

TODAY'S INTERNET

Designed in the '80s, the current Internet – made up of more than 70,000 networks (or paths) through which data, such as pictures, videos, calls, financial and personal information, flows – can no longer meet the security, reliability, and performance needs of today's society.

When data is sent from one device to another, the route it takes is determined automatically, without the sender having any control over it. As a result, data can be routed through vulnerable, unsafe, or congested networks, which puts its integrity, availability, and performance at risk.





ROUTING ISSUES OF THE INTERNET

Issues with BGP have been understood for many years

VULNERABLE TO ROUTE LEAKS AND HIJACKING



Service disruption, traffic interception, redirection or modification, and potential for large-scale Distributed Denial-of-Service (DDoS) attacks.

LACK OF PATH SELECTION, LONG FAILOVER TIMES



Data can be (and often is) routed through different countries and over unsafe or congested networks. Failure reaction time is too long for critical infrastructure.

NO WAY TO ENFORCE DATA SOVEREIGNTY



Traffic can be disrupted, intercepted, or monitored by bad actors, and data can be sent outside of particular jurisdictions, which can breach national and supranational data protection legislation, such as FADP and GDPR.





What's clear is that the Internet can no longer meet the security and reliability needs of many organizations and users, particularly those in the finance, healthcare, utilities, and public sectors, as well as operators of critical infrastructure.



WHAT IS SCION?

SCION is a resilient inter-domain path-aware architecture that offers the following advantages:



TRUSTED NETWORKS FOR REDUCED ATTACK SURFACE



PATH SECURITY AGAINST HIJACKINGS



GEOFENCING FOR DATA SOVEREIGNTY



MULTI-PATH AND FAST FAILOVER FOR PERFORMANCE AND UPTIME

Clear network governance with common trust domains with agreed trust policies.

Paths are cryptographically secured at each hop. Networks can choose how they advertise their network topologies and how they send and receive traffic from other SCION networks.

Users can select the path(s) by which to send their data across the Internet, based on optimal characteristics or other parameters (e.g. geofencing, latency, ...).

SCION uses multiple paths and operators simultaneously, switching paths in less than a second, increasing resilience and performance.

SCALABLE AND INTEROPERABLE FOR EASY DEPLOYMENT



THE WORLD OF SCION

A growing ecosystem

BUILDING INFRASTRUCTURE FOR COMPETITIVE EDGE

Service providers, integrators and vendors play a crucial role in managing and maintaining the infrastructure that enables SCION. They offer SCION services to the users, enabling SCION's use today.



DIGITAL REALTY



























eraneos





cyberlink

ensWEvery

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CANCOM

FINASTRA

swisscom

THE EXPERTS DRIVING INNOVATION

With over sixty researchers and hundreds of practitioners using SCION in real-world scenarios, the deployment of SCION's technology continues to expand.























THRIVING THROUGH SECURITY, RELIABILITY AND PERFORMANCE

With SCION, enterprises in various verticals, non-profits, app developers and blockchain developers can have complete control over their online data flows, benefitting from security, reliability and performance advantages.























