Introduction

Technologies and Components for Smart Spaces

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Research

Audio/video and real-time service

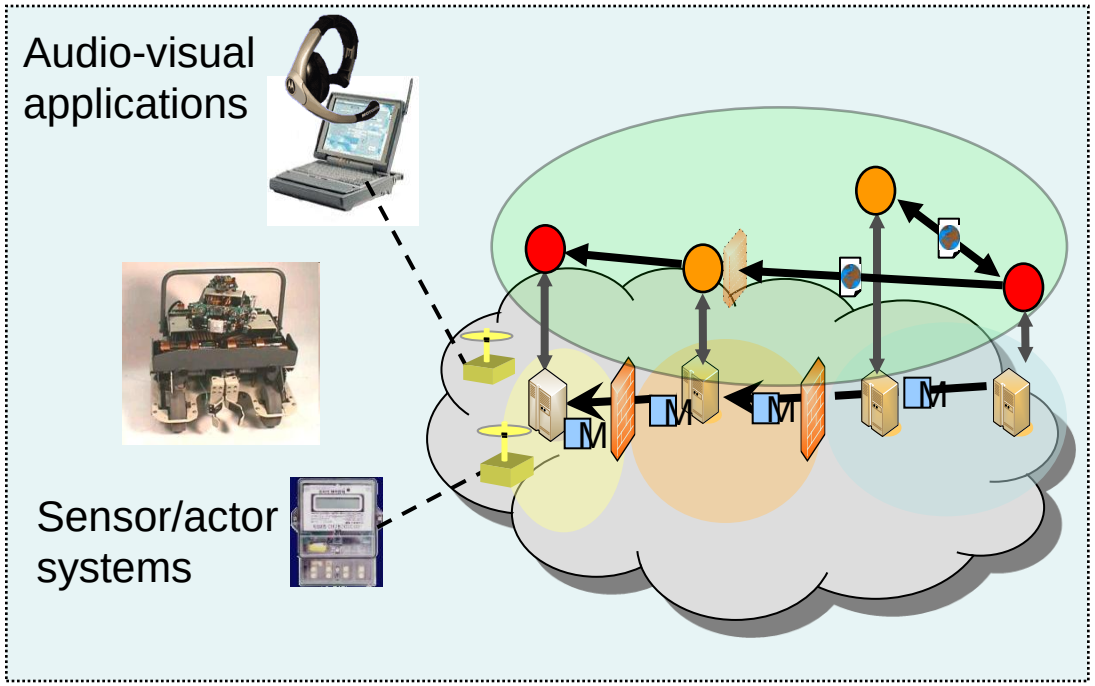
Peer-to-peer and overlay Networks

Mobile communications

Network monitoring

Autonomic management

Network security



- Innovative mechanisms
- Measure and analyze the network
- Methods and tools for network engineering

AutHoNe - Autonomic Home Networking

- Part of the European Celtic cluster within the EUREKA Initiative
  - German subproject funded by the BMBF

- German Consortium
  - Fraunhofer FOKUS
  - Siemens Corporate Technology
  - TU München

