**IMSSecure™**

**Signaling Security for IMS Networks**

*Save Time, Money, and Development Costs with a Pre-Integrated IPsec and SIP Solution from SafeNet and RADVISION*

**What is IMS?**

Conceived and developed by the Third Generation Partnership Project (3GPP), the primary wireless standards organization, IP Multimedia Subsystem (IMS) is the latest advancement in Internet standards-based fixed and mobile telecommunications. IMS dissolves the distinction between different services delivered by traditionally disparate networks in order to deliver next-generation services and applications to end-users, wherever, however, and whenever, therefore making it the most advanced carrier-grade service delivery architecture to-date. IMS is pegged to be one of the core technologies that bring true fixed-mobile convergence within the telecommunications industry.

**IMS Adoption Drivers**

Adoption of IMS is attractive to vendors and providers up and down the IP services value chain. As a standardized architecture, it can ultimately lower carrier cost for developing, introducing, and maintaining services by leveraging bundled (and simplified) billing, expanded subscriber reach, higher average revenue per user (ARPU), decreasing subscribers churn rate, and interoperability.

**IMS Deployment Challenges**

The successful delivery of any service or feature requires the ability to securely manage sensitive information on the user and the session for billing and account management purposes. This data is generally referred to as signaling data. In IMS the dominant signaling protocol is SIP (Session Initiation Protocol). SIP has its roots in the Internet and is a flexible and powerful protocol. However, it has no inbuilt security measures and requires a solution for protecting the sensitive information it carries.

The 3GPP and 3GPP2 have recommended the use of the standard IP security protocol, IPsec, to protect the privacy and integrity of all SIP data within the IMS. Therefore, the development of IMS and a V2oIP client require integration of SIP and IPsec technologies. The integration of these two historically separate technologies: IPsec security, a network level protocol, and SIP data management, an application level protocol costs IMS client software and telecom equipment manufacturer’s valuable time and increases development costs, and interoperability efforts.

**How To: IMSSecure, a complete, secure IMS development framework**

To accelerate IMS service roll-out and development while reducing development costs and interoperability efforts, SafeNet and RADVISION have partnered to offer IMSSecure, a pre-integrated IMS SIP & IPsec solution to support development of any IMS client.

IMSSecure is a pre-integrated, IPsec-protected IMS signaling solution that provides device and equipment manufacturers within telecom and networking industries with a complete set of tools for building next-generation mobile and fixed network capable applications including Voice and Video over IP (V²oIP), push to talk over cellular (POC), video share, multi-party gaming, video and audio conferencing, and content sharing.

By investing in a pre-integrated, IPsec-protected IMS signaling solution, customers will gain competitive advantage while saving development costs and reducing time to market in a highly competitive environment.

The joint solution is fully compliant with IETF, 3GPP, 3GPP2 and TISPAN standards.

**Best-in-Breed IPsec Security from SAFENET**

SafeNet is the premier provider of IPsec security solutions for telecom equipment and handset manufacturers. SafeNet’s industry leading IPsec solution already powers the majority of deployed IMS gateways (PDGs and PDIFs). SafeNet’s QuickSec for IMS IPsec toolkit provides solution providers, integrators, and device manufacturers with a complete solution to protect signaling traffic – from the gateway to the end user equipment - for access, IWLAN, and inter-network communications.
The QuickSec security platform provides a complete standards-compliant and interoperable IPsec and IKEv2 protocol implementation including the necessary cryptographic algorithms, a dual-mode (IKEv2/IKEv1) policy manager, an EAP authentication framework (with EAP-SIM and EAP-AKA methods already implemented), and a multilayer stateful TCP/IP firewall with integrated attack prevention.

SafeNet’s IPsec toolkit protects sensitive call setup and billing data from interception and manipulation, therefore meeting robust integrity, confidentiality, and authentication requirements within the IMS.

Industry-Leading SIP Development Tools from RADVISION

RADVISION is an industry-leading provider of advanced standard-based software building blocks which support the development of IMS-compliant products. Radvision’s award-winning IMS SIP Developer Suite is a powerful and highly versatile set of tools to dramatically accelerate IMS application development. It includes a suite of Toolkits, Add-Ons and Testing Tools that enables developers to combine all the necessary components to create an ideal development environment for every application’s specific needs.

The IMS SIP Developer Suite is fully IMS-compliant and offers a rich feature set including: Support of all IMS P-headers; AKA-MD5 and IKE Support; Security Agreement; enabling IPsec with ESP transport mode, tunnel mode and manual keying; Support for mobile registration using Service-route and Path Headers; and latest 3GPP Signaling Compression requirements.

The Developer Suite includes all the required components, including an extensive choice of quick start sample applications that enable full user control and flexibility, a GUI test application, and detailed documentation. Radvision IMS SIP Developer Suite provides the protocol and means for building next-generation IMS capable applications including VoIP, push to talk over cellular (POC), Video Share, multi-party gaming, video and audio conferencing, IPTV, and content sharing.