Multiple Interfaces (MIF) Problem Statement

draft-blanchet-mif-problem-statement-01

MIF wg
IETF 75, Stockholm

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2009-07-28
Context

- draft-blanchet-mif-problem-statement-00
  - presented IETF 74 San Francisco MIF BOF
- This presentation is about -01
- Objectives of -01:
  - wording/content closer to charter
  - Integrate comments from BOF and mailing lists
  - Attempt to have more formal wording (such as Definition of a MIF host)
  - Use consistent vocabulary throughout the draft (eg. Node-scoped, ...)
- New co-author: Pierrick Seite (France Telecom/Orange)
Changes from -00 to -01
New Definition

- Definition of a MIF Host:
  - a [RFC1122] IPv4 and/or [RFC4294] IPv6 compliant host
  - configured with more than one IP addresses (excluding loopback, link-local)
  - on one or more active interfaces, as presented to the IP stack.
  - The interfaces may be logical, virtual or physical.
  - The IP addresses may be from the same or from different address families, such as IPv4 and IPv6.
Definition

● Definition of a MIF Host (continued):
  ● Communications using these IP addresses may happen simultaneously and independently
  ● While the MIF host may forward packets between its interfaces, forwarding packets is not taken into account in this definition.
  ● The IP addresses come from more than one administrative domains
    − "one or more than one" or "more than one"?
Changes (continued)

• Section « Related work »:
  • Added a section on Strong/Weak models from host requirements [RFC1122]
  • More text on address selection
  • Added discussion on ICE
  • Added section on API
    – Advanced socket API [RFC3542] used to specify source IP address or interface
    – Default address selection API [RFC5014]
Changes (continued)

- Section Symptoms
  - Each symptom is described with a (technical abstract) scenario.
  - DNS resolution
  - Routing
  - Address selection policy
  - Single interface on multiple networks
Changes (continued)

• Problems
  • Lists the underlying problems such as: routing tables, dns server addresses ... are usually node-scoped...
Next Steps

- Include section 3 of draft-williams-mif-problems-scenarios-00.txt for -02.
- Request to WG to accept this draft as MIF working group document.
Questions?

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Document:
• draft-blanchet-mif-problem-statement-01.txt