

# Security Gateway 4400 Series



**Clavister SSP™ Security Services Platform**

firewall • VPN termination • intrusion prevention • anti-virus  
content filtering • traffic shaping • authentication

**CLAVISTER™**

**Protecting Values**



- **Firewall**
- **VPN**
- **Intrusion Detection & Prevention**
- **Web Content Filtering**
- **Antivirus\*\***
- **Virtualization Technologies**
- **Bandwidth Management**
- **User Authentication**
- **Server Load Balancing**
- **High Availability Clustering**

## Unparalleled Resilience

The products in the Clavister Security Gateway 4400 Series are primarily designed to be used as central gateways in high load enterprise networks or in data centers where extreme plaintext and VPN performance and a rich set of functionality in combination with high-resilience are critical factors.

The Clavister Security Gateway 4400 Series consists of four models, the Clavister Security Gateway 4410, 4430, 4450 and 4470, differentiated by performance.

## Superior VPN performance

The health of your network is mission-critical and network interruptions can cause serious financial damage. For this reason, all products in the Clavister Security Gateway 4400 Series support state and VPN synchronized clustering with port and route fail-over, hot-swappable redundant backup power supplies as well as replaceable fan modules.

The Clavister Security Gateway 4400 Series is specifically designed for maximum availability.

Apart from the impressive plaintext throughput, where the Clavister Security Gateway 4400 Series performs at up to 4 Gigabits per second, the products in this series are built for managing VPN traffic at high rates.

The Clavister Security Gateway 4400 Series of products deliver up to gigabit VPN throughput, using either AES or 3DES encryption algorithms.

Support for several thousand simultaneous VPN tunnels in combination with the high data rate make the Clavister Security Gateway 4400 Series ideal as central VPN gateways.

### Product Highlights

#### Modularity as no two networks are alike

With the 4400 series you can set security policies any way you want - from having a specific, detailed policy for every single user in your organisation to filtering by application, credentials, time of day or any one of a hundred other variables.

#### Clavister CorePlus™ kernel

At the heart of the 4400 Series, just as all Clavister SSP products, lies an in-house developed, high-performance kernel with an invisible attack surface and air-tight component integration. We write every line of code ourselves to ensure that it all works perfectly together at staggeringly high performance levels.

This stands in direct contrast to most security products on the market which piece solutions together from several different sources.

#### Big on Performance - Low on maintenance

With the 4400 Series, just as with all other Clavister products, there are no time-consuming upgrades and service pack installations to be done (as is common with many other vendors). Any upgrades that are required (to handle newly emerging threats, for example) are provided by the Clavister Service Provisioning Network (CSPN).

#### Based on Clavister Service Oriented Security (SOS)™

Our goal is to allow customers the benefit of granularity and provide the greatest freedom to configure and optimize their security solution to exactly meet their specific needs. Our SOS design philosophy means that, where possible, we avoid integrating third-party code.

## Feature list 4410 4430 4450 4470

### System Performance and Capacity

Plaintext Throughput (Mbps)	500	1.000	2.000	4.000
AES/3DES Throughput (Mbps)	200/200	300/300	1.000/1.000	1.000/1.000
Concurrent Connections	256.000	512.000	1.000.000	5.000.000
Concurrent VPN Tunnels	1.000	2.000	5.000	10.000
Ethernet Interfaces	8 x SFP (Mini-GBIC), 2 x 1000BASE-TX, 4 x 100BASE-TX			
Virtual Interfaces (VLAN)	512	1.024	2.048	4.096
Virtual Systems	10 + up to 1.000 additional Virtual Systems			
Virtual Routers	10 + up to 1.000 additional Virtual Routers			

## Feature list 4400 Series

### Mode of Operation

Layer 2 mode (transparent mode)	Yes
Layer 3 mode (route mode)	Yes
Policy-based NAT/PAT	Yes
Policy-based Server Load Balancing	Yes
Virtual IP	Yes

### Firewall

Network Attack Detection/Prevention	Yes
DoS and DDoS Detection/Prevention	Yes
TCP Reassembly	Yes

### VPN – Virtual Private Networking

Encryption	AES, 3DES, DES, Blowfish, CAST-128
Authentication	SHA-1, MD5
IKE Modes	Main, Aggressive
Perfect Forward Secrecy (DH Groups)	1,2,5
X.509 Certificates, Pre-Shared Keys	Yes
PKI Certificate Requests	PKCS#7, PKCS#11
Self-Signed Certificates	Yes
IPSec NAT Traversal (NAT-T)	Yes
VPN Policy Selection Through	Firewall Ruleset, Routing, PBR
VPN Tunnel Keep-alive	Yes
L2TP Client / Server (LNS)	Yes
PPTP Client / Server (PNS)	Yes

### Intrusion Detection and Prevention

Stateful Pattern Matching	Yes
Protocol Anomaly	Yes
Rate Anomaly	Yes
Insertion/Evasion Protection	Yes
Dynamic IP Blacklisting	Yes
Automated Signature Updates	Yes
Stateful Signatures	Yes
Component Based Signatures	Yes
Application Blocking	Yes

