



# Powerful next-generation firewall with excellent scalability, performance and expandability

#### **FEATURES AT-A-GLANCE**

- Cost-effective next-generation firewall for larger remote/branch office or smaller data centers
- Future-proof with Expansion Slot for added connectivity
- Next-generation firewall services, including Clavister True Application Control, Clavister Content Security Services and User Identity Awareness
- Centralized Security Management System included free-of-charge in the Clavister Security Subscription package
- Value adding feature, such as WAN Load Balancing, Server Load Balancing, Traffic Optimization, all included in the Clavister Subscriptions

The Clavister W30 is a powerful and flexible next-generation security appliances, targeted towards remote/branch offices and smaller data centers. The Clavister W30 delivers next-generation firewall security at an attractive price point, offering flexible and future-safe expansion options. With the Expansion Slot, you have the option to add an interface module with the choice of 8 x 1GbE (RJ45), 8 x 1GbE (SFP), 2 x 10GbE (SFP+) or 4 x 10GbE (SFP+).

The Clavister W30 is the perfect solution for any organization that need a powerful, flexible and expandable network security solution, at an attractive price point.

#### **Next-Generation Firewall Services**

#### **True Application Control**

Clavister W30 fully supports True Application Control – one of our next-generation firewall security services.

Enabling True Application Control will help you to manage applications used in your network more safely. With added security you lower your overall risk exposure and as a result, costly security incidents and down-time can be avoided. It also gives you valuable insight in which applications are used by which user, and can therefore prioritize business critical application and increase your overall business productivity.

True Application Control not only recognize more application and data, it understands how these application behave and can act immediately on malicious behavior.

With its unique support for Deep Application Content Control (DACC) technology, our application control can perform in-depth analysis and control of application content with higher degree of control. DACC enables you



#### **Connectivity Choices**

The Clavister W30 is equipped with six 1GbE (RJ45) connectors. Thanks to the Expansion Slot, it is possible to add an additional interface module. Currently there are four modules available:  $8\times 1$ GbE (RJ45),  $8\times 1$ Gbe (SFP),  $2\times 1$ GbE (SFP+) and  $4\times 1$ GbE (SFP+). The flexible routing capabilities means that any port can be fully configured.

Clavister W30 also support link aggregation, which means that you have the added benefit of maximizing throughput and increase the resilience of your system.



#### RADIUS Relayer - Pinpoint Security

Clavister W30 includes support for RADIUS Relayer, which can provide user information and DHCP IP provisioning for RADIUS-based authenticated users.

For example, when a user roams over from a cellular network to an Enterprise Wi-Fi network for data access. This is useful as it allows for granular user and group-based policing of traffic and controlling access to network resources.



#### **Advanced Routing**

The Clavister W30 provide an advanced routing engine, including Policy-Based Routing, with seamless route failover. This allow for Dynamic Policy-Based Routing where traffic can be routed based on dynamic events, such as User Identity, latency, HTTP Get responses, etc.

This enable you to create truly flexible and sophisticated policies that reflect the true requirements of your network.

to understand and visualize Skype IDs, SQL queries, Facebook chat text, VoIP call information and much more.

Clavister SSL Inspection for Application Control provides a high performance and non-intrusive way to identify and control even SSL encrypted applications.

True Application Control is included in the Clavister Security Subscription (CSS) service.

#### Content Security Services

Having a regular firewall is not enough to prevent attacks from happening on your network. As attacks become more severe and the threat land-scape becomes more dynamic, additional measures need to be in place to protect your network. Clavister offers best-of-breed content security services, including Intrusion Detection and Prevention System, network-centric Anti-Virus from Kaspersky Labs, and Web Content Filtering to add an additional security layer to your firewall. These content security services protect your network from advanced threats your firewall alone cannot stop. The Content Security Services are included in the Clavister Security Subscription (CSS) service.

#### User Identity Awareness

User Identity Awareness (UIA) provides granular visibility of user identity, and enables you to control network access at the user level. The User Identity Awareness together with our True Application Control functionality will provide you with an extremely powerful and versatile tool for granular visibility and control of "who-does-what-and-when" in your networks. You will have the ability to pinpoint user access to applications across both wired and wireless networks regardless of connecting device.

### True Security Values

#### Clavister Subscriptions

We believe our customers should have choices. We also believe you should have it all. Therefore we offer you a choice between our comprehensive Clavister Product Subscription (CPS), or our all-inclusive, full service option, Clavister Security Subscription (CSS).

#### **Clavister Product Subscription**

The Clavister Product Subscription contains a high number of product service, such as software updates, centralized management support and flexible service plans.

CPS includes a hardware replacement service to offer you the best possible protection in case a hardware failure should occur. Finally to ensure you get the best out of your Clavister security gateway, we provide you with around-the-clock support from our award-winning technical support team – your dedicated resource with highly skilled engineers that help you out in case of need. The Clavister Product Subscription keeps your Clavister updated, online and ready for business twenty-four-seven.

#### Clavister Security Subscription

Clavister Security Subscription is a complete, all inclusive suite of product services. It contains all the services you get with Clavister Product Subscription, but extends the service offering by including a full set of next-generation firewall services, such as Clavister True Application Control, Web Content Filtering, Anti-Virus and Intrusion Detection and Prevention (IDP).

CSS offers best-in-class content services, which protect you from the more advanced types of malware and exploits. It grants you access to the latest software and signature updates keeping your infrastructure up to date and increasingly more stable and secure.

All Clavister Subscriptions are available in 12, 24, 36, 48 and 60 months service terms, offering you maximum security and flexibility.

For more information about Clavister Subscriptions, see the separate Clavister Subscriptions brochure.

#### True Flexibility - Get more performance when you need it

Clavister W30 is available in two models, each addressing specific customer requirements. Should your performance needs increase, Clavister offers you the flexibility to upgrade to a more powerful Clavister W30 without having to invest in new hardware. Just simply order the upgrade to your preferred Clavister W30 model and install the new license file. It is as simple as that.

This makes Clavister W30 a low risk choice in dynamic business environments where requirements can change overnight. Clavister provides you the performance when you need it, avoiding high up front investment costs to your security infrastructure or having to worry about costly upgrades.

#### **Uptime Technologies**

Clavister W30 comes with powerful features to ensure that your network infrastructure is online and ready for work. Features like High Availability (HA) is fully supported, as well as Fast Route Failover technologies and link aggregation, which ensures that your business is not affected by network downtime caused by link failure or hardware problem. It also support flood protection technologies to increase uptime in case your network is subjected to a Denial-of-Service (DoS) attack.

#### Powerful Firewall

The Clavister W30 is a next-generation firewall, but it also has all the traditional security features, such as stateful firewall with deep-packet inspection, and it is powered by our own in-house developed network security operating system, the Clavister cOS Core. As well as providing all traditional firewall functions, such as port blocking and proxy server, all Clavister firewall solutions incorporate next-generation firewall features to detect and block sophisticated application-level attacks. This means higher level of security, higher traffic throughput and minimal use of system resources.

#### Performance

Clavister W30 provides next-generation security services across all points of your network without sacrificing performance throughput. Purpose-built hardware running on our highly efficient network security operating system ensures that the firewall performance throughput is one of the highest in the industry, making sure that your Clavister firewall will not be a bottleneck in your network infrastructure.

