IP over Intentionally Partially Partitioned Links

draft-nordmark-intarea-ippl-05
Erik Nordmark

Refresh our memory

- Looks to IPv4/6 as a link; has subnet prefix
- Doesn't forward packets at L2 uniformly
  - Typically hosts can talk to routers but not H-2-H
- Several examples
  - Split horizon for DSL (TR-101)
  - Private VLANs (RFC 5517)
- Private VLANs is superset
  - Promiscuous, community and isolated ports
  - Allows multiple promisc i.e. multiple routers

Document Updates

- Added section on DHCP implications (Sowmini)
- Added section on redirect implications - need to disable them
- Added Appendix on Layer 2 Implications (Mikael)
- Earlier revision: added text about Proxy ND [RFC4389] (Dave Thaler)

Next steps

- Seems to be a de-facto WG document
  - Should we formally make it so?
- Is this useful?
- Can we move it to a WG last call?

Backup slide: Protocol issues

- ARP
  - Proxy-ARP and ACD (RFC 5227) requires care
  - ARP request from one router answered by other rtr
- IPv6/ND
  - Proxy-DAD (RFC6957) works even with dual routers
  - RA with L=0 works for global addresses
  - Optionally forward/proxy link-locals with dual routers
- Disable upstream multicast
  - Downstream does not result in duplicates
- Disable sending redirects on the routers