

Collective responsibility and collaboration for Routing Resilience and Security

Routing Resilience Manifesto

Objectives

- Raise awareness and encourage actions by demonstrating commitment of the growing group of supporters
- Demonstrate industry ability to address complex issues
- Clear and tangible message:

“We do at least this and expect you to do the same”

Routing Resilience Manifesto

- Principles of addressing issues of routing resilience
 - Interdependence and reciprocity (including collaboration)
 - Commitment to Best Practices
 - Encouragement of customers and peers
- Guidelines indicating the most important actions
 - BGP Filtering
 - Anti-spoofing
 - Coordination and collaboration
- High-level document specifying “what”
 - “How” is in external documents (e.g. BCPs)

The end product

- Landing page
- Published document
- Growing list of supporters
- Pointers to more specific information, e.g. BCOPs

Work in progress

- A small group of network operators drafting text
- ISOC as a neutral platform (convener and promoter)
- Draft document is published, feedback is welcome and needed!
- <http://www.routingmanifesto.org>

L9 - Principles

- 1) The organization (ISP/network operator) recognizes the interdependent nature of the global routing system and its own role in contributing to a secure and resilient Internet
- 2) The organization integrates best current practices related to routing security and resilience in its network management processes in line with the Guidelines
- 3) The organization is committed to preventing, detecting and mitigating routing incidents through collaboration and coordination with peers and other ISPs in line with the Guidelines
- 4) The organization encourages its customers and peers to adopt these Principles and Guidelines

Guidelines – 3 requested actions

1. Prevent propagation of incorrect routing information
2. Prevent traffic with spoofed source IP address
3. Facilitate global operational communication and coordination between the network operators

Guidelines – requested actions

Prevent propagation of incorrect routing information

*Network operators are encouraged **to define a clear routing policy** and implement a system that ensures correctness of **their own announcements and announcements from their customers** to adjacent networks with a prefix and as-path granularity. Network operators **should be able to communicate** to their adjacent networks which announcements are correct..*

Guidelines – requested actions

Prevent traffic with spoofed source IP address

*Network operators should implement a system that enables **source address validation for at least single-homed stub customer networks**, their own end-users and infrastructure. Network operators are encouraged to implement filtering to prevent packets with incorrect source IP address from **entering and leaving the network**.*

Guidelines – requested actions

Facilitate global operational communication and coordination between the network operators

*Network operators should **maintain globally accessible up-to-date contact information.***

Next steps

- Solicit wider feedback from the community
 - Language should be clarified (soudl, encouraged, etc.)
 - Better name?
 - References to BCPs are missing – input appreciated
- Finalize the draft – please visit the site and submit your comments
- Launch and promote

Questions

- Are you interested in contributing?
- Will you support the Manifesto?

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