5G Security

OVERVIEW

5G is evolutionary in the context of cellular technology generation. According to 3GPP, 5G comes with 3 main use case families: eMBB (Enhanced mobile broadband), mMTC (Massive machine type communication), and URLLC (Ultra-reliable low latency communication).

However, 5G security is vastly different from traditional security due to the real-time nature of the communications. It poses an alarming challenge due to the involvement of a vast number of protocols, applications, systems, and endpoints. 5G also requires full interoperability with today's existing systems. 5G is potentially so susceptible to cyberattacks because of its possibilities and flexibility. Also, the introduction of service-based architecture further contributes to the various threats. The need to have a robust security solution to secure their 5G services is of paramount importance.

Our 5G security solution secures interconnections between 5G networks, secure interoperability services (backward and forward compatibility), and also the connections on different 5G slices, thus ensuring the QoS and QoE are maintained.

FEATURES

01 **Multi-Protocol Threat Detection:**
Ability to look across multiple types of protocols and detect threats proactively in standalone and non-standalone scenarios in the 5G environment in real-time.

02 **Signatures & Heuristics:**
With over 58400 signatures, 3000 pre-configured rules, and the threat intelligence from the global honey pot infrastructure is fed into our system to detect known attacks in 5G environment and reduce fraud run-time significantly.

03 **ML-Based Anomaly Detection:**
Enables early detection of unknown patterns and monitors deviations against known normal behavior across 5G networks with the anomaly detection engine, which incorporates advanced AI/ML capabilities to prevent advanced attacks and ensure business continuity.

04 **Network Slicing Security:**
Enables CSPs to offer secure versions of these slices to their customers to meet their requirements.

05 **Coherent Integration:**
Integrates seamlessly with various network elements in the CSPs' infrastructure, thus securing all points.

06 **Comprehensive Protection:**
Protects the underlay network (MEC infrastructure) as well as the overlay network, thus enhancing every client's security posture.

07 **5G Service Innovation:**
Enables CSPs with new revenue streams through security capabilities and tools to provide "as a service" offerings for 5G slice security and multi-access edge computing (MEC) security.

08 **Containerized Deployment:**
Support for Docker, Kubernetes, ONAP, and NFV based deployments that are cloud-enabled and containerized. Also, virtual and physical appliances are available.

BUSINESS BENEFITS

Enhanced Customer Experience:
Enriches your customers' experience by protecting all the services across the 5G network.

Innovative Business Models:
Enables CSPs to rapidly create and roll out new 5G business models and services leveraging partner ecosystems, packaging 5G connectivity with new connected devices.

Positive Brand Image:
Safeguards customers from a range of emerging threats, reduces customer churn, and helps build a positive brand image. Secured and trusted solutions for your network establishes premium value with your customers.

Increased Profitability:
Enables CSPs to unlock revenue streams, successfully monetize connectivity capabilities, thus enhancing profitability.

Safeguard Your Core Infrastructure:
Protects your core infrastructure, defending against sophisticated fraud and abuse, thus providing your customers with a reliable and high-performing network.

Meet Data Security and Data Privacy Requirements:
Use the solutions' inbuilt reports to help customers meet security compliances such as HIPAA, IEC 62443, NIST, ISO 27001, etc. Also, provide an enhanced security posture to help the CSP meet regulatory compliances.

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