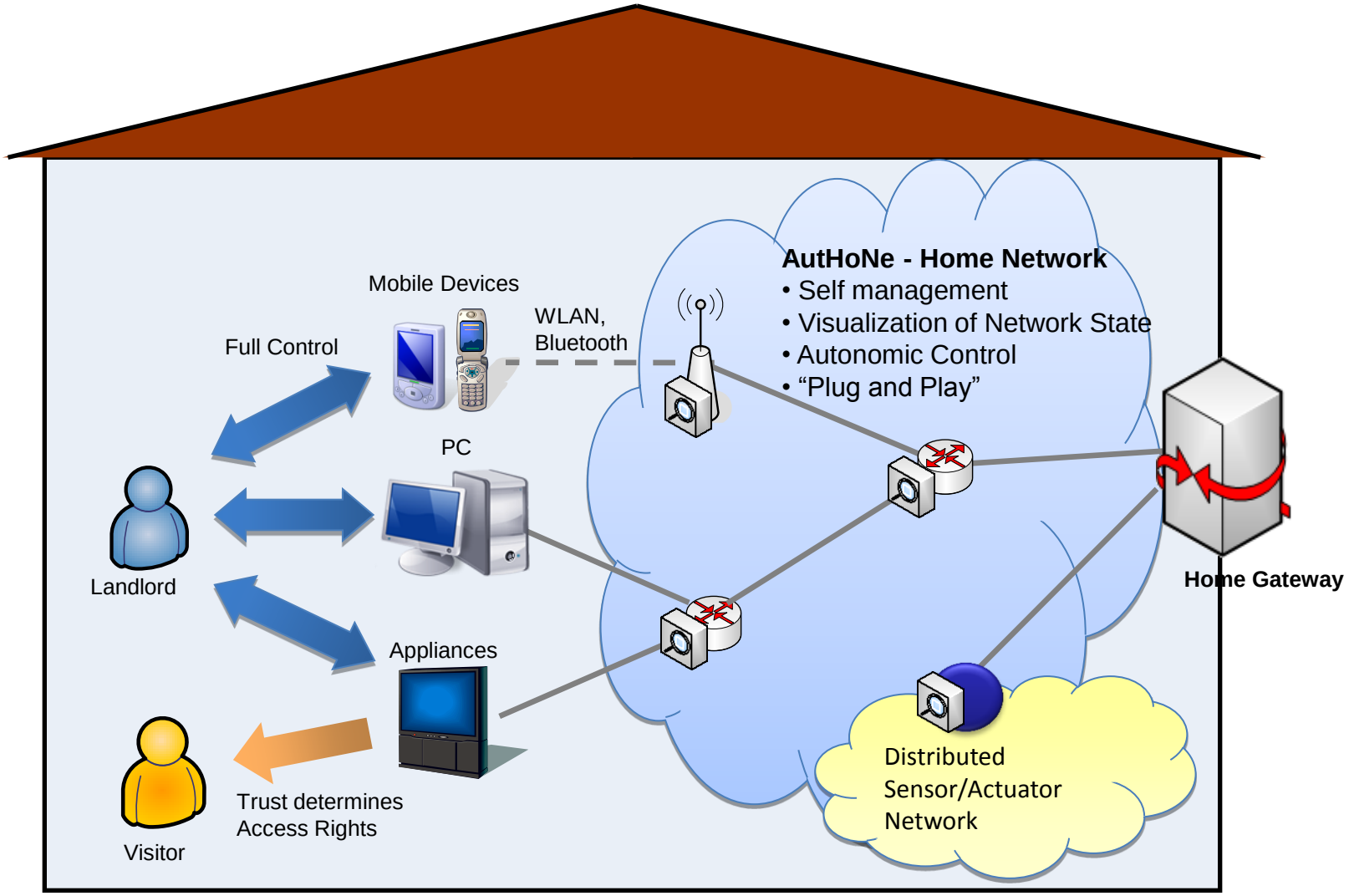
- EU/Celtic Partners
  - Ginkgo Networks, France
  - France Telecom, France
  - Paris 6 (UPMC), France
  - Lund University, Sweden
  - Sony-Ericsson, Sweden

