

Allowed Traffic Types on Unicast Peering LANs

Important: The OM-IX NOC reserves the right to disable ports that violate the rules below.

To ensure smooth operation of the OM-IX infrastructure we impose a set of restrictions on what kind of traffic is allowed on the peering fabric. This page gives a summary of those restrictions. For more info, including hints on how to configure equipment, please see the OM-IX Configuration Guide.

1. Physical Connection

1.1 Interface settings

100base and 10base Ethernet interfaces attached to OM-IX ports must be explicitly configured with speed, duplex other configuration settings, i.e. they should not be auto-sensing.

2. MAC Layer

2.1 Ethernet framing

The OM-IX infrastructure is based on the Ethernet II (or “DIX Ethernet”) standard. This means that LLC/SNAP encapsulation (802.2) is not permitted. For more information on the differences, see the Ethernet FAQ, question 4.1.

2.2 Ethernet types

Frames forwarded to OM-IX ports must have one of the following ethertypes:

0x0800 - IPv4

0x0806 - ARP

0x86dd - IPv6

2.3 One MAC address per port

Frames forwarded to an individual OM-IX port shall all have the same source MAC address.

2.4 No proxy

ARP Use of proxy ARP on the router's interface to the Exchange is not allowed.

2.5 Unicast only

Frames forwarded to OM-IX ports shall not be addressed to a multicast or broadcast MAC destination address except as follows:

- broadcast ARP packets

- multicast ICMPv6 Neighbour Discovery packets.

Please note that this does not include Router Solicitation or Advertisement packets.

2.6 No link-local traffic

Traffic related to link-local protocols shall not be forwarded to OM-IX ports. Link-local protocols include, but are not limited to, the following list:

- IRDP
- ICMP redirects
- IEEE 802 Spanning Tree
- Vendor proprietary protocols. These include, but are not limited to:
 - Discovery protocols: CDP, EDP
 - VLAN/trunking protocols: VTP, DTP
 - Interior routing protocol broadcasts (e.g. OSPF, ISIS, IGRP, EIGRP)
- BOOTP/DHCP
- PIM-SM
- PIM-DM
- DVMRP
- ICMPv6 ND-RA
- UDLD
- L2 Keepalives

The following link-local protocols are exceptions and are allowed:

- ARP
- IPv6 ND

3. IP Layer

3.1 No directed broadcast

IP packets addressed to OM-IX peering LAN's directed broadcast address shall not be automatically forwarded to OM-IX ports.

3.2 no-export of OM-IX peering LAN

IP address space assigned to OM-IX Peering LANs must not be advertised to other networks without explicit permission of OM-IX.

4. Application layer (TCP/IP model)

Using Application layer protocols to unleash malicious actions against other OM-IX customers over OM-IX infrastructure, is forbidden. OM-IX reserves the right to disable a customer's port in case of complaints of attacks/abuse originating from such customers. The following list includes, but is not limited to:

- BGP hijacking
- DNS amplification/flood
- HTTP flood
- NTP amplification
- UDP flood
- ICMP flood
- Simple Service Discovery Protocol (SSDP)