Requirements for the extension of the MLD proxy functionality to support multiple upstream interfaces

<draft-ietf-pim-multiple-upstreams-reqs-03>

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Purpose and Content

• Purpose
  • To define the functionality that an IGMP/MLD proxy with multiple upstream interfaces should have in order to support different scenarios of applicability in both fixed and mobile networks

• Content
  • Problem statement
  • Scenarios of applicability (*more detail in next slide*)
  • Requirements for these scenarios are identified
  • Security considerations
Scenarios of applicability

- Multicast wholesale offer for residential services
- Multicast resiliency
- Load balancing for multicast traffic in the metro segment
- *Network merging with different multicast services*
- **Multicast service migration**

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<th>Functionality</th>
<th>Multicast Wholesale</th>
<th>Multicast Resiliency</th>
<th>Load Balancing</th>
<th>Network Merging</th>
<th>Network Migration</th>
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Document’s history and Next Steps

• Adopted after IETF 92nd (Dallas)
  – Problem presented to different WGs before (originated in MULTIMOB)

• Some initial security considerations added in -01 presented in IETF 94

• Version (-02 &) -03 includes two new applicability scenarios

• Next steps:
  – Add mobile network scenarios?
  – Collect input and comments from the WG on the use cases and requirements for new version in next IETF meeting
    • How to mobilize PIM WG community for this?
  – Goal: publish it as Informational RFC
BACKUP SLIDES
Problem statement

- General application:
  - Sharing of a common network access infrastructure among different multicast content providers

- Advantages
  - Subscribers can get their preferred contents from different multicast content providers without network constraints and without requiring PIM routing on the access / aggregation device
  - Redundancy