Bundesministerium für Bildung und Forschung

CELTIC Telecommunication Solutions

EUREKA

Vision of a Secure Autonomic Home



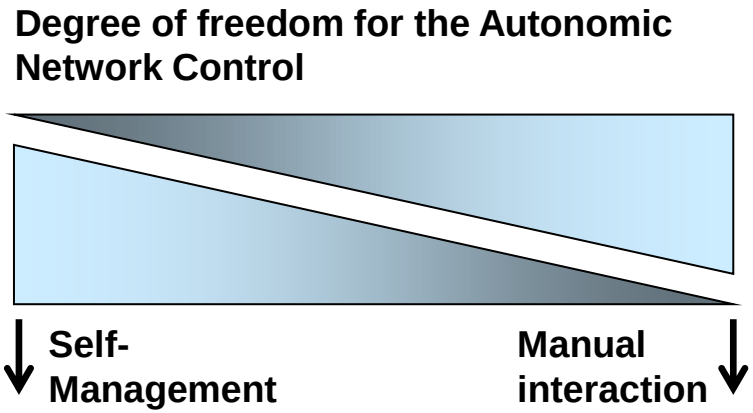
Project

Home Networks Today

- Social and technological barriers
- No interconnection of devices
- Just used to access the Internet

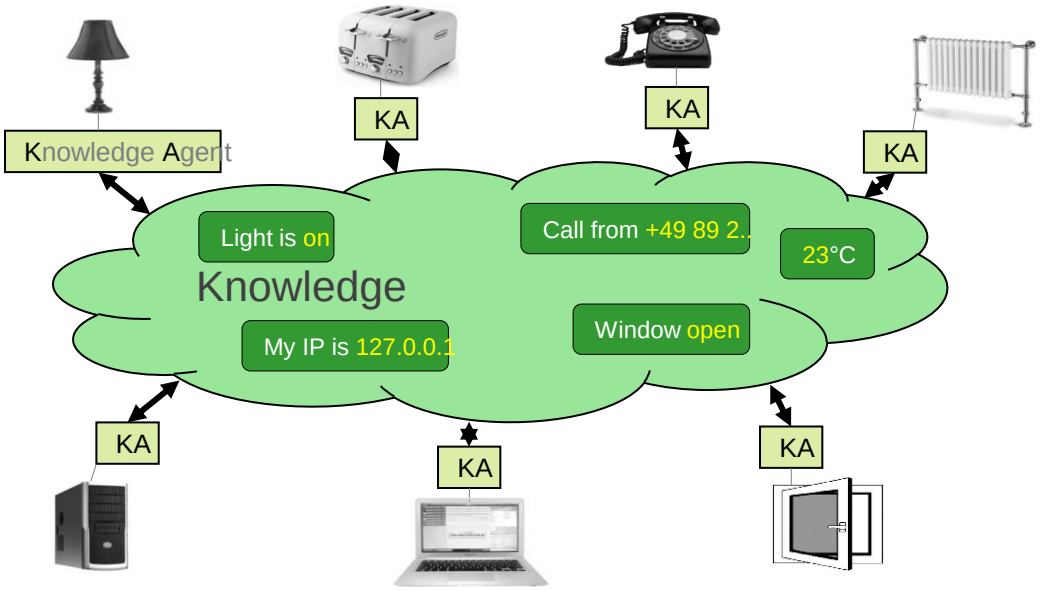
AutHoNe

- Introduction of autonomic behavior
- Self-management and manual interaction
- Adapt devices and services to users and environment

