ROLL Working Group Meeting
IETF-83, Paris, March 2012

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Co-chairs: JP Vasseur/Michael Richardson (David Culler)
ADs: Adrian Farrel / Stewart Bryant
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ROLL Working Group Meeting – IETF-83

1) WG Status (Chairs - 15 mn) [20]
2) The Minimum Rank with Hysteresis Objective Function draft-ietf-roll-minrank-hysteresis-of-06 - (Phil Levis - 5mn) [25]
3) Recommendations for Efficient Implementation of RPL (Phil - 5mn) [30] draft-gnawali-roll-rpl-recommendations-03
4) "Applicability Statement for the Routing Protocol for Low Power and Lossy Networks (RPL) in AMI Networks" - draft-ietf-roll-applicability-ami-05 (TBD - 10mn) [40]
5) Update on P2P (Emmanuel - 15mn) [55]
   1) * Update on the RPL P2P Work
   2) * Updated on draft-ietf-roll-p2p-measurement-02
6) Multicast requirements for control over LLN (Peter van der stok - 10mn) [65] draft-vanderstok-roll-mcreq-00
7) Experiences with RPL: IPv6 Routing Protocol for Low power and Lossy Networks - draft-clausen-lln-rpl-experiences-01 (Thomas - 10mn) [75]
8) Discussion on Security - 45 mn (Discussion led by Michael) [120]
   1) draft-dvir-roll-security-authentication (Amit - 10mn)
   2) draft-alexander-roll-amikey-lln-key-mgmt (Roger Alexander - 10mn)
   3) draft-qiu-roll-kemp-00 (QIU Ying - 10mn)
   4) Open Mic: 15mn
Charter Review and Milestones

• Welcome to our new co-chair: Michael Richardson and a warm “Thanks!” to David Culler

• Update on various documents
  • draft-ietf-roll-security-framework-06 => One Last DISCUSS
  • RFC 6550: RPL: IPv6 Routing Protocol for Low-Power and Lossy Networks
  • RFC 6551: Routing Metrics Used for Path Calculation in Low-Power and Lossy Networks
  • RFC 6552: Objective Function Zero for the Routing Protocol for Low-Power and Lossy Networks (RPL)
  • RFC 6553: The Routing Protocol for Low-Power and Lossy Networks (RPL) Option for Carrying RPL Information in Data-Plane Datagrams
Charter Review and Milestones

- **Cont’**
  - draft-ietf-roll-minrank-hysteresis-of => in RFC Editor Queue
  - draft-ietf-roll-p2p-rpl => Passed WG Last Call
  - No New WG Document
  - Several new revision of Applicability statement series: “Use of RPL in AMI Networks”
Layer-3 keying and security

- Three security problems to discuss
  - Two solutions to one
  - One solution to another
- The goal is to have a conversation,
  - not a presentation.
- We need to make some decisions.
IETF WG ROLL status as of today

Done Submit Routing requirements for Industrial applications to the IESG to be considered as an Informational RFC.
Done Submit Routing requirements for Connected Home networks applications to the IESG to be considered as an Informational RFC.
Done Submit Routing requirements for Building applications to the IESG to be considered as an Informational RFC.
Done Submit Routing requirements for Urban networks applications to the IESG to be considered as an Informational RFC.
Done Submit Security Framework to the IESG to be considered as an Informational RFC.
Done Submit Routing metrics for LLNs document to the IESG to be considered as a Proposed Standard.
Done Submit first draft of ROLL routing protocol specification as Proposed Standard.

Jun 2011 Submit first draft of RPL applicability statement for Industrial applications to the IESG to be considered as an Informational RFC.
Jun 2011 Submit first draft of RPL applicability statement for Building Automation applications to the IESG to be considered as an Informational RFC.
Jul 2011 Submit first draft of RPL applicability statement for Home Automation applications to the IESG to be considered as an Informational RFC.
Jul 2011 Submit first draft of RPL applicability statement for Urban applications to the IESG to be considered as an Informational RFC.
Oct 2011 Submit RPL applicability statement for Industrial applications to the IESG to be considered as an Informational RFC.
Oct 2011 Submit RPL applicability statement for Building Automation applications to the IESG to be considered as an Informational RFC.
Nov 2011 Submit RPL applicability statement for Home Automation applications to the IESG to be considered as an Informational RFC.
Nov 2011 Submit RPL applicability statement for urban applications to the IESG to be considered as an Informational RFC.
Dec 2012 Evaluate WG progress, recharter or close.