

Simplified Multicast Forwarding (SMF) Progress/Issues

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SMF Document Progress/Intent

- Version -02 was posted prior to last IETF
- -03 planned post Montreal for following reason
- WG discussions led to agreement to produce common approach to Neighborhood Discovery Protocol (NHDP)
 - NHDP recently drafted
- Next revision of SMF -03 will remove section 7 from -02 which defines an NHDP approach in some detail
- PLAN: Document will conform to WG NHDP ID
- TLV review/revision in context of NHDP to support the multiple CDS approaches
 - MPR, E-CDS types are presently specified in document and implemented in running code
- Revision should provide a complete implementation approach for people wishing to develop experimental prototypes and will be consistent with common WG mechanisms in progress

Running Code Options

- SMF can be an independent stand-alone MANET multicast protocol
 - Can operate without a unicast protocol if desired
 - Without NHDP: Classical flooding supported, duplicate detection
 - With NHDP: Enables presently defined CDS optimizations
- SMF can work alongside a MANET unicast protocol that is already running NHDP or maintains CDS information
 - Present experimental prototype uses OLSRv1 NHDP for CDS information: modified to provide both E-CDS and MPR capability

Further Planned Work

- Section 9 of -02 discusses SMF Multicast Border Gateway Considerations
- Present work is now ongoing to investigate PIM<->MANET SMF gateway approaches
- Present common architectural approach is to make MANET area look like a subnet (common prefix) to PIM gateway router
- IGMP/MLD methods can vary
 - E.g., proxy vs. MANET extensions (Ruiz work)
- This section will discuss issues but will not dictate methods since valid deployment requirements may vary
 - Need for recommended practices in this EXP document?
- Additional TBDs (e.g., multiple gateways)

SMF MIB

- No present work being done
- Interested parties in developing an early draft?