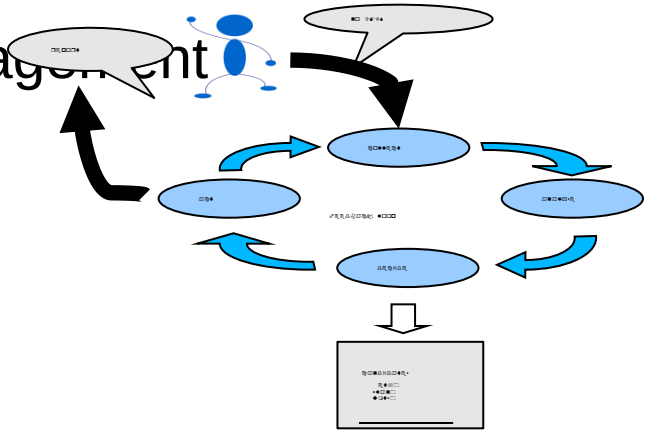


Basic concepts

- Knowledge Platform



- Autonomous Configuration and Management

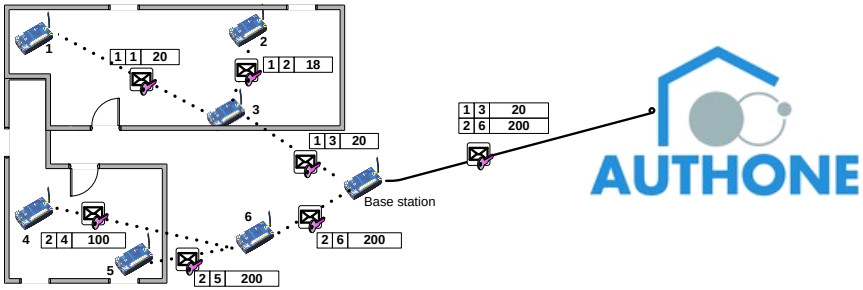


Basic concepts

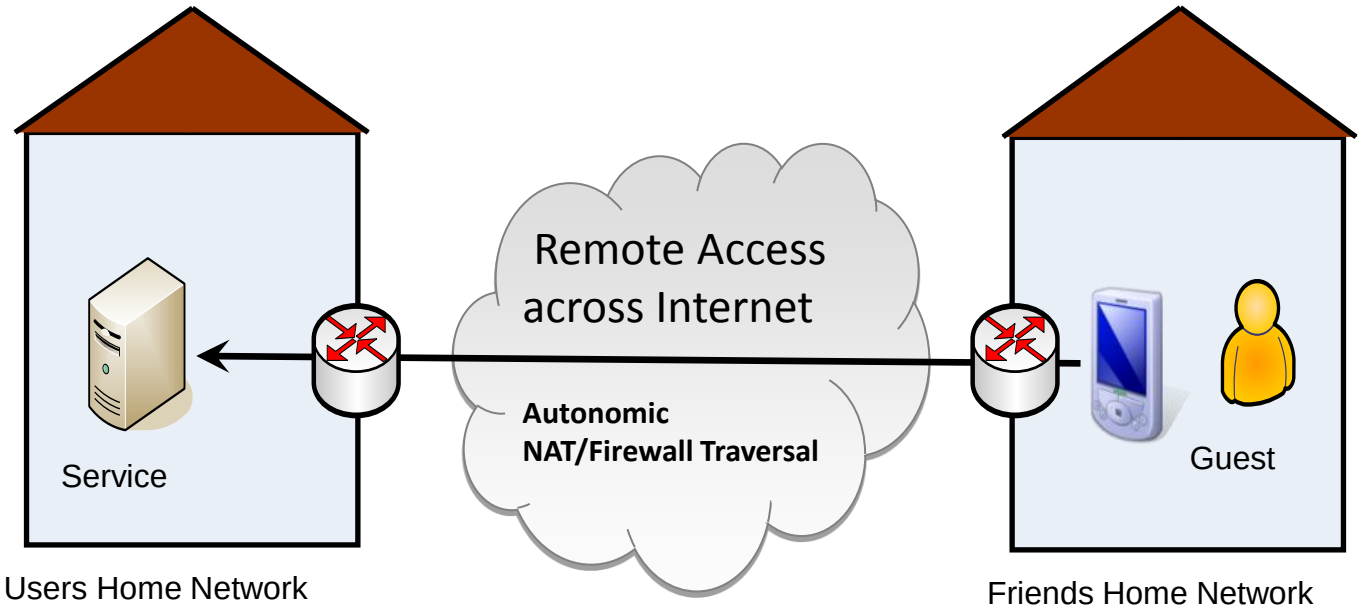
- User Control
  - User-friendly
  - Modes for normal use and experts

- No remote access
- Remote access by owner (no administrative control)
  ...
- Remote access by friends
  ...