#### Simplicity

We strive to make things easy to understand and easy to use. This includes everything from hardware design to security management. We build highly customizable enterprise-grade firewalls, and despite the inherent complexity, we make an effort of making it easy to use. For example, our highly acclaimed centralized security management system, Clavister InControl uses color-coded attribute groups to provide a clear overview over dependencies that the firewall rules have to each other, making human errors less likely to occur. By combining policies and services into one, firewall policy management can be simplified and more easy to use. This results in fewer policy rules, making it easier to manage and less likely to cause a security breach.

## All-Inclusive Security Management

For any network, security management is one of the more important aspects. It has to be intuitive, efficient and easy to use for large enterprises, with multiple firewalls at multiple sites, and even in geographical disperse areas, keeping your security management consistent and cohesive, and up to date is a non-trivial task. All these security management systems are included with our Clavister cOS Core products – free of charge.

#### Clavister InControl - Centralized Security Management

Clavister InControl offers a comprehensive centralized management solution that will assist and help administrators perform their daily tasks faster, easier and in a more streamlined way. Its intuitive user interface and support for task-driven workflow management guides administrators through complex and repetitive tasks, thereby alleviating the burden of managing large installations. With support for triple-AAA (Authentication, Authorization and Audit) the integrity and configurations managed by the Clavister InControl system is kept under strict control. This level of control makes it easy to use delegated manage-

ment, allowing specific teams and personnel to access only designated parts of the system.

Clavister InControl can be extended to collaborate with a vast number of other management system with the use of Clavister InControl Software Development Kit (SDK). The Clavister InControl SDK enables organizations to integrate and extend existing system management tools with Clavister InControl management. For example, optimized provisioning systems, integrated help desk functionality.

#### Splunk for Clavister

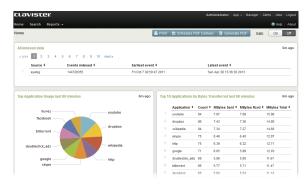
Splunk for Clavister is a comprehensive Web-based reporting system that offers enterprise-level reporting with tight integration with all Clavister cOS Core-based products. Splunk supports real-time data analysis, with Key Performance Indicators (KPI), graphs, tables and long-term trending, scaling from a single Clavister security gateway to large data centers.

Splunk for Clavister enables you to visualize your Clavister security solution, including pinpointing problem areas, thwarted attacks and other security issues, and then turn them into business-level reports. You can also take advantage of the built-in scheduling and distribution features to make sure the right people get the right reports on time.

#### Other Management Options

In addition to our centralized management solution, we also provide the Clavister Web Management system, an easy-to-use Web-based security management solution that works for smaller installations with just a few firewalls. Each product also supports our comprehensive command-line interface (CLI), enabling you to script common tasks.







#### **Next-Generation Firewall Security**

By integrating world-class Next-Generation Firewall functionality, such as our Clavister True Application Control, Intrusion Detection and Prevention (IDP), Anti-Virus, Anti-Spam and Web Content Filtering with a stateful firewall with deep packet inspection, IPsec and SSL VPN connectivity, we are able to protect your organization against everything from network layer attacks to application layer threats, and even viruses and worms. While you have full control of who does what, when and with what.

#### Clavister cOS Core

Clavister cOS Core is our in-house developed, high-performance security network operating system. Every line of code is carefully crafted to ensure that it delivers maximum performance at all times. We take pride in delivering a product that we have full control over, rather than a mashup of open-source components.

#### Flexibility and Adaptability

Not all networks are created equally. Vast differences in network topology and configuration require a network security gateway to be able to accommodate all these differences. Our security gateways gives you the freedom to set routing policies with extreme granularity. A large number of parameters can be used to construct policies and rules to meet even the most demanding network installation.

#### **Big on Performance - Low on Maintenance**

All Clavister security gateways share a common trait: they all support Clavister Service Provisioning Network (CSPN). This secure, high-speed network ensures that all Clavister Security Subscription services are kept updated and current from newly emerging threats. This gives system administrators the freedom to concentrate on running their network without having to worry about having the latest security patches installed.

#### **License Scalability**

One important aspect of our products is scalability. Our licensing model offers you the ability to start with your performance needs today and upgrade your product incrementally as your organization grows. You also have the choice of two subscriptions models: the Clavister Security Subscription, our all-inclusive subscription, or the regular Clavister Product Subscription.

#### Low Total Cost of Ownership

Our goal is to provide a complete security solution that is more cost efficient than our competitors. Clavister security gateways, with their unique set of integrated security features, world-class service and support, and their powerful administration system, enables you to spend less time managing your security environment and keep your network defenses up to date, and thereby lower your network security infrastructure TCO significantly.

Performance* and Capacity	Clavister W30	Clavister W30 Pro
Firewall Performance (plaintext throughput)	6 Gbps	10 Gbps
IPsec VPN Performance (large packets)	1,5 Gbps	2 Gbps
Maximum Concurrent Connections	750,000	1,000,000
Maximum Concurrent IPsec VPN Tunnels	1,000	2,000
Maximum Concurrent L2TP/PPTP/SSL VPN Tunnels	1,000	2,000
Maximum Number of Users	Unrestricted	Unrestricted
Maximum Number of Routing Tables (Virtual Routers)	50	100
Connectivity	Clavister W30	Clavister W30 Pro
Ethernet Interfaces	6 x 1GbE (RJ45)	
Expansion Slot	One (1) slot, supports: 8 x 1GbE (RJ45), 8 x 1GbE (SFP), 2 x 10GbE (SFP+) or 4 x 10GbE (SFP+)	
Interfaces for Management / High Availability (HA)	Yes, any Ethernet interface can be configured for Management/High Availability (HA)	
Configurable Internal / External / DMZ Ports	Yes	Yes
Local Console Port	Serial Console – RJ45	
Link Aggregation IEEE 802.1AX-2008 (Static/LACP)	Yes	Yes
Maximum Number of VLAN Interfaces IEEE 802.1Q	1,024	2,048
Support for High Availability (HA)**	Yes	Yes
Service-VLAN Interfaces IEEE 802.1ad (Q-in-Q)	Yes	Yes
Product Specific Specification		
Form Factor / Rack Mountable	1U 19" rack mount / Yes	
Dimensions (height x width x depth)	44 mm x 431 mm x 305 mm (1.73 in x 16.97 in x 12.01 in)	
Hardware Weight / Package Weight	4 kg (8.82 lb)	/ 7 kg (15.43 lb)
Regulatory and Safety Standards		
Safety / EMC	FCC class A, CE class A / UL, CE	
Power Specifications		
Power Supply (AC) / PSU Rated Power (W)	100-240VAC, 50-60 Hz, 3-1,5 A / 150 W	
Average Power Consumption / Redundant PSU	37 W/127 BTU / No	
Appliance Input	100-240VAC	
Environmental		
Cooling / Humidity	Single built-in fan module / 0% to 90% non-condensing	
Operational Temperature	5° to 45° C (41° to 113° F)	
Vibration (operating) / Shock (operating)	0.00142 G2 (5-100 Hz), -6 dE	3/Oct (100 - 500 Hz) / 0,5 Grms

<sup>\*</sup> Performance based on Clavister cOS Core 11.00.

Warranty

# Where to Buy Clavister

For more information about where to buy Clavister products, visit <a href="https://www.clavister.com/partners">www.clavister.com/partners</a>. Additional resources and customer testimonials can be found at <a href="https://www.clavister.com/resources">www.clavister.com/resources</a>.

