

Prefix-List Sanity-Checker A Free Online Tool by and for Network Operators

Version 1.1 February, 2007 Bill Woodcock Packet Clearing House



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.



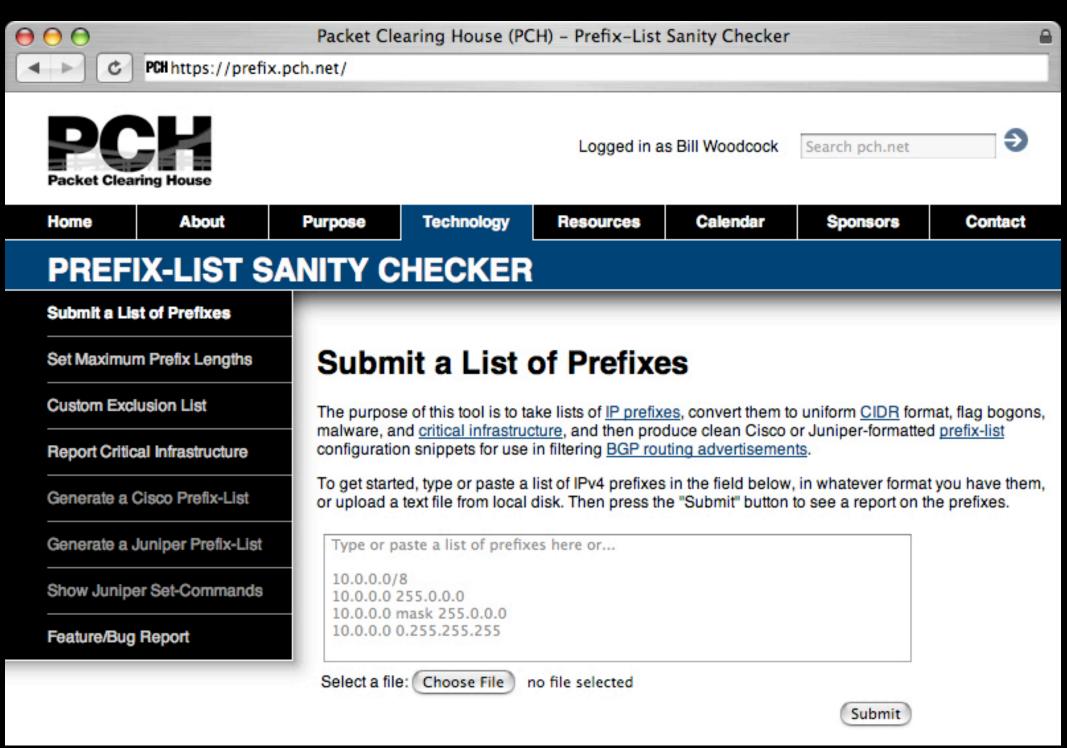
Output

Cisco prefix-lists Juniper prefix-lists Juniper set-commands



Live Demo!







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!

Chris Morrow Marla Azinger Rob Seastrom David Huberman Leo Vegoda Jared Mauch Neil Fenemor John Todd Philip Smith Peter Schoenmaker Bijal Sanghani Dorian Kim Ted Seely Geoff Huston



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

https:// prefix.pch.net

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

Bill Woodcock Packet Clearing House woody@pch.net