INSIDE THE SCION ASSOCIATION

Open, trusted, connected and curious

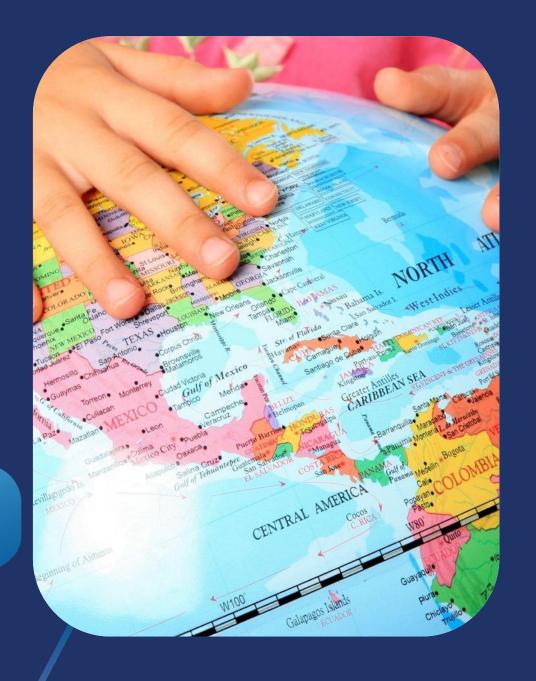




OUR PURPOSE

CREATING A SAFE CONNECTED WORLD

Our Purpose is to create a safe connected world. Because we believe in a future where the exchange of information can be made trustworthy; anytime, anywhere and for anyone. Our openness, curiosity to learn and innovate continuously pushes the boundaries of what is possible. It's what drives us and it's what makes SCION a truly transformative catalyst. Fast, reliable and scalable. This is why SCION is the first choice for everyone looking to elevate the secure exchange of data.





OUR VALUES

The guiding principles we live by



WE ARE OPEN

- We actively seek and welcome new ideas, empowering innovation and continuous improvement.
- We cultivate a culture of broadening horizons and learning, constantly challenging ourselves to explore new ways of making SCION and everyone within even better.
- We are inclusive and nurture a community that celebrates diversity, embracing everyone's unique contributions.
- SCION is an inviting space where collaboration and teamwork thrive.
- Together, we build an open ecosystem, uniting diverse talents and perspectives to continuously elevate SCION as the transformative leap in internet technology.



WE ARE TRUSTED

- At the core of our motivation lies a deep commitment to the safety of information exchange – making our lives safer and better.
- But it's not just about protecting sensitive data; it's about safeguarding the trust and confidence placed in the SCION technology we continuously elevate.
- This extends to the people we collaborate with, fostering a culture of mutual trust and respect in our entire ecosystem: academics, researchers, implementation partners, users etc.
- We believe that building strong relationships lays the foundation for a reliable and successful future of SCION.



WE ARE CONNECTED

- Connectivity is the heartbeat of SCION and our society. It links our revolutionary technology with the real world.
- And it fuels our passion to continuously think and build secure data exchange technology, fostering deep trust and collaboration within and beyond our ecosystem.
- We forge bonds that transcend boundaries, uniting as teams and individuals.
- With SCION technology as our catalyst, we revolutionize internet architecture, driven by the profound belief in a future where every connection matters, anytime, anywhere and for anyone.

