SEC VLAN @ NIX.CZ
NIX.CZ platform and SECURE VLAN

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NIX·CZ

IXP NIX.CZ in numbers

- **Established in 1996**
- **5 PoPs in Prague**
- **120 connected networks**
- **210 connected ports**
- **1488 Gbps connected capacity**
- **286 Gbps peak traffic**
- **7 .TLD operators**
- **L2 virtualized dual star infrastructure**
- **Public Peering, Private Interconnection, .TLD housing and Partner Program services**

SEC VLAN - reasons

- **Reaction to series of DoS attacks to high profile Czech targets**

  - On-line media, banks, cell phone operators,

  Seznam.cz (czech search engine portal)

- **Attack through NIX.CZ and upstreams**

  (source probably in Russia)

- **Nothing from Czech Republic**

- **Some of the victims used island operation**

  – last resort reaction

- **National traffic also affected**

SEC VLAN - actions

- **Create a community of trustworthy local companies**
- **Connection to public peering and also to (secure) VLAN**
- **Secure VLAN functions as a last resort island in case of a massive DoS attack**
  → "Czech citizens will be able to reach czech services and content"
- **Community high entry threshold!**

SEC VLAN – technical conditions

- **BCP-38/SAC004**
- **RTBH Filtering using RS**
- **Technical excellence:**

  - DNSSEC, IPv6

  - Full redundancy (on IXP)

  - Network monitoring (MRTG, NetFlow, etc.)

  - Control plane policy RFC6192

  - UDP amplification protection (DNS, NTP, . . .)
- **Security incident reaction time <30min.**
- **BGP – TCP MD5**

SEC VLAN – organizational cond.

- **End User Terms & Conditions – spam, attacks etc.**
- **24/7 technical contact, no IVR**
- **CSIRT team - listed by Trusted Introducer, Terena**
- **More than 6 months at NIX.CZ**
- **Impeccable reputation**
- **Active participation**
- **Proposed, seconded, no veto**

THE SECURE VLAN CONNECTION RULES
http://nix.cz/en/file/SEC_VLAN_RULES

SEC VLAN – beyond technology

- **New logo - "secure provider"**
    - *→ marketing advantage*
- **Group self governance**
    - *→ "semi-independent" on NIX.CZ*
- **Attractive for new players**
    - *→ banks, governmental bodies*
- **Importance of IXP**
- **No limited to czech companies only**

SEC VLAN – status

- **Seed group founded**
  – 6+1 companies signed a memorandum

  → ACTIVE 24, CESNET (NREN), CZ.NIC,

  → Dial Telecom, Seznam.cz,

  → Telefónica Czech Republic + NIX.CZ

- **Some other companies declared interest**
- **Working on administrative matters**

  - voting mechanism

  - information sharing

- **Working on technical matters**

  - RTBH, RS, root DNS

¿ Questions ?

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