# Location Privacy and Authentication in Massively Distributed Systems

Andrei Gurtov

HIIT/ARU Portfolio Seminar

11.10.2005

# Outline

- Joint application by Andrei Gurtov/HIIT and Klaus Wehrle/Tübingen TU
- Finnish Academy of Science/DAAD in Germany
- Researcher mobility, mutual visits of few months
- Duration: 2-3 years
- Tentative budget of HIIT: 20 000 €/year
- Tobias Heer arrived to HIIT to make his Diploma thesis for 6 months already the first week of October

# Background

- Klaus and Andrei shared an office in ICSI/Berkeley in 2003
- Joint work with Prof. Ion Stoica
- Related work on i3 proxy
  - Windows networking with Samba
  - HIP proxy module
- Guest lecture in Tübingen, Sigcomm shadow TPC
- Participation into Dagstuhl seminars

# Research Areas

- SARA architecture in Tübingen
  - SARA is a system which uses a peer to peer network to obscure the path of IP packets
- HIP privacy extensions in HIIT/TKK
  - Changing Host Identities over time
- The idea of combining HIP authentication and SARA anonymity offers the possibility to use anonymous identities. With these identities, it is possible to provide a trusted service without being exposed to third parties.

# Researcher Exchange

| 2006 | Jan | Feb | Mar | Apr | Mai | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
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| **From Germany to Finland** | | | | | | | | | | | | |
| Klaus Wehrle | █ | | | | | | █ | | | | | |
| Olaf Landsiedel | █ | | | | | | █ | | | | | |
| Stefan Götz | █ | | | | | | | | | | | |
| Tobias Heer | █ | █ | █ | | | | | | | | | |
| **From Finland to Germany** | | | | | | | | | | | | |
| Andrei Gurtov | | | | █ | | | | | | | █ | |
| Miika Komu | | | | | █ | █ | | | | | | |
| Teemu Koponen | | | | | | | | | | | | |
| Diego Beltrami | | | | | | | | | | | █ | █ |
| Laura Takkinen | | | | | | | | █ | █ | █ | | |