Ethernet Proxying Support for HTTP

draft-asedeno-masque-connect-ethernet-00

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Existing and upcoming HTTP/MASQUE standards

Layer 4 - HTTP CONNECT method (tcp)

Layer 4 - RFC-9298 - Proxying UDP in HTTP (connect-udp)

Layer 3 - draft-ietf-masque-connect-ip - Proxying IP in HTTP



Proposed work

Layer 2 - draft-asedeno-masque-connect-ethernet - Proxying Ethernet in HTTP

Why do we need Layer 2?

Isn't connect-ip sufficient?

Usually, yes! If Layer 3 is all you need, please use connect-ip!

Existing Layer 2 VPN solutions show there is a need for them, and having one in the MASQUE toolbox is valuable.

If you want to handle some non-IP based protocols or bridge ethernet segments, Layer 2 is for you.

Why not something else?

GUE
Can't we just run EtherIP over connect-ip?
L2TP

Yes, but:

- More layers of tunneling == more complexity
- Consumes more MTU

How does it work? 10,000 ft (3048 m) view

Take connect-ip and

- Tweak it to work on Ethernet Frames instead of IP Packets
- Drop everything having to do with address assignment and routing



Does it work?

Prototype implementation is in Google QUICHE.

What's next?

The draft is a -00 and plenty still need to be fleshed out.

Gauging interest from others on additional implementations.

Gauging interest from the WG on adopting the draft.

Questions?

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