

OSGi Alliance Community Event

SerCHo
Service Centric Home

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What is SerCHo ?

- SerCHo stands for Service Centric Home
- It is a research project, which is funded by the German Federal Ministry of Economics and Technology
- Project Duration: 07/2005 – 06/2008
- Project Coordinators: Alcatel-Lucent and DAI-Labor



Who is involved ?

- Alcatel-Lucent
- BITKOM
- Cycos
- DAI-Laboratory / Technical University Berlin
- Deutsche Telekom Laboratories
- ProSyst Software
- Siemens Home and Office Communications
- SevenSenses (Pro7Sat1 Group)
- Wik Consult



What is SerCHo about ?

- Providing a **personalized** and **convergent smart home platform** combining:
 - Entertainment
 - Communication
 - Home Device / Home Appliances
 - PC-Technology
- **Easy Integration:**
 - Allowing 3rd-parties (especially SMEs) to develop and offer new or additional services to homes



What did we do in Detail ? (1)

- Develop a Home Service Platform
 - OSGi based Execution Platform for Services
 - Standard Services: User Authentication, Profile Management
 - Exemplary Services for Demonstrations
 - Operator Specific Services: SIP Border Proxy, TR-069 Management
 - Device Management / Device Control
 - Interfaces also with other Execution Platforms (JIAC)
- Hardware: Siemens Gigaset SX765
- Software: ProSyst mBedded Server Professional Edition and Smart Home Extension



What did we do in Detail ? (2)

- Develop a Service Provider Platform
 - Manages VPN Connections to HSPs
 - Manages Customer Identities
 - Remote Management of HSPs
 - Execution Platform for Hosted Services
 - Provides Standard Services to Enable 3rd-party Services
 - Intergration of 3rd-Parties

- Software: ProSyst mPower Remote Manager & Deutsche Telekom Telehome



What did we do in Detail ? (3)

- Develop Easy Service Creation Suite
 - Graphical Editors and Wizards for the development of services
 - Service Repository allowing the reuse of existing software components
 - Services can be composed via Drag-and-Drop
 - Representation and Semantics are based on BPNM (Business Process Modelling Language)
 - No need to know any development language

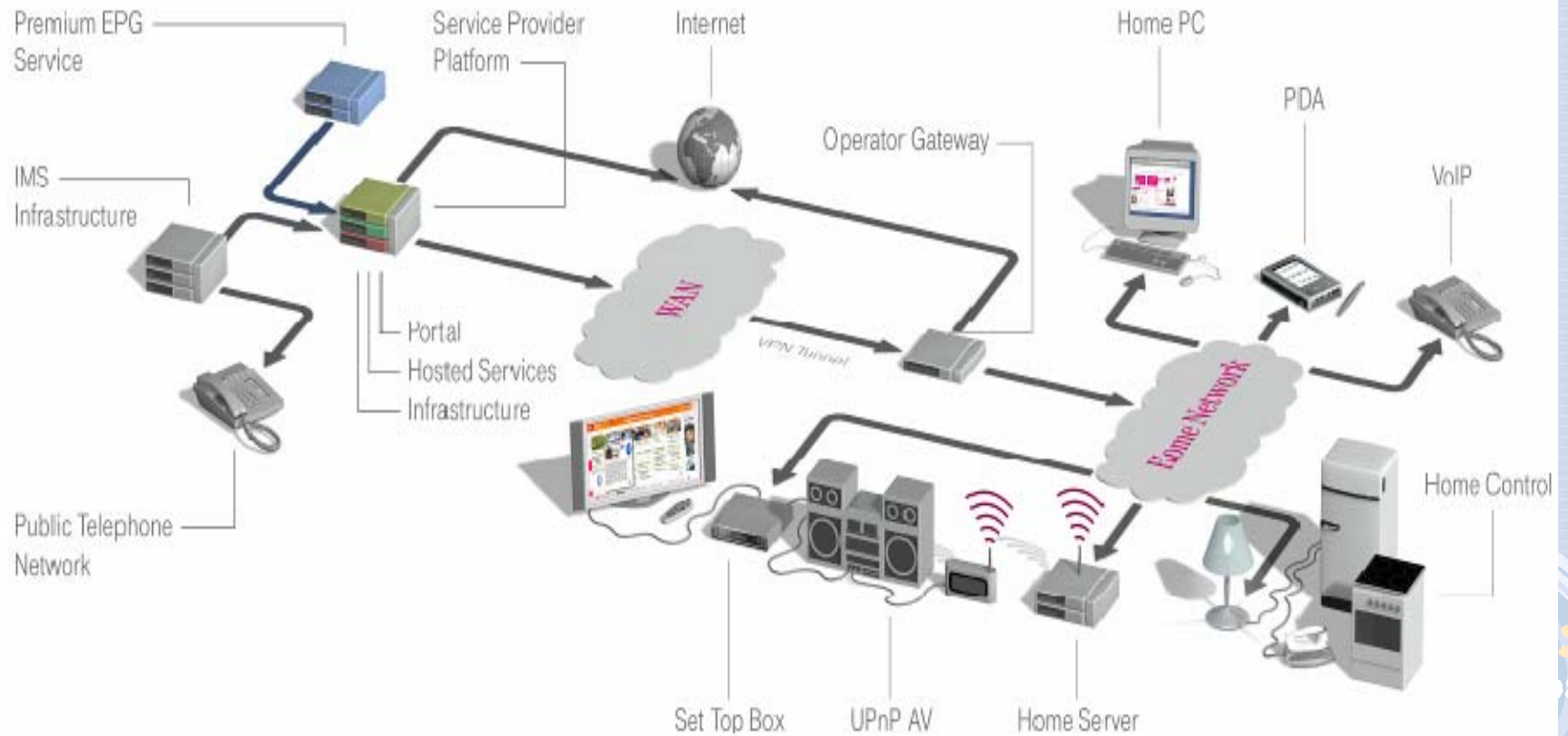


What did we do in Detail ? (4)

- Develop Exemplary Services
 - Smart Home Energy Assistant
 - Intelligent Electronic Program Guide
 - Intelligent TV Links Service
 - Media Sharing
 - 4 Star Cooking Assistant
 - Home Unified Communication
 - Service Management & Subscription



Service Centric Home Architecture



Demonstrations at the SerCHo Showroom

- Located at Deutsche Telekom Laboratories in Berlin
- Associated Partners:
 - B/S/H (serve@home)
 - Ubisense (UWB Location System)
- Three rooms: Kitchen, Living Room and office



SerCho Showroom – The Kitchen



SerCHO Showroom – The Living Room



SerCho Showroom – The Office



Advantages of using OSGi

- OSGi enabled us to integrate many different technologies into one platform
- Provides a true cooperative environment
- Costs for development, integration and maintenance of Software can be reduced and enables 3rd-Parties to participate in this market
- The platform will be reused to develop additional services in the following areas:
 - Ambient Assisted Living
 - Energy Efficiency

