

Internet Engineering

241-461

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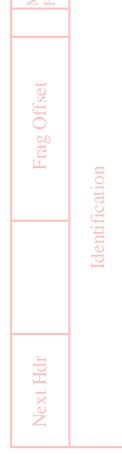
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IPv4 Mapped Addresses

- ◇ 2002:a.b.c.d:SLA:EUI-64
 - Cannot be written this way
 - Must use
 - ▷ 2001:AABB:CCDD:SLA:EUI-64
 - a.b.c.d must be a global IPv4 address
- ◇ Any site with an IPv4 address
 - can use this as an IPv6 prefix
 - IPv4 internet is the IPv6 backbone

IPv6 Fragment Header



- ◇ Fragment Offset & MF
 - Identical to IPv4
 - Except now flags are where they belong
- ◇ Identification
 - Identical purpose, but 32 bits
 - Less chance of accidental collision
- ◇ DF
 - Not needed

IPv6

- ◇ **Requires use of Fragment header**
 - Only source nodes add headers
 - Only source node can fragment packets
 - ▷ No router complexity
- ◇ **No overheads when no fragmentation**
- ◇ **PMTUD is required**
 - Or packets must remain smaller
 - than guaranteed PMTU
 - ▷ 1280 for IPv6