

intarea working group IETF94

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I E T F

Agenda

- Identify note taker and jabber scribe
 - Please volunteer
- WG & Document Status
- Agenda Bashing

Document Status

- draft-ietf-intarea-gre-ipv6-02
 - Published as RFC7676
- draft-ietf-intarea-tunnels-01
 - Updated in July, discussions ongoing on list
- Two new drafts adopted since the Prague meeting
 - draft-ietf-intarea-hostname-practice-00
 - draft-ietf-intarea-adhoc-wireless-com-00

Agenda

- Tunnels draft update, Mark Townsley, 10 minutes
 - draft-ietf-intarea-tunnels-01
- Multicast Update from IEEE, Dan Harkins, 15 minutes
- GRE Tunnel Fragmentation, Fred Templin, 5 minutes
 - draft-templin-intarea-grefrag
- IP over intentionally partially partitioned links, Erik Nordmark, 5 minutes
 - draft-nordmark-intarea-ippl
- Yang data model for GRE, Vero Zheng, 5 minutes
 - draft-zheng-intarea-gre-yang-00
- YANG data model for Tunnels, Ing-Wher Chen, 5+5 minutes
 - draft-liu-intarea-ipipv4-tunnel-yang-00
 - draft-liu-inarea-gre-tunnel-yang-00
- IEEE 802.15.llc (Logical Link Control), Charlie Perkins, 5 minutes

Announcements

(Please review these drafts)

Considerations for broad- and multicast protocol designers

- You constantly broadcast “yourself”
 - E.g. Dropbox, Spotify, BitTorrent Sync...
- Rich pool of data to combine
 - Persistent IDs, Hostnames, links between people, message frequency...
- Hard to encrypt, hide or protect in any way
- Easy to collect – passively listening
- <https://tools.ietf.org/html/draft-winfaa-broadcast-consider-01>

Dynamic GRE Tunnel Mechanism

- **Motivation:** For large scale usages, GRE tunnels should be auto-configurable and dynamically manageable
- **Discovers AR (Tunnel Concentrator) by DHCP**
 - To set up a GRE tunnel, a WTP sends a **DHCP Request** to DHCP server to obtain the GRE relevant configuration parameters
 - DHCP Server replies the **DHCP Reply** to WTP with AR address in a **DHCP GRE Discovery (GD) Option** (below)

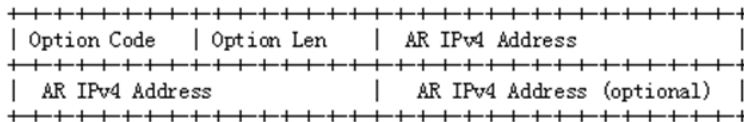


Figure 5: DHCPv4 GRE Discovery Option



Figure 7: DHCPv6 GRE Discovery Option



Figure 6: DHCPv4 GRE Information Option

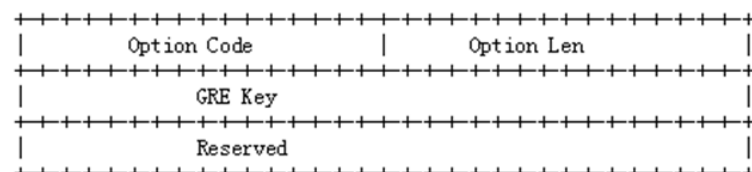


Figure 8: DHCPv6 GRE Information Option

- **The GRE tunnel is set up after WTP receives DHCP Reply with DHCP GD Option**
 - AR learns WTP via the received GRE encapsulated packet from WTP