

CLAVISTER®

PRODUCTS AND SOLUTIONS



Clavister Products and Solutions



We're pleased to welcome you to the latest edition of Clavister Products and Solutions. Here you will find information about us, our solutions and our current product range. We hope this will be an inspiration for you and help you to choose the Clavister solutions that best match your needs.

For a faster, simpler and more secure world,

Roland Svensson, CEO Clavister AB

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 Phone: +46 (0)660 29 92 00 | www.clavister.com

About Clavister

Clavister delivers the security solutions required for market leaders to optimize their networks – today and tomorrow. Driven by a passion for innovative design, simplicity and extreme performance, we offer a portfolio of high performance network security products designed specifically for Cloud, Enterprise and Telecoms environments.

As a leading provider of mobile and network security solutions for cloud services providers, enterprise customers and telecoms operators, we design our products from the inside out. This not only results in the highest level of protection against ever changing network threats and malicious attacks, but also beautiful design too. Our products are designed for ease of use, ease of deployment and are easy to manage and maintain.

In conclusion, our solutions are based on:

- Innovative design
- Simplicity
- Extreme performance

We believe these criteria are the key to unlocking a new dimension in mobile and network security.

Clavister worldwide

Founded in 1997, we have a long history of providing network security for some of the most mission-critical networks in the world. For detailed information, please visit www.clavister.com/about-us/contact/worldwide-offices.



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Solutions overview

New technologies like 4G/LTE are providing users of mobile devices, such as smart-phones, tablets and netbooks with 10x the speeds of 2G and 3G networks, enabling voice, data and multimedia streaming as fast as 1Gbps and beyond. The enormous increase in data traffic has resulted in substantial need for more bandwidth and has generated more complex network security environments.

Our market is driven by three major trends: the mobile data explosion, the transition to cloud services and growing network security requirements. These trends correlate with our main three segments detailed below.

Cloud

Security remains the main challenge hindering adoption of cloud services. Gartner predicts that by 2016, 40 per cent of enterprises will make proof of independent security testing a precondition for using any type of cloud services.

It is vital that providers of cloud services have reliable security measures in place and implement the latest technologies to protect client data. Trusted security is now the most important differentiator for cloud vendors.

Enterprise

Today, the workplace is facing a new dimension of threats to the corporate network. Cyber terrorism continues to cost enterprises dearly; an increase in mobile and field workers means that corporate networks have never needed to be more secure; and the explosion in social networks means that businesses face the challenge of managing and controlling how employees access these sites on the corporate network.

Telecoms

According to analyst firm Gartner, the world had five billion mobile connections in 2010 and is expected to grow to 50 billion mobile connections by 2020.



Mobile telecoms operators are facing fierce competition with decreasing revenues, as well as the challenge of handling the increased data traffic that comes from the use of mobile devices for both business and personal use. The need to optimize mobile data offloading in a secure manner and invest in core security has never been more vital.

Solutions

For more information about our solutions, please visit www.clavister.com/solutions.

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Cloud solutions

The Clavister Virtual Series covers a huge range of solutions; deployed as a virtual firewall for enterprises, a business driver for cloud providers and enables Service Providers to offer security services to customers. Highlights from these solutions are listed below:

Virtual firewall

The challenge for today's cloud environment is that the virtualized servers in the data center are more or less open for attacks between different servers without any protection when deployed in the same cloud. This can lead to regulatory compliance issues, as well as potential privacy and data leakage.

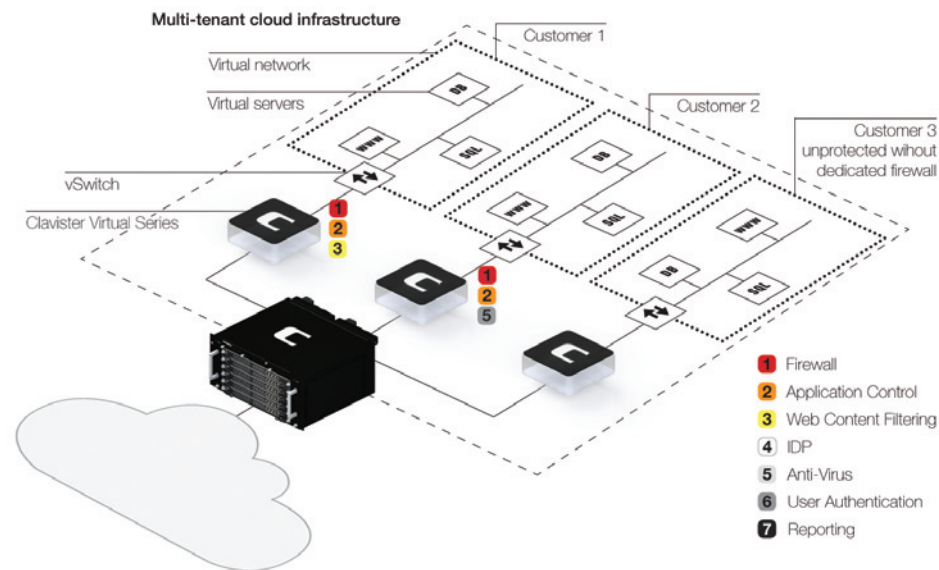
You can solve this by deploying Clavister Virtual Series in an enterprise-virtualized environment and establish protected zones in an otherwise open environment. This means that the virtual security gateway is used to establish security zones for different areas of the virtual network, each with different security classified information.

The Clavister Virtual Series can be used to establish protected zones for the HR, R&D, Sales and finance departments, but also for different functions, such as Web servers, database servers and ERP system – all in the same cloud environment. Each department can have their own firewall, which simplifies calculations on cost distribution within the enterprise.

Security as a Service

There are a number of security challenges facing those enterprises that want to move from a familiar, controlled in-house solution to an out-sourced, hosted multi-tenant cloud infrastructure. Hosting providers who cannot meet these challenges have a hard time attracting customers. Hosting providers that succumb to using their infrastructure firewalls to provision security policies for their customers are creating an administrative nightmare with a "shared" firewall. Customers are unwilling to pay for a service that is not tailored specifically for them.

