

ARTEMIS

An Open-source tool for Detecting BGP prefix
hijacking in Real-Time

ARTEMIS Demo
Open Source Working Group

RIPE 85
Belgrade, Serbia
24 - 28 October 2022

Lefteris Manassakis | COO, Code BGP

 bgpartemis.org

Funded by RIPE NCC Community Projects

ARTEMIS Design Goals

- **Real-time BGP observability**
- **Advanced BGP hijacking detection**
- **On-prem** operation to keep local information in-house
- **Custom UI** for better user experience
- **Modern software stack** for modularity & extensibility

ARTEMIS Overview

Data Sources



Public BGP feeds



Your BGP routers

RIS live
BGPstream

BGP/BMP

ARTEMIS
(on-prem)

Monitoring & detection

Exact-prefix type-0/1,
path + policy violations,
sub-prefix, squatting
attacks

User



UI



Notifications
(slack/email/syslog)



Configuration
(Yaml)



Demo

ARTEMIS Dashboard BGP Updates Hijacks Admin Actions About Logout

Dashboard

Live Update:

Activity

Welcome back **lefteris@codebgp.com**, your last login was at **(8/29/2022 11:27:32 AM)**. You are admin.

Ongoing, Non-Dormant Hijacks

[DOWNLOAD TABLE](#)

Show entries 1

Last Update ↓/↑	Time Detected ↓/↑	Hijacked Prefix	Matched Prefix	Type	Hijacked AS	RPKI	# Peers Seen ↓/↑	# ASes Infected ↓/↑	Ack	More
		<input type="text" value="Prefix"/>	<input type="text" value="Matched Prefix"/>	<input type="text" value="Type"/>	<input type="text" value="Hijacked AS"/>	<input type="text" value="RPKI"/>				
Today 11:35:56	2022-9-5 12:21:23	2a12:bc0:2::/48	2a12:bc0:2::/48	E 1 -	57578	VD	51	53	<input type="checkbox"/>	View
Today 11:35:56	2022-9-4 19:43:13	2a12:bc0:1::/48	2a12:bc0:1::/48	E 1 -	57578	VD	73	78	<input type="checkbox"/>	View
Today 11:35:56	2022-9-5 14:18:24	2a12:bc0::/48	2a12:bc0::/48	E 1 -	57578	VD	36	36	<input type="checkbox"/>	View
Today 11:26:52	2022-9-2 19:30:43	2a12:bc0:2::/48	2a12:bc0:2::/48	E 1 -	57695	VD	189	209	<input type="checkbox"/>	View
Today 11:26:52	2022-9-2 19:30:43	2a12:bc0:1::/48	2a12:bc0:1::/48	E 1 -	57695	VD	189	209	<input type="checkbox"/>	View
Today 10:36:52	2022-9-2 19:29:07	212.46.55.0/24	212.46.55.0/24	E 1 -	57578	VD	56	64	<input type="checkbox"/>	View
Today 02:14:29	2022-9-2 19:31:29	2a12:bc0:2::/48	2a12:bc0:2::/48	E 1 -	917	VD	12	17	<input type="checkbox"/>	View

Questions



✉ lefteris@codebgp.com

🌐 bgpartemis.org