

STC Enhances Network Security Posture with SecurityGen's ACE, Breach & Attack Simulation platform

The Customer: STC

The MENA region's digital leader providing customers innovative services and platforms and enabling digital transformation. A forward-focused digital champion, STC has led digital transformation nationally and regionally through innovation and evolution. With a range of ICT solutions and digital services in categories including telecommunication, IT, financial technology, digital media, and cybersecurity, STC remains a key enabler of digitalization for the public and private sector, perfectly aligned with Saudi Vision 2030.

Business Background

As a major channel for Saudi Arabia's government and business communications, STC supports corporate clients of all types and sizes. STC's network is underpinned by a robust security strategy and security mechanism that covers not only the IT side but also the signaling layer. Regular security assessments, tuning, and proper configuration of signaling firewalls are an essential part of the STC security process.

Since the launch of MENA's first 5G network, back in 2018, STC has continued to expand its 5G offering and has over 6,000 5G sites across 75 cities in the Kingdom, giving the company the widest 5G coverage in Saudi Arabia. STC was among the first service providers to launch 5G, with commercial services available since June 2019. As an early 5G adopter, STC emphasized designing the 5G deployments with solid security at the core.

The Business Challenge

Given the complexities 5G advancements bring with them, STC wanted to build a wireless network that was resilient, secure, and capable of protecting individual privacy. This approach aligned with the company's strategic goal of creating a differentiated, flexible, and secure 5G service environment for B2B and B2C customers.

As part of STC's next-generation cybersecurity roll-out, improving the identification and remediation of vulnerabilities was a priority for maximizing uptime and preventing customer data breaches. With a vast infrastructure and 5G advancements, **the Security team was keen on an automated network monitoring approach: one that could continuously measure and evaluate the security levels and help eliminate hidden and emerging attack surfaces.**

The critical security barrier was the **manual ad hoc vulnerability assessment model, which, while being time-consuming and expensive, doesn't offer comprehensive scoring and remediation of threats.** In essence, it doesn't ensure a proactive security framework.

The Solution

Building a **comprehensive security strategy that could ensure complete network visibility for ongoing protection and compliance** was imperative for STC to enhance its security posture. And this meant:

- Ensuring an unchanged security posture despite the introduction of new equipment (5G especially).
- Ensuring the existing security configurations (including the firewall) were working as expected and performing ad-hoc tuning if required based on the inspection results.
- Ensuring clear and easy reporting to guarantee compliance – as per GSMA/Saudi regulations.

Given these security priorities, the **SecurityGen team suggested their innovative, award-winning Breach & Attack Simulation platform – ACE (Artificial Cybersecurity Expert)**. Designed on a proactive security model, ACE helps strengthen the security posture by constantly monitoring and preventing security breaches.

- Performs real-time attack simulation checks and identifies if there are any relevant threats to the mobile network infrastructure.
- Provides remediation guidance to address existing threats in the network according to priority.
- Executes different inspection plans – from express telecom cybersecurity assessments and GSMA compliance tests to full inspections of the network and fraud assessment – to name a few.

Additionally, **the flexible SaaS-based ACE model ensures rapid deployment without reconfiguring the customer networks**. By simply providing the test numbers and corresponding IMSIs to ACE, it could automatically initiate threat inspection and the mitigation process for the STC network.

The Business Benefits

Within **three months** of ACE deployment, STC could see concrete benefits.

- **Eliminating the need for constant security audits** – the same results could be achieved with the SecurityGen BAS solution with significantly less effort.
- **A structured vulnerability elimination process** – covers threat identification, prioritization, threat response via configuration and automatic reinspection to assess the effectiveness of the measures.
- **Reduction in overhead costs** – automated inspections via ACE helped reduce the overheads and expertise required for manual assessments. A single team member was in charge of the inspections, assessing results, and transferring ACE recommendations to the people concerned.
- **Autogenerated reporting module** – helped track the progress of the network's security posture while configurations were being made on the network equipment, and the signalling firewall reconfigurations that resulted as recommendations from the ACE inspections.

Key Metrics

Within a year of ACE deployment, STC team could report the below outcomes:

- 1 **50%** reduction in assessment services cost along with significant savings in resource time utilisation.
- 2 The well-structured training further helped the team handle the current department's security posture analysis and remediation.
- 3 **37%** improvement in security posture level was reported with the help of the existing network team and the "**Ask the Expert**" service of SecurityGen.



ACE, SecurityGen's award-winning Breach and Attack Simulation platform for Telecoms

- **An innovative, intelligent approach to Telecom security**
- **Ranked #2 in Rocco Vendor Innovators award 2022**
- **Winner of Innovation Award, Vendor at Telecoms World Middle East**

About SecurityGen

Founded in 2022, SecurityGen is a global start-up focused on telecom security. We deliver a solid security foundation to drive secure telecom digital transformations and ensure next-gen enterprise intelligent connectivity.

Connect With Us

- ✉ Email: contact@secgen.com
- 🌐 Website: <https://www.secgen.com>

UK | Italy | Czech Republic | Brazil | Mexico
India | South Korea | Japan | Malaysia | UAE