By deploying Clavister Virtual Series, hosting providers can offer all customers their own dedicated security solution as value-added services and thereby generate new revenue



streams. Customers benefit from greater control of their security policies without any administrative issues as each firewall is completely isolated and does not affect other customers' virtual deployments.

More cloud solutions are available at www.clavister.com/solutions/cloud.

RESOURCES

For more information about Clavister Cloud Solutions, please visit www.clavister.com/solutions/cloud.

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Enterprise solutions

Distributed enterprise security

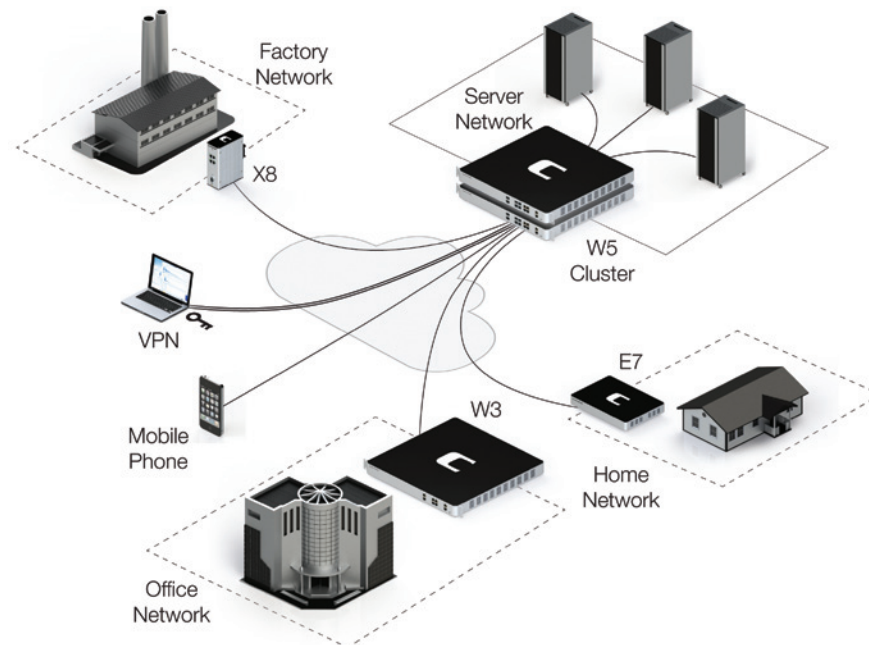
The main challenge for any enterprise is to create convenient and stable access to its headquarter resources for their branch offices and remote workers. It can be challenging to provide fast and uninterrupted connections across countries and continents. With an ever increasing number of cloud-based or internally hosted applications, social networks and an online culture introduces new security challenges for distributed enterprise networks. While employees need access to these services, they also expose the enterprise network to vulnerability threats. To protect their business, enterprises must make sure their network security solution can manage and control these services.

Clavister's versatile products are designed to deliver high performance in a distributed enterprise environment. The Clavister cOS Core is a modern, feature-rich network security operating system offering next-generation firewall features across all products, regardless of location and deployment. With excellent performance, world-class design and innovative functionality, the Clavister product portfolio delivers the performance, scalability and robustness required in a distributed enterprise environment.

For example, we deliver WAN optimization for remote and branch office by using more than one ISP. Load-balancing based on the characteristics of the traffic pattern and by using the connection with the best speed and lowest latency at any given time enables stable and secure connection to the organization's headquarters. Next-generation firewall features such as Application Control, Traffic Management and Web Content Filtering help prioritize business applications and restrict bandwidth for social media and leisure purposes.

With Clavister InControl, our comprehensive centralized management system, valuable IT resources can focus on daily tasks without unnecessary overhead. With fully centralized management, network analysis and reporting, Clavister InControl enables organizations to manage thousands of Clavister devices.

To ensure that your Clavister solution is always secure and fully operational, we have the all-inclusive Clavister Security Subscription. This subscription includes not only all software upgrades, all security services, such as Application Control, Anti-Virus, Web Content Filtering and Intrusion Detection and Prevention, but also 24/7 support, hardware replacement



and our management systems, both Clavister InControl and Clavister Web Management. This gives an organization everything it needs to deliver fast, secure and uninterrupted security in a distributed enterprise environment.

For example, a mobile worker uses a VPN client on his laptop or smartphone to connect to the organization's headquarters. The machines in the production facility are all controlled and managed by using the ruggedized Clavister X8, which is also connected to the headquarters using a VPN connection. The branch offices use Clavister W3 and Clavister W5; all connected securely to the headquarters. All Clavister products are centrally managed using Clavister InControl.

More enterprise solutions are available at www.clavister.com/solutions/enterprise.

RESOURCES

For more information about Clavister Enterprise Solutions, please visit www.clavister.com/solutions/enterprise.

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Telecoms solutions

Data offloading

With the introduction of smartphones and connected devices, data traffic has increased disproportionately putting operators in a position where infrastructure investments has become critical. Gartner predicts a growth from today's five billion connected devices to over 50 billion in less than a decade. Operators are now being forced to look for alternative ways to offload that surge in capacity demand.

