Case Study

![Clavister CONNECT · PROTECT]

WiFi Access Gateway

Benefits

- Advanced awareness control
- Not vendor locked
- Most powerful DPI engine
- Total visibility and control

How does one of the world's biggest WiFi providers guard it's networks?

Clavister's Wireless Access Network (WAG) is the answer.

WiFi connectivity gives people unprecedented mobility, enables them untethered access to the Internet for productivity. However, a poorly managed WiFi network can be extremely frustrating to users due to performance bottlenecks. Even bulking up with more bandwidth won't fix the problem as congestion continue unless traffic is optimized and different priorities based on subscription model can be enforced. That sub-optimised WiFi network also prohibits providers from creating monetized services through service differentiation such as premium subscriptions, IoT subscriptions and more.

The Clavister Wireless Access Gateway, a solution that allows WiFi providers to increases quality of Quality of Service (QoS), high levels of security and potential revenue streams to boot.
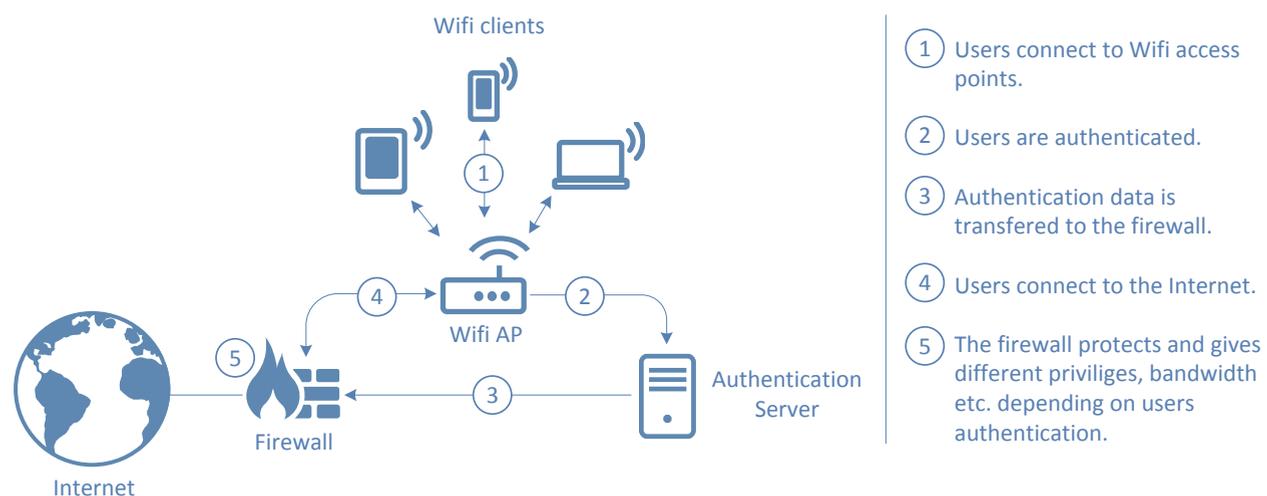
Customer Case: NTT-BP

Tokyo, Japan—the densest metropolitan population centre in the world at upwards to 38 million. It is also considered the most technological with the level of mobile devices, innovative features its consumers demand and use of streaming services. To meet the needs of businesses in this operating environment requires highly efficient, flexible solutions and above all a high level of customer delivery.

When NTT-BP, Japan's largest public WiFi provider and one of the world's largest, looked to secure its network offering to its sizable customer base, it turned to Clavister for its cybersecurity competence. What it deployed was the Clavister Wireless Access Gateway (WAG), a system that allows NTT-BP to utilize the best of the WAG feature set.

Chief among those features is Application Control, a protocol that allows the carrier to allocate policies and priority to certain applications that a user can access. With this, the carrier can create limitations to certain applications (like downloading bandwidth hungry updates or streaming entertainment like Netflix) to make a healthy, high QoS experience for all users. It can also even sell premium subscriptions to those services and create revenue models.

