

P4 2STiC testbed

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Outline

- Aim of 2STiC Programme...
- 2STiC testbed...

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- 2STiC Programme: Security Stability and Transparency of inter-network communication
- Programme with: NLnet Labs, SIDN Labs, SURF, TU Delft, UTwente, UvA
- Provide publications, guidelines, experiences around future internet technologies
- Get practical experience: 2STiC testbed...

2STiC testbed

2STiC testbed

- Practical experience with future internet technologies and consortium partners
- Get experience with running a testbed
- Multi-domain environment
 - Initial setup...
 - Future direction...

Initial setup of 2STiC testbed

- Starting with P4 nodes (mostly Barefoot switches and servers with Netronome SmartNICs)
 - Configuring 100G port options was a learning step
- Physical and logical connectivity tests ('ping')
- In-band Network Telemetry (INT) as a use case for the 2STiC testbed
 - Trying out IETF standards and providing feedback
- Initially expose INT-metric: IN and OUT interface and node-id
- Designing a data collector design and topology
 - Looking at control and data plane aspects of gathering data

2STiC testbed: geographical locations



Future direction

- See P4 as a tool
- Investigate future internet technologies: SCION, RINA and NDN
- Cooperation with and connected to other similar testbeds (such as SCIONLab)
- Provide a platform for use cases and demonstrators
- Testbed as a Service: to provide a service to others

Questions?

Volg ons

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Thank you!

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