

# BCP: Avoid RPKI state in BGP signaling

**draft-spaghetti-sidrops-avoid-rpki-state-in-bgp**

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# The helpful “guidance”

```
router bgp 65000
  address-family ipv4 unicast
  neighbor 10.0.102.1 route-map rmap-PEX1-3 in
  bgp bestpath prefix-validate allow-invalid
!
route-map rmap-PEX1-3 permit 10
  match rpki invalid
  set local-preference 50
!
route-map rmap-PEX1-3 permit 20
  match rpki not-found
  set local-preference 100
!
route-map rmap-PEX1-3 permit 30
  match rpki valid
  set local-preference 200
!
route-map rmap-PEX1-3 permit 40
```

[https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute\\_bgp/configuration/15-s/irg-15-s-book/irg-origin-as.pdf](https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/iproute_bgp/configuration/15-s/irg-15-s-book/irg-origin-as.pdf)

# Another example

**Quote “When will RPKI be enabled on the Lumen AS3356 Internet Core? RPKI is already configured on the AS3356 Internet Core. Customers may use the Lumen Looking Glass to validate how their IP Prefixes are being marked in Lumen’s network:**

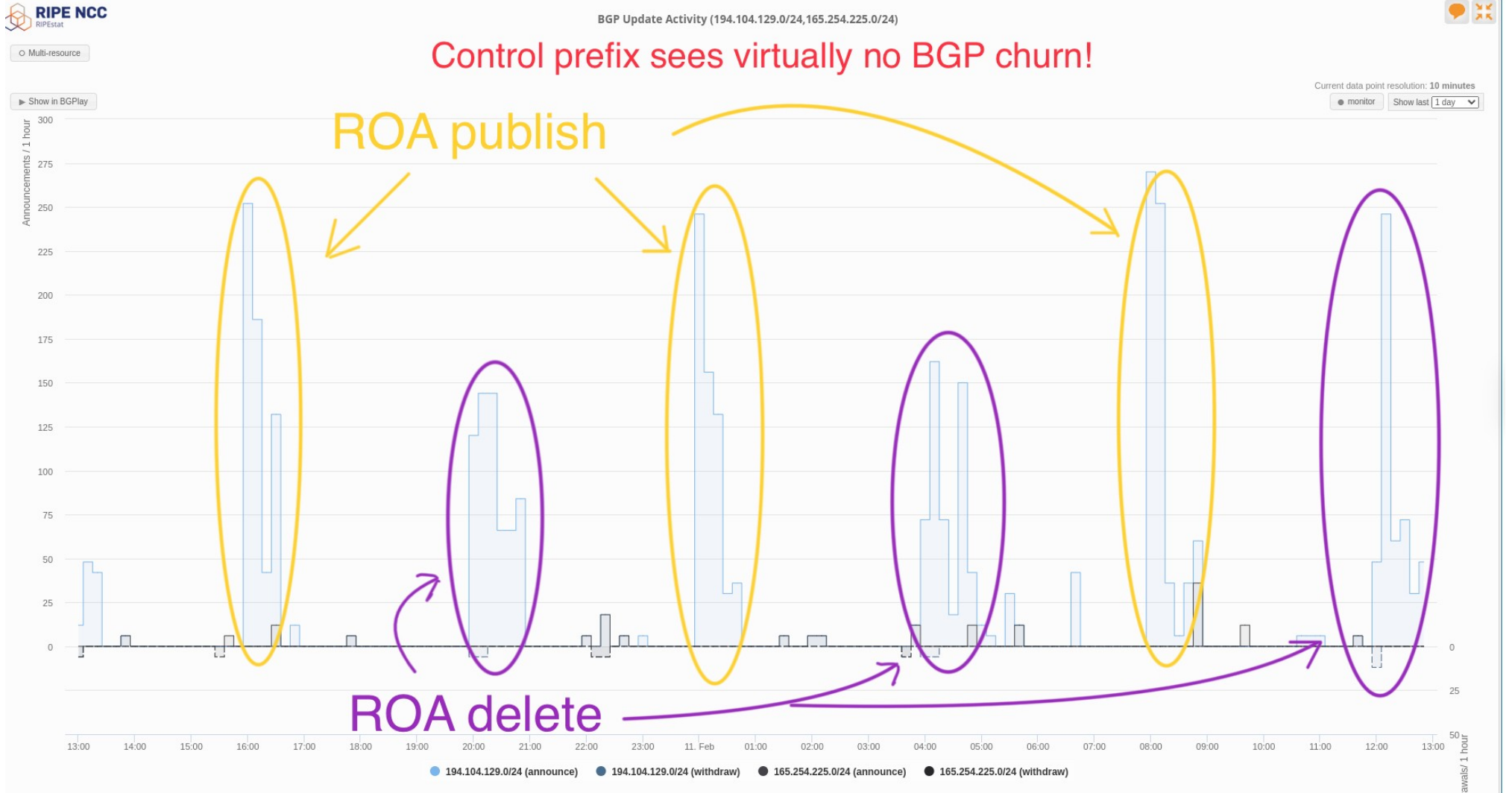
**community "rpki-valid" members "3356:901"**