### Content Security

Web Content Filtering	Yes
Audit Mode	Yes
Blocking Mode	Yes
Classification Categories	> 30
URL White/Black Listing	Yes
Antivirus *	Yes
Stream-based Signatures	Yes
Automated Signature Updates	Yes
Per Device Signature Service	Yes

### High Availability

Firewall and VPN state Synchronization	Yes
Device Failure Detection	Yes
Dead Link, Gateway and Interface Detection	Yes
Interface Failover	Yes
Route Failover	Yes
Average Failover time	< 800 ms

## Feature list 4400 Series

### Routing

Static Routing	Yes
Policy-based Routing (PBR)	Yes
OSPF / OSPF over VPN	Yes
Multicast - IGMP	Yes
Source Base Routing	Yes
GRE	Yes

### IP Address Assignment

Static	Yes
DHCP Client, Server and Relay	Yes
Proxy ARP	Yes
PPPoE	Yes

### Application Layer Gateways

FTP	Yes
H.323	Yes
NAT and SAT support	Yes
HTTP	Yes
SMTP *	Yes

### Bandwidth Management

Policy-based Bandwidth Management	Yes
Guaranteed / Maximum Bandwidth	Yes
Dynamic Bandwidth Balancing	Yes
Priority Levels	Yes

### Logging / Monitoring

Clavister Firewall Logger	Yes
Syslog	Yes
Real-time Log Viewer	Yes
Command Line Log Query Tools	Microsoft Windows, Linux
Log Export Format	CSV
Real-time Performance Monitoring	Yes
SNMP Polling/Traps	Yes

### Management

Local Console	RS232
Command-line based Remote Management	Microsoft Windows, Linux
Graphical Enterprise Remote Management	Included in all products
Multi-Device Management	Yes
Remote Fail-safe Operation	Yes
Revision History	Complete Configurations

### User Authentication

External RADIUS User Database	Yes, multiple servers
RADIUS Accounting	Yes
CHAP, PAP	Yes
Web-based Authentication	Yes
Customizable HTTP(s) Front-end	Yes
XAuth VPN Authentication	Yes

### Dimensions and Weight

H x W x D (mm)	88x440x440
Weight	12 kg
Form Factor	2U
Rack Mountable 19"	Yes
Redundant Hot-Swapable Power Supply (AC)	100-240V 50 to 60 Hz AC
Redundant Hot-Swapable Power Supply (DC)	36VDC to 72VDC

### Regulatory and Safety Standards

Safety: UL	
EMC: FCC class A, CE class A, VCCI class A	

### Environmental

Humidity: 20% to 95% noncondensing
Operational Temperature: 5 to 55 C
Vibration: 0.41 Grms2 (3-500 Hz)
MTBF: 5 years
Shock: 30 G

For detailed and current technical specifications, please visit: [www.clavister.com](http://www.clavister.com)  
\* Release schedule to be announced

## Clavister Security Gateway 4400 Series

### Appliances

Clavister Security Gateway 4410 (AC)	CLA-APP-SG4410
Clavister Security Gateway 4410 (DC)	CLA-APP-SG4410-DC
Clavister Security Gateway 4410 Failover unit (AC)	CLA-APP-SG4410-FO
Clavister Security Gateway 4410 Failover unit (DC)	CLA-APP-SG4410-DC-FO
Clavister Security Gateway 4430 (AC)	CLA-APP-SG4430
Clavister Security Gateway 4430 (DC)	CLA-APP-SG4430-DC
Clavister Security Gateway 4430 Failover Unit (AC)	CLA-APP-SG4430-FO
Clavister Security Gateway 4430 Failover Unit (DC)	CLA-APP-SG4430-DC-FO
Clavister Security Gateway 4450 (AC)	CLA-APP-SG4450
Clavister Security Gateway 4450 (DC)	CLA-APP-SG4450-DC
Clavister Security Gateway 4450 Failover Unit (AC)	CLA-APP-SG4450-FO
Clavister Security Gateway 4450 Failover Unit (DC)	CLA-APP-SG4450-DC-FO
Clavister Security Gateway 4470 (AC)	CLA-APP-SG4470
Clavister Security Gateway 4470 (DC)	CLA-APP-SG4470-DC
Clavister Security Gateway 4470 Failover Unit (AC)	CLA-APP-SG4470-FO
Clavister Security Gateway 4470 Failover Unit (DC)	CLA-APP-SG4470-DC-FO

### Software Subscription Service - Major and Minor Releases

12 months / 36 months

Clavister Security Gateway 4410	CLA-APP-SG4410-SS12/36
Clavister Security Gateway 4410 Failover unit	CLA-APP-SG4410-FO-SS12/36
Clavister Security Gateway 4430	CLA-APP-SG4430-SS12/36
Clavister Security Gateway 4430 Failover Unit	CLA-APP-SG4430-FO-SS12/36
Clavister Security Gateway 4450	CLA-APP-SG4450-SS12/36
Clavister Security Gateway 4450 Failover Unit	CLA-APP-SG4450-FO-SS12/36
Clavister Security Gateway 4470	CLA-APP-SG4470-SS12/36
Clavister Security Gateway 4470 Failover Unit	CLA-APP-SG4470-FO-SS12/36

