Fast Notification Framework
draft-lu-fast-notification-framework

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• Clarification of Goals
• Development on Transport Methods
• Emerged applications
Goals

- Build infrastructure for quick dissemination of the bad news
  - namely link/node failures;
- Fast notification to benefit its receivers in multiple ways
  - Enable them to perform actions which are otherwise either difficult or impossible;
  - Allow coordinated actions for better network-wide convergence
- Not replacing IGP protocols, nor their flooding schemes.
  - But to serve them better
Transport Methods

Draft-lu-fn-transport-01.txt

1. Various methods were studied and evaluated
   - Tree based vs. non-tree based
   - Simplicity, flexibility, security, resilience

2. Some intermediate approach for
   - Quick prototyping
   - And concept proving

3. Ultimate goal for
   - Perfect coverage, reliability, easy of use,
   - And deployability
List of Methods

1. Redundant trees
2. Unicast method
   - no forwarding change, for quick prototyping
3. Gated Multicast thru RPF check
   - Using existing SPT, RPF for loop prevention
4. PIM-BiDir
5. SPT-elect-root
6. Bridged-flooding
   - Non-tree based, permeate
7. Messaging
8. Auth
Applications

• draft-kini-ospf-fast-notification-01.txt
  a. The remote boxes become aware of the failure sooner
  b. They use the earned time to do SPF and RIB/FIB downloading
  c. Safety measures are taken

• draft-csaszar-ipfrr-fn-00.txt
  a. redundant trees for fn, can survive node failure
  b. a different approach for achieving ipfrr.
  c. Only two trees, vs many trees: Not-via.
Open topics

• Authentications
  – Area-wide vs link-scope
  – DoS attack (replay attack)

• Messaging
  – False alarm, sequence number

• Packet drop
  – Fn gets lost
WG Adoption

• The Authors would like to request
  – The work group adoption of this draft
Thank You