**community "rpki-unknown" members "3356:903"”**

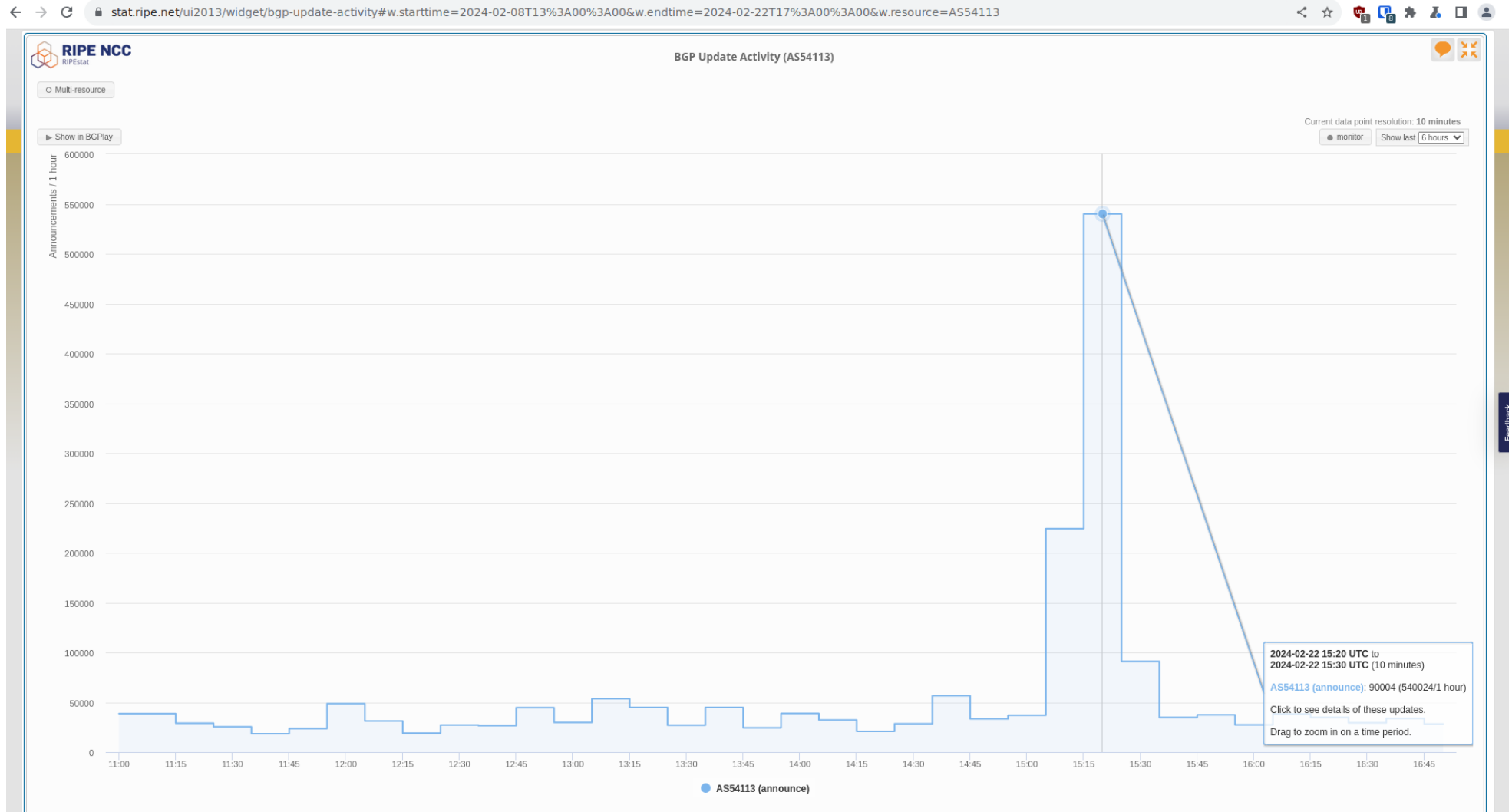
**<https://assets.lumen.com/is/content/Lumen/rpki-customer-notification?Creativeid=1c967bb7-1321-4be8-92c0-74097e840849>**

