



Deployment Experiences

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Background & goal

SCION is a path-aware technology that with early adopters who gained operational experience:

- [SSFN](#): Connecting 300+ banks with each other for payments and settlements, others in rollout (Health, power). Presented at last session in Prague.
- [SCIERA](#): global research network
- SCIONLab R&D testbed

What can we learn from these early adopter experiences?

Can we answer some of the open question in path-aware networking (RFC 9217)?

- how can a path-aware network in a path-aware internetwork be effectively operated?
- how can the incentives of network operators and end users be aligned?

SCION Deployment Experiences – some ideas

1. **Deployment Models:**

- SCION Network – how to roll it out ← most operational experience, some documentation
- SCION-IP Gateway ← some operational experience
- SCION-enabled endpoints/applications ← experimental

2. **Establishing and running an Isolation Domain** ← operational experience, detailed documentation

- Description & Use Case
- Governance, roles (Core members, TRC signers, CAs)
- ISD Policy Development & Maintenance
- Assignment and registration of ISD numbers + SCION AS numbers ← longer-term solution required
- TRC configuration

New I-D: SCION Deployment Experiences (continued...)

3. **Establishing and running a SCION AS**

← some operational experience and

documentation

- Pre-requisites
- How to join an ISD
- Obtaining a SCION AS and certificate
- Setting-up the Control Services (Beacon, Path & Certificate servers) and SCION Border Routers
- Configuring path(segment) attributes and parameters

4. **Adding and removing networks from an Isolation Domain**

← limited operational experience

- Adding a new core / removing existing core network
- Adding a new / removing existing non-core network

6. **Connecting to other ISDs**

← some experience in education network

Next Steps

We have some ideas and a draft skeleton.

- Is the RG interested about these topics? If so, what should be addressed in the draft?
- Is there anything we missed?

Thank you!