

Technologies for IP Mobility and Multihoming Support Above Layer 3

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Mobile IP (MIPv4, MIPv6, & NEMO)

- These standards have a lot of momentum
 - ◆ First out the gate
 - ◆ Many companies developing products
 - Especially in NEMO world, for PANs, vehicular networks, etc.



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- Given these options, why should aeronautical networking care?
 - ◆ Want the strongest long-term solution; don't want a cumbersome upgrade path



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 - ◆ HIP
 - ◆ SCTP
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 - ◆ Sit between transport (L4) and network (L3)
 - ◆ Present static "address" to upper layers (transport/application)
 - call this *identifier*
 - ◆ Deal with dynamic network layer addresses, depending on point of physical attachment
 - call these *locators*



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- Can allow communication between IPv4 and IPv6 endpoints!
- Emphasis on end-to-end security
 - ◆ Transport mode IPsec ESP
- Hosts can have multiple identities and hide subsets of them from peers



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- Change-Primary
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- ADD-IP + Change-Primary = Soft Handovers



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- Shim/Wedge layer handles all the magic



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- Further research and development of alternative protocols is justified, **ALONGSIDE** work on Mobile IP
- I'm sure you have questions!

