

RPKI-ROA Planner, and more

Steven Wallace
ssw@internet2.edu



*Development of these web tools was supported in part by
the National Science Foundation (OAC-2530871)*

Important Disclaimer

This service is provided by Internet2 on an "as is" and "as available" basis, without any warranties—express or implied—including, but not to, warranties of accuracy, completeness, merchantability, or fitness for a particular purpose.

The information and recommendations produced by this tool are intended for informational purposes only. You are solely responsible for verifying the accuracy and suitability of any RPKI Route Origin Authorizations (ROAs) you create or modify based on the output of this service.

Incorrect ROAs can result in partial or complete loss of connectivity for your organization's networks.

Internet2 accepts no liability for any direct, indirect, incidental, or consequential damages arising from the use of, or reliance upon, this service.

By using this service, you acknowledge and agree to these terms.

✓ I Acknowledge and Accept

RPKI-ROA Planner

A tool to make ROA creation easier and safer

- For a given IP prefix, the tool presents candidate ROAs based on likely routes derived from IRR route objects, currently observed Internet routes, and historical routing data.
- The user selects which routes apply, and the tool identifies the ROAs to create and the safest order in which to create them.

RPKI-ROA Visualizer

A tool for understanding how RPKI Route Origin Validation works in BGP

- Given an RPKI-ROA (Prefix, MaxLen, and Origin AS) and a BGP route (Prefix and Origin AS)
- Show how to determine if the ROA covers the BGP route, bit by bit
- Show the list of covered subnets
- Show the process of Route Origin Validation of the ROA against the route.

RPKI-ASPA Planner

An **EXPERIMENTAL** tool to assist network operators build an ASPA (Autonomous System Provider Authorization) object for RPKI.

- Given an ASN (autonomous system number)
- Based on CAIDA AS relationship data (and some magic)
- Suggest a possible ASPA

Demo RPKI-ROA Planner

<https://rootbeer.internet2.edu/roa-planner/prefix/129.114.0.0%2F16>

<https://rootbeer.internet2.edu/roa-planner/prefix/2605%3A2800%3A%3A%2F32>

<https://rootbeer.internet2.edu/roa-planner/prefix/131.187.0.0%2F16>

Demo RPKI-ROA Visualizer

Demo RPKI-ASPA Planner

<https://rootbeer.internet2.edu/aspa/asn/19782>

rootbeer.internet2.edu