

# Proxy-Arp considered harmful

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Proxy ARP – a recap

We do not want Proxy ARP on our platform

- → Security tests
  - → Configuration tests
  - → Light levels
  - → Counters

# DE-CIX Where networks meet INTERNET 80.81.195.B/22 80.81.194.C/22 80.81.194.A/22 80.81.192.D/22 DE-CIX 80.81.192.0/22

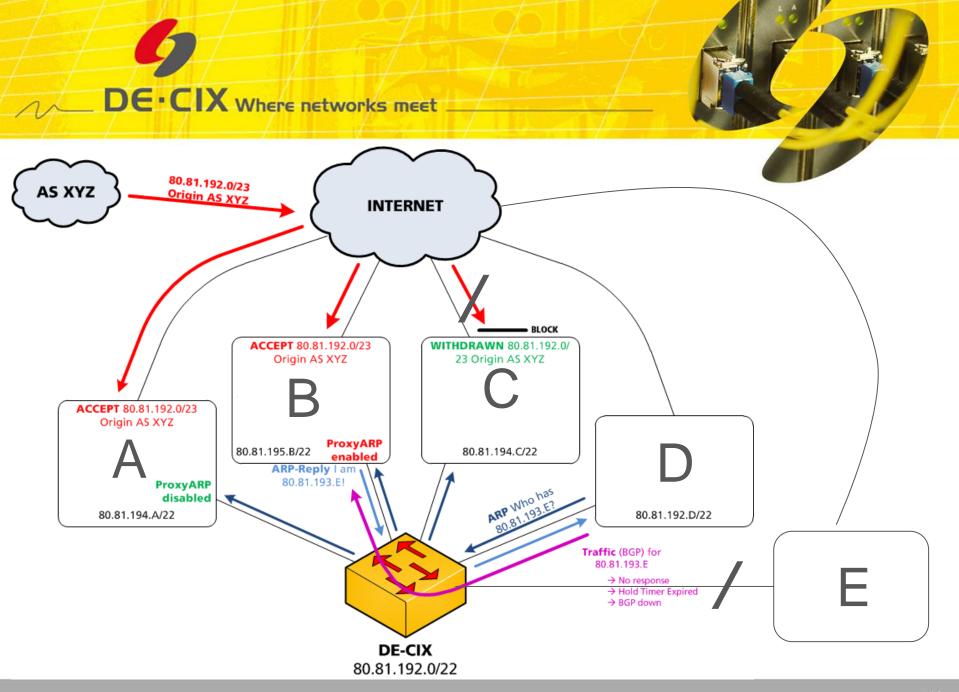
# DE-CIX Where networks meet 80.81.192.0/23 Origin AS XYZ INTERNET 80.81.195.B/22 80.81.194.C/22 80.81.194.A/22 80.81.192.D/22 DE-CIX 80.81.192.0/22

## DE-CIX Where networks meet 80.81.192.0/23 Origin AS XYZ INTERNET BLOCK ACCEPT 80.81.192.0/23 WITHDRAWN 80.81.192.0/ Origin AS XYZ 23 Origin AS XYZ ACCEPT 80.81.192.0/23 Origin AS XYZ 80.81.194.C/22 80.81.195.B/22 80.81.194.A/22 80.81.192.D/22 **DE-CIX** 80.81.192.0/22

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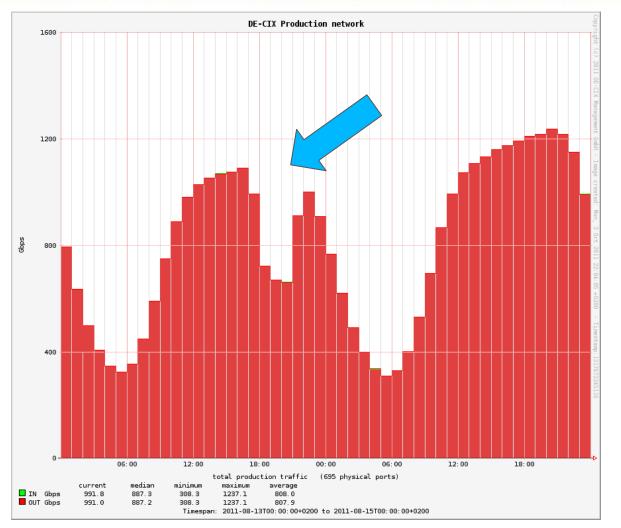
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#### DE-CIX Where networks meet 80.81.192.0/23 Origin AS XYZ **INTERNET** BLOCK WITHDRAWN 80.81.192.0/ ACCEPT 80.81.192.0/23 Origin AS XYZ 23 Origin AS XYZ **ACCEPT** 80.81.192.0/23 Origin AS XYZ **ProxyARP** 80.81.195.B/22 80.81.194.C/22 enabled ARP-Reply I am 80.81.193.E! **ProxyARP** ARP Who has 80.81.193.E? disabled 80.81.194.A/22 80.81.192.D/22 **DE-CIX** 80.81.192.0/22



# DE-CIX Where networks meet





The 2011-08-13 incident:

It was a Saturday.
It was peak time.
It took 3.5 hours to fix

145 customers affected Up to 45% traffic loss





#### Countermeasures:

Regular proactive checks to identify proxy ARP

#### Additional Countermeasures:

- Vendor implementation: disable default proxy ARP
- Use of dynamic ARP inspection with static bindings





#### Thank you

Join DE-CIX now!

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