

Securing Axpo Systems' remote user access with Anapaya GATE powered by SCION

Due to a surge in zero-day exploits targeting VPNs, Axpo Systems has transitioned to Anapaya GATE on the SCION Internet. This move shields their remote infrastructure from public Internet vulnerabilities, enhancing security and cyber resilience.

About Axpo Systems

Employees: 150
Footprint: 5 locations
Industry: OT solutions provider
SCIONabled since: 2021
Product: EDGE, GATE

Overview

As a leading operational technology (OT) solutions provider, Axpo Systems delivers crisis-proof services to over 100 clients, including Axpo Group. To fulfill its mission, Axpo Systems must ensure the security and reliability of its operating infrastructure, at all times. To enhance the security of their home workstations and supplier access, they have transitioned from their previous VPN-based remote access to a SCION-based solution via Anapaya GATE.

“By transitioning to SCION and Anapaya GATE, we isolate remote access completely from the Internet, ensuring the highest network security and availability for remote work, while achieving cost and operational efficiencies. With traditional VPN or Zero Trust solutions, such a level of security was not possible. This innovation aligns with Axpo Systems’ commitment to excellence in critical OT environments.”

Manuel Dietrich
CTO of Axpo Systems



The challenges

With the rise of cyberattacks and the expanded attack surface introduced by remote access – from home-office employees to suppliers – along with the increase in zero-day vulnerabilities found in VPN software, Axpo Systems needed a more resilient solution than the existing VPN.



In 2023, 56% of businesses suffered cyberattacks that exploited VPN vulnerabilities, a significant increase from 45% in 2022.

Source: Zscaler 2024 ThreatLabz VPN Risk Report, which surveyed 647 professionals across the security, IT, and networking sectors.

- Internet-facing appliances for remote access are exposed globally due to the vast and open nature of the Internet.
- Unknown entities are constantly scanning and attacking Internet-facing appliances to launch DDoS and ransomware attacks.
- Cybercriminals’ search for vulnerabilities, particularly of the zero-day variety, is constantly underway.

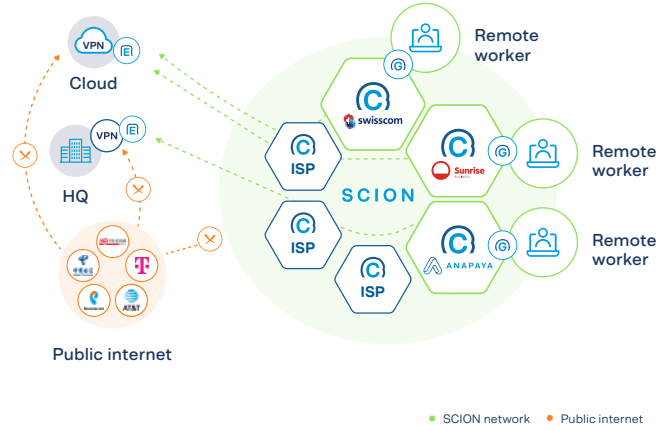
The new solution had to meet the following requirements:

- Seamless remote connectivity with high bandwidth and availability.
- Enhancements over traditional VPN limitations, offering improved security and performance by enforcing full isolation from any Internet exposure.
- A transparent and efficient migration process with no disruption to users or operations.



The setup

Axpo Systems' critical services, which employees and suppliers need to access to deliver OT services to their customers, are hosted on the SCION Internet behind Anapaya EDGE at their HQ server.



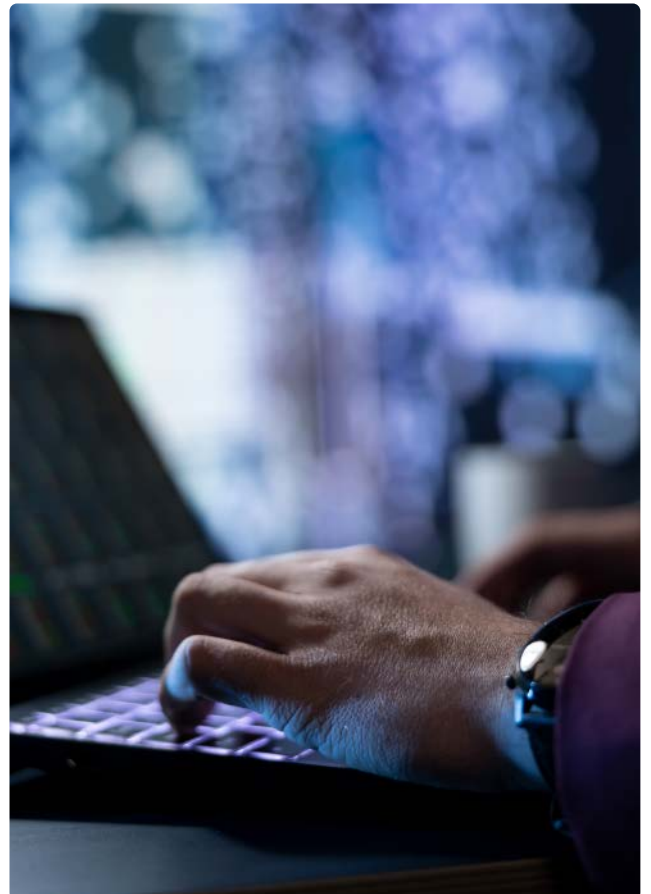
Once employees and suppliers connect through their service connectivity provider, their traffic is automatically redirected through Anapaya GATE and enters the SCION Internet, where they can access the service without requiring any additional steps from the user.

The solution

Axpo Systems transitioned from a traditional VPN solution to a SCION-based solution with Anapaya GATE, in order to safeguard its operational infrastructure from breaches related to remote access.

This solution provides secure remote access to all employees and suppliers:

- Employees can securely access internal systems, such as ERP, intranet, and the grid control network.
- Suppliers can perform maintenance on critical OT systems and other critical services without posing security risks to the company network.
- Full isolation from the Internet is enforced at all times. Access points are not routed on the Internet and can no longer be attacked.



The outcome

The GATE solution is used in two different instances by Axpo Systems – one for remote employees and the other for supplier access – with the benefits remaining the same:



Secure connections for remote workstations and third-party suppliers, ensuring enhanced data security.



Protection against attacks thanks to a reduced attack surface of up to 99%, preventing DDoS and intrusion attacks, and mitigating the risk of network-wide escalations.



Cyber resilience with sub-second path switching in case of path failure or congestion.



Simplified monitoring and quick response to network issues, providing peace of mind.



Simple and scalable, offering flexibility for future growth.

The SCION-based solution enables Axpo Systems to continue its mission of delivering robust, crisis-proof services while adapting to the demands of modern, secure connectivity.

All employees accessing critical services
are connected via the GATE

to be fully isolated from the Internet.

The existing IT systems, including VPN, are still kept for **redundancy purposes.**

Critical systems such as SCADA are now accessible to be operated remotely while being

100% isolated from the Internet.

[Download the Digital tips for improving VPNs](#)

Have questions? Contact us at team@anapaya.net