

Future Internet

22.5.2006, Haukilampi

Patrik Floreen

Andrei Gurtov

Juho Heikkilä

Pertti Hölttä

Kimmo Raatikainen

Ken Rimey

Current Projects

- *Andrei*: InfraHIP, TrustInet, LPAMDS, MERConc, NordichIP. About 20 people in total.
- *Sasu/Kimmo*: FuegoCore II, Dynamos.
- *Ken*: S4All, P2P-Fusion (mainly NS).
- *Patrik*: Trust4All, Mobilife (→ ADA), ad-hoc sensor nets (→ ADA).
- *Juho*: Muppet (could be FI or NS).

Pertti's Comments

- The stated challenges are of interest to industry:
 - *Security-trust-privacy,*
 - *Mobile always-on connectivity,*
 - *And also, service architecture.*
- Resources for participating in meetings are limited. (Solution: Hold project steering group meetings in conjunction with program advisory board meetings when feasible.)

Program Advisory Board

- That's the name we like: PAB!
 - ADA PAB
 - FI PAB
 - NS PAB
 - PAS PAB
- HIIT's portfolio seminar can also be split into four, one for each program.

FI Mission

Add mention of *services*:

- Enhance Internet infrastructure to enable efficient, secure and trusted always-on connectivity *and services*.

FI Challenges

Add third example research challenge:

Scalable open service architectures: As the Internet reaches on the order of a billion personal computers and mobile phones, the challenges and rewards of providing services to these devices will become equally huge. Particularly exciting is the possibility of widely deploying high-level communication and storage middleware based on modern distributed computing structures—both P2P overlays connecting end-user equipment and scalable commercial service implementations.

Conclusion: Challenges versus Solution Space

Challenges:

- Mobile always-on connectivity
- Security-trust-privacy
- Context awareness

Solution space:

- Distributed algorithms and structures
- Service architecture
- Middleware
- Protocols