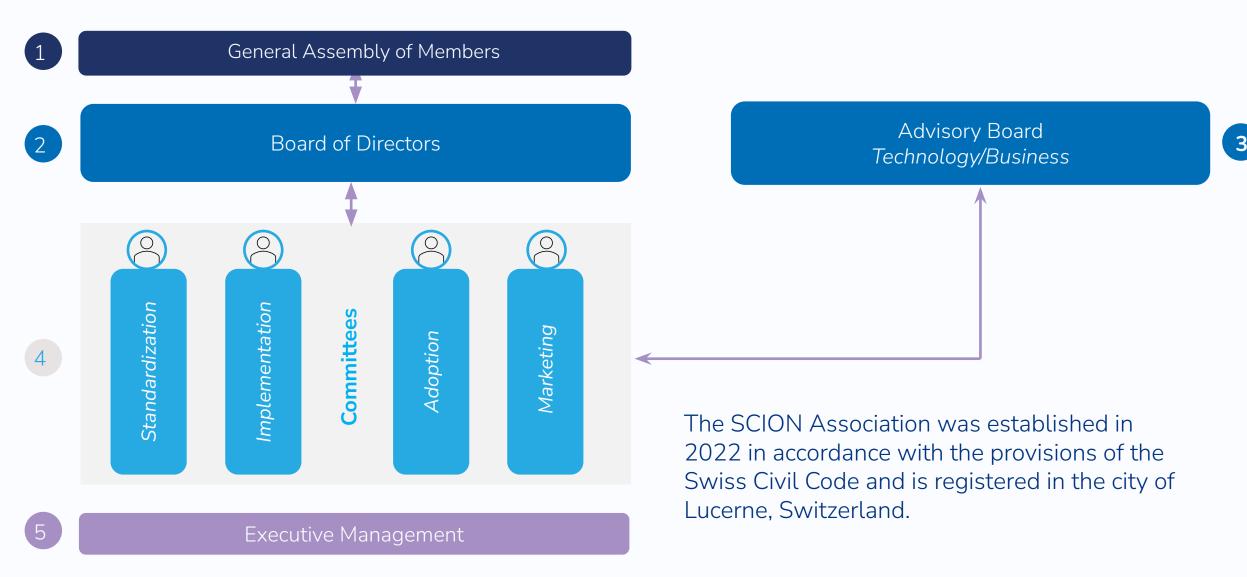


WE ARE CURIOUS

- We live relentless curiosity, encouraging everyone in our environment to embrace a thirst for knowledge, explore new frontiers, and challenge the status quo.
- We always go deep and love to dissect complexity – and then to resurface with simplicity.
- The desire to learn and innovate, pushing the boundaries of what is possible to make the internet a more secure place is what drives us.
- It's what makes SCION a truly transformative catalyst to safely exchange information. Fast, reliable and scalable.



GOVERNANCE - OVERVIEW





BOARD OF DIRECTORS



Professor, ETH-Delegierter für Digitale Transformation, ETH Zürich



PROF. RETO FRANCIONI

UBS European Chair



DR. ULI SIGG

Private individual



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SIX Group BoD



PROF. VANESSA WOOD

ETH Board, VP Corporate relations



DR. THOMAS MOSER

SNB Observer



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CEO Anapaya



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CTO EMEA, Extreme Networks



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Professor, ETH Zürich



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Chief Information & Technology Officer, GÉANT



HUI ZHANG

Chief Scientist, Chairman of the Board, Conviva



MIKE DARGAN

Chief Operations and Technology Officer at UBS



OUR TEAM







KATARINA GARIC

Marketing & Communications

Manager



JEAN-CHRISTOPHE HUGLY
Software Engineer



KEVIN MEYNELL

Community Engagement Manager



KATYA TITKOVA
Software Engineer



ROMAN SCHARKOV

Software Engineer



GROWING THE SCION MOVEMENT

Empowering communities, creating value

TECHNOLOGY

The technology keeps evolving to provide more and more benefits to its users, more use cases are developed and deployed.



The ecosystem keeps growing together, creating new adoption areas and building up a larger and larger SCION network.











CREATING A SAFE CONNECTED WORLD

Together with our Members





ENABLING THE SUCCESS OF THE ECOSYSTEM

How we are driving progress in three core areas

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SPECIFICATION

We create the technical specifications to implement SCION, with the goal of ensuring interoperability and keeping the ecosystem open. We represent the SCION community at standards development venues such as the IETF.



OPEN SOURCE

We coordinate and maintain a SCION implementation for research, development, and experimental deployments.



BRAND & COMMUNITY

We raise awareness of the benefits and features of SCION while fostering an actively engaged community.



SCION SPECIFICATION

A big step towards global adoption

INTEROPERABILITY

Multiple implementations ensuring compatibility.



OPEN ECOSYSTEM

Anyone can succeed with a clear specification.







BETTER TECHNOLOGY

Multiple Wider community review by renowned experts and global recognition.



CERTIFICATION

Fundamental for a certification program.

WHAT IS OUR ROLE?

Standardization technical committee

SCION draft specification (see: datatracker.ietf.org)

Representation at standardization development organizations



HOW CAN MEMBERS GET INVOLVED WITH THE SPECIFICATION?

Define future protocol evolution

Be informed with timely updates on the latest developments with the SCION protocol and its IETF specification.

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Shape together the future of the SCION specification and of its journey through IETF/IRTF.



