

Prefix-List Sanity-Checker

A Free Online Tool

by and for Network Operators

Version 1.1

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Goals:

An interactive tool to help ISP provisioning techs qualify prefixes that customers want to BGP-advertise.

Generate properly-formatted Cisco and Juniper prefix-lists to cut-and-paste into configurations or provisioning systems.

Input Parsing

Pasted or uploaded text in many formats:

CIDR or classful

Address-ranges (including pre-CIDR)

Cisco or Juniper prefix or filter lists

Cisco route statements

sho ip bgp

sho ip route

RIR whois entries

IRR entries

Analysis

Flag bogons and critical infrastructure like IXP subnets and root / TLD nameservers.

Flag long prefixes.

Graphically map geographic distribution.

Malware incident to address ratio report

Table sortable by registrant, country, originating AS, malware reports, or status.

Output

Cisco prefix-lists

Juniper prefix-lists

Juniper set-commands



Live Demo!



PREFIX-LIST SANITY CHECKER

Submit a List of Prefixes

[Set Maximum Prefix Lengths](#)[Custom Exclusion List](#)[Report Critical Infrastructure](#)[Generate a Cisco Prefix-List](#)[Generate a Juniper Prefix-List](#)[Show Juniper Set-Commands](#)[Feature/Bug Report](#)

Submit a List of Prefixes

The purpose of this tool is to take lists of [IP prefixes](#), convert them to uniform [CIDR](#) format, flag bogons, malware, and [critical infrastructure](#), and then produce clean Cisco or Juniper-formatted [prefix-list](#) configuration snippets for use in filtering [BGP routing advertisements](#).

To get started, type or paste a list of IPv4 prefixes in the field below, in whatever format you have them, or upload a text file from local disk. Then press the "Submit" button to see a report on the prefixes.

Type or paste a list of prefixes here or...

```
10.0.0.0/8
10.0.0.0 255.0.0.0
10.0.0.0 mask 255.0.0.0
10.0.0.0 0.255.255.255
```

Select a file: no file selected

Future Features

Custom acceptable prefix-length tables

Custom prefix-rejection tables

Custom AS-rejection and accept tables

Previous transit AS uniformity check

Suggest potential aggregates

XML API for provisioning system integration

IRR submission generation

IPv6

Others?

Known Issues

Performance.

The entire service is currently running on a single 1.66Ghz Mac Mini. As use picks up, we'll look for a grant to cover a stack of Xserves for it.

Thanks, Beta Testers!

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Thanks, HSARPA!

This tool and the whois-changes RSS feed were developed as a result of an operator-tools round-table held by Doug Maughan and HSARPA during NANOG 38 in St. Louis.



Thanks, and Questions?

Copies of this presentation can be found in PDF and QuickTime formats at:
[http:// www.pch.net / resources / papers / prefix-list-sanity-checker](http://www.pch.net/resources/papers/prefix-list-sanity-checker)

More importantly, the tool discussed in this presentation can be found at:

[https:// prefix.pch.net](https://prefix.pch.net)

Please give it a try, and let us know what features would make it more useful to you.

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