All Clavister Wolf Series products include a two (2) years standard RMA warranty.

<sup>\*\*</sup> When using High Availability clusters, the hardware settings for each interface must be identical on both cluster nodes (bus, slot and port)

#### **Product Features**

#### Firewal

Firewall	
Stateful Firewall / Deep Packet Inspection	Yes / Yes
IP Policies	ALLOW, DROP and REJECT
Multiple IP Rule Sets	Yes
User- and Group-Based Policies	Yes
Scheduled Policies	Yes
DoS and DDoS Detection and Prevention	Yes
Threshold Rules (Connection Count and Rate Limits)	Yes
IP Blacklisting / Whitelisting	Yes / Yes
TCP Sequence Number Tracking	Yes
FQDN Address Filter in IP Policies	Yes
IP Geolocation Filter in IP Policies	Yes
Ingress Filtering / IP Spoofing Protection	
Access Rules	Yes
Strict Reverse Path Forwarding (RPF)	Yes
Feasible RPF by using Interface Equivalence	Yes
Address and Port Translation	162
Policy-Based	Yes
,	
Dynamic NAT (Source)	Yes
Symmetric NAT	Yes
NAT Pools	Yes
Static Source Translation	Yes
Static Destination Translation (Virtual IP/Port Forward)	Yes
NAT Hairpinning	Yes
Server Load Balancing (SLB)	
SLB Distribution Methods	Round-Robin, Connection-Rate
SLB Monitoring Methods	ICMP Echo, Custom TCP Port, HTTP Request/Response
SLB Server Stickiness	State, IP Address, Network
Mode of Operations	
Transparent Mode (Layer 2)	Yes
Routing Mode (Layer 3)	Yes
Mixed Transparent and Routing Mode	Yes
Routing	
Static Routing	Yes
Policy-Based Routing (PBR)	Yes
Scheduled Policy-Based Routing	Yes
Virtual Routing	Yes
Multiple Routing Tables	Yes
Loopback Interfaces	Yes
	Yes
Route Load Balancing (Equal-Cost Multipath)	
Route Failover	Yes
Route Monitoring Methods	ARP, ICMP Echo, Custom TCP Port, HTTP Request/Response
Source-Based Routing	Yes
Path MTU Discovery	Yes
Dynamic Routing	
Policy-Based Dynamic Routes	Yes
OSPFv2 Routing Process (RFC2328)	Yes, multiple
OSPFv2 RFC1583 Compatibility Mode	Yes
OSPFv2 over VPN	Yes
Multicast	
Multicast Forwarding	Yes
IGMPv2 Compatibility Mode (RFC2236)	Yes
IGMPv3 (RFC3376)	Yes
IGMP Proxy Mode	Yes
IGMP Snoop Mode	Yes
Transparent Mode (L2 Bridge Mode)	
Policy-Based	Yes
-	
MPLS Pass-through	Yes
DHCP Pass-through	Yes
Layer 2 Pass-through of Non-IP Protocols	Yes
Spanning Tree BPDU Relaying	Normal (STP), Rapid (RSTP), Multiple (MSTP), Per VLAN Spanning Tree Plus (PVST+)
IP Address Assignment	
Per Interface Address Assignment	Yes
Static	Yes

DHCP Client	Ethernet, VLAN, Link-Aggregation	
PPPoE Client	Ethernet, VLAN, Link-Aggregation	
PPTP/L2TP Client	Yes	
Network Services		
DHCP Server	Yes, multiple	
DHCP Server Custom Options	Yes	
DHCP Relay	Yes, multiple	
IP Pool	Yes	
Proxy ARP	Yes	
Dynamic DNS Services	DynDNS.org, Dyns.cx, CJB.net, Peanut Hull	
Custom HTTP Poster	Yes	
Bandwidth Management		
Policy-Based Bandwidth Management	Yes	
Scheduled Policies	Yes	
Bandwidth Guarantees / Limits / Prioritization	Yes / Yes	
DSCP- / ToS-Based	Yes	
Bandwidth Management per Group	Yes	
Dynamic Bandwidth Balancing between Groups	Yes	
Packet Rate Limits	Yes	
DSCP Forwarding	Yes	
DSCP Copy to Outer Header	VLAN, IPsec	
Application Control		
Recognizable Applications	< 2,000	
Recognition of SSL Based Applications	Yes	
Application Content Control	2,400	
Policy-Based	Yes	
Policy Matching on Application	Yes	
Policy Matching on Application Content (Metadata)	Yes	
Policy Actions	Audit, DROP, Bandwidth Management	
Intrusion Detection and Prevention	, ladity Bit Of , Barawatt Mailegornorit	
	Yes	
Policy-Based		
Signature Selection per Policy	Yes	
Policy Actions	Audit, DROP, Bandwidth Management	
Stateful Pattern Matching	Yes	
Protocol and Rate Anomaly Detection	Yes	
Insertion and Evasion Protection	Yes	
Dynamic IP Blacklisting	Yes	
Automatic Signature Updates	Yes	
Content Security		
Policy-Based	Yes	
Protocol Validation	HTTP, HTTPS, FTP, SMTP, POP3, IMAP, TFTP, SIP, H.323, PPTP, TLS/SSL	
Web Content Filtering		
HTTP/HTTPS	Yes / Yes	
Audit / Blocking Mode	Yes / Yes	
Classification Categories	32	
URL Whitelisting / Blacklisting	Yes / Yes	
Customizable Restriction Pages	Yes	
Cloud-Based URL Classification Source	Yes	
SafeSearch Enforcement	Google, Yahoo, Bing	
User-Agent Filter	Yes	
Anti-Virus		
Supported Protocols	HTTP, HTTPS, FTP, SMTP, POP3, IMAP	
Stream-Based Scanning	Yes	
Stream-Based Scanning File Type Whitelisting	Yes Yes	
-		
File Type Whitelisting	Yes	
File Type Whitelisting Scanning of Files in Archives (ZIP/GZIP)	Yes Yes	
File Type Whitelisting Scanning of Files in Archives (ZIP/GZIP) Nested Archives Support (ZIP/GZIP) Automatic Updates	Yes Yes Yes, up to 10 levels	
File Type Whitelisting Scanning of Files in Archives (ZIP/GZIP) Nested Archives Support (ZIP/GZIP) Automatic Updates Anti-Spam	Yes Yes Yes, up to 10 levels Yes	
File Type Whitelisting Scanning of Files in Archives (ZIP/GZIP) Nested Archives Support (ZIP/GZIP) Automatic Updates Anti-Spam Supported Protocols	Yes Yes Yes, up to 10 levels Yes SMTP, POP3, IMAP	
File Type Whitelisting Scanning of Files in Archives (ZIP/GZIP) Nested Archives Support (ZIP/GZIP) Automatic Updates Anti-Spam Supported Protocols Anti-Spam Detection Mechanisms	Yes Yes Yes, up to 10 levels Yes SMTP, POP3, IMAP Yes	
File Type Whitelisting Scanning of Files in Archives (ZIP/GZIP) Nested Archives Support (ZIP/GZIP) Automatic Updates Anti-Spam Supported Protocols Anti-Spam Detection Mechanisms Reply Address Domain Verification	Yes Yes Yes, up to 10 levels Yes SMTP, POP3, IMAP Yes SMTP, POP3, IMAP	
File Type Whitelisting Scanning of Files in Archives (ZIP/GZIP) Nested Archives Support (ZIP/GZIP) Automatic Updates Anti-Spam Supported Protocols Anti-Spam Detection Mechanisms Reply Address Domain Verification Malicious Link Protection	Yes Yes Yes, up to 10 levels Yes SMTP, POP3, IMAP Yes SMTP, POP3, IMAP SMTP, POP3, IMAP	
File Type Whitelisting Scanning of Files in Archives (ZIP/GZIP) Nested Archives Support (ZIP/GZIP) Automatic Updates Anti-Spam Supported Protocols Anti-Spam Detection Mechanisms Reply Address Domain Verification	Yes Yes Yes, up to 10 levels Yes SMTP, POP3, IMAP Yes SMTP, POP3, IMAP	

