CSRIC IV
Working Group 6
Long-Term Core Internet Protocol Improvements

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Working Group 6 Chair

WG6 Members

- Alliance for Telecommunications Industry Solutions
- AT&T
- Bank of America
- CableLabs
- Center for Democracy & Technology
- CenturyLink
- Cisco
- Comcast
- Cox
- CTIA
- Farsight Security
- Goldman Sachs
- Google

- Internet Identity
- NCTA
- NIST
- Nsight
- Princeton University
- Renesys
- Shadowserver
- Sprint
- Time Warner Cable
- University of Oregon
- US Telecom
- Verizon
- Verisign
- Xerocole

Status

- Working Group is comprised of 41 experts from across the industry

- Scope for the work group defined and agreed upon

- Working groups will be comprised of two sub-groups:

  - DNS

  - Inter-domain Routing and IPv6 deployment best practices

WG6 – Subgroup Descriptions

DNS

- Matt Tooley (NCTA), subgroup chair

- The protocols used to govern the operation of the Internet Domain Name System (DNS) are vulnerable to spoofing attacks.

Inter-Domain Routing & IPv6

- Tony Tauber (Comcast), subgroup chair

- The protocols used to govern the operation of the Internet's crucial inter-domain routing system are vulnerable to route hijacking attacks.

- Best practices for the transition from IPv4 to IPv6

DNS Subgroup Mission

- DNS Open Resolvers
  - A DNS open resolver will resolve queries from any external location even if they are not part of its administrative domain
  - Open DNS resolvers are frequently the source of DDoS attacks

- WG6 Mission/Scope for DNS Sub-team
  - The DNS sub-team will identify and recommend best practices for use by the Internet ecosystem (ISPs, ASPs, and CPE vendors) for mitigating issues related to DNS Open Resolvers

Inter-Domain Routing & IPv6 Subgroup

- Inter-Domain Routing
  - Naïve mistakes can cause interruption of legitimate traffic flows
  - Determined attackers can arrange for misdirected flows resulting in the routing of data via unauthorized networks
  - Review of recent Internet route hijacking incidents
  - Review of CSRIC III recommendations to determine if any new CSRIC recommendations would help

Inter-Domain Routing & IPv6 Subgroup

- IPv6
  - Available pool of IPv4 addresses nearing exhaustion
  - IPv6 roll-out is accelerating
  - Possible Security, Reliability, Interoperability issues
  - Explain potential issues and deployment recommendations to address them

Next Steps

- Subgroups have now been formed
- Subgroup leads assigned
- Scheduling subgroup calls
- Full group will meet every 2 months; subgroups on a more frequent basis
- Targeting March for interim report from DNS subgroup
- Targeting March for interim report from BGP/IPv6 subgroup