

members
services
workshops
about
research
connecting
links
sitemap
contact
faq
press
private



This is the most basic service that **Internet Exchange Points** provide. Internet Service Providers connect to TREX and sign up for peering so that they can exchange their customers' traffic between each other.

Members can include this button or logo on their websites:

The Member **Requirements** for the peering service are on a separate page, because they are common to some other services. One of the requirements is to **peer with the exchange point itself**.

Address Generation

The turku peering LAN addressing is IPv6 only, but IPv4 peering can be accomplished using **RFC5549**¹ / **RFC8950**². It's important to use next-hop-self in IBGP in case the IPv6 next-hops for IPv4 routes are not supported by all routers inside the network. The IPv6 addresses on this VLAN are formed as follows:

```
2001:07F8:001D:0007:0000:ASHI:ASLO:RTRN
```

where ASHI This is the upper part or high 16 bits of the **AS** number in hexadecimal.

ASLO This is the lower part or low 16 bits of the **AS** number in hexadecimal.

RTRN This is the router number, usually 0001, but if the member has more than one router this can be higher.

Examples: AS29432 becomes 0000:72F8 and AS197032 becomes 0003:01A8.

¹<http://tools.ietf.org/html/rfc5549>

²<http://tools.ietf.org/html/rfc8950>

MAC Addresses

At this stage we are not restricting the use of MAC addresses on the shared medium, but we wish that members use the MAC addresses generated by the algorithm that follows. We are using the local OUI 0E-xx-xx on the shared medium:

0E:RN:AS:HI:AS:LO

So again, the two exchange point routers would become:

0E:01:00:00:72:F8 and
0E:02:00:00:72:F8