

FIA Madrid 9/12/08 – Future Internet Services Offer

Panel 1: Internet of Services and Internet of Things: adapting to user, task, and location in a seamless fashion

Trust, Security, Privacy, and Identity perspective

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BREIN 
Business objective driven **RE**liable
and Intelligent grids for real busiNess

CONSEQUENCE 

 **PrimeLife**

Future Internet: platform for rich, end-to-end apps across trust domains

- FI should offer platform for next generation end-to-end applications delivered through Software AND Services
 - Not only/purely web-based
 - Particularly for IoT local software is important
 - Same application may be instantiated in different ways, “adapting to user, task, and location”
- End-to-end experience is dynamic, personalized, contextualized, and distributed across multiple trust domains
 - *Leverage support for scoped trust relationships and fine-grained access control mechanisms*

Support security and identity in more heterogeneous environments

- New, or at least much more prominent: everything may be a “service”, yet end-to-end application across very heterogeneous environment
 - Combining IoS and IoT: sensors to cloud services, etc
 - Using and mixing different composition technologies underpinning same application experiences
 - “Adapting to user, task, and location”
- *Must be able to “bridge” security technologies and identity management*
- *May need “multi-hop” security and identity with some level of “transparency” where needed*
- *Need to support this in a scalable way*

Support security and identity for dynamic and content-rich applications

- Value-added applications: increased information exchange between services
 - More content, more sensitive, longer lifetime
- Consider application lifecycle (creation, composition, deployment, runtime) and associated content generation
 - *More emphasis on data handling (incl. privacy) policies and enforcement, rather than pure service access control*
 - *Need support for reasoning about, managing, and enforcing trust and security constraints (i.e. requirements and promises) throughout lifecycle*