

Upper Layer Identifiers Work in Progress

Pekka Nikander

62nd IETF, Minneapolis

Presentation outline

- Background
 - Layered naming architecture
 - Delegation
- Introducing Service identifiers

Layered Naming Architecture

- A Layered Naming Architecture for the Internet
Balakrishnan, Lakshminarayanan, Ratnasamy, Shenker, Stoica, Walfish
ACM SIGCOMM 2004
- Basic idea: To separate
 - Service Identifier (SId)
 - Host Identifier (HId)

Delegation

- Delegation of Signalling Rights,
Pekka Nikander and Jari Arkko,
Security Protocols Workshop, 2002
- Use SPKI / Keynote2 / something similar to
delegate some rights from one HI to another HI

Service Identifiers

Initiator

“Service”

Responder

I1: HIT_I, HIT_S



R1: $HIT_I, [HIT_S, \text{puzzle},$
 $DH_R, \text{deleg}, HI_R]_{\text{sig}_S}$



I2: $[HIT_I, HIT_R, \text{solution}, DH_I, \{HI_I\}]_{\text{sig}_I}$



R2: $[HIT_I, HIT_R, \text{authenticator}]_{\text{sig}_R}$

