MANETs

thomas.clausen@polytechnique.fr

Why...?

- Chartering process of AUTOCONF revealed divergent understanding: "we know, but haven't communicated well"

- MANET originated in routing area

- Now spreading to INT (AUTOCONF)

- Deployment scenarios, which may, in time, involve other WGs and areas

Where...?

- MANET?

- AUTOCONF?

- Elsewhere? (status quo)

- Since AUTOCONF brought the need of such discussion & document to light:

  ➡ first deliverable of AUTOCONF

What...?

- What is a MANET?

- Why is it different?

- What does MANET imply for IP / the IETF?

- Overriding question:

  - "Do we need to rework all IETF protocols in order to function on MANET?"

  ➡ NO!

"Traditional" Observations

- MANETs sport:
  - highly dynamic topology
  - fragile, low-capacity links
  - no dedicated infrastructure components

Example Differences

"Other" Networks	MANETs
Links form the network	Network forms the links
Broadcast Interfaces	Half-Broadcast Interfaces
Routing: diff. interfaces	Routing: same interface
Hierarchical ctrl. structure	Entirely "flat", decentralized
Sep. infrastructure/host	Both infrastructure/host
No, or macro-mobility	Yes - micro-mobility
...	...

Roadmap

- This IETF:

  - Solicit discussions on arch. I-D

- Post-IETF:

  - publish MANET architecture I-D

    - draft-autoconf-manet-arch-xx.txt

Reminder!

- Charter:

  - Oct 05   Submit 'MANET architecture' document for WG review

  - Apr 06   Submit 'MANET architecture' document to IESG for publication as aninformational RFC