

Change (Increase) Default ARP Limiter Setting



(Needed config change for DE-CIX Frankfurt Peering LAN | Base = Juniper)

0) Background

The size of the DE-CIX peering LAN produces an amount of ARP packets per second (~ 1.000 pps) which is higher than the default setting of a Juniper. To not have session drops, the default number must be changed. Please verify this with your vendor for other used router vendors on base of this Juniper example.

1) Verify the Status:

```
> show policer __default_arp_policer__
Policers:
```

Name	Bytes	Packets
__default_arp_policer__	3091706	67211

Means: if there is something different than a "0" for both counters, there are drops. (The default policer is active on all layer3 interfaces.)

2) Configure Solution: Create and Activate a New Policer for the DE-CIX Peering

- You need to define a "policer" first (in the *firewall* context):

```
policer DECIX-arp {
  if-exceeding {
    bandwidth-limit 2m;
    burst-size-limit 2m;
  }
  then discard;
}
```

Allowed ARP traffic in bits/s

Burst size in bytes

- Then you apply the policer to your DE-CIX interface:

```
interface ae5 {
  unit 2800 {
    description "DE-CIX Peering-Interface";
    vlan-id 2800;
    family inet {
      policer {
        arp DECIX-arp;
      }
    }
  }
}
```

Interface of your DE-CIX connection

VLAN you are using to connect to DE-CIX Frankfurt

Reference to your policer

Verify the result via "show policer ?" and follow the instruction from section:1.

3) Credits and further readings:

- Thanks all who participated at the DE-CIX Tech Mailing List
- <https://de-cix.net/academy> for finding a webinar on the ARP topic
- <https://lkhill.com/juniper-arp-policer/> (find here a long version which were also used as base for this document)

For questions please contact: support@de-cix.net