Service   Serv			
SMITE   SMIT	Strip Malicious Links	SMTP, POP3, IMAP	
E-mail Free Liming   SMIP	Tag Subject and Headers	SMTP, POP3, IMAP	
File Integrity   Supported Protects	Send to Quarantine E-mail Address	SMTP	
Bageolat Politicals   Intel PLES PIE SAME POSS, MAP   Pack   Pa	E-mail Rate Limiting	SMTP	
File Type Withestardy / Elaborators   Application   Layer Gateway   File Farthrine on MMC Type (winds)   Application   Layer Gateway   File Farthrine Content Security     F	File Integrity		
Page   Application part MMP Type Verification	Supported Protocols	HTTP, HTTPS, FTP, SMTP, POP3, IMAP	
Application Layer Gateway	File Type Whitelisting / Blacklisting	Yes / Yes	
HTTP://TITLEs (content Security, NAT / SAT)	File Extension and MIME Type Verification	Yes	
THE PLANT AND   Yes	Application Layer Gateway		
TETP BAT / SAT)	HTTP / HTTPS (Content Security)	Yes	
SIP   Mar 7, SAT)   Yes     Mar   Contain Source   Yes   Yes     SMF   Contain Source   Yes   Yes     SMF   Contain Source   Yes   Yes     Mar   Contain Source   Yes   Yes     Mar   Mar   Yes   Yes   Yes     Mar   Mar   Mar   Yes   Yes     Mar   Mar   Mar   Yes   Yes     Mar   Mar   Mar   Mar   Yes   Yes     Mar   Mar   Mar   Mar   Mar   Yes   Yes     Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar   Mar     Mar   Ma	FTP (Content Security, NAT / SAT)	Yes	
Hasts / Hasts Getweeper (NAT / SAT)	TFTP (NAT / SAT)	Yes	
SAFE (Content Security)	SIP (NAT / SAT)	Yes	
PCPS  Control Security   Pres	H.323 / H.323 Gatekeeper (NAT / SAT)	Yes	
MAP   Contant Socially   You, using Email Control Profits   SEZ / TLS (Orbitating)   You	SMTP (Content Security)	Yes	
SEL / T.S. (Olhoudry   Yes   PPPP   Pusatifronty, NAT / SAT)   Yes     Pasc VPN	POP3 (Content Security)	Yes	
Pises VPN	IMAP (Content Security)	Yes, using Email Control Profile	
Pised NP   Pitch   P	SSL / TLS (Offloading)	Yes	
Internal Key   Exchange	PPTP (Passthrough, NAT / SAT)	Yes	
KEVT Press 1	IPsec VPN		
KEVI Phase 2	Internet Key Exchange	IKEv1, IKEv2	
Pace Medics	IKEv1 Phase 1	Main Mode, Aggressive Mode	
MEE Encryption	IKEv1 Phase 2	Quick Mode	
Peoc Encryption	IPsec Modes	Tunnel, Transport (IKEv1 only)	
AES kay Size         128, 192, 256           IKE/Psex Authentication         \$IAA-1, \$IA-256, \$IA-612, MD-5, AES-XCBC (KEv2 only)           Perfect Environal Secrety (DH Groups)         1, 2, 5, 14, 15, 16, 17, 18           IKE Config Mode         Yes           IKE DSCP Assignment         Statio           Dead Peer Description (PPD)         Yes           Pre-Shared Keys (PSK)         Yes           X.000 Certificates         Yes           X.000 Certificates         Yes           ALAUTI (RECY)         Yes Clarificate Properties           EAP (RECY)         Yes Clarificate Paculty           EAP (RECY)         Yes Clarificate Paculty           EAP (RECY)         Yes (PADUIS only)           PRC Certificate Paculty         Yes (PADUIS only)           Certificate Paculty         Yes (PADUIS only)           Certificate Paculty         Yes (PADUIS only)           IKE Islandity         Yes (PADUIS only)           IKE Islandity         Interpretation           IKE Islandity	IKE Encryption	AES, 3DES, DES, Blowfish, Twofish, Cast-128	
IKER Psec Authentication	IPsec Encryption	AES, 3DES, DES, Blowfish, Twofish, Cast-128, NULL	
Perfect Forward Scorecy (DH Groups)         1, 2, 5, 14, 15, 16, 17, 18           IKE Config Mode         Yes           IKE DSCP Assignment         Static           Dead Peer Detection (DPD)         Yes           Pro-Shared Koya (PSK)         Yes           XAuth (IKEV)         Yes           Yes, Client and Server         FAP (IKEV)           PKI Contificates         PKGS/II, PKCSH3, PKCSH7, PKCSH10           Set Signed Certificates         PKGS/II, PKCSH3, PKCSH7, PKCSH10           Set Signed Certificates         Yes           Certificate Revocation List (CRL) Protocols         LDAP, HTTP           Certificate Revocation List (CRL) Protocols         LDAP, HTTP           CELL Fall-Mode Behavior         Conditional, Enforced           IKE Identity         IP, FODN, E-mall, X.500 Distinguished-Name           Socurity, Association Granularity         Retailed Revocation Association Granularity           Replay Attack, Prevention         Yes           Policy-Based Routing         Yes           Virtua Routing         Yes           Roaming Client Turnels         Yes           NAT Traversal (NAT-1)         Yes           Pleac Dialon-Diamand         Yes           IP-sec Turnel Selection Through         Frewall Rule Set, Routing and Policy-Based Routing	AES Key Size	128, 192, 256	
IKE DSOP Assignment         Static           Dead Peer Detection (DPD)         Yes           Pee-Shared Kays (PSK)         Yes           X.500 Cartificates         Yes           X-Auth (IKEVI)         Yes, Client and Server           EAPI (IKEVI)         Yes, Client and Server           Self-Signer Certificates         PKCS#1, PKCS#3, PKCS#7, PKCS#10           Self-Signer Certificates         Yes           Certificate Revocation List (CRL) Protocols         LDAP, HTTP           Certificate Revocation List (CRL) Protocols         LDAP, HTTP           CRL Fall-Mode Behavior         IP, FDDN, E-mail, Xo500 Distinguished-Name           Security Association Granularity         IP, FDDN, E-mail, Xo500 Distinguished-Name           Septil Attack Provention         Yes           Policy Based Routing         Yes           Routing Attack Provention         Yes	IKE/IPsec Authentication	SHA-1, SHA-256, SHA-512, MD-5, AES-XCBC (IKEv2 only)	
IKE DSCP Assignment         Static           Dead Per Detection (IPDP)         Yes           Pre-Sihared Kays (PSK)         Yes           X-509 Certificates         Yes           X-buth (IKEVI)         Yes, Client and Sarver           Abuth (IKEVI)         Yes, Client and Sarver           EAP (IKEV2)         Yes, Server (IRADIUS only)           PKC Berli, PKCS-84, PKCS-87, PKCS-81, ONLY         Self-Signed Certificates           Certificate Requests         Yes, VerSign, Entrust etc.           Certificate Authority issued Certificates         Yes           Virtual Routing         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Versual Rula Set, Routing, Polic	Perfect Forward Secrecy (DH Groups)	1, 2, 5, 14, 15, 16, 17, 18	
Dead Peer Detection (DPD)         Yes           Pre-Shared Koye (PSK)         Yes           X-509 Certificates         Yes           XAuth (REXt)         Yes, Clent and Server           EAP (REXt)         Yes, Server (RADUS only)           FRI Certificate Requests         PKCS#1, PKCS#7, PKCS#10           Self-Signed Certificates         Yes           Certificate Authority Issued Certificates         Yes, VerSign, Entrust etc.           Certificate Revocation List (CRL) Protocols         LDAP, HTTP           Certificate Revocation List (CRL) Protocols         LDAP, HTTP           CRL Fail-Mode Behavior         Conditional, Enforced           IKE Identity         IP, FCDIN, E-mail, X500 Distinguished-Name           Security Association Granularity         Net, Host, Port           Replay Attack Prevention         Yes           Replay Attack Prevention         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Virtual Routing         Yes           Variety Routing, Client Turnels         Yes           Posential Client Turnels         Yes           Pose Turnel Selection Through         Firewall Rule Set, Routing, Policy-Based Routing           Reductor VPN Turnels         Yes           SSL VPN<	IKE Config Mode	Yes	
Pre-Shared Keys (PSK)         Yes           X.500 Cartificates         Yes           X-Auth (IKEV!)         Yes, Client and Server           EAP (IKEV2)         Yes, Server (PADIUS only)           PKI Cartificate Requests         PKCS#1, PKCS#1, PKCS#3, PKCS#7, PKCS#10           Self-Signed Certificates         Yes           Certificate Revocation List (CPL) Protocols         LDAP, HTTP           CPL Fail-Mode Behavior         Conditional, Enforced           IKE Identity         IP, FCDIN, E-mail, X.500 Distinguished-Name           Security Association Granularity         Net Team, X.500 Distinguished-Name           Replay Attack Prevention         Yes           Replay Attack Prevention         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Repair Routing         Yes           Policy-Based Routing         Yes           NAT Traversal (NAT-T)         Yes           Presc Dial-on-Demand         Yes           Presc Passithrough         Firewall Rule Set, Routing, Policy-Based Routing           Presc Passithrough         Yes           St.VFN         Yes           St. VSV         Yes           One-Time Client Installation         Yes           Extry Size LyPN	IKE DSCP Assignment	Static	
