

# HIPL – HIP for Linux

Status and „call for hands“

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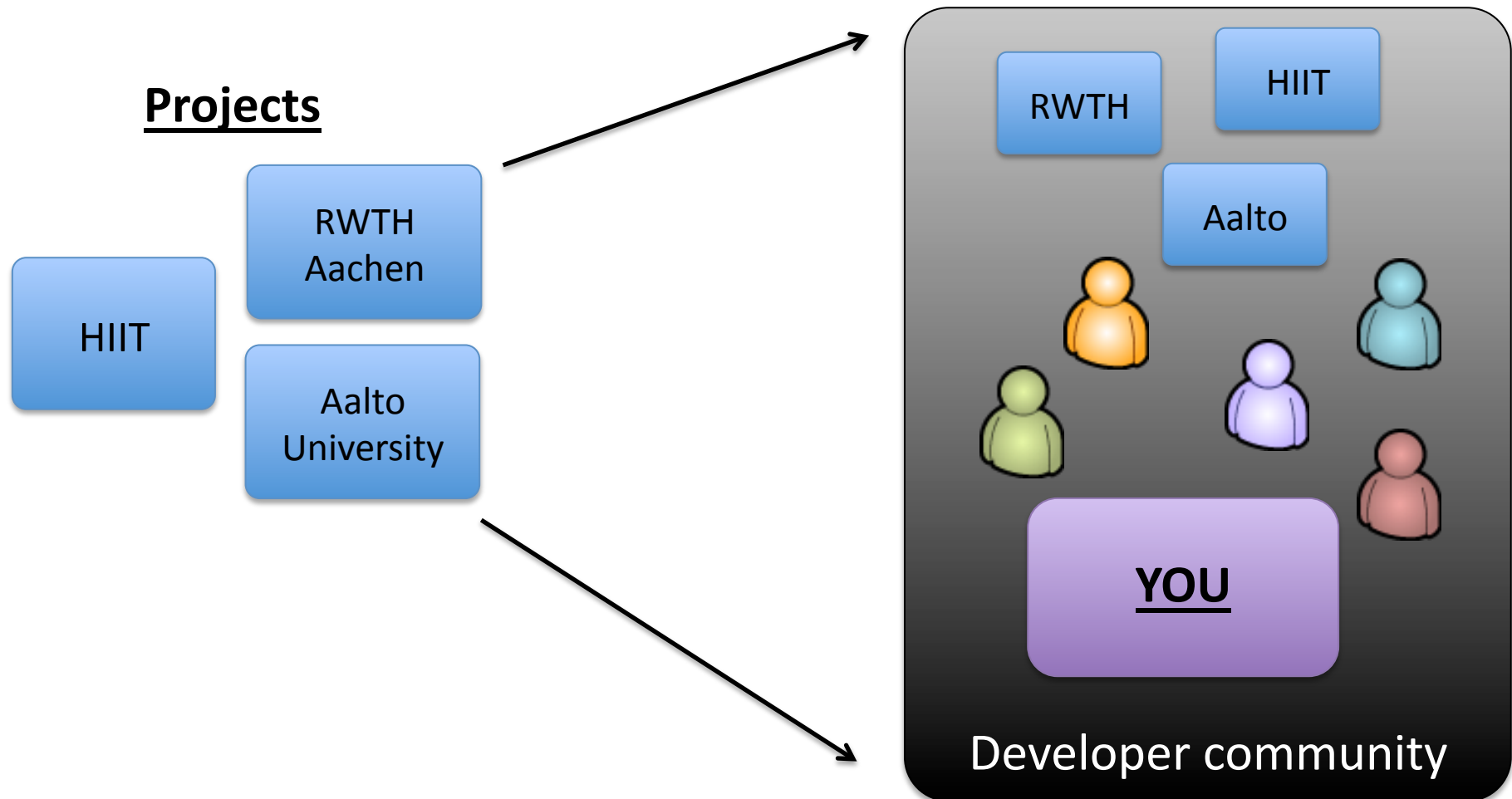


# What is HIPL

- “HIP for Linux” implementation of HIP
- Features
  - HIP handshake (RFC5201)
  - Mobility & multihoming
  - Firewall / HIP middlebox
- Platforms:
  - Linux
  - Embedded Linux (Maemo/n900, openWRT)
  - WIP: Android
- Framework to implement extensions



# The Future of HIPL Development



# Developer Community

- Transitioning to a more open developer base
  - Every one is welcome to contribute
  - Projects, individuals, companies
  - Coordinator [rene.hummen@cs.rwth-aachen.de](mailto:rene.hummen@cs.rwth-aachen.de)
- More attractive hosting
  - <http://launchpad.net/hipl/>
  - <http://www.ohloh.net/p/hipl>
- Mailing list <http://www.freelists.org/list/hipl-dev>
  - Intensive code reviews and discussion



# Why contribute?

- Get involved with an active OSS project
- Learn more about HIP
- Experiment with embedded and mobile Linux
- Get your code into HIPL
- Get help from active developer community

→ We are actively looking for developers

<http://launchpad.net/hipl/>



# User Community

- We'd like more feedback from community
  - What are you using HIPL for?
  - What features are you using?
  - Which features are good/bad?
  - Are there bugs that bug you?
  - What is missing?
- Contact us, subscribe to user mailinglist, irc
  - Contact: [rene.hummen@cs.rwth-aachen.de](mailto:rene.hummen@cs.rwth-aachen.de)
  - ML: <http://www.freelists.org/list/hipl-users>
  - IRC: <irc://irc.freenode.net/hipl>

# Future

- Focus on simple-to-use HIP mobility
- RFC5201-bis – Standards Track HIP
  - New Cipher Suites
  - New feature negotiation
  - More suitable for lightweight devices
- In-network security
  - HIP authentication towards firewalls
- Bridging heterogeneous networks
- Fully automated home VPN
- Cloud security and HIP

# Current Maintenance Efforts

- Refinement of functionality to be maintained
  - Removed experimental and unmaintained parts:
    - HIP proxy
    - DHT lookup and i3
    - And many more...
- Functionality was split into core and modules
  - Current focus on hipd
  - Modules: update, heartbeat, userspace ipsec
  - Modularization is still incomplete (code dependencies)
- Automatic compilation testing  
(on supported platforms)
- Automatic run-time testing



# Current Efforts (cnt'd)

- Construction of a permanent open test bed
  - PC as responder
  - WRT160nl as router/firewall
  - N900/netbook as initiator
  - Infrastructure (DNS)
- Infrastructure for continuous system testing
  - Simple packaging
  - Scripted runs
- Unit-testing for newly added code