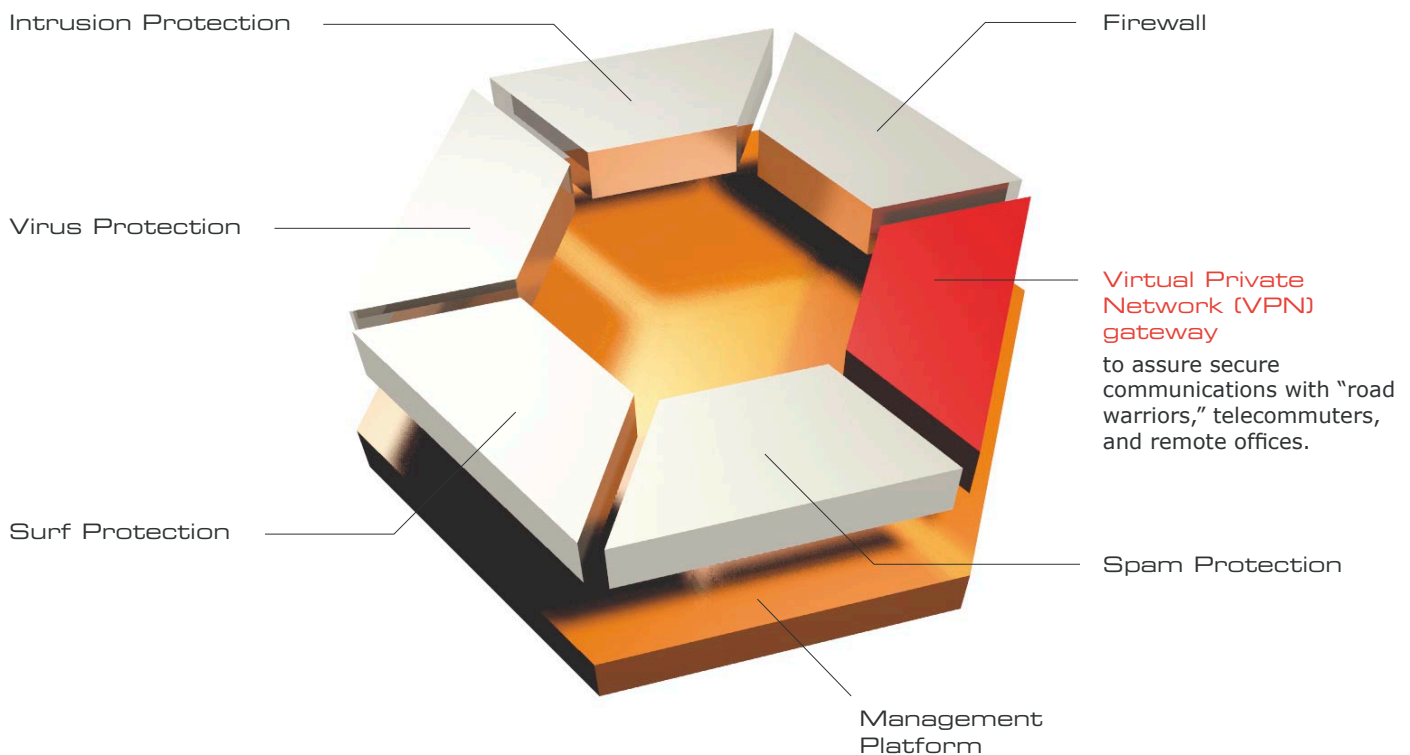


Astaro Security Linux V5 Virtual Private Network (VPN)

A Virtual Private Network (VPN) allows organizations to obtain the major cost savings of using the Internet for communication with remote offices, employees, and business partners, while achieving the level of security of a private line. However, VPNs are often very difficult to roll out and manage.

The Astaro Security Linux VPN gateway makes it easy to deploy a highly secure Virtual Private Network. It can use a variety of advanced encryption methods to protect data, and allows the organization to use a combination of VPN clients that meet the needs for convenience and security of different users.



Description

The Astaro Security Linux VPN gateway uses a variety of data encryption methods to create a secure communications "tunnel" over the public Internet.