X.509 Certificates         Yes           XAuth (KEVr)         Yes, Client and Server           EAP (KEVz)         Yes, Server (RADIUS only)           PKI Certificate Requests         PKCS#1, PKCS#7, PKCS#7, PKCS#10           Self-Signed Certificates         Yes           Certificate Revocation List (CRL) Protocols         LDAP, HTTP           Certificate Revocation List (CRL) Protocols         LDAP, HTTP           CHL Fail-Mode Behavior         Conditional, Enforced           KE Learthy         IP, FODN, E-mail, X.500 Distinguished-Name           Security Association Granularity         Net, Host, Port           Security Association Granularity         Net, Host, Port           Policy-Based Routing         Yes           Virtual Routing         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Nat Traversal (NAT-T)         Yes           IPsec Dial-on-Demand         Yes           IPsec Dial-on-Demand <td>Dead Peer Detection (DPD)</td> <td>Yes</td>	Dead Peer Detection (DPD)	Yes	
XAUTH (IKEV1)         Yes, Client and Server           EAP (IKEV2)         Yes, Server (PADIUS only)           PKI Certificate Requests         PKCS#1, PKCS#1, PKCS#10           Self-Signed Certificates         Yes           Certificate Authority Issued Certificates         Yes, VenSign, Entrust etc.           Certificate Revocation List (CRL) Protocols         LDAP, HTTP           CRIL Fail-Mode Behavior         Conditional, Enforced           Kite Identity         IP, FODN, E-mail, X.500 Distinguished-Name           Security Association Granularity         Net, Host, Port           Replay Attack Prevention         Yes           Security Association Granularity         Net, Host, Port           Replay Attack Prevention         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Roaming Client Tunnels         Yes           NAT Traversal (NAT-T)         Yes           Piseo Tunnel Selection Through         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Passithrough         Yes           SSL VPN         Yes           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           VPN Policy Selection Through	Pre-Shared Keys (PSK)	Yes	
EAP (IKEVZ)         Yes, Server (RADIUS only)           PKI Certificate Requests         PKCS#1, PKCS#3, PKCS#7, PKCS#30           Self-Signed Certificates         Yes           Certificate Authority Issued Certificates         Yes, VernSign, Entrust etc.           Certificate Revocation List (ORL) Protocols         LDAP, HITTP           CRL Fail-Mode Behavior         Conditional, Enforced           KE Identity         ILDAP, HITTP           Security Association Granularity         IP, FQDN, E-mail, X.500 Distinguished-Name           Security Association Granularity         Net, Host, Port           Replay Attack Prevention         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Roarning Client Tunnels         Yes           NAT Traversal (NAT-T)         Yes           Psec Tunnel Selection Through         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Passthrough         Yes           SSL VPN         Yes           SLL/VPN         Yes           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing	X.509 Certificates	Yes	
PKI Certificate Requests         PKCS#1, PKCS#3, PKCS#7, PKCS#10           Sell-Signed Certificates         Yes           Certificate Revocation List (CRL) Protocols         LDAP, HTTP           CRL Fail-Mode Behavior         Conditional, Enforced           IKE Identity         IP, FODN, E-mail, X.500 Distinguished-Name           Security Association Granularity         Net, Host, Port           Replay Attack Prevention         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Rearning Client Tunnels         Yes           NAT Traversal (NAT-T)         Yes           IPsec Dai-on-Demand         Yes           IPsec Dai-on-Demand         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Stylen         Yes           SSL VPN         Yes           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Still Tunneling         Yes           Still Tunneling         Yes           Still Tunneling         Yes           Still Tunneling	XAuth (IKEv1)	Yes, Client and Server	
Self-Signed Certificates         Yes           Certificate Authority Issued Certificates         Yes, VeriSign, Entrust etc.           Certificate Revocation List (CRL) Protocols         LDAP, HTTP           CRL Fail-Mode Behavior         Conditional, Enforced           IKE Identity         IP, FODN, E-mail, X-500 Distinguished-Name           Security Association Granularity         Net, Host, Port           Replay Attack Prevention         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Roaming Client Tunnels         Yes           NAT Traversal (NATT)         Yes           IPsec Dial-on-Demand         Yes	EAP (IKEv2)	Yes, Server (RADIUS only)	
Certificate Authority Issued Certificates         Yes, VerSign, Entrust etc.           Certificate Revocation List (CRL) Protocols         LDAP, HTTP           CRL Fail-Mode Behavior         Conditional, Enforced           Kie Identity         IP, FQDN, E-mail, X.500 Distinguished-Name           Security Association Granularity         Net, Host, Port           Replay Attack Prevention         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Nat Traversal (NAT-T)         Yes           IPsec Dial-on-Demand         Yes           IPsec Dial-on-Demand         Yes           IPsec Dial-on-Demand         Yes           IPsec Pasthrough         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Pasthrough         Yes           SSL VPN         Yes           SSL VPN Traversal (NAT-T)         Yes           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static <tr< td=""><td>PKI Certificate Requests</td><td>PKCS#1, PKCS#3, PKCS#7, PKCS#10</td></tr<>	PKI Certificate Requests	PKCS#1, PKCS#3, PKCS#7, PKCS#10	
Certificate Revocation List (CRL) Protocols         LDAP, HTTP           CRL Fail-Mode Behavior         Conditional, Enforced           IKE Identity         IP, FODN, E-mail, X.500 Distinguished-Name           Security Association Granularity         Net, Host, Port           Replay Attack Provention         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Roaming Client Turnels         Yes           NAT Traversal (NAT-T)         Yes           IPsec Dial-on-Demand         Yes           IPsec Dial-on-Demand         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Passthrough         Yes           SELVPN         Yes           TLS/SSL VPN         Yes           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Provisioning         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TPV VSN         Yes           L2TPV VSN         Yes           L2TPV2 Client (LAC)         Yes           L2TPV3 Client (LAC)         Yes <th< td=""><td>Self-Signed Certificates</td><td>Yes</td></th<>	Self-Signed Certificates	Yes	
Certificate Revocation List (CRL) Protocols         LDAP, HTTP           CRL Fail-Mode Behavior         Conditional, Enforced           IKE Identity         IP, FODN, E-mail, X.500 Distinguished-Name           Security Association Granularity         Net, Host, Port           Replay Attack Provention         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Roaming Client Turnels         Yes           NAT Traversal (NAT-T)         Yes           IPsec Dial-on-Demand         Yes           IPsec Dial-on-Demand         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Passthrough         Yes           SELVPN         Yes           TLS/SSL VPN         Yes           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Provisioning         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TPV VSN         Yes           L2TPV VSN         Yes           L2TPV2 Client (LAC)         Yes           L2TPV3 Client (LAC)         Yes <th< td=""><td>Certificate Authority Issued Certificates</td><td>Yes, VeriSign, Entrust etc.</td></th<>	Certificate Authority Issued Certificates	Yes, VeriSign, Entrust etc.	
IKE Identity         IP, FQDN, E-mail, X.500 Distinguished-Name           Security Association Granularity         Net, Host, Port           Replay Attack Prevention         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Soaming Olient Tunnels         Yes           NAT Traversal (NAT-T)         Yes           IPsec Dial-on-Demand         Yes           IPsec Dial-on-Demand         Yes           IPsec Tunnel Selection Through         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Passithrough         Yes           SSL VPN         Yes           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TPV VIN         Yes           L2TPV2 Server (LNS)         Yes           L2TPV3 Client (LAC)         Yes           L2TPV3 Client (LAC)         Yes	Certificate Revocation List (CRL) Protocols	LDAP, HTTP	
