

# The Role of RIRs and LIRs in SCION

Birds of a Feather Session at RIPE81

David Hausheer (OVGU Magdeburg), Victor Reijs (SIDN Labs),  
Adrian Perrig (ETH Zurich)



# Welcome

- Thanks to the RIPE81 organizers and PC
- Thanks to all the BoF speakers and participants
- Thanks to Caspar Schutijser (SIDN Labs) for serving as secretary

# Logistics

- How to ask a question:
  - Ask for mic access: press on mic symbol at the left top
  - Write a question: press 'Q&A' icon and include your affiliation in your question



# What this BoF is about

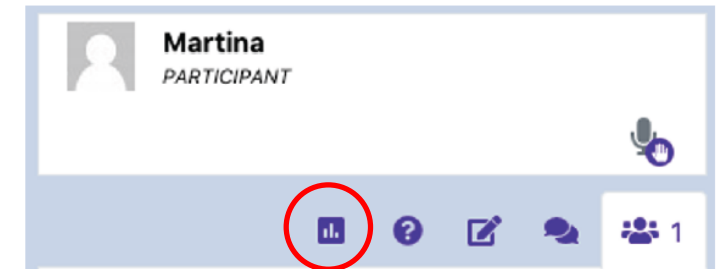
- Something different than the IP protocol suite
- Secure internetworking protocol SCION, which is implemented and in operation
- How can we involve RIRs/LIRs in a SCION Internet?
- This BoF is to hear your ideas how to roll this out at a large scale.

# Agenda

- David Hausheer (OVGU Magdeburg): Chair's Welcome (5min)
- Adrian Perrig (ETHZ): SCION overview, ambition and progress (10min)
- BoF Discussion: The new roles of RIRs and LIRs in a SCION Internet (40min)
  - Moderator: Victor Reijs (SIDN Labs)
  - Several presenters will provide their ideas around the subject (1 min each)
  - Afterwards, we expect *you* to provide your remarks/comments and questions
- Wrap-up

# Poll

- Caspar Schutijser (SIDN Labs)
- What is your experience with SCION?
  - None
  - I heard about it
  - I played with it
  - Practical experience
  - I'm an expert.



Press the poll symbol

# Next...

- Adrian Perrig (ETH Zurich): SCION Overview, Ambition and Progress





# BoF Discussion Questions

- Would RIRs want to take up coordination around SCION?
- Should RIRs hand out the SCION-AS numbers?
  - How to coordinate with traditional Internet AS numbers?
  - Owners of a SCION-AS, contrary to owners of traditional Internet ASNs, would often want to obtain multiple SCION-AS numbers for different domains to take advantage of SCION's features.
  - We expect 10-100 times more SCION-ASNs.

# BoF Discussion Questions (cont'd)

- Should RIRs assist with the establishment of ISDs?
  - Does this provide additional opportunities for LIRs?
- What about SCION-AS certificates?
  - Should RIRs take on a similar role as in RPKI?
  - What's the CA role in all of this? For current IP prefixes; could RIRs provide certificates that enable the owner to prove ownership?
  - This could be based on RPKI, but require the active use of the private key for authentication / key establishment purposes.

# BoF Discussion: The New Roles of RIRs and LIRs in a SCION Internet

- Moderator: Victor Reijs (SIDN Labs)

# Speakers

- The ISPs/LIR's Perspective:
  - Simon Leinen (SWITCH)
  - Fritz Steinmann (SIX)
- The Role of IXPs:
  - Stavros Konstantaras (AMS-IX)
- An Implementer's Viewpoint:
  - Joeri de Ruiter (SIDN Labs)

# Would RIRs want to take up coordination around SCION?

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SCION

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# Should RIRs hand out the SCION-AS numbers?

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# Wrap-up

- There will be a summary of the BoF
  - We plan to write an article and publish it on RIPE Labs  
<https://labs.ripe.net/>
- Slides are available here:
  - <https://ripe81.ripe.net/presentations/presentation-archive/>