

Why Is It Taking So Long to Secure Internet Routing?



Routing Incidents: 31st July – 31st August 2018

Possible Hijack from AU

Expected AS	Prefix	AS Description	Detected AS	AS Description	Start time (UTC)	End time (UTC)
AS29484	134.147.203.0/24	RUB-AS, DE	AS9738	BRENNANIT-AS9738-AP Brennan IT, AU	31/7/18 10:20	31/7/18 22:08
AS51852	141.255.160.0/24	PLI-AS, CH	AS9738	BRENNANIT-AS9738-AP Brennan IT, AU	31/7/18 10:20	31/7/18 22:08
AS42570	185.35.62.0/24	EU-CH-KS	AS9738	BRENNANIT-AS9738-AP Brennan IT, AU	31/7/18 10:20	31/7/18 22:08
AS10439	209.126.136.0/24	CARINET - CariNet, Inc., US	AS9738	BRENNANIT-AS9738-AP Brennan IT, AU	31/7/18 10:20	31/7/18 20:01
AS3356	4.79.179.0/24	LEVEL3 - Level 3 Parent, LLC, US	AS9738	BRENNANIT-AS9738-AP Brennan IT, AU	31/7/18 10:20	31/7/18 22:07
AS4134	58.218.198.0/24	CHINANET-BACKBONE, CN	AS9738	BRENNANIT-AS9738-AP Brennan IT, AU	31/7/18 10:20	31/7/18 22:08
AS6939	184.105.139.0/24	Hurricane Electric LLC, US	AS9738	BRENNANIT-AS9738-AP Brennan IT, AU	31/7/18 10:19	31/7/18 23:51



Bogons: 31st August 2018

A bogon is a type of resource (IPv4/v6 or ASN) which shouldn't exist on the global Internet. More specifically, "bogon" (derived from the word "bogus") refers to an advertisement of a IPv4/v6 prefix or ASN from a reserved or otherwise unallocated resource block.



Bogons: Unallocated ASN (31st August 2018)

AS45692 Announced by AS17668 SPTTEL-AP Soul Pattinson Telecommunications Pty Ltd, AU

AS55481 Announced by AS1221 ASN-TELSTRA Telstra Pty Ltd, AU

AS63976 Announced by AS7474 OPTUSCOM-AS01-AU SingTel Optus Pty Ltd, AU

AS64141 Announced by AS64044 EP2-AS-AP EP2 Payments Pty Ltd, AU

AS64512 Announced by AS56163 APT-NET-AS-AP Asian Pacific Telecommunications, AU

AS63976 Announced by AS7474 OPTUSCOM-AS01-AU SingTel Optus Pty Ltd, AU



Bogons: Unallocated IPv4 (31st August 2018)

45.124.164.0/22	AS38803	GOLDENIT-PTY-LTD-AUSTRALIA-AP Goldenit Pty Ltd Australia, AU
45.252.236.0/22	AS38803	GOLDENIT-PTY-LTD-AUSTRALIA-AP Goldenit Pty Ltd Australia, AU
103.24.196.0/22	AS24130	TPG-AU TPG Internet Pty Ltd., AU
103.58.216.0/22	AS38803	GOLDENIT-PTY-LTD-AUSTRALIA-AP Goldenit Pty Ltd Australia, AU
103.221.236.0/22	AS38803	GOLDENIT-PTY-LTD-AUSTRALIA-AP Goldenit Pty Ltd Australia, AU
220.152.112.0/21	AS23871	AINS-AS-AP Australia Internet Solutions, AU
103.56.0.0/22	AS63976	Unknown



Bogons: Unallocated IPv6 (31st August 2018)

2001:df0:2b7::/48 AS9555VZB-AU-AS Verizon Australia PTY Limited, AU

2404:5f00::/32 AS132029 ASN-TELSTRA-02 Telstra Pty Ltd., AU





MANRS

Filtering

Prevent propagation of incorrect routing information

Anti-spoofing

Prevent traffic with spoofed source IP addresses

Coordination

Facilitate global operational communication and coordination between network operators

Global Validation

Facilitate validation of routing information on a global scale

MANRS defines four simple but concrete actions that network operators must implement to dramatically improve Internet security and reliability.

Visit <https://www.manrs.org>

