Multimob BoF IETF-75

Charter Discussion

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Charter… (1 of 3)

The Multicast mobility (multimob) will develop protocol extensions and provide guidance for supporting *IPv6 (and also IPv4) multicast in a mobile environment*. It will consider both source specific multicast (SSM) and any source multicast (ASM) multicast models. The scope of work will be *limited to Proxy Mobile IPv6, MLD/IGMP protocols and listener mobility*. Work requiring modifications of multicast routing protocols is out of scope.

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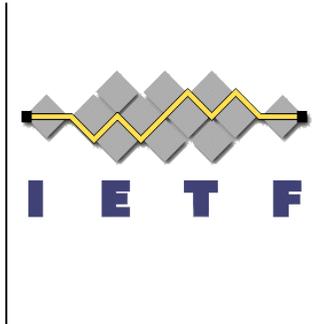
The Proxy Mobile IPv6 (PMIPv6) specification as defined in RFC 5213 does not explicitly define support for multicast. The WG will work on solutions for multicast support in PMIPv6. It will document **basic support for multicast with remote subscription**. Such basic support will not require any additions or changes to RFC 5213 specified message types and parameters, and will assume an unmodified mobile host. Remote subscription is a mechanism by which a mobile node joins a multicast group and receives multicast data forwarded via the local mobility anchor. **If required, basic multicast support may be extended to support optimizations to address the avalanche problem and fast handover**.

Charter… (3 of 3)

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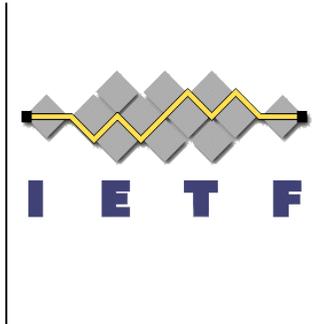
IGMPv3/MLDv2 has been specified for wired networks with shared links. Mobile nodes also have other needs that are specific to wireless networks and mobility (e.g. entering a dormant mode to conserve battery power, minimising the latency for joining and leaving a group in support of movement).

The WG will assess existing solutions for group management, and determine if these methods are sufficient in a mobile environment. This will include recommending appropriate selection of timer values and protocol parameters. ***If current methods are not sufficient, the WG shall specify updates to existing protocols***. It is a goal for the WG to ensure backward compatibility with current implementations of group management protocols. New IGMP/MLD message types may be specified to optimize mobile performance. Since these could be ignored, dropped or improperly forwarded by existing hosts, switches, routers and proxies, these will not be necessary for proper IGMP/MLD performance, albeit with a partial or total loss of the intended performance optimization in deployments that do not fully support them.
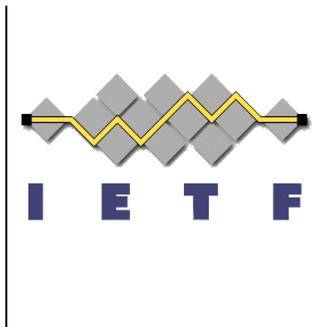
Charter Milestones

- Six months:
  - Submit a document explaining use of multicast in PMIPv6, for publication as an **INFO/BCP RFC.**
  - Submit a document on how to tune MLD for mobility, for publication as an **INFO/BCP RFC.**

- One year:
  - Submit a document on extensions for multicast mobility in PMIPv6 as an **EXP/PS RFC.**
  - Submit a document on IGMP/MLD extensions for multicast mobility as an **EXP/PS RFC.**

QUESTIONS
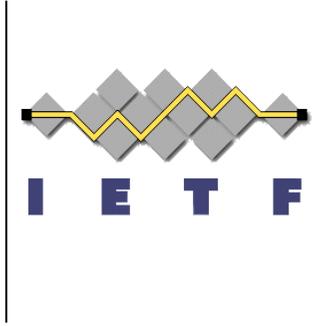
1. Is the charter clear, well-scoped, solvable, and useful to solve?

2. Who thinks that additional MLD support is needed for mobile multicast?

3. Who is willing to contribute to or review the MLD documents?

4. Who thinks that PMIP support multicast should be documented?

5. Who thinks we need to also look at traffic optimisations for multicast transmission in PMIP?

6. Who is willing to contribute to or review such PMIP documents?

OPEN MIC….

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