Multiple Architectures

The Astaro Security Linux VPN gateway supports a variety of VPN architectures to accommodate the needs of branch offices, home users, and "road warriors". Configurations supported include:

- ▶ Net-to-Net
- ▶ Host-to-Net
- ▶ Host-to-Host

Advanced Encryption

Sophisticated encryption algorithms include:

- ▶ AES (Rijndael)
- ▶ DES
- ▶ 3DES
- ▶ Blowfish
- ▶ Serpent 128-bit
- ▶ Twofish 128-bit
- ▶ MPPE (40 and 128 bit)

IPSec and PPTP VPNs

The Astaro Security Linux VPN gateway supports both PPTP and IPSec VPNs.

A range of choices for VPN clients allows administrators to balance ease of implementation and levels of security for each user group. Supported clients include:

- ▶ The native Windows PPTP client
- ▶ The native Windows IPSec client
- ▶ The Astaro IPSec client
- ▶ Other VPN clients that follow the IPSec standard
- ▶ Mac OS X VPN client

These clients can be mixed in an Astaro VPN environment.

Technical Specifications

Authentication Methods

A variety of authentication methods are offered using:

- ▶ Passphrase (PSK)
- ▶ Certificates (X.509v3)
- ▶ Raw RSA Keys
- ▶ CHAP, MSCHAP, MSCHAPv2, and PAP
- ▶ RADIUS (for L2TP IPsec and PPTP)

IPsec Protocols

- ▶ Internet Key Exchange (IKE)
- ▶ Encapsulated Security Payload (ESP)
- ▶ Layer 2 Tunneling Protocol (L2TP)
- ▶ NAT-Traversal

Certificate Authority

Astaro Security Linux includes an internal certificate authority with authentication based on PKI-trustchain. This enables the use of digital certificates without requiring that certificates be generated centrally and distributed to remote sites.

Certificates from external and public Certificate Authorities can also be used. X509 CRL support means that Certificate Revocation Lists can be imported to revoke disabled or expired certificates.

Dynamic IP VPN Tunnels

VPN tunnels can be created based on dynamic IP interface addresses (DynDNS) at both ends. This provides flexibility in choosing different Internet Service Providers, network types and Internet uplinks for remote offices and users.

Remote Access Simplified

Dynamic IP addresses and DNS/WINS server addresses are distributed automatically to simplify remote access. Astaro IPsec client configurations can be generated and distributed from a central point, simplifying mass rollouts of IPsec VPNs.

Integrates Into Existing Environments

- ▶ Authenticate VPN users against a local database, Radius Servers, or Active Directory.
- ▶ Apply access policies based on users and groups, as well as IPs and networks.
- ▶ Apply access policies on PKI-based IPsec user groups.
- ▶ Full Support of Native Windows VPN and Mac OS X VPN using L2TP over IPsec.

Firewall Integration

The VPN gateway is fully integrated with the firewall in Astaro Security Linux. IPsec VPNs can utilize NAT traversal and virtual IP addresses. Firewall settings are generated automatically when VPN clients are configured. Packet filter policies can be specified on a per-user basis. VPN user groups can be created and used to grant access rights.

Part of a Complete Network Security Solution

The VPN gateway is one of six security applications included in Astaro Security Linux. Administration is simple and management costs are low because all six applications share:

- ▶ One installation process
- ▶ One management interface
- ▶ One update mechanism
- ▶ One set of logs and reports

About Astaro

Astaro provides a network security solution that is complete, simple to manage, affordable, and effective. Astaro selects and integrates the best of open source security software to provide the widest range of innovative security technology available in a single package. Astaro's software has won numerous awards, and is in use on over 20,000 networks in more than 60 countries. Astaro Security Linux is distributed by a worldwide network of solutions partners who offer local support and services.

Americas

Astaro Corporation
3 New England Executive Park
Burlington, MA 01803
USA

T: +1 781 272 8787
F: +1 781 272 8989
americas@astaro.com

Offices in Kelowna, BC and
Sunnyvale, CA

Europe, Middle East, Africa (EMEA)

Astaro AG
Pfnzstalstrasse 90
76227 Karlsruhe
Germany

T: +49 721 490 069 0
F: +49 721 490 069 55
emea@astaro.com

Offices in Pinneberg/Germany,
Paris/France and Reading/UK



www.astaro.com

Asia Pacific (APAC)

T: +49 721 490 069 0
F: +49 721 490 069 55
apac@astaro.com

Your Astaro Partner

Aavex Technology Corporation
545 S. Main Street, Suite 400
Elburn, IL. 60119
630-365-0025
geiger@aavextechnology.com