With these features in mind, NTT-BP customers know that the WiFi services that their users access are of the highest security grade, that they afford the most advance protection against malware, Man In The Middle attacks and spyware that is a common threat to public WiFi networks.

Wifi clients

Wifi AP

Internet

Firewall

Authentication Server

1. Users connect to Wifi access points.

2. Users are authenticated.

3. Authentication data is transfered to the firewall.

4. Users connect to the Internet.

5. The firewall protects and gives different priviliges, bandwidth etc. depending on users authentication.

Context-aware policies with Mobility and IoT in mind

Manage onboarding of IoT devices and control the Quality of Experience for your subscribers using the context-aware policies available in the Clavister WiFi Access Gateways.

The context-aware policies allows you to Block, Allow or traffic shape traffic based on contexts such as:

• Who the user is
• Subscription / Service Level
• Type of device
• Application
• Category of website
• and more...

Application Visibility & Control

Using probably the most advanced and powerful DPI engines on the market, Qosmos DPI Engine, which is tightly integrated into the Clavister WiFi Access Gateway gives you supreme visibility of the applications being used in your network.
Imagine being able to limit bandwidth and access to windows or iOS updates for free-users and boost the capacity to productive tools such as Salesforce or VoIP applications for your premium subscribers. All this (and more) you can do with the Clavister WiFi Access Gateway without even breaking a sweat.

Vendor-Agnostic Solution

As a WiFi network service provider you are often challenged by offering a unified set of services but with a network that has been built over a long time, with different brands that integrates poorly with each other.
Clavister's WiFi Access Gateways are agnostic to vendor or type of WiFi equippment you might have running in your network.

• No vendor lock-in or integration problems
• Provide unified set of services throughout entire network
• Optimize and Monetize already existing networks
• Future-safe investment with freedom of choice

Centralized Management
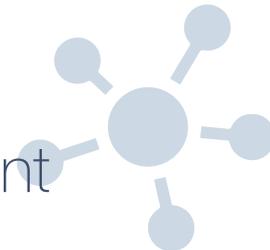
Clavister InControl is our premium centralized management system built to manage thousands of Clavister WiFi Access Gateway and Next-Generation Firewalls in a single pane of glass.

By using Clavister InControl you can easily handle anything from policy management to network troubleshooting and even produce insightful reports.

• Reduces management costs & simplifies configuration
• Simplifies device provisioning
• Analyze traffic and produce KPI Reports
• Integrate with business and IT systems using APIs and SDKs

Clavister Features (Summary)

Content Level Security

Application Control	√	Web Content Filtering	√
Intrusion Detection and Prevention (IDP/IPS)	√	Anti-Spam	√
Anti-Virus	√	File Integrity	√
IP-Reputation	√	Geo IP	√

Network Level Security / Network Infrastructure

Firewalling	√	High Availability Support* (HA)	√
User Identity Awareness (UIA)	√	Multiple WAN Connections	√
User Authentication	√	Server Load Balancing	√
Single-Sign-On-Support	√	WAN Load Balancing	√
User-based Rules	√	Traffic Management	√
Scheduled Rules	√	VLAN Support	√
IPsec VPN	√	Advanced Routing (Policy-Based, OSPF)	√
SSL VPN	√	Transparent and Routing Modes	√
DoS and DDoS Protection	√	DHCP Services	√

Management / Support and Maintenance

Centralized Management	√	24/7 Support	√
Web Management	√	Unlimited Trouble-Tickets	√
Command-Line Interface (CLI)	√	Hardware Replacement	√
Advanced Logging and Reporting	√	Software Subscriptions	√
Syslog- and Splunk-support	√	Online License Center	√

* Optional service on Clavister E20.
Specifications are subject to change without notice.

CID: 9150-0040-24 (2017/04)

For a complete overview of the features included in the Clavister solutions please visit www.clavister.com or contact your local Clavister Representative directly.

CLAVISTER®

CONNECT . PROTECT