IETF 114 Babel / ROLL / MANET
Joint session on multicast routing
29 July 2022

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Note Well

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
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- Use of a headset is strongly recommended
Resources for IETF 114 Philadelphia

- Agenda
  https://datatracker.ietf.org/meeting/agenda
- Meetecho and other information:
  https://www.ietf.org/how/meetings/114/preparation
- If you need technical assistance, see the Reporting Issues page:
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Resources for this session

● Presentation slides
https://datatracker.ietf.org/meeting/114/agenda/manet-drafts.tgz
https://datatracker.ietf.org/meeting/114/agenda/manet-drafts.pdf

● Meetecho / On-site tool
https://meetings.conf.meetecho.com/ietf114/?group=manet&short=&item=1
https://meetings.conf.meetecho.com/onsite114/?group=manet&short=&item=1

● Notepad (Please volunteer)
https://notes.ietf.org/notes-ietf-114-manet
1. Chairs' Introduction (5 min)
   ○ Note Well, etc.
   ○ Agenda bashing

2. Introduction to joint session (5 min)
   ○ Purpose – joint chairs

3. Multicast in MANETs
   ○ Ronald in 't Velt (15 min)

4. Let's talk about the IP multicast data plane
   ○ Henning Rogge (15 min)

5. Multicast in IEEE 802.11s
   ○ Donald Eastlake (15 min)

6. BIER for Babel
   ○ Zhang Zheng (15 min)

7. Multicast in LLNs - TBD (20 min)

8. Discussion - all (15 min)
   ○ Commonalities / Need for protocol action / Operating System aspects

9. Wrap-up of multicast session (5 min)
   ○ joint chairs

10. Exciting features of the Babel routing protocol
    ○ Juliusz Chroboczek (10 min)
Introduction to joint session

• Prompted by a conversation Donald Eastlake had with the Routing ADs at IETF-113,. The suggestion was made to have a joint BABEL / MANET / ROLL WG meeting on the topic of multicast. According to the ADs: “All three Working Groups, BABEL, MANET and ROLL, have considered multicast but not made much progress in that direction.”

• Presentations today should provide insight into challenges of (and potential solutions for) multicast in wireless mesh networks / MANETs / LLNs. They will hopefully also make clear to what extent the ADs assessment is true.
Discussion

- What are the commonalities / differences in the Babel / ROLL / MANET use cases and challenges?
- Are there existing solutions that would apply?
- What actions can be taken that are within scope of the IETF (Routing Area)?
- What actions could be taken elsewhere? (e.g., changes to OS kernels)
- ...