OpenHIP 0.8 release

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OpenHIP overview

- http://www.openhip.org
- open source (GPLv2) implementation originated by Boeing Research & Technology
- User-space support for Linux, OS X, and Windows hosts
 - Additional modes include VPLS and mobile router
- Current maintainers: Jeff Ahrenholz, David Mattes, Orlie Brewer, Tom Henderson

Features

Testing Status

feature	Linux kernel	Linux U-M	Win XP U-M	OS X U-M
IPv4 Base exch + ESP	0.4	0.8	0.8	0.8
IPv6 Base exch + ESP	0.3.4	0.8	X 1	
mobility	0.3.4	0.8	0.8	0.3.3?
NAT	X ²	0.8	0.8	0.7
RVS	0.3.3?	0.8		
DNS	Χ³	0.8	0.4	0.3.3?
DHT	0.3.1?	0.3.1?	0.3.1?	
mobile router	Х	0.8	Х	X
endbox	Х	0.8	Х	X
IPv6 over IPv4	X ²	0.8	0.3.4	
IPv4 over IPv6	X ²	0.6	X 1	

Key: 0.3.4 = tested with given version number, X = not supported, ()(empty space) = not yet tested, CVS = support in CVS version (next release)

Notes:

- 1. Windows disallows an IPv6 socket bound to protocol 50 (ESP)
- 2. Limitation due to using built-in Linux kernel implementation
- 3. Would require modified resolver or LD_PRELOAD

http://www.openhip.org/wiki/index.php?title=Usage



Use cases and new features

Traditional end-to-end HIP

- use IANA allocated HIP UDP port 10500 instead of 50500
- contribution from Alexander Kiening: process RVS addresses from DNS response
- BIND patch update
- OpenWRT support (ARM architecture)
- Several bugs fixed

Mobile Router

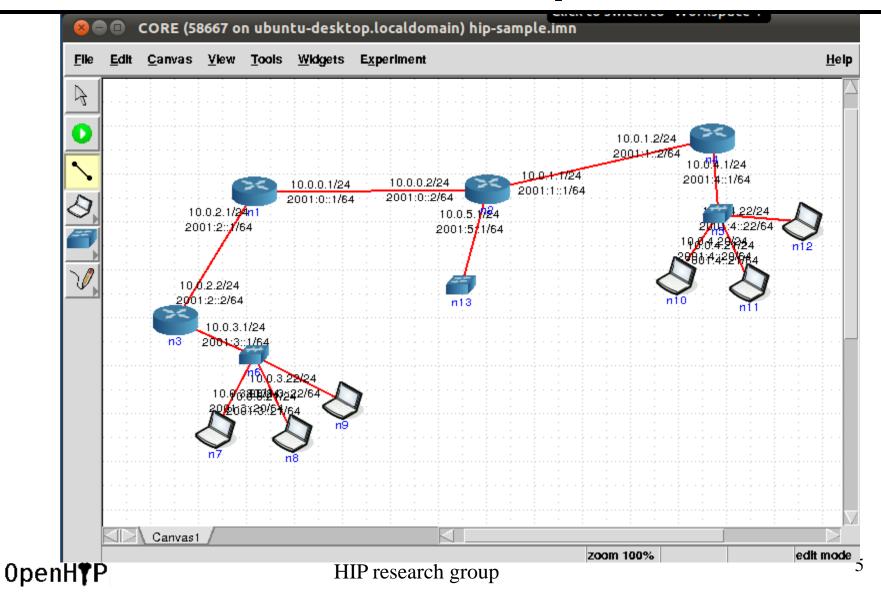
- allow a mobile node behind one mobile router to connect to a mobile node behind another mobile router
- double-jump support

HIP VPLS

IF-MAP configuration plugin



Mobile router capabilities



VPLS testing using CORE emulator

