

SecurityGen

Telecom Security. Transcending Generations.

5G CYBER-SECURITY LAB

Solution Overview Datasheet

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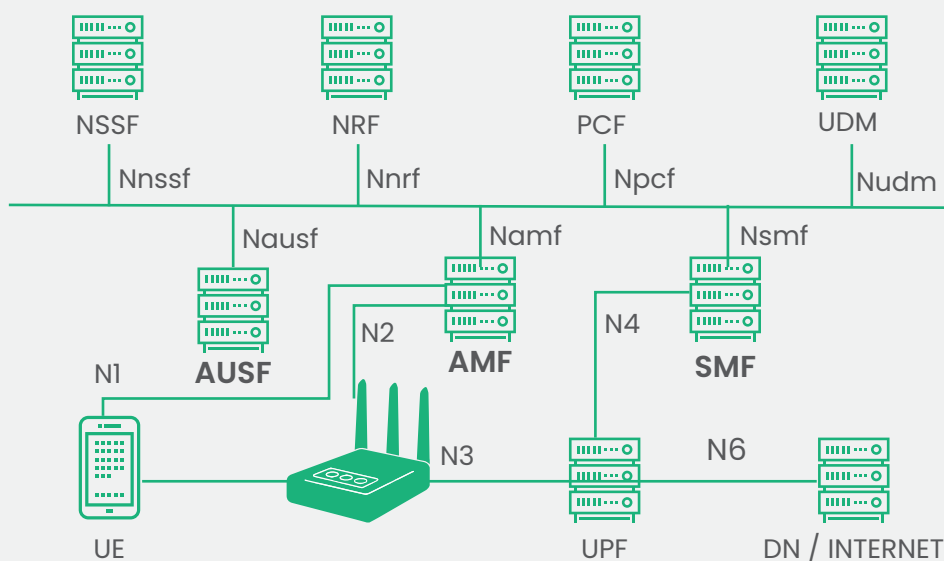
SecurityGen 5G Cyber-security Lab - A holistic 5G view for building a safe & secure tomorrow

While the 5G developments are making rapid strides, the new technologies and virtualised cloud-based networks are also bringing new challenges. How do you ensure secure transformation if MNOs need to get to market quicker and provide a fast and best customer experience? The answer is fairly simple: You must test and validate solutions to ensure a safe and secure rollout of 5G use cases.

But with the lack of an actual 5G environment, how do you ensure secure transformations from legacy to 5G. With deep experience in telecom security, SecurityGen has developed 5G Cybersecurity Lab to:

- Help MNO security teams better understand how 5G works
- Define accurate list of security requirements
- Prove efficient ways to protect against threats and vulnerabilities
- Test new systems for security issues and many more.

With our 5G cyber-security lab, you can know, plan, and prepare better for tomorrow



Solution Overview

- SBA Core Elements – AMF, SMF, UPF, NRF, AUSF, UDM, UDR, PCF, NSSF
- 3GPP release – Release 15
- Encryption and integrity protection – AES, SNOW3G, ZUC
- USIM authentication – XOR, Milenage, 5G-AKA
- IP Version – IPv4, IPv4v6, IPv6
- QoS – Configurable flows
- Network Interface
- NG (NGAP and GTP-U protocols) to several gNodeBs
- RX for external IMS server
- Service Based Interfaces (Namf, Nsmf, Nnrf, Nausf, Nudm, Nudr, Npcf, Nnssf)
- Integration with 5G NR SA (N1, N2, N3, N6)
- 5G NR Interfaces (NGAP)
- Implementing control-user plane split – PFCP (N4)
- Service-Based Architecture (HTTP/2, OpenAPI, REST)
- Highly customizable for vertical use cases and dedicated networks
- Extensive support of network slicing.

What You Get



A better understanding of 5G network



Deep understanding of 5G security



The same level of preparedness as the network team



These real experiments and tests will empower the security teams to push their initiatives/agendas



Helps MNO teams identify what and how they need to protect



Facilitates MNO teams in finalising what to request from 3rd parties



Quick verification of newly published attacks allows one to take a decision without real impacting of the network, customers and business

Why SecurityGen 5G Cyber-security Lab

- First, it helps you understand how 5G technology works
- Second, when you understand how 5G works, you are in a better position to understand how the real issues may appear
- Additionally, the better and deeper your experiment
 - Helps verify if some attack is possible or not
 - You can invent new type of attack/s
 - Enables you in mitigating issues via configuration or via 3rd party solutions
 - You can test 3rd party solutions without any influence on the commercial network
 - When you prepared – you can go to check real network.

Why SecurityGen

<p>It's our know-how how to build such environment</p>	<p>We are committed to continuously support and upgrade this environment to keep the pace of technology evolution</p>
<p>The same lab is used for conducting our security research</p>	<p>We are able and happy to share our experience with security teams</p>

Configurable, security-centric 5G network environment. Train ahead to secure your 5G networks against threats.



Low cost



Fast deployment



Easy to use



Secgen team
support

About SecurityGen

Founded in 2022, SecurityGen is a global company focused on telecom security. We deliver a solid security foundation to drive secure telecom digital transformations and ensure safe and robust network operations. Our extensive product and service portfolio provides complete protection against existing and advanced telecom security threats.

Connect With Us

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