

The role of IXPs in SCION internet

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Today's status



IXPs are central points for

- Interconnecting ASNs
- Provide redundant paths for enhanced reachability and resilience
- Group AS connectivity based on technical, business or security reasons.



The role of IXPs in SCION era



In short, we believe our SCION future could be:

- IXPs can still operate under one big ISD and provide redundant paths between ASs
- IXPs can also host (parts of) multiple ISDs and technically separate their traffic
- Potentially IXPs can operate at the core and provide GWs between multiple ISDs

The role of IXPs in SCION era



Our future role looks similar to our current one

- IXPs are good on grouping ASNs and provide traffic isolation, SCION aims for similar goal
- IXPs could host the SCION beaconing mechanism due to their neutral and independent role in the current internet.
- IXPs could help on building and implementing the SCION design