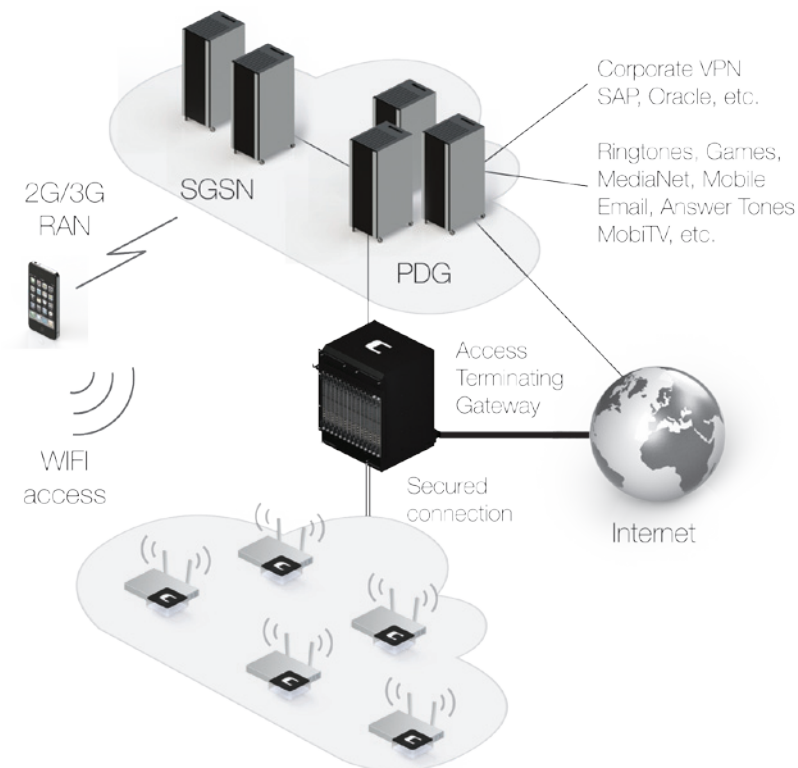
The flat rate of data traffic independent of volume becomes a real issue as operators try to find ways to facilitate traffic growth at the lowest possible cost. However, this is a difficult scenario due to the lack of measuring parameters, making the consumer unsure what should be free and what should be paid for. Unlike 3G networks, Wi-Fi traditionally lacks security, guaranteed quality of service and seamless coverage, parameters which operators are used to implementing in their traditional 3G networks. There are several data offloading strategies, but below we concentrate on the integrated data offloading strategy.

Integrated data offloading

This data offloading strategy is fully integrated with the operators core network and the consumer generally moves seamlessly between the core network and the Wi-Fi network without interruption. Operators opting for this strategy can promote carrier subscribed content, such as IP, TV, etc. to the consumer regardless, whether they are in the core network or in the Wi-Fi network.

The consumer is continuously secured, both in the core network and in the Wi-Fi network, thus preventing security breaches or tampering in the operators extended network.

The ability to integrate the Wi-Fi solution with the core network provides the operator with full management capability and a transparent billing process. Traditionally, this strategy also provides more content-based services, which generates more revenue. This strategy is required in many countries since it provides the necessary foundation for implementing Lawful Intercept (LI) since law enforcement policies are also subjected to Wi-Fi networks.



Regardless of which strategy operators are considering, using the Wi-Fi network for data offloading is the most adopted strategy for curbing the exploding data traffic growth.

More telecom solutions are available at www.clavister.com/solutions/telecom.

RESOURCES

For more information about Clavister Telecom Solutions, please visit www.clavister.com/solutions/telecom.

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Customer references

We have delivered network security solutions for over 15 years and have gained a reputation for flexible and powerful solutions that offer our customers world-class security functionality. We understand what matters to our customers across a variety of different business sectors.

Core values

Some of the core values we bring to our customers are:

Innovative design

- Not only do our products look great, our software is also designed to be clear and concise to help administrators get the job done with minimal difficulty.

Simplicity

- Everything we do contributes to making your job easier; from finding the right product, and ordering it to installing, configuring, deploying and operating it. We strive to make your life easier.

Extreme performance

- The need for speed is vital in today's connected world. If your network is congested, your customers are going to complain. We deliver extreme performance.

Trusted partner

Many of our customers have been with us over eight years and we have constantly delivered on our promises and helped our customers develop their businesses. With attractive upgrade paths, trade-in offers and attractive pricing, we have enabled our customers to reap the benefit of their initial investment in Clavister. We're also a trusted partner to our many OEM (original equipment manufacturer) partners. Our outstanding technology is powering D-Link, Radisys and many Ericsson installations around the world.



Flexibility

We not only provide flexibility when it comes to tailoring your security needs to your network infrastructure, we also integrate our products with minimal disruption to your business. We also offer flexibility in our product's growth. Most of our products are delivered as two versions; a standard version and a Pro version. Many customers start off with the standard version and upgrade to the Pro version when the business demands it. This flexible upgrade only requires a new licenses file, which means minimal downtime, no hardware replacements and longer production life for your investment.

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Our customers

We have a large variety of customers using our products in a wide range of applications. Below is just a small selection of our customers in various segments.

Energy and Utility

<i>Customer</i>	<i>Country</i>
Gothenburg Energi	Sweden
E.ON Renewable Energy	Germany
Petro China	China
N-ERGIE	Germany

Research and Education

<i>Customer</i>	<i>Country</i>
ESTIA	France
TI-EDU	Switzerland
CASPUR	Italy
Södertörn University	Sweden

Service Providers

<i>Customer</i>	<i>Country</i>
Terremark	Belgium
DGC	Sweden
Defendo	Sweden
EPIserver	Sweden

Telecoms Operators

<i>Customer</i>	<i>Country</i>
SoftBank	Japan
France Telecom	France
Rogers Wireless	Canada
Cincinnati Bell	USA

Financial Services

<i>Customer</i>	<i>Country</i>
Industrial Securities	China
Börsen AG	Germany
Bank of Xi'an	China
Carnegie	Sweden

Manufacturing

<i>Customer</i>	<i>Country</i>
Bodycote	Germany
SIT Group	Italy
Eldon Group	Sweden
Danieli	Italy

Healthcare

<i>Customer</i>	<i>Country</i>
Guangdong General Hospital	China
Region Skåne	Sweden

Facility Management

<i>Customer</i>	<i>Country</i>
Regus	UK
Tagerim	France
Newsec	Sweden

Media and Entertainment

<i>Customer</i>	<i>Country</i>
bwin	Sweden
Pilot Media	Germany
Tain Operations	Malta
Shanghai World Expo 2010	China

