MASQUE IP Proxying Requirements

Updates & GitHub Issue Discussion

draft-ietf-masque-ip-proxy-reqs
Updates since IETF 109
IP Addressing

- **Clarified server requesting an IP** - Previously the requirements incorrectly indicated this was a necessary function for the network-to-network case. This text has been removed; the server may request a range if it so desires but the client may decline the request.

Resolves issue #3
Authentication/Authorization

- **OAuth is explicitly an example** - Previously the requirements incorrectly indicated OAuth was the only authentication/authorization mechanism that will be supported. This was not intended; OAuth is an example.

  Resolves issue #5
Load balancing

- **Load balancing moved to Extensions** - Load Balancing is now purely marked as an extension rather than a core requirement.

- **Multi-threaded language removed** - IETF 109 indicated this was controversial and unnecessary.

- **Multi-session Load Balancing called out as desirable** - but not required.

Resolves issues #9 and #11.
Packet formats

- **Permit packet format extensions** - Previously the requirements indicated that packets must be forwarded in their unmodified entirety. This has been loosened to must be *capable* of forwarding unmodified packets, and extensions may add additional features such as compression.

  Resolves issue #13 and partly resolves #10.
Terminology

- **Small rephrasings** - The relationship between Data Transport and IP session has been clarified; the term "IP proxying session" removed.

Resolves issue #16
Open Issues
Addressing Architecture

- **Issue #12** - Ongoing discussion on NAT being a core protocol feature or an extension
Linking Requirements

- **Issue #2** - Plan to add cross-references after incorporating any other suggestions after this Interim.
Addressing Examples (if needed)
Addressing Example - Point to Network

- (These addresses are internal to the tunnel)
- Client: can I have address range please?
  - Server: 2001:db8:b::/64 is yours!
    - Inside the tunnel, only packets to/from that range are allowed – client drops received tunneled packets to other destinations, server drops received tunneled packets from other sources
- Server: I can let you reach 2001:db8::/32
  - Inside the tunnel, only packets to/from that range are allowed – server drops received tunneled packets to other destinations, client drops received tunneled packets from other sources
Addressing Example - Point to Point

- Point to point is a special case of point to network.
- Client: can I have address range please?
- Server: 2001:db8::b/128 is yours!
- Server: I can let you reach 2001:db8::a/128
Addressing Example - Network to Network

- Server: I can let you reach 2001:db8:a::/48
- Client: I can let you reach 2001:db8:b::/48
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