Security Association Granularity         Net, Host, Port           Replay Attack Prevention         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Roaming Client Tunnels         Yes           NAT Traversal (NAT-T)         Yes           IPsec Dial-on-Demand         Yes           IPsec Dial-on-Demand Pisce Tunnel Selection Through         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Passthrough         Yes           SSL VPN         Yes           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TP VPN         L2TP VS Client (LAC)           L2TPV2 Client (LAC)         Yes           L2TPV3 Client (LAC)         Yes           L2TPV3 Server (LNS)         Yes           L2TPV3 Server (LNS)         Yes	CRL Fail-Mode Behavior	Conditional, Enforced	
Replay Attack Prevention         Yes           Policy-Based Routing         Yes           Virtual Routing         Yes           Roaming Client Tunnels         Yes           NAT Traversal (NAT-T)         Yes           IPsec Dai-on-Demand         Yes           IPsec Dai-on-Demand         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Passthrough         Yes           SSL VPN         Yes           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Diloy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SsL VPN IP Provisioning         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           LZTP VPN         Yes           LZTP VS Client (LAC)         Yes           LZTP V2 Server (LNS)         Yes           LZTP V3 Client (LAC)         Yes           LZTP V3 Server (LNS)         Yes	IKE Identity	IP, FQDN, E-mail, X.500 Distinguished-Name	
Policy-Based Routing         Yes           Virtual Routing         Yes           Roaming Client Tunnels         Yes           NAT Traversal (NAT-T)         Yes           IPsec Dial-on-Demand         Yes           IPsec Tunnel Selection Through         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Passthrough         Yes           SSL VPN         Yes           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TP VPN           L2TP V2 Client (LAC)         Yes           L2TPV2 Server (LNS)         Yes           L2TPV3 Client (LAC)         Yes           L2TPV3 Server (LNS)         Yes	Security Association Granularity	Net, Host, Port	
Virtual Routing         Yes           Roaming Client Tunnels         Yes           NAT Traversal (NAT-T)         Yes           IPsec Dial-on-Demand         Yes           IPsec Tunnel Selection Through         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Passthrough         Yes           SSL VPN           TLS/SSL VPN           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           LZTP VPN           LZTP V2 Client (LAC)         Yes           L2TPV2 Server (LNS)         Yes           L2TPV3 Client (LAC)         Yes           L2TPV3 Client (LAC)         Yes	Replay Attack Prevention	Yes	
Roaming Client Tunnels         Yes           NAT Traversal (NAT-T)         Yes           IPsec Dial-on-Demand         Yes           IPsec Tunnel Selection Through         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Passthrough         Yes           SSL VPN           TLS/SSL VPN           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TP VPN         Yes           L2TP V2 Client (LAC)         Yes           L2TP V2 Server (LNS)         Yes           L2TPV3 Client (LAC)         Yes           L2TPV3 Server (LNS)         Yes           L2TPV3 Server (LNS)         Yes	Policy-Based Routing	Yes	
NAT Traversal (NAT-T)         Yes           IPsec Dial-on-Demand         Yes           IPsec Tunnel Selection Through         Firewall Rule Set, Routing, Policy-Based Routing           Redundant VPN Tunnels         Yes           IPsec Passthrough         Yes           SSL VPN           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TP VPN         Yes           L2TP V2 Client (LAC)         Yes           L2TP V2 Server (LNS)         Yes           L2TP V3 Client (LAC)         Yes	Virtual Routing	Yes	
IPsec Dial-on-Demand     Yes       IPsec Tunnel Selection Through     Firewall Rule Set, Routing, Policy-Based Routing       Redundant VPN Tunnels     Yes       IPsec Passthrough     Yes       SSL VPN       TLS/SSL VPN       One-Time Client Installation     Yes       Browser Independent     Yes       VPN Policy Selection Through     Firewall Rule Set, Routing and Policy-Based Routing       Split Tunneling     Yes       SSL VPN IP Provisioning     IP Pool, Static       L2TP VPN     Yes       L2TPV2 Client (LAC)     Yes       L2TPV2 Server (LNS)     Yes       L2TPV3 Client (LAC)     Yes       L2TPV3 Server (LNS)     Yes       L2TPV3 Server (LNS)     Yes	Roaming Client Tunnels	Yes	
IPsec Tunnel Selection Through     Firewall Rule Set, Routing, Policy-Based Routing       Redundant VPN Tunnels     Yes       IPsec Passthrough     Yes       SSL VPN       TLS/SSL VPN       One-Time Client Installation     Yes       Browser Independent     Yes       VPN Policy Selection Through     Firewall Rule Set, Routing and Policy-Based Routing       Split Tunneling     Yes       SSL VPN IP Provisioning     IP Pool, Static       L2TP VPN     Yes       L2TPV2 Client (LAC)     Yes       L2TPV3 Client (LAC)     Yes       L2TPV3 Client (LAC)     Yes       L2TPV3 Server (LNS)     Yes       L2TPV3 Server (LNS)     Yes	NAT Traversal (NAT-T)	Yes	
Redundant VPN Tunnels         Yes           IPsec Passthrough         Yes           SSL VPN           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TP VPN         Yes           L2TPV2 Client (LAC)         Yes           L2TPV2 Server (LNS)         Yes           L2TPV3 Client (LAC)         Yes           L2TPV3 Client (LAC)         Yes           L2TPV3 Server (LNS)         Yes	IPsec Dial-on-Demand	Yes	
IPsec PassthroughYesSSL VPNTLS/SSL VPNYesOne-Time Client InstallationYesBrowser IndependentYesVPN Policy Selection ThroughFirewall Rule Set, Routing and Policy-Based RoutingSplit TunnelingYesSSL VPN IP ProvisioningIP Pool, StaticL2TP VPNYesL2TPv2 Client (LAC)YesL2TPv2 Server (LNS)YesL2TPv3 Client (LAC)YesL2TPv3 Client (LAC)YesL2TPv3 Server (LNS)Yes	IPsec Tunnel Selection Through	Firewall Rule Set, Routing, Policy-Based Routing	
SSL VPN           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TP VPN           L2TPv2 Client (LAC)         Yes           L2TPv2 Server (LNS)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Server (LNS)         Yes	Redundant VPN Tunnels	Yes	
SSL VPN           TLS/SSL VPN         Yes           One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TP VPN           L2TPv2 Client (LAC)         Yes           L2TPv2 Server (LNS)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Server (LNS)         Yes	IPsec Passthrough	Yes	
One-Time Client Installation         Yes           Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TP VPN           L2TPv2 Client (LAC)         Yes           L2TPv2 Server (LNS)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Server (LNS)         Yes	SSL VPN		
Browser Independent         Yes           VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TP VPN         Yes           L2TPv2 Client (LAC)         Yes           L2TPv2 Server (LNS)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Server (LNS)         Yes	TLS/SSL VPN	Yes	
VPN Policy Selection Through         Firewall Rule Set, Routing and Policy-Based Routing           Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TP VPN         Yes           L2TPv2 Client (LAC)         Yes           L2TPv2 Server (LNS)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Server (LNS)         Yes	One-Time Client Installation	Yes	
Split Tunneling         Yes           SSL VPN IP Provisioning         IP Pool, Static           L2TP VPN         Yes           L2TPv2 Client (LAC)         Yes           L2TPv2 Server (LNS)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Server (LNS)         Yes	Browser Independent	Yes	
SSL VPN IP Provisioning         IP Pool, Static           L2TP VPN         Yes           L2TPv2 Client (LAC)         Yes           L2TPv2 Server (LNS)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Server (LNS)         Yes	VPN Policy Selection Through	Firewall Rule Set, Routing and Policy-Based Routing	
L2TP VPN           L2TPv2 Client (LAC)         Yes           L2TPv2 Server (LNS)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Server (LNS)         Yes	Split Tunneling	Yes	
L2TP VPN           L2TPv2 Client (LAC)         Yes           L2TPv2 Server (LNS)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Server (LNS)         Yes	SSL VPN IP Provisioning	IP Pool, Static	
L2TPv2 Server (LNS)         Yes           L2TPv3 Client (LAC)         Yes           L2TPv3 Server (LNS)         Yes	L2TP VPN		
L2TPv3 Client (LAC) Yes L2TPv3 Server (LNS) Yes	L2TPv2 Client (LAC)	Yes	
L2TPv3 Server (LNS) Yes	L2TPv2 Server (LNS)	Yes	
L2TPv3 Server (LNS) Yes	L2TPv3 Client (LAC)	Yes	
L2TP over IPsec Yes	L2TPv3 Server (LNS)	Yes	
	L2TP over IPsec	Yes	

