manet
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IETF88  Vancouver
7th November 2013
Overview

• Implementation status on RIOT
• Implementation status on Linux
• Issues raised
• Source code sharing
• Next steps
Implementation Status

• RIOT [R(еаl-‐tиме) IoT] project at Freie Universität
  – ”The friendly Operating System for the Internet of Things.”
  – http://www.riot-os.org/
• Plan for code running on RIOT by Christmas
• RIOT user space has direct access to kernel
• RFC 5444 code running on RIOT (oonf API port)
• RREQ, RREP packets – being revised now
Linux implementation status

• Plan for code running on Ubuntu by Christmas
• Kernel interface via /dev/net/tun
  – Spent a long time messing with netlink interface
• Taking RFC 5444 code from RIOT (oonf api port)
• Hope to run on many modern versions of Linux
• Currently building on Ubuntu
  – Should work on all Fedorlas since version 12
  – Haven’t tried other systems, but will do for any system that has freeware downloadable ISO file
Issues raised: Issue #10

• #10 Reporting multiple broken routes whose metric types are different

Would save bytes over the air

Would require multiple Metric-Type message TLVs, one per addrblk
Issues raised: field names

- Suggestion: make naming in document consistent with RFC 5444
- Problem with description of “tail” bytes.
Other issues

• Some were raised by Sue Hares, need to check that these all were resolved.

• Any others?
Sharing

• Github and bitbucket repositories set up
• Not at all suitable yet for general consumption
• If interested, please contact me for more information.
• Open source available after it’s working.
Next Steps

- Interoperable implementations by Christmas
- Next draft revision within three weeks
- MPR integration (or other CDS)
- NS-2 Simulation
- NS-3 Simulation
- Possible integration with AODV-UU code
  - Run AODV2, OLSR and AODV in same network?