Autoconf Problem Statement

MANET AUTOCONF
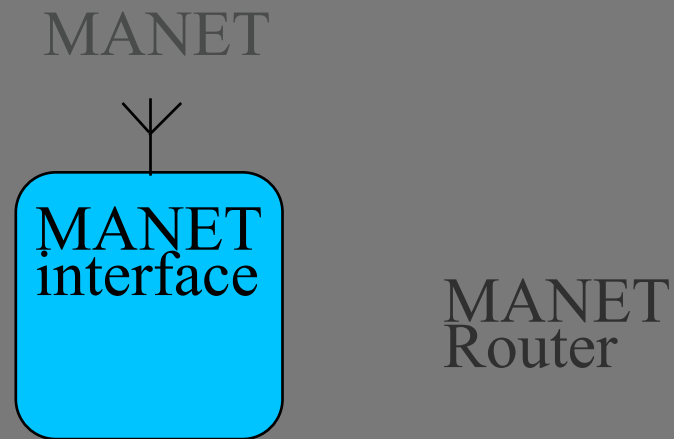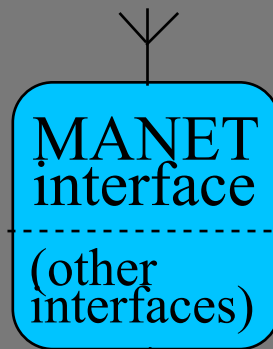
autoconfiguration of routers in a MANET

MANET

MANET
interface

MANET
Router

MANET AUTOCONF

autoconfiguration of routers in a MANET

Background

Terminology, scenarios, goals discussed since Vancouver.
Allow routers in a MANET to:

1. configure their MANET interface(s) with IPv6 addresses that are unique within the MANET .

2. be allocated IPv6 prefixes that are disjoint from prefixes allocated to other routers within the MANET.

3. maintain, within the MANET, the uniqueness of configured addresses and the disjoint character of allocated prefixes (even in case of network merging).

4. be allocated topologically correct prefixes, in the subordinate MANET scenario.

Applicability of DHCP

Corresponding Goals

1. configure IPv6 addresses that are unique within the MANET, on their MANET interface(s).

3. maintain, within the MANET, the uniqueness of configured addresses and the disjoint character of allocated prefixes (even in case of network merging).

4

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DHCP Assumptions

★ direct communication with server

★ communication through relay agent

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WRONG IN MANET's

Applicability of NDP/SLAAC

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NDP Assumption

★ a single multicast-enabled link

Applicability of NDP/SLAAC

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NDP Assumption

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Applicability of DHCP-PD

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DHCP-PD Assumptions

★ direct communication with server

★ communication through relay agent

Applicability of DHCP-PD

Corresponding Goals

2. be allocated IPv6 prefixes that are disjoint from prefixes allocated to other routers within the MANET.

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WRONG IN MANET's

Solution Requirements

See draft-ietf-autoconf-problem-statement-04

(14 requirements listed in Section 6.1.)

Next Steps

Improving draft-ietf-autoconf-problem-statement-04

★ list of requirements. Suggestions? Additions? Modifications?

★ security section. Need feedback/input.