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Multihoming Status in MIPL2 and SHISA

Multihoming tests in NEMO environment

Current Status in MIPL2 (Linux)

Current Status in SHISA (*BSD)

Multihoming tests in NEMO environment

- ✧ **draft-kuntz-nemo-multihoming-test-02**
- ✧ **Tested Multiple Mobile Routers and Multiple NEMO-Prefixes**
 - ✧ 8 cases according to (X,Y,Z) classification
 - ✧ X = numbers of MR
 - ✧ Y = numbers of HA
 - ✧ Z = numbers of MNP advertised on Mobile Network
 - ✧ See *draft-ietf-nemo-multihoming-issues-02*
- ✧ **Test platform**
 - ✧ 2 MRs, 2 HAs, 1 CN, 1 MNN
 - ✧ Tested with both NEPL on Linux, and SHISA on NetBSD 1.6.2
- ✧ **Goals**
 - ✧ Evaluate the current support of multihoming on SHISA and NEPL

- x **MIPL2: Mobile IPv6 for Linux**

- x Developed by

- x Go-Core Project (HUT)

- <http://www.mobile-ipv6.org>

- x USAGI Project (WIDE)

- <http://www.linux-ipv6.org>

- x MIPL2-RC2 released on May 18th

- x Linux Operating System with 2.6.8.1 kernel

- x This is a **work in progress**

Current Status in MIPL2 - Features

x **Interface preferences**

- x We can define a preference for each network interface.
- x The most preferred one will be used to send/receive the traffic.
- x However, this feature is still under development.

x **Policy Routing**

- x We can define policies for Route Optimization

```
#          proto  type  code  route opt.
MnRoPolicy ICMP   129   0     enabled;
MnRoPolicy ICMP   any   any   disabled;

#          proto  sport dport  route opt.
MnRoPolicy TCP    80    any   enabled;
MnRoPolicy TCP    any   any   disabled;
```

x **Multiple Home Links**

- x MIPL2 is designed to handle multiple Home Links, thus multiple Home Addresses.

x **Multiple Care-of Addresses Registration**

- x Implementation is in progress on NEPL (NEMO implementation based on MIPL2-RC2)

- ✗ **SHISA : Mobile IPv6 for *BSD**

- ✗ SHISA homepage: <http://www.mobileip.jp>

- ✗ KAME Project: <http://www.kame.net>

- ✗ Released in summer 2004

- ✗ **NetBSD, FreeBSD, OpenBSD**

- ✗ This is a **work in progress**



- ✗ **Interface preference mechanism**

- ✗ User can define a preference for each network interface.
- ✗ The most preferred one will be used to send/receive the traffic.

- ✗ **Multiple Home Links**

- ✗ SHISA can register multiple Home Addresses to the same/different HAs.

- ✗ **Multiple Care-of Addresses registration**

- ✗ draft-wakikawa-mobileip-multiplecoa-03.txt
- ✗ Only for NEMO at the moment
- ✗ It is up to the user to create its own policies
 - ✗ On NetBSD, policy settings can be defined with **ipfilter**

✦ Thank you for listening

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