Transportation

<i>Customer</i>	<i>Country</i>
Beijing-Shanghai Express Railway	China
Chongqing Public Traffic	China
Nobina	Sweden
Eckerö Line Ferries	Åland

Government

<i>Customer</i>	<i>Country</i>
Civil Police, Federal District	Brazil
Gotland Kommun	Sweden
Göteborgs Trafikkontor	Sweden
Kammarkollegiet	Sweden

Retail

<i>Customer</i>	<i>Country</i>
Wittwer	Germany

RESOURCES

For more information about Clavister customers, please download product collateral from www.clavister.com/resources/customer-spotlights

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Clavister technology

The main functionality available throughout our two operating systems, Clavister cOS Core and Clavister cOS Stream is described below:

Content level security

Clavister cOS Core provides support for Application Control, Anti-Virus, Intrusion Detection and Prevention and Web Content Filtering. These security services give you a thorough defense against current threats. Most services are backed by our high-speed service network, the Clavister Service Provisioning Network (CSPN), which enables fast updates for signature and content.

Network level security

Firewalling, network user authentication and connectivity are central aspects to all Clavister products. With support for both IPv4 and IPv6, and firewall performance ranging from 200 Mbps to 560 Gbps, Clavister cOS is capable of delivering business value throughout all our main target segments. It also supports IPsec and SSL VPN connectivity to further extend your Clavister capabilities.

Network infrastructure

Clavister products offer high availability and advanced routing concepts, such as static routing, policy-based routing, virtual routing, dynamic routing, multicast routing and transparent mode. This makes our products extremely suitable in highly diversified network environments. Clavister cOS Core also employs a highly efficient server-load balancing functionality for server farms, public Web servers or internal applications.

Management

For enterprise customers and hosting providers, the challenge of managing security in large installations requires an easy-to-use, centralized and scalable security management solution. Clavister InControl, our centralized security management solution, offers this and



much more. With advanced logging, built-in Software Development Kit (SDK) and the ability to service thousands of Clavister products, Clavister InControl is a key component in any enterprise solution.

For customers with only a single Clavister product, our highly acclaimed Clavister Web Management solution offers an easy to use way to manage it. Also included with all Clavister products is our efficient command-line interface (CLI), giving you full managerial access to all parameters.

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Clavister application control

In this section we look more closely at Clavister Application Control, a major new feature in the Clavister cOS Core 10.00 release.

Clavister Application Control provides an effective way to block or control unauthorized or misbehaving applications. This centrally managed service-based solution recognizes over 1,000 applications and network protocols, and more importantly, over 5,000 meta data tags associated with applications and network protocols.

Managing application control policies

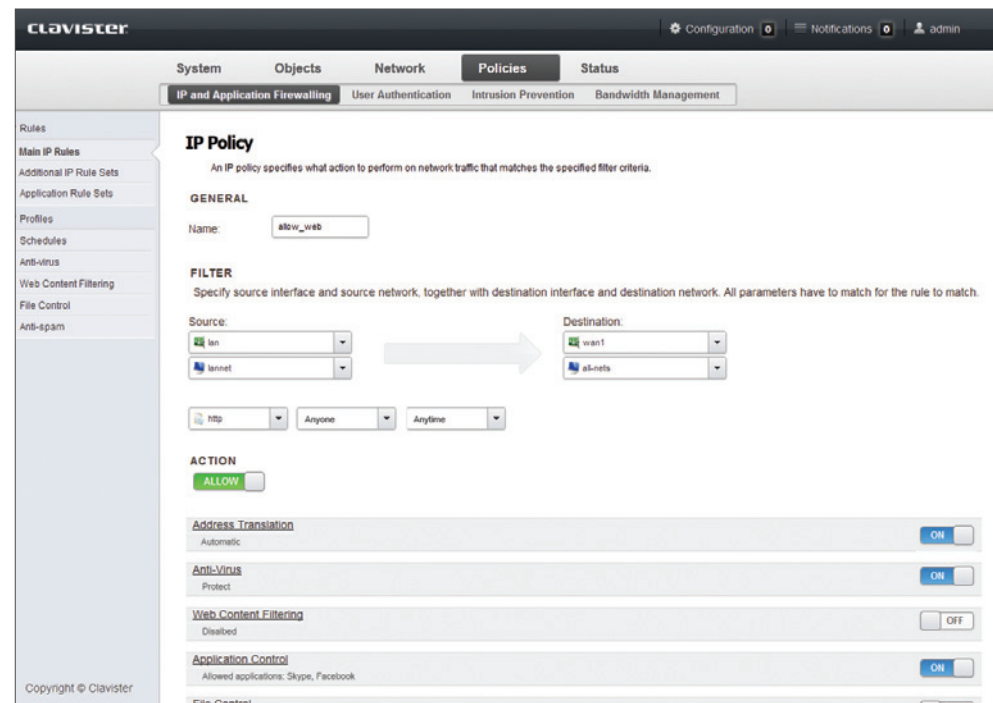
Applying Clavister Application Control policies are as easy to define as regular Level 3 policies. To further enhance the usability of Clavister Application Control, it is possible to define Allow/Deny rules for specific users.

One of the strong points of Clavister Application Control is the ability to monitor application usage in your network. Some applications can disturb the network traffic by using too much resource or they can attract malicious traffic patterns or viruses.

Network interrogation scenario

As an example, an administrator notices that there is an increase in traffic going back and forth between the Internet and the internal network. Before taking any steps to curb this, the administrator enables Clavister Application Control. Studying the log files reveals that the offending application is a BitTorrent application originating from an IP address on the internal network. This information enables the administrator to act accordingly, either by blocking or applying traffic management to BitTorrent applications.

For applications that have a tendency to starve network traffic resources, you can apply traffic management to these applications. This gives you the ability to allocate the right amount of resources without having network congestion caused by applications.