Join us at IETF meetings worldwide for collaboration, hackathons opportunities.



STANDARDIZATION COMMITTEE















ROGER LAPUH
Extreme Networks





MIKAEL HOLMBERG
Extreme Networks





KEVIN MEYNELL
SCION Association



SCION OPEN SOURCE

Fostering a healthy community with transparency and collaboration at its heart

WHAT IS OUR ROLE?

- Custodians of the open-source SCION implementation.
- Actively contribute to software development projects.
- Support through code contribution reviews.
- Provide documentation.
- Define the open-source roadmap.
- Organize member community meetings.

WHY DO WE DO THIS?

- To make sure the SCION ecosystem can rely on a stable, quality reference implementation.
- To have a vendor-independent, low-barrier entry point to SCION.
- To ensure that there are multiple software options for SCION adopters.

scionproto/scion

SCION Internet Architecture

A 68 Contributors ☆ 24

44 ೪

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107

Forks

Tech

CE MANUALS

Control Service

SCION-IP Gatewo

Router Gateway

Dispatcher |

scion scion-pki snet API (2

DEVELOPER DOCUMENTATION

Setting up the Developmen Environment

Style Guides
Testing

ependencies esign Documents nformation for end-to-end communicati

Technology

The ideas and concepts behind SCION.

Overview: SCION | Control Plane | Data Plane | SCION End Host

Reference Manuals

User documentation for the services, tools and programming libraries of the open-source SCION implementation (**.

- . For operators of SCION end hosts: scion | Daemon | Dispatcher
- For operators of SCION ASes: Control Service | Router | Gateway | Configuration | scion-pki
 For developers of SCION applications: spet API^(F)
- For developers of Scrott applications, site

Developer Documentation

Start with the Contribution Guide to contribute to the open-source SCION implementation

- Policies and Processes: Governance: TC Implementation | Change Proposal Process | Style
 Colders
- . Building and Running: Setting up the Development Environment | Running SCION Locally
- Design Documents



HOW CAN MEMBERS GET INVOLVED WITH IMPLEMENTATION?

Unlock exclusive benefits

Opportunity to contribute to the development of the SCION open source.



Have a direct say in determining the next steps of SCION's progress



Participate in hackathon projects at worldwide events.



IMPLEMENTATION COMMITTEE







MARKUS LEGNER
Mysten Labs















SCION BRAND & COMMUNITY

Spreading the SCION story worldwide

WHAT DO WE DO?

- Brand awareness across multi-channels
- Events and community gatherings

MARKETING COMMITTEE

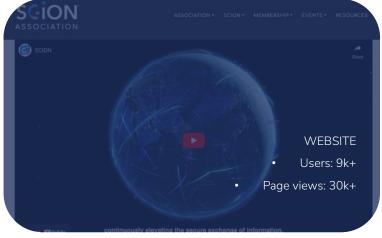
- Get your products recognizable thanks to the SCION brand and trademark.
- Enhance your marketing impact with co-branded campaigns and valuable insights
- · Participate in joint events in Switzerland and abroad and get exposure.

ADOPTION COMMITTEE

- Deployment blueprints & best practices
- Collect user and adopter experiences
- Document use cases, benefits, markets
- Engage with key stakeholders







