DDoS and Routing Security BoF

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FIRST 2022

Three Themes for Today

- Unsolved network security problems:
 Specifically in: DDoS and BGP routing
 Others perhaps: DNS, protocol abuse, weak defaults
- CSIRT role(s) mitigating DDoS / routing issues
- Considerations for a NETSEC SIG within FIRST.org

DDoS discussion topic examples

- DDoS info sharing, case studies, expertise
- CSIRT involvement, another group, or externally handled
- Traceback and attribution
- Monitoring tools and solutions
- Mitigation strategies
- Disclosure, reporting, and regulatory requirements

BGP discussion topic examples

- Router system bugs, routerOS management challenges
- IP address resource management and usage monitoring
- External view of ASN/prefix expectations
- RX/TX route filtering practices
- BGP peer monitoring
- WHOIS
- IRR
- RPKI

Possible Challenges for individual CSIRT engagement

- DDoS and routing events are sufficiently infrequent?
- Responsibility often falls to network engineering team
- CSIRT access to DDoS/BGP tools + data tend to be limited

Why Do This in FIRST?

- Other places have done some of this, e.g.,
 - "old" FIRST, NOGs, nsp-sec, ops-trust, secret channels
 - netsec community may have splintered too much
- We already have a rich FIRST member base to draw from
 - But good opportunity to attract new netsec teams?
- FIRST org transparency, stability, and support
- Internationally diverse community
- Operational-oriented teams
- FIRST is a leading incident response authority

What might a SIG do? Possible ideas...

- Information sharing (e.g., mailing list, Slack, meetings)
- Maintain authoritative list of BCPs and netsec resources
- Advocacy and education (e.g., MANRS, peeringdb)
- Contribute to FIRST blog
- Training and workshops at FIRST TCs/Conferences
- Team directory extensions (e.g., assigned ASNs)
- Community tool building and monitoring services

Next steps

- If agreed a SIG fills a need, and is of sufficient interest...
- Collect charter participant names, teams, emails
- Begin charter process
 - Outline mission/goals
 - Propose activities and deliverables
 - Propose participant requirements
 - Enumerate needs (e.g., mailing list, funds)
 - Review phase with charter members
 - Submit

Proposed Mission

To foster the deployment of inter-AS network security BCPs, coordinated mitigation, and information sharing.

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Thank You!

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