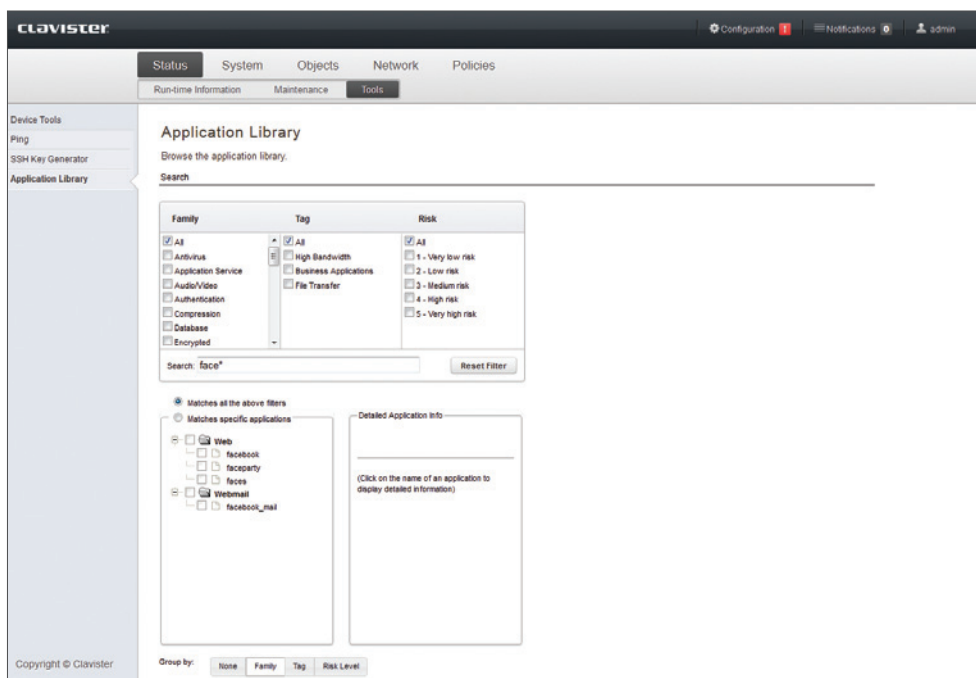


Extending classification on layer 7 scenario

Another example could be if an administrator needs to verify that only MySQL traffic is using a Layer 3 rule and that no other applications are using the same ports. This can be achieved by activating Clavister Application Control on the Layer 3 rule and add MySQL as an allowed application. If any disallowed applications try to use the same ports, they are blocked.

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Using the associated meta data it is possible to refine policies for greater accuracy. For example, for generic HTTP traffic you can specify URL, user agent, web server, cookies and more than 60 additional meta data tags. Another example could be Yahoo Mail, where it is possible to specify receiver, subject, message and more than 50 additional meta data tags.

Configuration

We have made Clavister Application Control as easy and straight forward to configure as everything else in Clavister InControl. There is a tight integration between configuring Intrusion Detection and Prevention (IDP), Anti-Virus (AV) and Web-Content Filtering (WCF) and configuring Clavister Application Control.

For more information about all the new features in Clavister Application Control, please see the Clavister cOS Core 10.00 Administration Guide.

Availability

Clavister Application Control is available in Clavister cOS Core 10.00 or higher, and available for all customers with an active Clavister Security Subscription. For download information, please visit www.clavister.com/my-clavister (registration required).

Logging and reporting

One of the key components in Clavister Application Control is the Clavister InControl Logging Agent (ILA) which is used for collecting application statistics. The statistics can then be processed, analyzed and presented in Clavister InControl using a wide range of display options, including online analytical processing (OLAP) functionality.

Clavister InControl enables you to view not only collected application control information, but all collected information, including IDP, AV and WCF information. This gives you a correlated view of collected information, which can be analyzed and distributed in various formats.

RESOURCES

For more information about Clavister Application Control, please visit www.clavister.com/cos/content-level-security/application-control.

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Clavister product portfolio

Innovative design, simplicity and extreme performance

In response to the requirements of today's connected business, our new portfolio of high performance mobile and network security products are designed to meet these specific needs.

Our new product portfolio is based around our two new operating systems, the **Clavister cOS Core** and **Clavister cOS Stream**. They have been carefully designed to provide extreme performance with special care on optimization for their respective target segments. They both share key network security functionality, but whereas Clavister cOS Stream is optimized for telecoms operators targeting data offloading and core security in 4G/LTE networks, Clavister cOS Core is optimized for enterprise and cloud solutions.

Key highlights

- Our innovative, sleek product design combats the very latest security and operational challenges facing today's organizations, and offers next generation firewalls, multi-functional security and fully centralized management – all in one space-efficient device.
- Application Control is one of several network security services available in Clavister cOS Core and it allows organizations to identify and control the use of over 1,000 applications, such as Facebook, Skype and YouTube. Other network security services are Anti-Virus, Intrusion Detection and Prevention (IDP) and Web Content Filtering.
- Clavister InControl, our centralized management system, enables the management of thousands of devices from the same management system and can be shared by as many administrators as needed.
- Clavister's products and solutions offer network security for the most demanding environments and can monitor network traffic, protect critical business assets, block undesirable surfing, protect against intrusion, viruses, worms, Trojans and denial-of-service attacks.



Portfolio

This section presents our product portfolio in more detail.

- Clavister Wolf Series – Products for enterprise and data centers
- Clavister Lynx Series – Industrial and ruggedized products
- Clavister Eagle Series – Products for remote and branch offices
- Clavister Virtual Series – Designed for virtual and cloud environments
- Clavister PolarBear Series – Telecom and carrier-grade products

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Clavister W3

Clavister Wolf Series – high performance, excellent scalability and robust functionality

The Clavister W3 is highly suited as a security gateway for larger remote/branch offices or as an entry-level enterprise security gateway. The Clavister W3 delivers next-generation firewall security at a break-through price point, offering flexibility and robust features without compromising security.

