

Resource Certification

Alex Band – Product Manager



The RIPE NCC



The RIPE NCC

- The authority on who is the registered holder of an Internet Number Resource in our region
 - IPv4 and IPv6 Address Blocks
 - Autonomous System Numbers
- Information is kept in the Registry
- Accuracy and completeness are key

Internet Routing Today

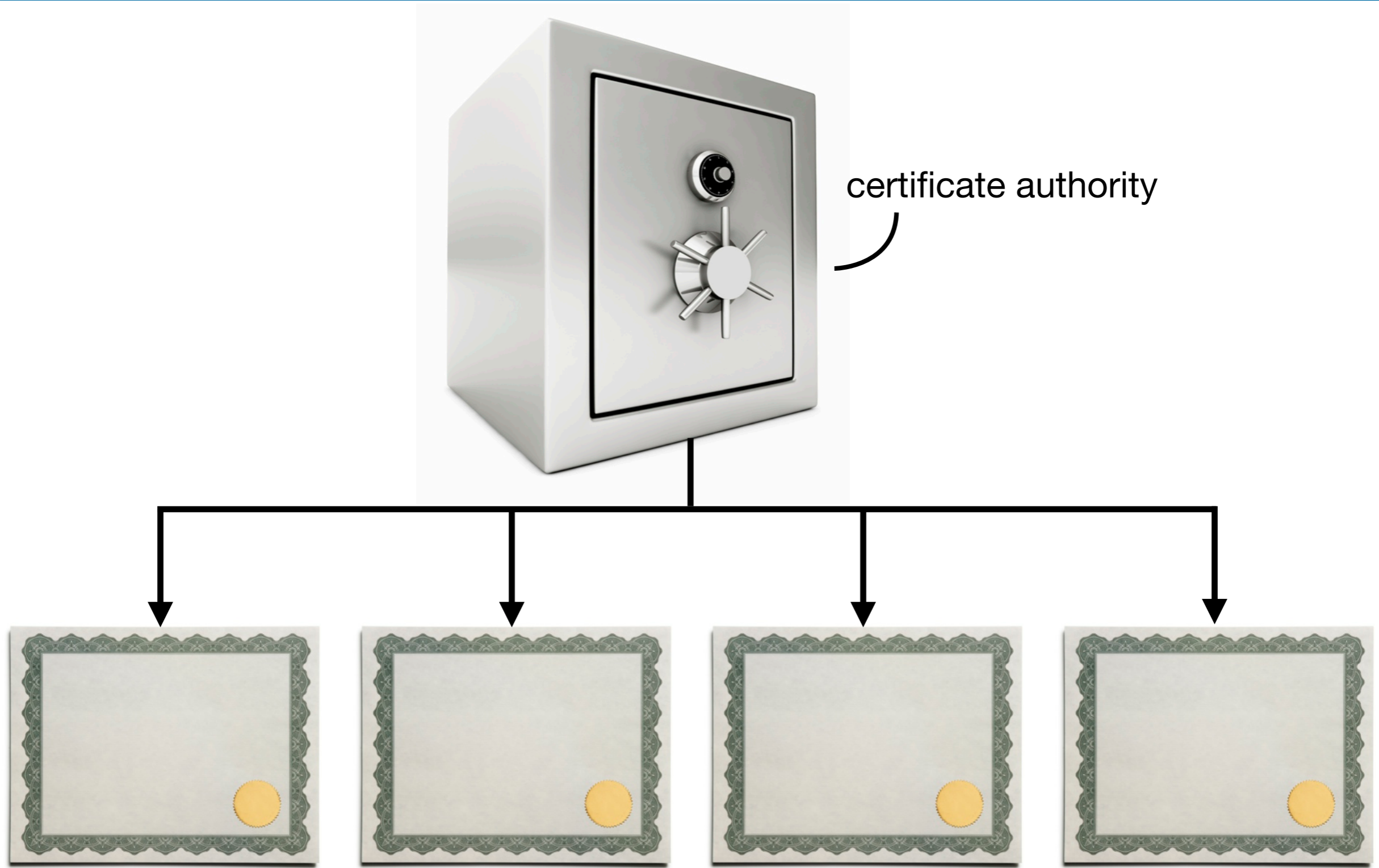
- Routing is non-hierarchical, open and free
- Freedom comes at a price:
 - You can announce any address block on your router
 - Accidental errors happen frequently, impact is high
 - Entire networks become unavailable
 - Malicious attacks are relatively easy
 - Mitigation requires intervention from operators
- IPv4 address depletion may intensify issue

Resource Certificates – The Goal

- Issue digital certificates along with the allocation of Internet Resources
- Two main purposes:
 - Make Internet routing more secure
 - Make the Registry more robust
- Validation is the added value



The System



Adoption

- 1100 members have requested a certificate
- 1/8th of our membership
- 10% of RIPE address space is secured by ROAs

To keep in mind...

- Anyone is free to request a certificate
- Anyone is free to specify their routing policy
- Anyone is free to base any decision on the data

Resource Certification drives
routing preferences

Questions?



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