



MANRS

Have you been minding  
MANRS lately?

Plenty of updates!

[manrs.org](https://manrs.org)

# Mutually Agreed Norms for Routing Security (MANRS)

- **Common routing security baseline**

Defined by “Actions”. 4 programs - 4 baselines

- **Commitment**

Verified conformance

- **Transparency**

MANRS Observatory

- **Community driven**

NetOps, IXP, CDN&Cloud, Equipment vendors programs, Implementation guides, MANRS+

# MANRS Programs



Network  
Operators (2014)



Internet Exchange Points (2018)



Content Delivery Networks (CDNs)  
and Cloud Providers (2020)



Network Equipment Vendors (2021)

# MANRS Actions



## Filtering

Ensure the correctness of your own announcements and of announcements from your customers to adjacent networks with prefix and AS-path granularity

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## Anti-Spoofing

Enable source address validation for at least single-homed stub customer networks, your own end-users, and infrastructure

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## Coordination

Maintain globally accessible up-to-date contact information

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## Routing Information

Publish your data, so others can validate routing information on a global scale

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## Tools

Provide monitoring and debugging tools to help others

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## Promotion

Actively encourage MANRS adoption among peers, customers, and partners

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# Commitment and Transparency

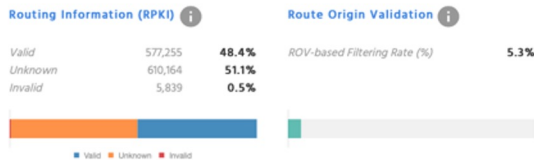
<https://observatory.manrs.org/#/overview>

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## Overview

### State of Routing Security

Number of incidents, networks involved and quality of published routing information in the IRR and RPKI in the selected region and time period



### MANRS Readiness



● Ready ● Aspiring ● Lagging ● No Data Available

<https://manrs.org/netops/participants/>

Organization Name	Date Approved	Areas Served	ASNs	Action 1 Filtering	Action 2 Anti-Spoofing	Action 3 Coordination	Action 4 Routing Information		
							IRR	RPKI	
Alt Telecom	10th Jul 2019	CA, US	21659	✓		100%	100%	100%	
Alternativa Internet	11th Nov 2022	BR	264459	✓		100%	100%	0%	
Altibox	25th Aug 2018	NO	29695	✓	100%	100%	100%	59%	
Amazonel Telecomunicações	4th May 2020	BR	61577	✓		100%	100%	0%	
AMPATH	31st Dec 2021	US	20080	✓	100%	100%	100%	50%	
Amsio BV	20th Nov 2018	NL	8315	✓	No data	100%	100%	99%	
Andorra Telecom	25th Feb 2019	AD	6752	✓	No data	100%	100%	100%	
andrewnet	28th Oct 2022	US	1003	✓	No data	100%	100%	100%	
andrewnet, llc	1st Mar 2022	US	211562	✓	No data	100%	100%	100%	
Anexia	17th Dec 2019	AE, AR, AT, AU, BG, BR, CA, CH, CL, CN, CO, CZ, DE, DK, ES, FI, FR, GB, HK, HU, IE, IL, IN, IT, JP, KR, LU, MX, NL, NO, NZ, PE, PH, PL, PT, RO, RS, RU, SE, SG, SI, SK, TH, TR, TW, UA, US, VN, ZA	42473, 42388, 197540, 42360, 47147	✓	100%	100%	100%	77%	
Organization Name	Date Approved	Areas Served	ASNs	Action 1 Filtering	Action 2 Anti-Spoofing	Action 3 Coordination	Action 4 Routing Information	IRR	RPKI

# MANRS is turning 10 years old this year...

## Key achievements:

- Uptake: with 1,100 participants from across the globe
- Diversity: from one original program to four
- Dissemination: with training resources and activities that play at global scale
- Impact: an industry-driven reference for policy-makers
- Objectivity: compliance can be effectively tracked through the MANRS Observatory

The Internet Society launched the MANRS project in 2014. After ten years of providing the MANRS secretariat, they partnered with the Global Cyber Alliance to take on that role as of January 2024.

# Who is the Global Cyber Alliance (GCA)?

GCA's mission: **A Trustworthy Internet for all**

- Not for profit established in 2015
- Offices in the US, UK, Europe

At GCA we build programs, partnerships, and tools to make the connected world safer and more secure for all.

One of GCA's two Programs, **Internet Integrity (I2)**, aims to bring together key players in internet infrastructure operations, as well as adjacent industries, in order **to identify top priorities for addressing cybersecurity issues that cannot be solved by any single actor**, or subset of actors, independently.

# Where do we go from here?

- Scalable Growth
  - Local communities, close collaboration with a selection of key stakeholders (champions)
- Improving conformance and level of assurance
  - Improving data quality on the MANRS Observatory, peer pressure and better transparency
- Increasing value proposition
  - A stronger case for routing security. Meeting customer demand for routing security.
- Tracking and supporting regulatory work across the globe and capacity building
  - In collaboration with the Internet Society
- Linking Routing Security to Internet Integrity: names, numbers, and routes



# We are setting up for the next decade of MANRS

MANRS is now a GCA project, and GCA is a community-building, partner-supported organization.

We're looking to you to help us understand how to support MANRS and its growth for the next decade:

- Expanding adoption of MANRS actions around the globe
- Identifying the next step in pushing the envelope on routing security practices
- Attracting more of the impacted stakeholders – enterprises, industries, etc

Reach out to us, become part of this!

