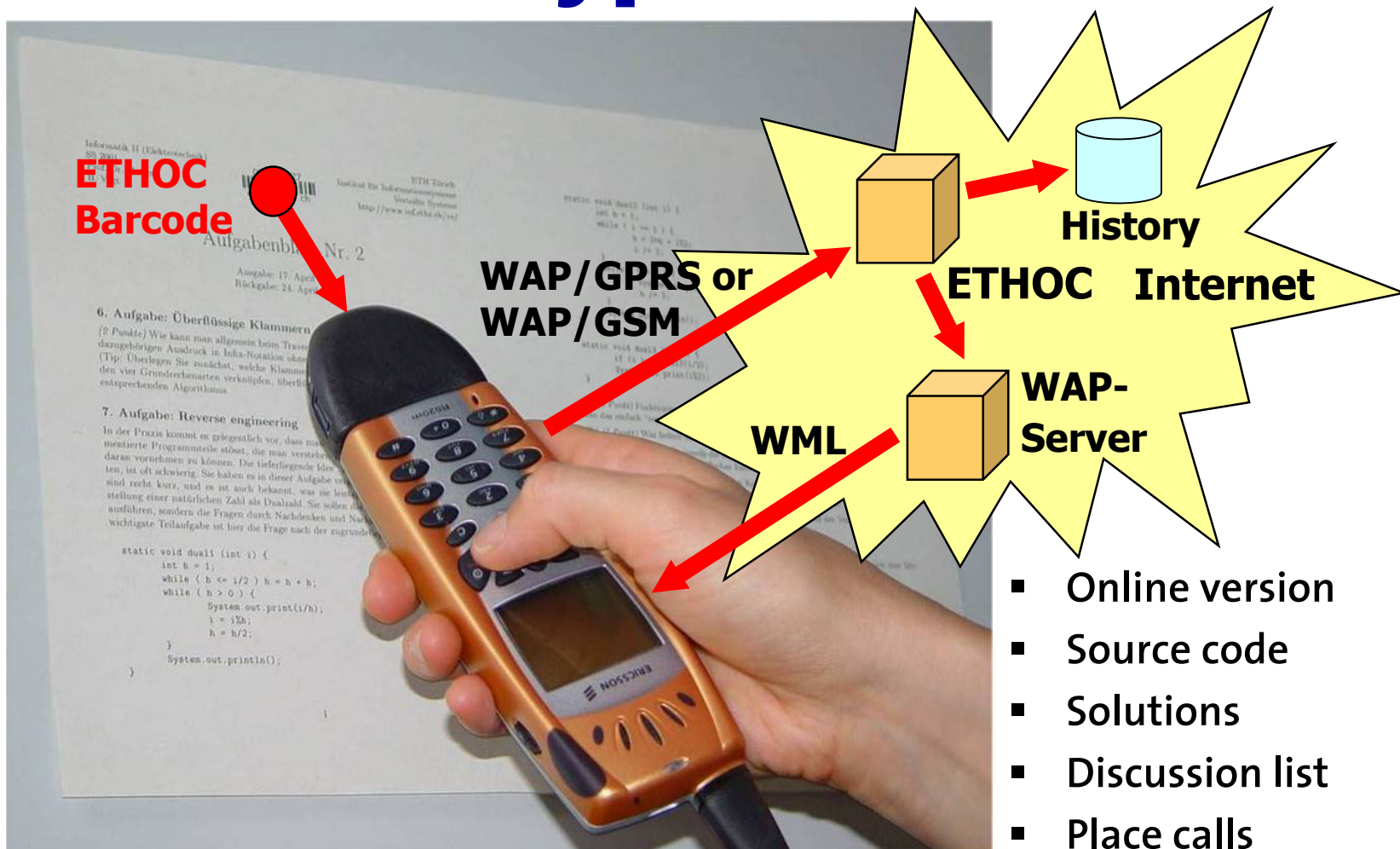
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Swiss Federal Institute of Technology Zurich

Prototype: ETHOC



- Get background information
- View schedule
- Store calendar entries
- Registration

Prototype: ETHOC



ETH World Positioning Services

- In-building guide and navigation aid
 - Find-your-way prototype
- Facility management
 - room utilization profiles,
 - detect zones of activity
- Electronic diary
- Lecture assistant
- Locate friends and study groups



Prototype: Find Your Way

- Positioning using barcodes
- “Routing people”

File Edit Help

Von hier zur Bibliothek

Direction

Location of next barcode

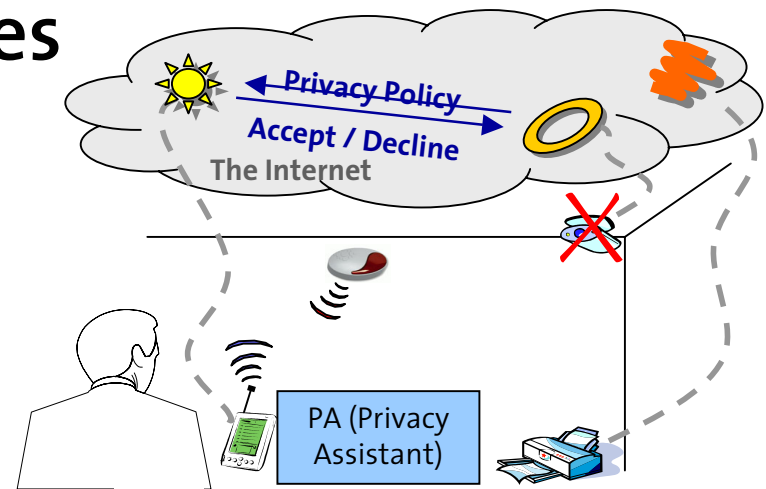
55 Schritte

[Ziel aendern](#) [Uebersichtsplan](#)

Start My Handheld PC SymLupeCE 21:05

Privacy and Acceptance

- **Privacy** of location information and personalized data
- Investigation of **social implications** of introducing ubicomp technologies into the student's lives



Expected Results

- ETH World offers ideal **deployment environment** for testing ubicomp scenarios
 - Focus on technologies that are immediately available
- Experimentation with responsive objects
 - Design of virtual counterparts
 - Interaction with smart objects
- Everyday use of navigation and localization techniques
 - Evaluation of their usage constraints and opportunities in a realistic setting

Thank you for your attention!

- Email:
 - rohs@inf.ethz.ch
- ETH World Website:
 - www.ethworld.ch
- Entry Points Project:
 - www.ethworld.ch/nw/projects/details/137/
- ETHOC
 - <http://ethoc.ethz.ch>