

CHECK POINT CARRIER SECURITY SOLUTIONS



Check Point Carrier Security

Integrated security and scalability for LTE mobile networks

Product Benefits

- Single platform to secure all LTE Interfaces including Internet Gi Connection, S1 LTE Radio Access, roaming connectivity and Packet Controller
- Minimal latency and maximum performance for growing mobile data traffic volumes
- Easy security management across the entire mobile network, reducing operational and maintenance effort and lowering TCO
- Flexible security architecture with modular components for easy deployment of new security protections
- Consolidate gateways and secure multiple networks with Virtual Systems

Product Features

- Stateful inspection of LTE protocols including GTP, SCTP and Diameter
- Carrier Security platforms offer a scalable solution with optimal price performance for carriers of all sizes
- Centralized, single-console management with role-based administration
- Extensible architecture offer subscriber-based value-added security services including IPS, Antivirus, Web security and Anti-Bot

INSIGHTS

The growing power of mobile devices, and subscribers' hunger for richer, faster mobile Internet services, is introducing a range of new security risks for network operators and service providers. Dramatic growth in smartphone and mobile application usage is introducing new challenges and new vulnerabilities to networks, while the move to IP-centric architecture in next-generation LTE networks means that networks are vulnerable to security attacks from the radio access interface.

These fundamental changes demand new approaches to securing mobile networks, customer data and devices against current and emerging threats, while keeping networks running with maximum availability and performance.

SOLUTION

Check Point's Carrier Security solutions deliver complete protection for 3G and 4G LTE networks, giving mobile carriers and network operators a single, integrated platform for securing their entire next-generation infrastructure.

Built on the award winning, proven technologies used by Fortune 100 companies and telcos all over the world, Check Point's Carrier Security solutions secure all LTE interfaces, protect the mobile packet core, secure roaming connectivity, and support a range of subscriber value-added security services. This enables MNOs and carriers to maximize their infrastructure investments with comprehensive protection, scalability, and opportunities for managed security service offerings.

INTEGRATED PROTECTION

Check Point platforms offer scalable solutions with optimal price-performance for carriers of all sizes. These solutions provide a single, integrated platform for protecting all 3G and 4G Interfaces connected to the mobile packet core:

- Securely connect thousands of 4G LTE Radio Stations (eNodeBs) to the Evolve Packet Core network, using IPsec to authorize connectivity and encrypt user data traffic
- Secure IP Internet connectivity for devices with IPv4 and IPv6 addresses with the most scalable carrier-grade NAT (CGNAT) firewall, supporting up to 70M concurrent sessions
- Secure roaming connectivity with partners' roaming networks
- Complete control of infrastructure security with unified policies, monitoring, management, logging and reporting for all carrier interfaces

WELCOME TO THE FUTURE OF CYBER SECURITY

RADIO ACCESS IPSEC SECURITY

Securely connect thousands of 4G LTE Radio Stations (eNodeBs) to the Evolve Packet Core network. Use IPsec to authorize Radio Stations' connectivity and to encrypt user data traffic. Easily provision the IPsec connectivity when adding more radio Stations. Ensure service availability with backend services using Dead-Peer-Detection and fully redundant hardware platform. Support ESP and IKEv2 to deliver data traffic confidentiality and integrity with AES, SHA-1 or 3DES encryption algorithms. Protects against eavesdropping and data tampering on the control plane and user traffic.

IPS

NSS Labs' top-rated IPS Software Blade delivers complete and proactive intrusion prevention. Ranked #1 in Microsoft and Adobe threat coverage 3 years in-a-row, it secures your network by timely and effectively preventing browser and application vulnerability exploits.

CLEAN-PIPE VALUE-ADD SERVICES (OPTIONAL)

Offer your mobile subscribers secure web access service by leveraging the Check Point enterprise-grade Software Blades security with IPS, Antivirus, URL Filter, Application Control and Anti-Bot. Use the same Internet Gi Carrier-Grade NAT Gateways and Radio Access Gateways to offer additional security services to your mobile subscribers with mobile identity based policy.

CARRIER GRADE NAT

Allow Internet access control to millions of mobile subscribers with Check Point Large Scale NAT. Securely connects mobile devices using both IPv4 and IPv6 addresses to the Internet. Protect the Mobile Packet Core network from DDoS attacks, signaling storm, port scan, sweep scan, spoofing, over billing attacks and advanced application malware and threats.

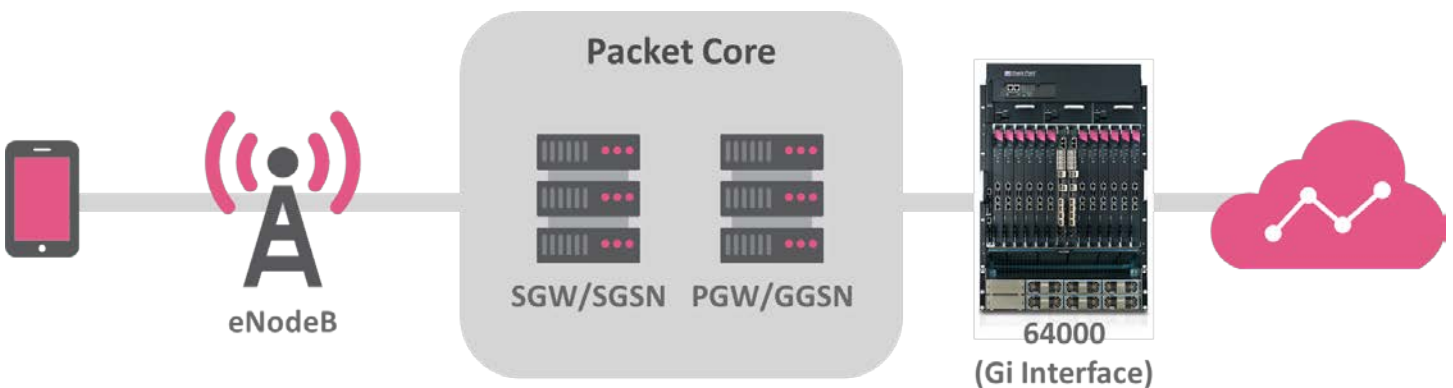


Figure 1: Example Check Point Appliance deployed as a CGN firewall

LTE PROTOCOLS SECURITY

Inspect and secure 3G and 4G IP protocols including GTP, SCTP and Diameter. Allow Mobile Operators to securely connect the packet core to untrusted interfaces such the roaming partners or the radio network. Enforce roaming agreements using Carrier Identity-Based Policy. Provide protections for DDoS, Overbilling attacks, data leakage and unauthorized access. Use advanced Diameter and GTP protocols policy to protect subscribers' data in MME and HSS. Use advanced security with Check Point Software Blades including IPS, Anti-Virus, URL Filter, Application Control and Anti-Bot to inspect subscriber traffic within the GTP data plane.

INTEGRATED SECURITY MANAGEMENT & LOGGING

Unified security management simplifies the monumental task of managing large carrier environment. Our comprehensive, centralized security management system controls all Check Point gateways deployed on all mobile network interfaces. The intuitive graphical user interface enables IT managers to easily manage a wide range of security management functions. Carrier-grade central lawful logging with advanced log analyzer delivers split-second search results providing real-time visibility into billions of log records over multiple time periods and domains.

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