Snapshot of OLSRv2-Routed MANET Management

draft-ietf-manet-olsrv2-management-snapshot-01

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Reminder: What is it?

- Describes how, what and why OLSRv2-based MANETs are typically managed and monitored (as of July 2014)
 - Pre-deployment management (lower layer alignment, interface addresses, security material, constant "C")
 - Internal management (local process), external management (via NMS)
 - What to manage (message sending intervals, validity time of tuples, errors) + rationale
 - New: Typical communication patterns

What happened since WG adoption?

- Requested feedback from OPSAWG:
 - http://www.ietf.org/mail-archive/web/opsawg/current/msg03212.html
- Got very valuable responses that we integrated:
 - Thanks to David Harrington and Jürgen Schönwälder!
 - Added pointer to RFC5706 ("Guidelines for Considering Operations and Management of New Protocols and Protocol Extensions")
 - Included information about IESG statement regarding writable MIB modules:
 - http://www.ietf.org/iesg/statement/writable-mib-module.html
 - Added section 6 about typical communication patterns

New Section 6: Typical Communication Patterns

- Describes typical (management) communications patterns in an operating (post-startup) network, including efficient broadcast management operations using MPR flooding:
 - Inquire the state (complete topology graph, link states, and local links - even those not part of topology graph) of a router
 - Inquire the history/statistics of a router
 - Change the configuration of a router
 - Visualizing the network as a router sees it

Rekeying

Next Steps

Feedback from WG needed: any OLSRv2
management approaches in active
deployments that we do not capture (we can
only write about what we know)

 Would like feedback this week (if possible) and request to move to WGLC a week after Toronto

From IETF89 (for proceedings only): Motivation

- Request during IESG evaluation of RFC6779 (Benoit Claise, Ron Bonica):
 - Describe MANET management use cases ("how are MANETs managed")
 - Ron Bonica:

"This document fails to provide use cases. Because it doesn't provide use cases, it is not clear that any/all of its objects are useful. While this comment might be leveled concerning regarding MIB, it is particularly applicable in this case because we have so little operational experience with ad hoc networks. Will the ad hoc network include a NOC? What policy will that NOC attempt to enforce? What information/control will the NOC need to enforce that policy."

From IETF89 (for proceedings only): Motivation

- Document how the ad hoc networks that we know are actually being managed;
- Asking those building/operating such networks;
- And trying to generalize from that.
- Note: This draft does not intend to "replace" draft-nguyen-manet-management, which is much broader (not only OLSRv2 MANETs) and more prospective (many possible ways how MANETs could be managed, without evidence from deployments that they are managed that way)