



Success Story A Fortune 500 Japan Based Telecom Company

IPSEC SDK

The Challenge

The project involved:

- Creating IPsec SDK to be used by IPV4 and IPV6 stack
- SDK needed to be OS independent
- SDK to be ported to real OS

Benefits

- IPsec SDK can be integrated with any IPv6/IPv4 stack.
- IPsec SDK is optimized for memory (ROM and RAM) which is suitable for embedded systems.
- Design is scalable so that any new feature can be incorporated with minimal changes.
- IPsec SDK can be ported to Unix flavor OS with minimal effort.

The Solution

The IPsec SDK was embedded into LSI devices consisting of a processor, IP stack and associated drivers, and an OS. The APIs provided could be used by any third party developed embedded IP stack to enable secure Internet communication.

This library provides the following key features:

- Embedded OS independent (ITRON etc.) that supports ESP (DES, 3DES, NULL, BLOWFISH, CAST128, etc.)
- Modular structures for easy use by multiple stacks like IPv4 and IPv6 etc.
- Supports AH (SHA1, MD5, HMAC-SHA-1-96, and HMAC-MD5)
- Provides standard APIs, which can be used by IPv4/IPv6 stack. Supports both manual and dynamic key management
- Small module size appropriate for embedded systems
- Supports tunnel and transport mode
- High-speed processing using the code accelerator chip