### Hardware Replacement - Next Business Day Shipment and Software Subscription Bundle

12 months / 36 months

Clavister Security Gateway 4410	CLA-APP-SG4410-SSHW12/36
Clavister Security Gateway 4410 Failover unit	CLA-APP-SG4410-FO-SSHW12/36
Clavister Security Gateway 4430	CLA-APP-SG4430-SSHW12/36
Clavister Security Gateway 4430 Failover Unit	CLA-APP-SG4430-FO-SSHW12/36
Clavister Security Gateway 4450	CLA-APP-SG4450-SSHW12/36
Clavister Security Gateway 4450 Failover Unit	CLA-APP-SG4450-FO-SSHW12/36
Clavister Security Gateway 4470	CLA-APP-SG4470-SSHW12/36
Clavister Security Gateway 4470 Failover Unit	CLA-APP-SG4470-FO-SSHW12/36

### X-Pansion Line Upgrades

SG4410 to SG4430	License Upgrade	CLA-APP-SG4410-SG4430
SG4410 to SG4450	License Upgrade	CLA-APP-SG4410-SG4450
SG4410 to SG4470	License Upgrade	CLA-APP-SG4410-SG4470
SG4430 to SG4450	License Upgrade	CLA-APP-SG4430-SG4450
SG4430 to SG4470	License Upgrade	CLA-APP-SG4430-SG4470
SG4450 to SG4470	License Upgrade	CLA-APP-SG4450-SG4470

## Clavister Security Gateway 4400 Series (continued)

### UTM Services

IDP Signature Update Service - 12 Months

Clavister Security Gateway 4410	CLA-APP-SG4410-IDP12
Clavister Security Gateway 4430	CLA-APP-SG4430-IDP12
Clavister Security Gateway 4450	CLA-APP-SG4450-IDP12
Clavister Security Gateway 4470	CLA-APP-SG4470-IDP12

Antivirus Signature Update Service - 12 Months

Clavister Security Gateway 4410	CLA-APP-SG4410-KAV12
Clavister Security Gateway 4430	CLA-APP-SG4430-KAV12
Clavister Security Gateway 4450	CLA-APP-SG4450-KAV12
Clavister Security Gateway 4470	CLA-APP-SG4470-KAV12

Web Content Filtering Service - 12 Months

Clavister Security Gateway 4410	CLA-APP-SG4410-WCF12
Clavister Security Gateway 4430	CLA-APP-SG4430-WCF12
Clavister Security Gateway 4450	CLA-APP-SG4450-WCF12
Clavister Security Gateway 4470	CLA-APP-SG4470-WCF12

### Spare Parts, Accessories and Virtualizations

SFP Gigabit Module (Mini-GBIC), 1000BASE-LX	CLA-APP-SFP-LX
SFP Gigabit Module (Mini-GBIC), 1000BASE-SX	CLA-APP-SFP-SX
SFP Gigabit Module (Mini-GBIC), 1000BASE-TX	CLA-APP-SFP-TX
Hot-Swappable AC Power Supply	CLA-APP-SG4400-ACPSU
Hot-Swappable DC Power Supply	CLA-APP-SG4400-DCPSU
Swappable Fan Module	CLA-APP-SG4400-FAN
Upgrade from 10 to 25 Virtual Systems and Routers	CLA-APP-SG4400-VSYS25
Upgrade from 25 to 50 Virtual Systems and Routers	CLA-APP-SG4400-VSYS50
Upgrade from 50 to 100 Virtual Systems and Routers	CLA-APP-SG4400-VSYS100
Upgrade from 100 to 250 Virtual Systems and Routers	CLA-APP-SG4400-VSYS250
Upgrade from 250 to 500 Virtual Systems and Routers	CLA-APP-SG4400-VSYS500
Upgrade from 500 to 1000 Virtual Systems and Routers	CLA-APP-SG4400-VSYS1000

### Warranty

All products in Clavister Security Gateway 4400 Series come with a two (2) years standard RMA warranty and 90 days Software Subscription covering all major and minor software releases counting from the Start Date

Start Date means the earlier of Product registration or ninety (90) days following shipment from Clavister.

### About Clavister

Clavister is a leading developer of high-performance IT/IP security. The products, based on unique technology, include carrier-class firewalls and VPN solutions. They have been awarded preferred choice by international press and are in use today by thousands of satisfied customers. In short; In a world where people depend on information, Clavister provides complete security solutions more cost-efficient than any competitor, always with Your business in mind.

Clavister was founded 1997 in Sweden. Its R&D and headquarters is situated in Örnskölds-vik, Sweden and its solutions are marketed and sold through sales offices, distributors and resellers in Europe and Asia. Clavister also offers its technology to OEM manufacturers.

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