REDCREEK®

GOVERNMENT BUSINESS & PUBLIC NETWORKS

Information privacy and accuracy are in jeopardy as government applications are linked with public networks – electronically accessible to anyone. To regain control, the Secure Virtual Private Network was developed. RedCreek Communications' Ravlin offers an affordable solution suited to government users that demand ease of operation, transparency, standards compliance, and scalability.

For most of the history of civilization, security has centered around the idea of a fortress. Gather the valuables and build a wall around them. Unfortunately, a fortress can't protect information that spends much of its life traveling across public networks.

Government network break-ins, password interceptions, and other high-tech attacks have demonstrated the risks. In response, Agency-wide directives demand improved security for all unclassified sensitive information (USI).

USI covers a wide range of data. Personnel, medical, payroll, and critical operations data are usually USI – and often online. More USI is certain to find its way onto public networks as new technologies, such as enterprise resource planning (ERP) packages, link distributed departments and services.

Unclassified Sensitive Information

Today's Secure Virtual Private Network (SVPN) is the answer. SVPNs authenticate people and locations on the network and encrypt transmissions so they can't be read or, worse, changed. Effectively, SVPNs build steel-like tunnels among authorized recipients and locations across public networks.

Choosing a Solution
The popularity of SVPNs has resulted in many products and SVPN designs. Some familiar, fundamental criteria can help in choosing the right solution.

Standards are essential to today's computing environment. IP security protocol (IPSec), developed by the Internet Engineering Task Force (IETF), has emerged as the standard for SVPNs. IPSec defines how well known, trusted standards are applied to building secure tunnels through the Internet. IPSec endorses the Data

Encryption Standard (DES) and triple DES (3DES) as traffic ciphers. International Key Exchange (IKE), a component of IPSec, defines the use of digital certificates for key management and authentication. IPSec supports 2nd level authentication systems, such as RADIUS, and widely used token generators, such as Security Dynamics' SmartCard and CryptoCard.

> *SVPN Guidelines*
> - *Stick to the Standards*
> - *Use Hardware-Based Encryption*
> - *Keep the System Transparent*
> - *Make it Easy to Manage*

Speed is crucial to today's applications. If the system is slow, productivity sinks along with user satisfaction. The fastest, most efficient, and least expensive solution is hardware-based encryption. Encryption is a compute-intensive operation. The latest standard, 3DES, processes every piece of data three times in order to complete the encryption.

Hardware solutions for SVPN products are superior to software-based systems. Hardware solutions embed the encryption algorithm in firmware and process data through a dedicated processor. Software-based encryption products, on the other hand, must share the host processor, which slows the entire system and uses expensive host resources.

Well-designed SVPN systems should be transparent to users and avoid misuse and circumvention. Many studies and news stories have demonstrated how application level security is often responsible for degraded security as users mishandle passwords and bypass other inconvenient security systems. SVPNs should be implemented and maintained without user intervention.

The new secure SVPN should support a simple graphical management system, as well as remote management capability. Managers installing a new SVPN should find it unnecessary to hire

several new people to handle new management

RedCreek Ravlin

RedCreek Communications designed its breakthrough Ravlin product line to meet these SVPN criteria. Ravlin's benefits are based on unique technology, CryptoCore™ (patent pending).

Ease of installation. Ravlin units install in seconds to any transmission media (e.g. frame, cable, satellite, wireless, dial, and ISDN).

Ease of use. New SVPNs are created with point-and-click simplicity using Ravlin Manager.

High performance. Ravlin CryptoCore's on-board processor delivers wire-line speed even with compute intensive, 3DES encryption.

Scalability. The Ravlin family lets users select the right price-performance components to meet their needs from single users to 100Mbit/s access.

Standards. Ravlin supports the IETF, IP Security (IPSec) standard for SVPNs, and the requirement for NIST validation according to FIPS-140-1.

Partners. RedCreek is supplier and technology partner to industry market leaders such as Cisco Systems, Com21, Fourelle, Secure Computing, and Security Dynamics. RedCreek chairs the I2O Security Committee on intelligent architecture with the desktop leaders Compaq, Hewlett Packard, Intel, and Microsoft.

Applications of SVPNs in Government

Government applications demand unique levels of reliability, scalability, and flexibility. The following are some examples of RedCreek Ravlin SVPN applications in government.

SERVER PROTECT
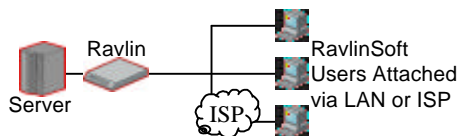
Ravlin unit placed just outside server protects information across internal networks without requiring the server to perform encryption and prohibits unauthorized devices accessing servers.
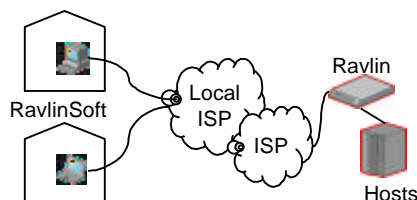

tasks.

TELECOMMUTER

RavlinSoft Client allows encrypted communications using low cost local ISPs. RavlinSoft also works with hardware tokens that encrypt disk, CD-ROMs and floppies to further protect these mobile assets.

MOBILE NETWORK

Like telecommuting, emergency services can establish secure command posts in seconds with Ravlin by using local ISP service, satellite, digital microwave, or cellular.
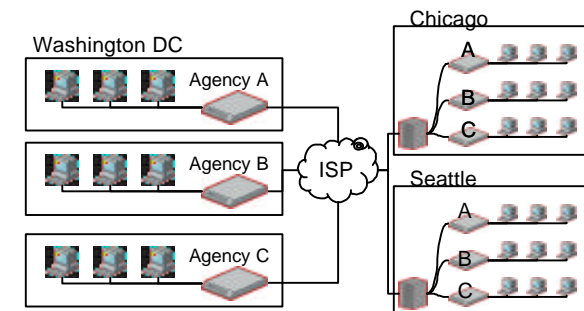
SHARED FACILITY PROTECTION
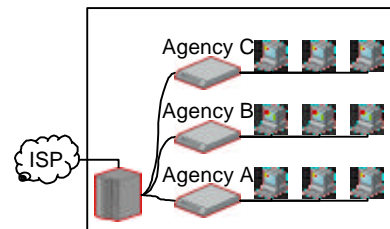
Agencies can share communications facilities to save costs. Ravlin units placed at the agency level prevent unauthorized access between agencies while protecting traffic in transit.

BASIC NETWORK

Private line service can be established across the Internet with Ravlin hardware to save cost or provide emergency back-up.

COLLABORATION

Temporary programs requiring work between outside departments, contractors, and others can be established securely across the Internet and revoked just as quickly with Ravlin Manager.

RedCreek Solutions for Government

For information on meeting your VPN requirements, contact your RedCreek VAR, or call 1-888-745-3900.