Mobility Complexity

IP4 and IP6

IP4 Mobility

- Static device talks to home agent
- Bidirectional tunnel to mobile device
 - Else ingress filtering problem
- Issues
 - Scaling
 - Single point of failure
 - Path MTU
 - Security association not specified



IP6 Mobility Structure

- Static device talks to home address via care of address
- Issues
 - Scaling improved
 - AAA association setup not complete in RFCs
 - ngtrans additional issues due to IP4/IP6 transition?

Direct to C/O Address

IP6 in Motion

- Static device talks to home address via care of address
- Issues
 - Scaling improved
 - AAA association setup not complete in RFCs
 - ngtrans additional issues due to IP4/IP6 transition?
 - Path MTU when router forwards to new care of address

Direct to C/O Address

Other issues with IP6 Mobility

AAA issues gate widespread deployment

- But not fully specified in RFCs
- IP6 AAA specifications moving target wrt mobility
 - Wireless operators conservative
 - Want to not be first to deploy

Operational experience questions in 3GPP etc

– Deployed in CDPD, applications, but not <u>as</u> RFC 2002

Service Providers have to support options

Not generally supported in IP4

- We have to make stationary IP6 servers support Home Address negotiation
 - May not be obvious to their vendors