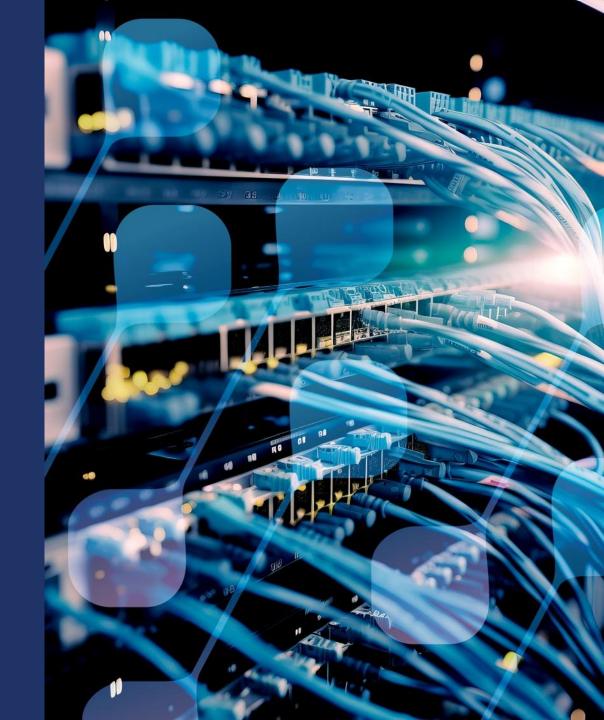
SCION AMBASSADOR PROGRAM

Launched in April 2024



OUR MEMBERSHIP MODEL

Join a vibrant community, be a catalyst for change!





SCION ASSOCIATION MEMBERS

SUPPORTER MEMBERS

ETH zürich

SCHWEIZERISCHE NATIONALBANK
BANQUE NATIONALE SUISSE
BANCA NAZIONALE SVIZZERA
BANCA NAZIUNALA SVIZRA
SWISS NATIONAL BANK



DR. ULI SIGG As a private individual



ADOPTER MEMBERS































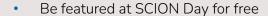
MEMBERSHIP & BENEFITS

ADOPTER

COMMUNITY

SUPPORTER

- Use of SCION wordmark & logo in marketing & products for commercial use (free for academia)
- Be listed as a SCION provider on www.scion.org
- Free SCION AS number assignment*
- Access to discounted sponsorship packages for SCION Day
- Opportunity to join all our Committees subject to BoD approval
- Be part of general assembly, voting rights (excl. free tiers)



- Marketing starter package (including basic messaging)*
- Access to Marketing and Adoption Committees by default
- Reduce risk and protect your SCION investment by supporting our efforts towards open source maintenance and standardization
- Custom joint events or articles under the SCION banner, including dedicated Marketing support
- Upon request, possibility for dedicated open source development support
- Right to join the Standardization Committees by default and recommendation to the Implementation Committee
- Certification discount*
- Access to SA boards/leadership for strategic discussions/guidance

* Coming soon















ASSOCIATE MEMBERSHIP

A "lightweight", free membership tier



FOR WHOM?

- Non-for profits
- Academic institutions
- Government organizations and regulatory bodies



BENEFITS

- · Be listed on www.scion.org
- Attend member meetings/AGM (no voting rights)
- Use of SCION wordmark & logo in marketing & products for non-commercial use



WHAT IS EXPECTED

Ongoing free membership is contingent on regular participation and contribution:

- Contributions to our Committees or to open source projects
- · Cross marketing, e.g. writing a blog post, hosting an event
- Contributions to SCION deployments
- Equivalent membership for SCION Association (if similar program exists)



VALUE-BENEFITS FOR ISPs

Telecommunications providers, IXPs and NRENs







ADVANTAGES

- · Define further use cases
- Make the technology better thanks to your feedback and experience
- Interoperability between networks is maintained

ADVANTAGES

Influence technology future developments

ADVANTAGES

- Featured at events (e.g. SCION Day)
- Use of the SCION logo
- Listing on scion.org
- Marketing starter package

BENEFITS

- Reaffirm your role as an early adopter in a growing global SCION Internet
- · Ge early insights into future technology evolution
- Guarantee long-term credibility of technology

BENEFITS

- Explore new use cases
- Gain advantage with early insights into future technology developments

BENEFITS

- Connect with potential customers and like-minded companies
- Expand and accelerate market entry
- Lower entry barrier for your SCION offering
- Recognition by being an official SCION provider



THANK YOU

Time for questions!

SEND ME AN EMAIL



NICOLA RUSTIGNOLI Co-CEO SCION Association

FOLLOW US



VISIT OUR WEBSITE