The Clavister W3 is an ideal solution for any organization that needs premium network security in a cost-effective package.

Key Features

- Support for Clavister Application Control
- High Availability Support included
- Support for Clavister Security Subscription

Key Benefits

- Great value for money
- Easy to set up and use



Clavister W3 Specifications

	W3 Start	W3	W3 Pro
Firewall Performance (Gbps)	1	3	6
VPN Performance (Mbps)	100	200	400
Concurrent Connections	250 000	500 000	1 000 000
Concurrent VPN Tunnels (SSL/IPsec)	250/250	500/500	1 000/1 000
Ethernet Interfaces	6 x 1GbE (RJ45)		
Management/High Availability Ports	2 x 1GbE (RJ45)		
Virtual Interfaces (VLAN)	128	256	512
Virtual Routers	10	10	25
Clavister OS	Clavister cOS Core		
Form Factor	19" Rack Mountable (1U)		

RESOURCES

For more detailed specifications on Clavister W3, please download the Clavister W3 product data sheet from www.clavister.com/products/wolf-series/w3/resources.

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Clavister W5

Clavister Wolf Series – high performance, excellent scalability and robust functionality

The Clavister W5 is the perfect security solution for organizations with a large headquarters or as a main enterprise firewall. The Clavister W5 delivers stunning performance, up to 16 Gbps of next-generation firewall security in a single 1U 19" rack mount. With dedicated management and high-availability ports (two 1GbE RJ45), the Clavister W5 is the easiest network security solution when you need to make a bullet-proof, clustered solution.

This makes the Clavister W5 an ideal solution for organizations that need premium network security.

Key Features

- Support for Clavister Application Control
- Powerful, feature-rich firewall
- Support for Clavister Security Subscription

Key Benefits

- Excellent value for money
- Easy to use, deploy and manage



Clavister W5 Specifications

	W5	W5 Pro
Firewall Performance (Gbps)	8	16
VPN Performance (Gbps)	1	2,5
Concurrent Connections	2 500 000	5 000 000
Concurrent VPN Tunnels (SSL/IPsec)	2 500/2 500	5 000/5 000
Ethernet Interfaces	2 x 10GbE (SFP+), 4 x 1GbE (SFP), 4 x 1GbE (RJ45)	
Management/High Availability Ports	2 x 1GbE (RJ45)	
Virtual Interfaces (VLAN)	512	1 024
Virtual Routers	100	250
Clavister OS	Clavister cOS Core	
Form Factor	19" Rack Mountable (1U)	

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For more detailed specifications on Clavister W5, please download the Clavister W5 product data sheet from www.clavister.com/products/wolf-series/w5/resources.

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Clavister W7

Clavister Wolf Series – high performance, excellent scalability and robust functionality

The Clavister W7 is targeted towards large data centers, service providers and high-end enterprise backbone security solutions. Clavister W7 delivers incredible performance, up to 20 Gbps in a single 1U 19" rack mount and is perfect for situations where security is first priority and speed is key to getting the job done.

For organizations with large investments in copper-based network infrastructure, the copper-centric approach of the Clavister W7 enables them to continue to utilize their investment, and start to adopt newer fiber-based network components seamlessly. This makes the Clavister W7 the perfect solution bridging existing network solutions with newer fiber investments.

Key Features

- Massive firewall performance
- Comprehensive connectivity
- Dedicated management and HA ports

Key Benefits

- Excellent value for money
- Support for Clavister Security Subscription



Clavister W7 Specifications

	W7	W7 Pro
Firewall Performance (Gbps)	10	20
VPN Performance (Gbps)	5	10
Concurrent Connections	5 000 000	10 000 000
Concurrent VPN Tunnels (IPsec)	5 000	10 000
Ethernet Interfaces	2 x 10GbE (SFP+), 4 x 1GbE (SFP), 16 x 1GbE (RJ45)	
Management/High Availability Ports	2 x 10GbE (SFP+), 2 x 1GbE (RJ45)	
Virtual Interfaces (VLAN)	512	1 024
Virtual Routers	250	500
Clavister OS	Clavister cOS Stream	
Form Factor	19" Rack Mountable (1U)	

RESOURCES

For more detailed specifications on Clavister W7, please download the Clavister W7 product data sheet from www.clavister.com/products/wolf-series/w7/resources.

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Clavister W8

Clavister Wolf Series – high performance, excellent scalability and robust functionality

The Clavister W8 is targeted towards large data centers, service providers and world-class enterprise backbone security solutions. The Clavister W8 delivers incredible performance, up to 40 Gbps in a single 1U 19 rack mount.

The fiber-centric approach of the Clavister W8 makes it a premium choice as the key firewall in a future-proofed installation and the perfect solution where premium security and speed is required.

Key Features

- Massive firewall performance
- Comprehensive connectivity
- Dedicated management and HA ports

Key Benefits

- Excellent value for money
- Support for Clavister Security Subscription



Clavister W8 Specifications

	W8	W8 Pro
Firewall Performance (Gbps)	20	40
VPN Performance (Gbps)	10	20
Concurrent Connections	5 000 000	10 000 000
Concurrent VPN Tunnels (IPsec)	5 000	10 000
Ethernet Interfaces	8 x 10GbE (SFP+), 4 x 1GbE (SFP)	
Management/High Availability Ports	2 x 10GbE (SFP+), 2 x 1GbE (RJ45)	
Virtual Interfaces (VLAN)	1 024	2 048
Virtual Routers	250	500
Clavister OS	Clavister cOS Stream	
Form Factor	19" Rack Mountable (1U)	

RESOURCES

For more detailed specifications on Clavister W8, please download the Clavister W8 product data sheet from www.clavister.com/products/wolf-series/w8/resources.

