



VPN-Appliance genucrypt

Fact & Features



Virtual Private Network (VPN)

IPsec	VPN on the network layer (layer 3)
Bridging IPsec	VPN on the link layer (layer 2)
L2TP	Support for Android, Windows, iOS, Mac OS X (layer 2)

IPsec VPN

General	
NAT-Traversal (NAT-T)	Supports connections between NATed devices
NAT for VPN	Connect locations with overlapping network ranges
High availability (sasync)	Synchronise security associations between multiple appliances to minimize failover outage
High performance replay protection	Increased replay windows
Operation Modes	
Tunnel mode	Entire IP packet is encrypted and encapsulated
Transport mode	Only the payload is encrypted
Network mode	Supports routing protocols such as OSPF over VPN connections
Layer 2 bridging	Use IPsec to connect two locations on layer 2
Transparent IPsec router	Encrypt your WAN traffic without changing your topology
IKEv2	Connect mobile or third party devices
L2TP	Support for Android, Windows, iOS, Mac OS X (layer 2)
Authentication	
RSA	De facto public-key standard for easy key exchange
Elliptic curves	Fast key exchange
Pre-shared keys	Manually exchange secret pair of keys
PKI (X.509)	Use a certificate authority (CA) to verify keys
Algorithms	
Encryption	AES-128, AES-192, AES-256, 3DES, Blowfish, CAST

Networking

General	
NTP client	Obtain time from NTP servers
DHCP server	Automatically assign IP address to clients
DHCP relay	Forward DHCP queries to central DHCP server
VLAN	Supports virtual LANs to separate networks
Trunking	Aggregate multiple network interfaces on one virtual interface
PPPoE	DSL uplinks
IPv6	
Native IPv6	Fully IPv6 ready
Tunnelling	Use tunnelling to cross legacy IPv4 networks
NAT64	NAT between IPv4 and v6



High Availability

Active-active with load balancing	Distribute load on several appliances depending on the source/destination IP address
Link aggregation	LACP: easy integration in a redundant/high-performance switch setup
Hot standby	Reserve appliance for automatic failover

Monitoring

System	System status (memory, load)
VPN	Supervise VPN connection status
NetFlow export	Monitor network traffic with the NetFlow protocol
SNMP, SNMPv3	Retrieve information via SNMP GET requests, or send SNMP TRAPS

Administration

General	
Web GUI	Powerful web-based user interface secured with TLS/SSL (HTTPS)
Online help	Instant help via user interface
Shell access	Local using console or serial interface, remotely using SSH
Cronjobs	Schedule jobs at specific times
Flexible configuration	Easily modify/add files to the system
USB update	Fix inaccessible systems with an USB stick
Patch Management	
GUI	Get and install patches via GUI
Automatic updates	Automate the process of fetching updates for the appliance
Patch rollback	Return to previous patch level
Logging	
Syslog	Use a third party syslog server to store logs
Hard drive	Use appliance hard drive for storage, if available
Memory	Logs are recorded in memory
Central	Use genucenter to concentrate the logs on one system
Debugging	
Network	Powerful command-line-tools: tcpdump, traceroute, ping, etc.
Firewall	Monitor firewall states, rules and logs
VPN	VPN connection status overview and problem analysis
Root shell	The shell offers full root access
Central Management	
Central Management	Easy administration of several (hundred) systems with Management Station genucenter

Further information:
www.genua.eu/genucrypt