# Changes in ROAs result in BGP churn

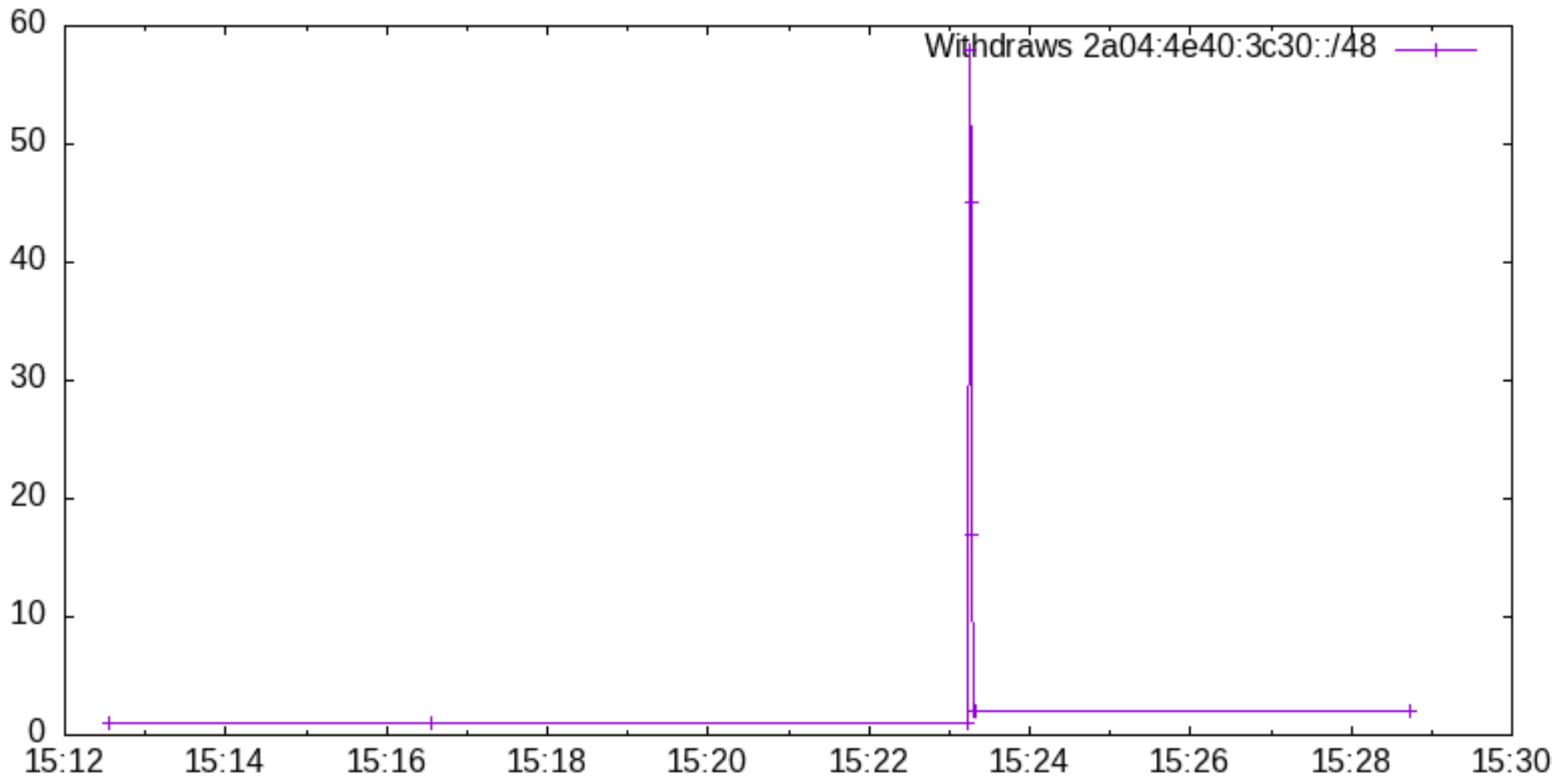
stat.ripe.net/ui2013/194.104.129.0%2F24#tabId=routing



# Massive BGP churn



# Even withdraws! Bad!



# The Recommendation

**Operators SHOULD ensure Validation States are not signaled in transitive BGP Path Attributes.**

**Specifically, operators SHOULD NOT group BGP routes by their Prefix Origin Validation state into distinct BGP Communities.** ¶

# Next steps

**Please review**  
**[draft-spaghetti-sidrops-avoid-rpki-state-in-bgp](#)**

**Start call for working group adoption?**