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Phone: +46 (0)660 29 92 00 | www.clavister.com

Clavister X8

Clavister Lynx Series – rugged and durable, with outstanding performance

The Clavister X8 is targeted at those installations where standard security products are unable to function reliably. With its industrial, rugged design, the durable Clavister X8 can withstand harsh, industrial environments and deliver outstanding solid performance. It also offers unified security management between office and industry environments. The Clavister X8 is perfect for tough environments, such as remote industrial locations, offshore installations and other demanding environments where high-end security is required.

Key Features

- Fast, powerful firewall
- Support for Clavister Application Control
- Support for Clavister Security Subscription
- Industry standards

Key Benefits

- Perfect for demanding applications
- Unified Security Management



Clavister X8 Specifications

	X8	X8 Pro
Firewall Performance (Mbps)	500	1 000
VPN Performance (Mbps)	100	200
Concurrent Connections	100 000	200 000
Concurrent VPN Tunnels (SSL/IPsec)	100/100	250/250
Ethernet Interfaces	4 x 1GbE (RJ45)	
Virtual Interfaces (VLAN)	128	256
Virtual Routers	5	10
Clavister OS	Clavister cOS Core	
Form Factor	Industrial DIN-mount	

RESOURCES

For more detailed specifications on Clavister X8, please download the Clavister X8 product data sheet from www.clavister.com/products/lynx-series/x8/resources.

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Clavister E7

Clavister Eagle Series – feature-rich, entry-level firewall, robust functionality

The Clavister Eagle Series is a set of network security products designed for remote access and branch office applications, which requires excellent performance, world-class design and innovative functionality.

The Clavister E7 is perfectly suited as a remote access firewall or as a branch office firewall, offering great performance and connectivity. The Clavister E7 offers great connectivity in a small, beautifully designed enclosure. It is full of capabilities, yet small enough to keep on the desktop. Its design is so stunning, you want to share it with others.

Key Features

- Powerful firewall
- Support for User Identity Awareness
- Support for Clavister Security Subscription

Key Benefits

- Easy to use, deploy and manage
- Unified Centralized Management



Clavister E7 Specifications

	E7 Remote	E7	E7 Pro
Firewall Performance (Mbps)	200	250	400
VPN Performance (Mbps)	20	50	80
Concurrent Connections	10 000	20 000	50 000
Concurrent VPN Tunnels (SSL/IPsec)	2/2	100/100	250/250
Ethernet Interfaces	8 x 1GbE (RJ45) switchblock + 3 x 1GbE (RJ45)		
Virtual Interfaces (VLAN)	2	32	128
Virtual Routers	0	5	10
Clavister OS	Clavister cOS Core		
Form Factor	Desktop		

RESOURCES

For more detailed specifications on Clavister E7, please download the Clavister E7 product data sheet from www.clavister.com/products/eagle-series/e7/resources.

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Clavister V3, V5, V7, V9

Clavister Virtual Series – excellent performance, feature-rich and efficient

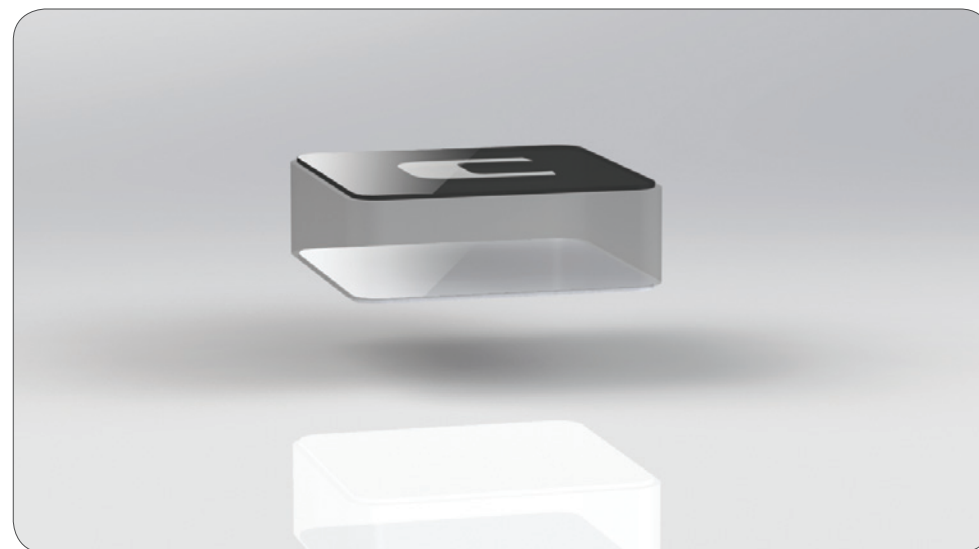
The Clavister Virtual Series is a set of network security products designed for virtual and cloud-based security, offering excellent performance, powerful security features and is resource efficient. The Clavister Virtual Series offers powerful security features for your virtual environment and is easy to deploy your in market-leading VMware virtualization environments. Its minimal footprint and extremely low resource requirements makes the Clavister V Series an optimal solution for all types of virtual and cloud-based network security solutions.

Key Features

- Low resource requirements
- Support for Clavister Application Control
- Powerful firewall
- Support for Clavister Security Subscription

Key Benefits

- Easy to use, deploy and manage
- Unified Centralized Management



Clavister Virtual Series Specifications

	V3	V5	V7	V9
Firewall Performance (Gbps)	1	3	5	10
VPN Performance (Gbps)	1	2	3	5
Concurrent Connections	100,000	250,000	500,000	1,000,000
Concurrent VPN Tunnels (SSL/IPsec)	500/500	1,000/1,000	1,500/1,500	2,000/2,000
Ethernet Interfaces	Up to 3	Up to 5	Up to 7	Up to 10
Virtual Interfaces (VLAN)	32	128	512	1,024
Virtual Routers	10	15	25	50
Support Virtual Platform	VMware ESXi			
Clavister OS	Clavister cOS Core			
Form Factor	Software			

RESOURCES

For more detailed specifications on Clavister Virtual Series, please download the Clavister Virtual Series product data sheet from www.clavister.com/products/virtual-series/virtual-series/resources.

