YANG Data Model for ARP

RTGWG IETF 101

draft-ding-rtgwg-arp-yang-model-01

Xiaojian Ding, Huawei
Feng Zheng, Huawei
Robert Wilton, Cisco
Recap

• This draft was firstly discussed in last RTGWG meeting in Singapore and there was agreement to proceed this work in RTGWG working group.

• After IETF 100 Singapore meeting, comments were received from Reshad Rahman and Robert Wilton from Cisco in rtgwg mailing list, Alex Campbell from Aviatnet in the netmod mailing list.

• Update since last IETF 100:
  – Aligned with RFC 7223bis & RFC 7277bis
  – Removed VRF related parameters in version -00
  – Clarified the relationship of static ARP entries configuration in RFC 7277bis
  – NMDA compliant
  – New co-author (Robert Wilton)
Why this draft in RTGWG

• Different vendor has different private YANG module to implement ARP functions (e.g., aging (timeout(vendor A), expire-time(vendor B)), interval (detect-interval(vendor A), arp-interval(vendor B))).
• Each private model requires vendor specific mapping.
• Service providers need many interoperability test tool to manipulate massive devices running proprietary ARP from various different vendors.
• This YANG model will be useful for service providers running BNGs (Broadband network gateway) with tens of thousands of subscribers per BNG which perform proxy ARP.
Model Overview

Static ARP entries

Dynamic ARP learning

Global statistics

Local statistics

Statistics

Query of ARP entries
Next Steps

• Have addressed comments received so far.

• Ask for WG adoption