Hierarchical OLSR

draft-lacharite-manet-holsr-02 Update

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Updates Overview

- Editorial changes:
  - Terminology additions, text clarifications, references, acknowledgments, appendix and updated message layout

- Novelty changes:
  (Comments from manet mailing-list duly noted)
  - Cluster Decommission
    - To increase robustness and avoid possible network partitions, cluster heads are permitted, in specific cases, to abandon their “head” status
Decommission Rules

- Requirements for a cluster head to decommission:
  - (i) Parameter C_CRITICAL_PATH set to ‘true’ on one level/interface, AND
  - (ii) Lose all connections/links on that interface

- Reviving cluster “head” status
  - When the interface C_CRITICAL_PATH has at least one link successfully reinstated
Basic Decommission Example

1) Lost link on critical path – level 3

Cluster A
Cluster B
Cluster C
Cluster D
Cluster E
Cluster F

Level 1
Level 2
Level 3

Overall Cluster

link lost
Decommission Example Cont’d

2) CIA Decommission messages (-1) are triggered
Decommission Example Cont’d

3) Nodes are free to select closest available cluster head (+1)
Decommission Example Cont’d

4) Decommissioned nodes join cluster C
Discussion / Questions