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Phone: +46 (0)660 29 92 00 | www.clavister.com

Clavister P8

Clavister PolarBear Series – highest performance and scalability, smallest footprint

The Clavister PolarBear Series is a set of network security products designed for telecom operators and large-scale data centers requiring high performance, excellent scalability and robust functionality. The Clavister P8 is an extreme powerful firewall solution with a wide range of options to meet the toughest performance targets for telecoms operators and large-scale data centers. Based on µTCA (MicroTCA) platform, it delivers up to 80 Gbps in its base configuration, with capacity up to 240 Gbps in a single 1U 19" rack mount. This makes the Clavister P8 the perfect solution for telecoms operations and large-scale data centers where performance demands are ever increasing.

Key Features

- Massive firewall performance
- Comprehensive connectivity
- Powerful and modular

Key Benefits

- Modular, extensible and powerful
- Reliable, world-class design



Clavister P8 Specifications

	P8	P8 Blade
Firewall Performance (Gbps)	80	40
VPN Performance (Mbps)	40	10
Concurrent Connections	20 000 000	10 000 000
Concurrent VPN Tunnels (IPsec)	200 000	50 000
Ethernet Interfaces	8 x 10GbE (SFP+)	4 x 10GbE (SFP+)
Management/High Availability Ports	2 x 10GbE (SFP+) 2 x 1GbE (RJ45)	n/a
Virtual Interfaces (VLAN)	2 048	1 024
Virtual Routers	500	250
Clavister OS	Clavister cOS Stream	
Form Factor	19" Rack Mountable (1U)	AMC Module

RESOURCES

For more detailed specifications on Clavister P8, please download the Clavister P8 product data sheet from www.clavister.com/products/polarbear-series/p8/resources.

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Phone: +46 (0)660 29 92 00 | www.clavister.com

CLAVISTER
PolarBearSeries

Clavister P9 Blade

Clavister PolarBear Series – robust ATCA design, uncompromising performance

The Clavister P9 Blades together with the Clavister P9 Chassis offers the highest level of redundancy, scalability and performance possible. With capacity up to 560 Gbps, the AdvancedTCA-based chassis is capable of delivering the required processing power that telecoms operators and large-scale data centers require.

The Clavister P9 Blades offers uncompromising power and performance. Organizations are able to keep adding as many Clavister P9 Blades as they can fit in a single Clavister P9 Chassis. The Clavister P9 Chassis offers the highest level of redundancy, scalability and performance possible.

Key Features

- Massive firewall performance
- Comprehensive connectivity
- Flexible configurations

Key Benefits

- Powerful processing blades
- Robust and reliable
- Extensible and powerful



Clavister P9 Blade Specifications

	P9 Blade
Firewall Performance (Gbps)	40
VPN Performance (Gbps)	20
Concurrent Connections	20 000 000
Concurrent VPN Tunnels (IPsec)	200 000
Ethernet Interfaces	4 x 10GbE (SFP+), 6 x 1GbE (SFP)
Virtual Interfaces (VLAN)	1 024
Virtual Routers	250
Clavister OS	Clavister cOS Stream
Form Factor	AdvancedTCA Blade

RESOURCES

For more detailed specifications on Clavister P9 Blade, please download the Clavister P9 Blade product data sheet from www.clavister.com/products/polarbear-series/p9-blade/resources.

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Phone: +46 (0)660 29 92 00 | www.clavister.com

CLAVISTER PolarBearSeries

Clavister P9 Chassis

Clavister PolarBear Series – robust ATCA design, uncompromising performance

The Clavister P9 Chassis offers the highest level of redundancy, scalability and performance possible. With capacity up to 560 Gbps, the AdvancedTCA-based chassis is capable of delivering the required processing power that telecom operators and large-scale data centers require.

Key Features

- Massive firewall performance
- Comprehensive connectivity
- Robust and reliable
- Extensible and powerful



Clavister P9 Chassis Specifications

	P9 6002	P9 6006	P9 6014	P9 6016
Firewall Performance (Gbps)*	80	160	480	560
VPN Performance (Gbps)*	40	80	240	280
Compliance	PICMG 3.0, Rev. 2.0 ATCA Base Specification		PICMG 3.0/3.1, Rev. 2.0 ATCA Base Specification	
ATCA Blade Slots	2	4	12	14
Switch Blade Slots	n/a	2	2	2
Cooling Fans	2	2 (removable)	2 front (removable), 2 back (removable)	2 front (removable), 2 back (removable)
Clavister OS	Clavister cOS Stream	Clavister cOS Stream	Clavister cOS Stream	Clavister cOS Stream
Form Factor	2U 19" ATCA rack-mount	6U 19" ATCA rack-mount	13U 19" ATCA rack-mount	13U 23" ATCA rack-mount 13U ETSI 515 rack mount (optional)

* Performance reflect fully populated chassis.

RESOURCES

For more detailed specifications on Clavister P9 Chassis, please download the Clavister P9 Chassis product data sheet from www.clavister.com/products/polarbear-series/p9-chassis/resources.

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In conclusion...

We hope this information has inspired you and taught you more about Clavister and what we and our products can do for you and your business. After all, we are here to help resolve your security challenges.

Important Clavister Links

Clavister Solutions

Learn more about our solutions.

www.clavister.com/solutions

Clavister Products

Learn more about our products.

www.clavister.com/products

Clavister Resources

Get access to product data sheets, customer spotlights and media related material.

www.clavister.com/resources

Clavister Training

View our available training courses, both online and on-site, to learn more about how to manage your Clavister products.

www.clavister.com/training

My Clavister

Log in and manage your Clavister account, your licenses and your help desk tickets (account required).

www.clavister.com/my-clavister/

Contacting us

We would like to hear from you, so please visit www.clavister.com/contact and let us know your thoughts and ideas on the next dimension on network security.



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