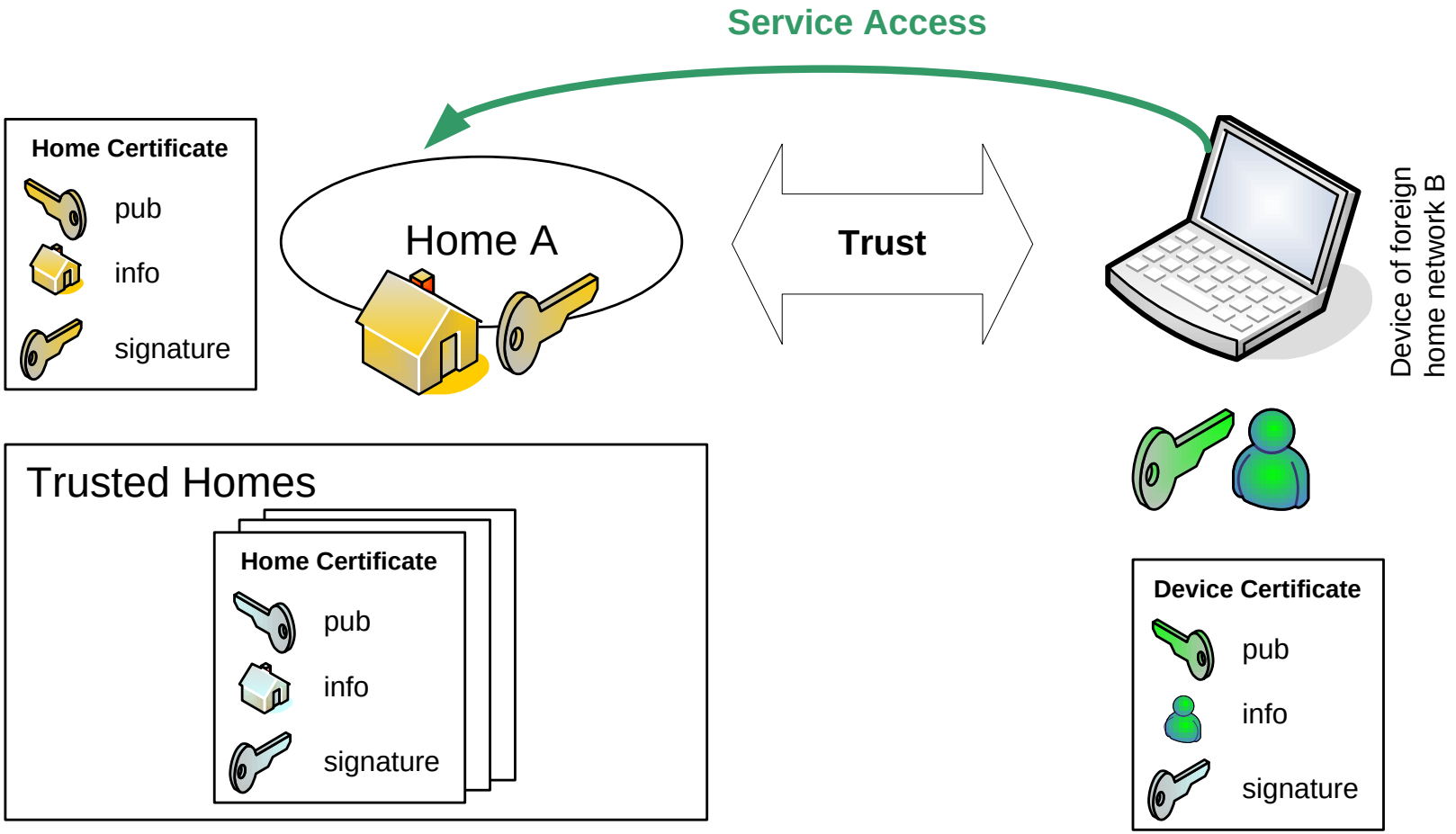
- Interaction with Environment
  - Sensors
  - Actuators



