This is a retired service. The normal unicast peering VLAN is now MTU 9000.

This is essentially identical to the normal **Unicast Peering** service apart from the fact that the peering medium has a higher Maximum Transfer Unit, or MTU. It has to be separated into its own VLAN, because a LAN with mixed MTUs can't work. Some of the members are connected with FastEthernet, which doesn't support a bigger MTU.

⚛ Member Requirements for Big MTU Unicast Peering service

All the Member **requirements** for Unicast Peering service hold for Big MTU Unicast Peering service as well. In addition all routers connected to this VLAN must support and be configured to use an MTU of 4470.

This means that the service is only available on Gigabit Ethernet (IEEE802.1z) and 10Gigabit Ethernet (IEEE802.1ae) ports.

The number (4470) is arbitrary right now. Different hardware vendors support different maximum values for MTU. Some are as low as 2450 and some are as high as 9180. Once enough operators are connected to this service, we will make a round of queries to find out what sort of MTU values their equipment supports and then raise the required MTU value of this service to the highest common denominator.

⚛ Address Generation

IPv4 addresses are assigned by TREX, but the IPv6 addresses on this VLAN are formed as follows:

```
2001:07F8:001D:0006:0000:0000:ASN\#:RTRN
```

where

ASN# This is the **AS** number of the router having this address, in **hexadecimal**. So for example AS12345 becomes 3039 and AS1234 becomes 04D2.

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

Applying this algorithm for the first exchange point router, one gets the following result:

```
2001:07F8:001D:0006:0000:0000:72F8:0001
```

or in a shorter format:

```
2001:7f8:1d:6::72f8:1
```

⊣ 32-bit Autonomous Systems

Generating IPv6 addresses for 32-bit ASNs is very similar, the structure is:

```
2001:07F8:001D:0006:0000:ASHI:ASLO:RTRN
```

where

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

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