L2TP Tunnel Selection Through	Firewall Rule Set, Routing, Policy-Based Routing
L2TP Client Dial-on-Demand	Yes
L2TPv2 Server IP Provisioning	IP Pool, Static
Other Tunnels	
PPPoE Client (RFC2516)	Yes
Unnumbered PPPoE	Yes
PPPoE Client Dial-on-Demand	Yes
PPTP Client (PAC)	Yes
PPTP Client Dial-on-Demand	Yes
PPTP Server (PNS)	Yes
PPTP Server IP Provisioning	IP Pool, Static
MPPE Encryption (PPTP/L2TP)	RC4-40, RC4-56, RC4-128
Generic Router Encapsulation (RFC2784, RFC2890)	Yes
6in4 Tunneling (RFC4213)	Yes
Tunnel Selection Through	
User Authentication	Firewall Rule Set, Routing, Policy-Based Routing
Local User Database	Voc. mythiolo
	Yes, multiple
RADIUS Authentication	Yes, multiple servers
RADIUS Accounting	Yes, multiple servers
LDAP Authentication	Yes, multiple servers
RADIUS Authentication Protocols	PAP, CHAP, MS-CHAPv1, MS-CHAPv2
XAUTH IKE/IPsec Authentication	Yes
Web-Based HTTP/HTTPS Authentication	Yes
Configurable HTTP/HTTPS Front-End	Yes
L2TP/PPTP/SSL VPN Authentication	Yes
Single Sign-On	
Device-Based Authentication (MAC Address)	Yes
ARP Authentication	Yes
RADIUS Relay	Yes
Active Directory Integration	Microsoft Windows Server 2003, 2008 R2, 2012
Client-less Deployment	Yes
Client Support	iOS, Android, Windows, OSX, Linux
Security Management	
Centralized Management	Clavister InControl <sup>1</sup>
Web User Interface (WebUI)	HTTP and HTTPS
SSH / SCP Management	Yes / Yes
Command Line Interface (CLI)	Yes
Management Authentication	Local User Database, RADIUS
Remote Fail-Safe Configuration	Yes
Local Console (RS-232)	Yes
Traffic Simulation (CLI)	ICMP, TCP, UDP
Scripting	CLI, WebUI
D I . I O I (DOAD)	V
Packet Capture (PCAP)	res
	Yes SSH / WebUl / Clavister InControl. From version 9.00.01 and later.
System Upgrade	SSH / WebUl / Clavister InControl. From version 9.00.01 and later.
System Upgrade System and Configuration Backup	SSH / WebUI / Clavister InControl. From version 9.00.01 and later. SSH / WebUI / Clavister InControl
System Upgrade System and Configuration Backup SNTP Time Sync	SSH / WebUl / Clavister InControl. From version 9.00.01 and later.
System Upgrade System and Configuration Backup SNTP Time Sync Monitoring	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes
System Upgrade System and Configuration Backup SNTP Time Sync  Monitoring Syslog	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers
System Upgrade System and Configuration Backup SNTP Time Sync  Monitoring Syslog Clavister Log	SSH / WebUl / Clavister InControl. From version 9.00.01 and later.  SSH / WebUl / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers
System Upgrade System and Configuration Backup SNTP Time Sync  Monitoring Syslog Clavister Log Real-Time Log	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl
System Upgrade System and Configuration Backup SNTP Time Sync  Monitoring Syslog Clavister Log Real-Time Log Mail Alerting	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes
System Upgrade System and Configuration Backup SNTP Time Sync  Monitoring Syslog Clavister Log Real-Time Log Mail Alerting Log Settings per Policy	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes
System Upgrade System and Configuration Backup SNTP Time Sync  Monitoring Syslog Clavister Log Real-Time Log Mail Alerting Log Settings per Policy Log Export via WebUI	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes  Yes  Yes
System Upgrade  System and Configuration Backup  SNTP Time Sync  Monitoring  Syslog  Clavister Log  Real-Time Log  Mail Alerting  Log Settings per Policy  Log Export via WebUI  SNMPv2c Polling / SNMPv2c Traps	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
System Upgrade  System and Configuration Backup  SNTP Time Sync  Monitoring  Syslog  Clavister Log  Real-Time Log  Mail Alerting  Log Settings per Policy  Log Export via WebUI  SNMPv2c Polling / SNMPv2c Traps  Real-Time Monitor Alerts (Log Action)	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
System Upgrade  System and Configuration Backup  SNTP Time Sync  Monitoring  Syslog  Clavister Log  Real-Time Log  Mail Alerting  Log Settings per Policy  Log Export via WebUI  SNMPv2c Polling / SNMPv2c Traps  Real-Time Monitor Alerts (Log Action)  Real-Time Performance Monitoring	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
System Upgrade  System and Configuration Backup  SNTP Time Sync  Monitoring  Syslog  Clavister Log  Real-Time Log  Mail Alerting  Log Settings per Policy  Log Export via WebUI  SNMPv2c Polling / SNMPv2c Traps  Real-Time Monitor Alerts (Log Action)  Real-Time Performance Monitoring  Hardware Key Metrics Monitoring	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
System Upgrade  System and Configuration Backup  SNTP Time Sync  Monitoring  Syslog  Clavister Log  Real-Time Log  Mail Alerting  Log Settings per Policy  Log Export via WebUI  SNMPv2c Polling / SNMPv2c Traps  Real-Time Monitor Alerts (Log Action)  Real-Time Performance Monitoring  Hardware Key Metrics Monitoring	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
System Upgrade  System and Configuration Backup  SNTP Time Sync  Monitoring  Syslog  Clavister Log  Real-Time Log  Mail Alerting  Log Settings per Policy  Log Export via WebUI  SNMPv2c Polling / SNMPv2c Traps  Real-Time Monitor Alerts (Log Action)  Real-Time Performance Monitoring  Hardware Key Metrics Monitoring  NOTE: Several third-party log monitoring plug-ins are available  IPv6	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
System Upgrade  System and Configuration Backup  SNTP Time Sync  Monitoring  Syslog  Clavister Log  Real-Time Log  Mail Alerting  Log Settings per Policy  Log Export via WebUI  SNMPv2c Polling / SNMPv2c Traps  Real-Time Monitor Alerts (Log Action)  Real-Time Performance Monitoring  Hardware Key Metrics Monitoring  NOTE: Several third-party log monitoring plug-ins are available  IPv6	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
System Upgrade  System and Configuration Backup  SNTP Time Sync  Monitoring  Syslog  Clavister Log  Real-Time Log  Mail Alerting  Log Settings per Policy  Log Export via WebUI  SNMPv2c Polling / SNMPv2c Traps  Real-Time Monitor Alerts (Log Action)  Real-Time Performance Monitoring  Hardware Key Metrics Monitoring  NOTE: Several third-party log monitoring plug-ins are available IPv6  IPv6 Ready Certification	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
System Upgrade  System and Configuration Backup  SNTP Time Sync  Monitoring  Syslog  Clavister Log  Real-Time Log  Mail Alerting  Log Settings per Policy  Log Export via WebUI  SNMPv2c Polling / SNMPv2c Traps  Real-Time Monitor Alerts (Log Action)  Real-Time Performance Monitoring  Hardware Key Metrics Monitoring  NOTE: Several third-party log monitoring plug-ins are available IPv6  IPv6 Ready Certification  Neighbor Discovery	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
System Upgrade  System and Configuration Backup  SNTP Time Sync  Monitoring  Syslog  Clavister Log  Real-Time Log  Mail Alerting  Log Settings per Policy  Log Export via WebUI  SNMPv2c Polling / SNMPv2c Traps  Real-Time Monitor Alerts (Log Action)  Real-Time Performance Monitoring  Hardware Key Metrics Monitoring  NOTE: Several third-party log monitoring plug-ins are available IPv6  IPv6  IPv6  Ready Certification  Neighbor Discovery	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye
Packet Capture (PCAP) System Upgrade System and Configuration Backup SNTP Time Sync  Monitoring Syslog Clavister Log Real-Time Log Mail Alerting Log Settings per Policy Log Export via WebUI SNMPv2c Polling / SNMPv2c Traps Real-Time Monitor Alerts (Log Action) Real-Time Performance Monitoring Hardware Key Metrics Monitoring NOTE: Several third-party log monitoring plug-ins are available IPv6 IPv6 Ready Certification Neighbor Discovery Proxy Neighbor Discovery IPv6 Path MTU Discovery ICMPv6	SSH / WebUI / Clavister InControl. From version 9.00.01 and later.  SSH / WebUI / Clavister InControl  Yes  Yes, multiple servers  Yes, multiple servers  WebUI, Clavister InControl  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye

