The Optimized Link State Routing Protocol v2

draft-clausen-manet-olsrv2-00.txt

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(on behalf of the OLSRv2 design team)

So what is OLSRv2?

- MANET std. track proactive protocol
- Evolution of OLSR(v1)
  - Fix minor nits
  - Improve extensibility
  - Directly inherited from OLSRv1:
    - identical algorithms, message exchanges - known protocol behavior
      - proactive link-state (HELLO, TC, ...)
      - MPR flooding
      - MPR link state dissemination
    - packet structure, headers, ...

Changes from RFC3626 to OLSRv2

- Ability to cancel prefix advertisements
  - Uniform treatment of HNA and TC messages from 3626
- Efficient address representation
  - Uniform treatment of IPv4 & IPv6
- Internal extensibility of messages
  - Reduce complexity
    - Avoiding need for explicit link between different messages
    - Ability to treat new pieces of information as “first class citizens”

Status & Background

- Phase 1:
  - Exp. RFCs (3626, ...), I-Ds
  - 1st OLSR Interop (San Diego, '04)
- Phase 2:
  - Washington / Minneapolis '05, DT discussions etc.
  - draft-clausen-manet-olsrv2-00.txt prior to Paris '05
    - 7 different contributing organizations

Status & Background

- Phase 3:
  - 2nd OLSR Interop (see later presentation)
  - Paris '05 IETF
    - Extreme Editing DT meeting Tuesday
  - Result (as of 4/8/2005):
    - completed draft-clausen-manet-olsrv2-01.txt
    - half-a-rationale document

Projected Documents from Design Team

- OLSRv2
  - specification (draft-clausen-manet-olsrv2-01.txt)
  - design rationale
  - interoperability report(s)
- Extensions
  - Link hysteresis
    - draft-clausen-olsrv2-link-hysteresis-00.txt
  - Fuzzy-sighted link-state
  - ....

The Road Ahead

- 8/8/2005
  - draft-clausen-manet-olsrv2-01.txt
    - (or draft-ietf-manet ?)
- ?/9/2005
  - Implementation review
    - draft-????-manet-olsrv2-02.txt
- Pre-Vancouver:
  - Interoperability test (3+ committed implementations)
  - draft-????-manet-olsrv2-03.txt