MASQUE IP Proxying Requirements

Updates & GitHub Issue Discussion

draft-ietf-masque-ip-proxy-reqs

Updates since IETF 109

draft-ietf-masque-ip-proxy-reqs - MASQUE Virtual Interim - 2021-01

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



Addressing Architecture

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

Linking Requirements

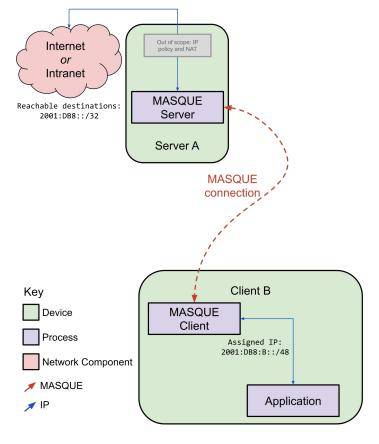
• **Issue #2** - Plan to add cross-references after incorporating any other suggestions after this Interim.

Addressing Examples (if needed)

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Addressing Example - Point to Network

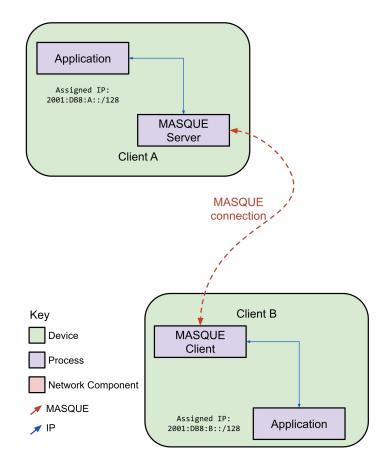
- (These addresses are internal to the tunnel)
- Client: can I have address range please?
- Server: 2001:db8:b::/64 is yours!
 - Inside the tunnel, only packets to/from that range are allowed – client drops received tunneled packets to other destinations, server drops received tunneled packets from other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



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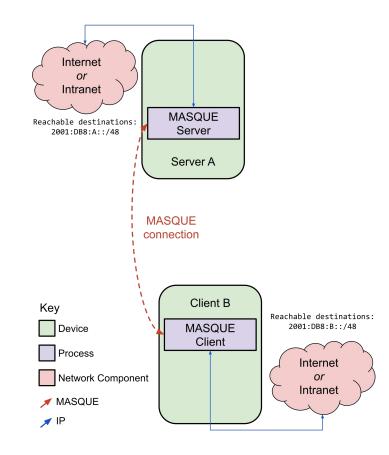
Addressing Example - Point to Point

- 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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