Interfaces	Yes	
Ethernet Interfaces	Yes	
VLAN Interfaces (802.1q)	Yes	
Link Aggregation IEEE 802.1AX-2008 (Static/LACP)	Yes	
Static IPv6 Address Assignment	Yes	
IPv6 DHCP Client	Yes	
Firewall		
IP Policies	ALLOW, DROP and REJECT	
Stateful Firewall	Yes	
Ingress Filtering	Yes	
IPv6 Routing / Policy-Based Routing	Yes / Yes	
Functionality		
DHCPv6 Server	Yes	
Application Control	Yes	
High Availability		
Active Mode with Passive Backup	Yes	
Firewall Connection State Synchronization	Yes	
IKE / IPsec State Synchronization	Yes / Yes	
User and Accounting State Synchronization	Yes	
DHCP Server and Relayer State Synchronization	Yes	
Synchronization of Dynamic Routes	Yes	
IGMP State Synchronization	Yes	
Server Load Balancing (SLB) State Synchronization	Yes	
Configuration Synchronization	Yes	
Device Failure Detection	Yes	
Dead Link / Gateway / Interface Detection	Yes / Yes	
Average Failover Time	< 800 ms	

Specifications subject to change without further notice.

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#### About Clavister

Clavister (NASDAQ: CLAV) is a leading security provider for fixed, mobile and virtual network environments. Its award-winning solutions give enterprises, cloud service providers and telecoms operators the highest levels of protection against threats, with unmatched reliability. Clavister's performance in the security sector was recognized with the Product Quality Leadership Award from Frost & Sullivan. The company was founded in Sweden in 1997, with its solutions available globally through its network of channel partners. To learn more, visit <a href="https://www.clavister.com">www.clavister.com</a>.

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<sup>&</sup>lt;sup>1</sup> See Clavister InControl datasheet for compatible versions.