FOKUS Insight!

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NGNI – Next Generation Network Infrastructures

SCIFIS / GUIDE: the major objectives of SCIFIS are to develop methods, concepts and prototypes for identity management in Internet and Telecommunication scenarios. The resulting software component GUIDE represents an Identity Management Meta System which aims to integrate a „Future Internet Identity Layer" into Next Generation (Mobile) Networks and Future Internet domains to enable secure authentication and authorization as well as federated identities, particularly with regard to mobile communication devices.

Service Broker: presents an environment that allows dynamic service exposure through enforcement of policies and service orchestration/composition. The Service Broker component allows the execution of service request constraints through the orchestration of several service enablers. In addition, the mechanism for bi-directional service integration will be introduced. This refers to the two approaches „inside-out" based on the internal software export of services (SaaS) and „outside-in" for the external import of Web Services like SOAP, REST, RSS, etc.

Smart Information sharing Service (SIS): This service provides information to users in smart ways to multiple networks. Smart in this context means that the service is capable of delivering information from various sources to different devices depending on user, operator, and service provider preferences. Technically, the service uses the FOKUS Broker as a service platform as well as GUIDE as identity provider and identity management entity. This demo presents the results of a commissioned R&D project by NTT Service Integration Laboratories, Japan.

ELAN – Electronic Government and Applications

Secure eIdentity-Lab presents a range of current projects with the aim to provide secure and trustworthy electronic identities and the self-determined use of personal data, such as:

New German ID-card: has been introduced in November 2010 as a governmental ID-solution for the internet. Its features support a high level of privacy protection by giving only necessary ID -attributes to a service provider such as age or address verification. The final data transfer always needs to be approved by the user entering his or her PIN number.

myID.privat: works on solutions for citizens to combine identity attributes from different sources for the use of services in the internet. Thereby the user shall always be in control about which data will be submitted to whom.

Electronic Safe for data and documents: deals with the conception and realization of a virtual safe for personal data and digital documents, which will be stored in decentralized blocks. So they cannot be viewed even when the encryption key has expired.

U-Prove: is a technology to support minimal data transmission. Only the necessary data, which are mandatory for identification are transferred during the transaction. The combination of U-Prove with the new German ID-card by Fraunhofer FOKUS has been awarded with the TeleTrusT Innovation Award 2010.

FAME – Future Applications and Media

FOKUS MEGASTORE: enables application deployment across devices and platforms. Developers can provide their applications for a broad range of terminals including mobile phones, settop boxes and TV sets, mobile and desktop computers. Beside cross-platform support, MEGASTORE implements a variety of innovative app deployment features.

Open IPTV Ecosystem: open end-to-end IPTV solutions for managed and unmanaged/hybrid networks. It is based on specifications from Open IPTV Forum (OIPF), ETSI TISPAN, HbbTV and OMTP. Developed in-line and somewhat ahead of standardizations, the Fraunhofer FOKUS Open IPTV Ecosystem is the first implementation on the R&D market to offer practical end-to-end implementations.

SMART Recommendations: is a complete parallel computing recommendations engine that enables Internet businesses and entertainment services to deliver a personalized experience and build customer loyalty by matching the right content and products to the right people at the right time.

ASCT – Automotive Services and Communication Technologies

Automotive Lab: „Identity in the car" – Future vehicles will offer a plethora of communication possibilities; consequently, identities of users, devices and service providers get involved. Fraunhofer FOKUS is doing research in the automotive domain, enabling secure and dependable identity management for critical applications is one of our key aspects of this activity.
The „identity in the car"-demonstration scenario illustrates our visions and technical opportunities concerning connected vehicles and future mobile services. A real vehicle interior with driver's seat and dashboard is set up to exhibit exemplary next generation applications. These show V2V (vehicle to vehicle) communications and infotainment applications utilizing identities for safe and secure operation.