IETF Berlin

draft-wijnands-pim-source-discovery-bsr-03

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Problem Statement

- Highly redundant Multicast network.
- No single point of failure.
- Simplification.
- Supports source discovery.

Problem Statement

- This sounds a lot like PIM SSM, no?
- Yes, it does ☺
- But, source discovery remains to be challenging in order to do SSM.
  - applications not capable.
  - IGMPv3 not available.
  - Sources not known in advance.
- SSM Mapping often used otherwise.

Problem Statement

- This proposal focuses on a specific sort of deployment where;

- The sources are not known in advance.

- Its not important to deliver the first (couple) of packets.

- Relatively low number of flows < 10K

Solution

- The First Hop Router (FHR) detects a active source.
  - The packet is NOT PIM registered.
- It uses RPF flooding to distribute the Source – Group mapping in network.
- Last Hop Routers that receive the SG-mapping and have local interest join the (S,G) tree via PIM.

Generic RPF flooding

- As defined in this draft (S,G) mappings is one application
- It seems that more features could benefit from a generic flooding mechanism for PIM.
- We generalized the BSR encoding to have TLV's, such that other mappings can be distributed easily.

Generic RPF flooding

- Is there interest in a generic flooding mechanism?

- Should we separate the draft in a generic flooding mechanism and applications of it?

Going forward

- Like to get feedback from the group.

Questions?