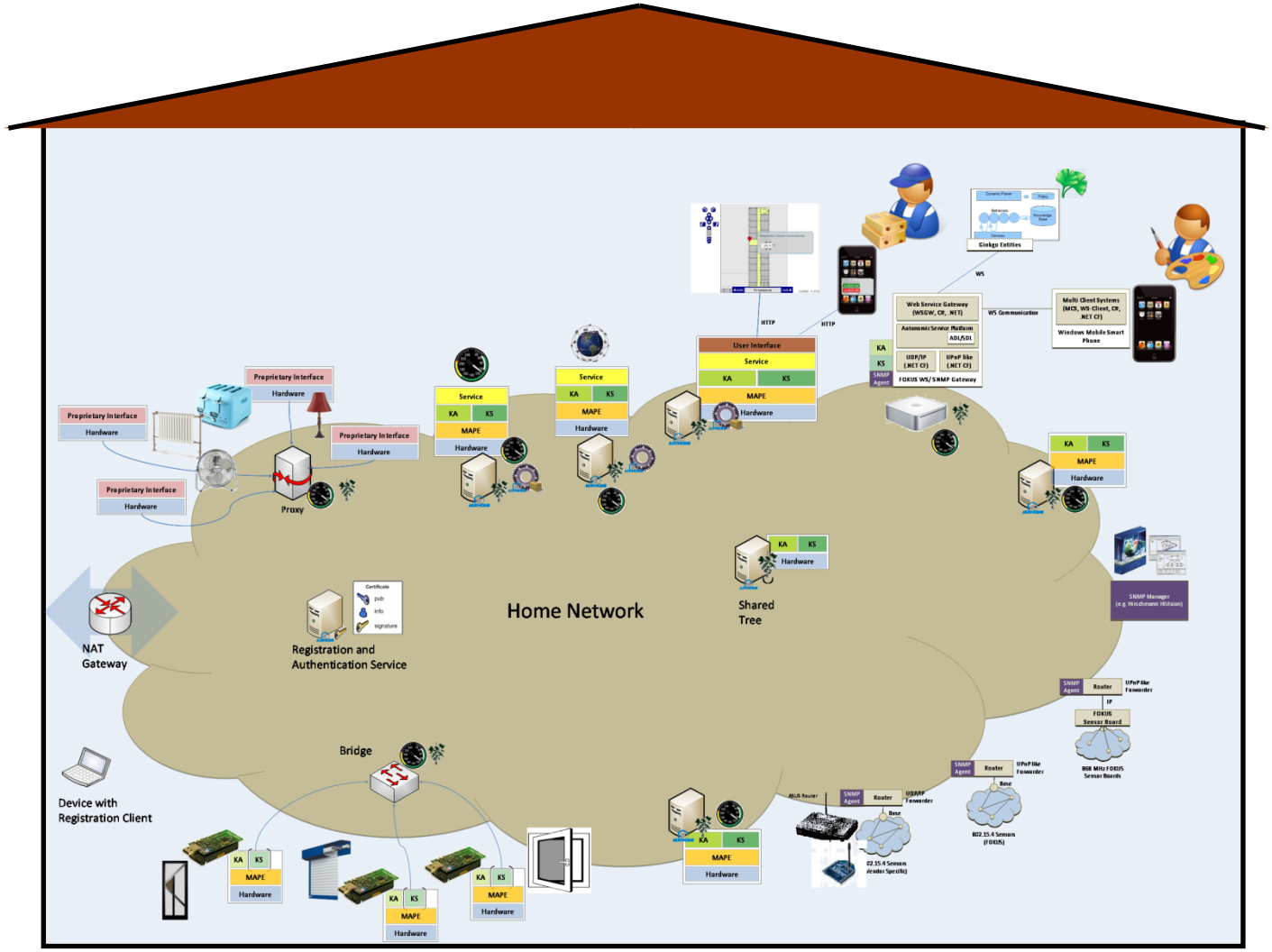
Scenario: Remote Service Access



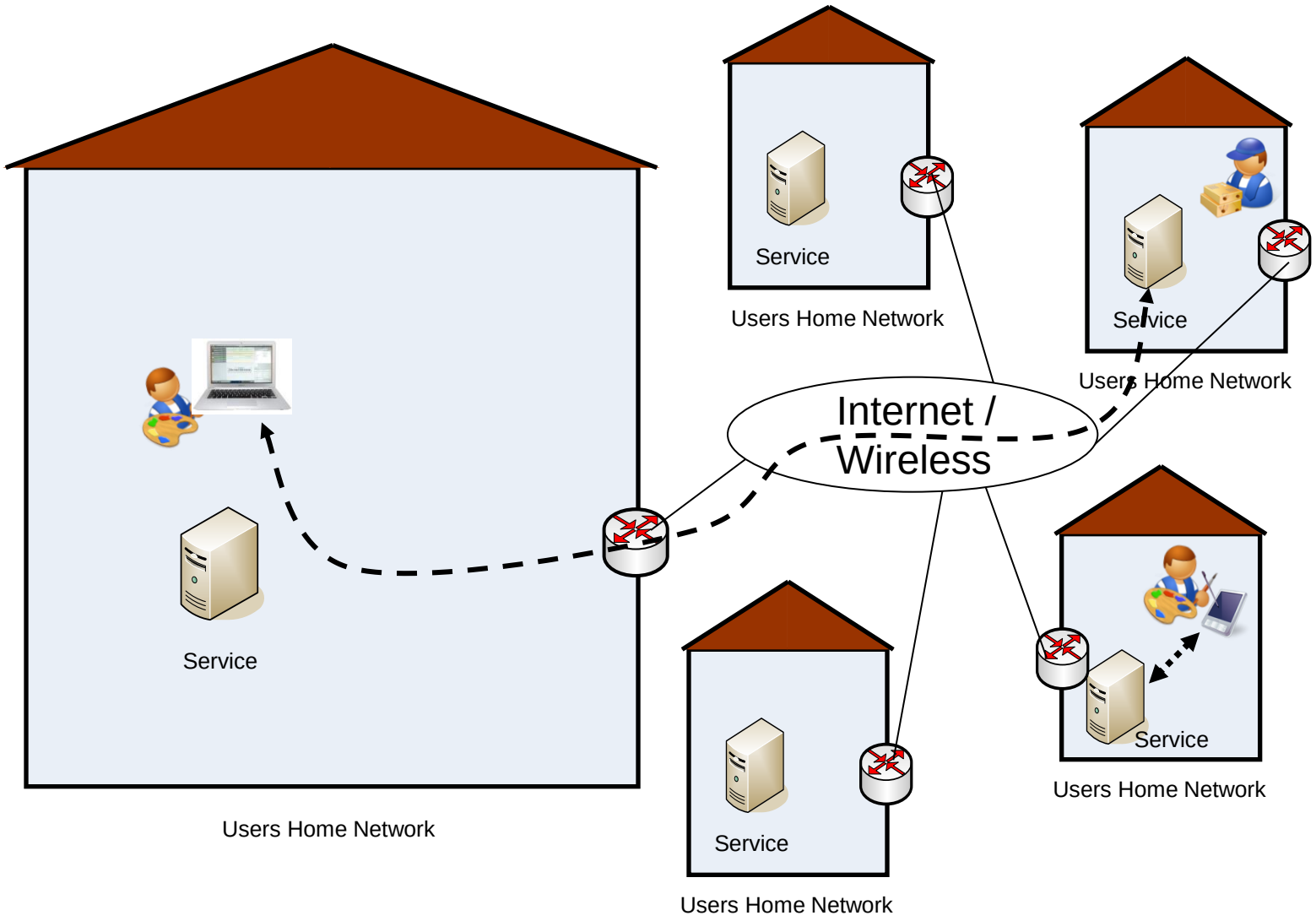
Scenario: Trust and Security



Architecture – Heterogeneous Devices



Architecture – Multiple Buildings



Thank you

for your attention!

Questions?