
IPv6 at the coal face: IP layer implications

APNIC 27

February 25th – Manila, Philippines

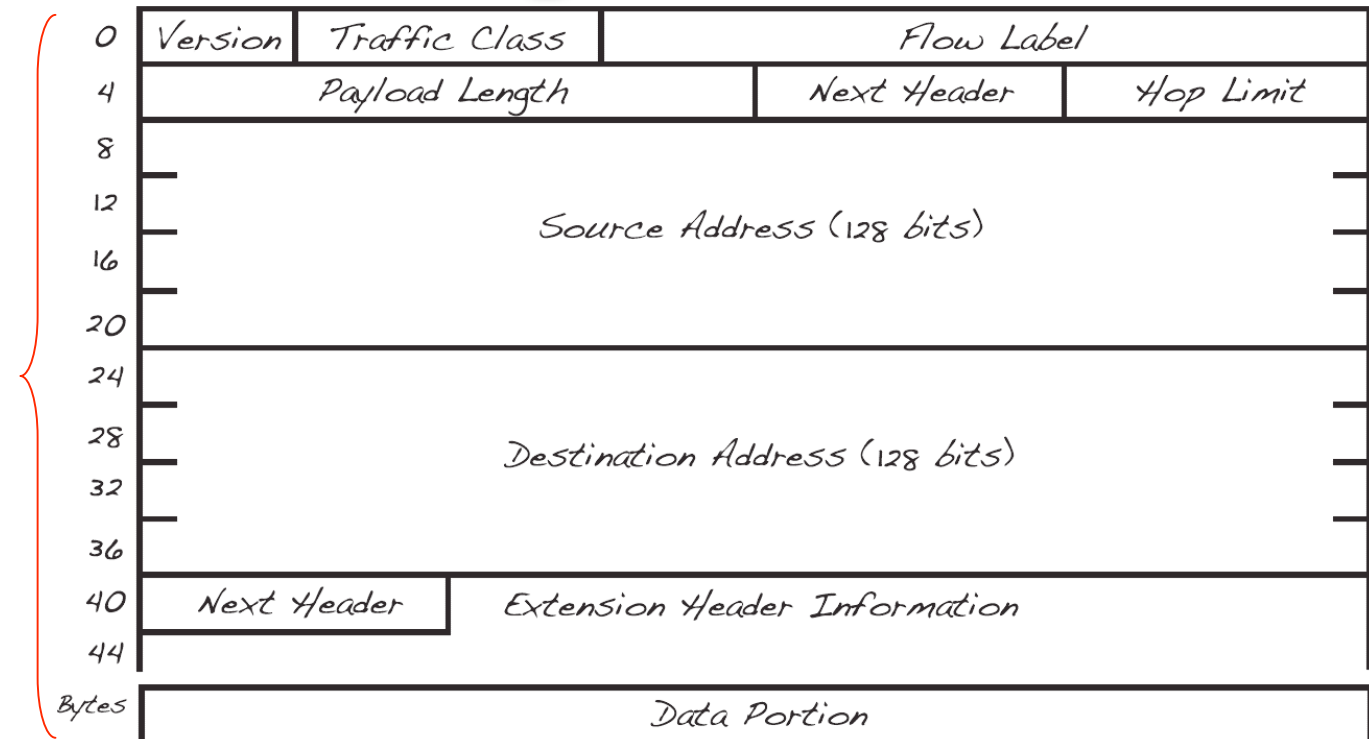
Martin J. Levy, Director IPv6 Strategy
Hurricane Electric

Hurricane Electric – IPv6 IP layer implications

Layer 7
Layer 6
Layer 5
Layer 4
Layer 3
Layer 2
Layer 1

The IP layer

This is where IPv6 lives
This is where it all matters



Hurricane Electric – IPv6 IP layer implications

12/2012

Two years till IANA runs out of IPv4 address blocks

One Year till IANA runs out of IPv4 address blocks

Projected IANA Unallocated Address Pool Exhaustion: 10-Mar-2011

One Year till RIR's (ARIN, RIPE, APNIC, LACNIC, AfrNIC) run out of IPv4 address blocks

Projected RIR Unallocated Address Pool Exhaustion: 01-Jun-2012

Dates from Geoff Huston at <http://www.potaroo.net/tools/ipv4/index.html>

Hurricane Electric – IPv6 ready? – quick recap

- Applied for and got IPv6 address allocation from RIR? ✓
 - Picked hardware & firmware? ✓
 - Enabled IPv6 (dual stack) everywhere? ✓
 - IPv6 peering & global connectivity? ✓
 - Built IPv6 routing for customer interconnections? ✓
 - Reverse-DNS & other backbone IP layer offerings? ✓
 - Evangelized IPv6 excessively? ✓✓✓
 - Saw real use from customers? ✓
-
- We're done! The problems at the other layers





Contact:

Martin J. Levy
Hurricane Electric
760 Mission Court
Fremont, CA 94539, USA
<http://www.he.net/>

martin at he dot net
+1 (510) 580 4167