EnGenius Cloud Solution
Vitnett AS. ISP/Managed Service Provider
Vitnett AS | Norway

Professional Wi-Fi As A Service

Vitnett is a Norwegian Internet provider with a significant focus on the residential market and a high self-demanded service level.

Vitnett offers Wi-Fi networks as a service (WAAS or Wi-Fi NAAS) within its subscription and provides a free access point to each customer to complement this service, included in their monthly fee.

The Stage

More than a million people in Norway live in single-family detached homes. Local Wi-Fi service providers are often challenged to provide a solution capable of blanketing every inch of such dwellings. Consequently, the ability to do so has become one of the most critical factors when determining the overall value of an ISP.

The demand for Wi-Fi services and features has been growing for years. Users lose track and do not realize the number of connected devices they end up adding to the local home network over time. When people thought of a Wi-Fi network, they associated it with a computer or mobile phone until not so long ago. However, today the number of connected devices in an ordinary home can be surprising. Nowadays, modern homes also have TVs, cameras, consoles, smart vacuum cleaners, and lighting devices that can strain the connection already used by computers, phones, and tablets.

Project Requirements

Offer customers a professional alternative for their home Wi-Fi connections to allow them to fully enjoy their fiber service. Integrate into the existing back-office solution, for quick and easy provisioning, management, and monitoring.

Remotely monitor access points, signal strength reached by the client devices, as well as being able to detect need for additional APs for better Wi-Fi signal coverage. Support mesh to bridge wirelessly to remote APs. Access points with multiple ethernet ports. A management solution that would allow its technical team absolute control of possible device incidents.

Technological Requirements

Vitnett uses software called NetAdmin, which is responsible for ensuring that all back-end tasks are performed and completed before fiber engineers perform the splicing and physical fiber connections and connect the end-user equipment (CPE).

For example, deploying GPON fiber connection is made easy. The system runs a series of scripts to configure the network equipment from their central network and the external access network. Hence, there is no need for manual work by a network engineer. This saves a lot of time and makes it possible to deploy clients at a considerable pace and with perfect consistency, limiting the possibility of human error.

The EnGenius Solution

After an intensive verification process, Vitnett decided to incorporate EnGenius Cloud with ECW115 access points.

The ability to integrate the cloud management solution into their existing back-office solution and the multiple management options of EnGenius Cloud was of main importance when selecting the device.

Using the cloud API (paid professional feature), Vitnett integrated NetAdmin with the EnGenius Cloud.

Additionally, the EnGenius Cloud management panel allows Vitnett to the signal level, signal between APs, clients associated with each AP, SNR, bandwidth utilization, channels, possible interference from other networks, logs with failed associations and, DFS events and an important range of management and configuration options.

Operational Accessibility

When you initiate a client's subscription, the system runs a script against the EnGenius Cloud API to create a site and network, add the selected access points for this client, and configure an automatically generated SSID and password, BSSID based on the client's name or number.

Subsequently, a label printer would print the SSID and password collected from this newly created site. When the fiber engineer receives the hardware for the assignment, all he needs to do is attach the label with the SSID and password, connect all access points to the CPE with a connection cable for configuration and firmware update from the cloud. And if needed, place mesh access points in the appropriate locations of the residence.

Before leaving engineer would check with the cloud application, using the guest access, checking everything is connected, and before closing the installation, he would perform speed tests.

The Selected ECW115 AP

The ECW115 features three ethernet ports (with a PoE ethernet) and an 11ac Wi-Fi network.

Once configured, the installation of the nodes can be done wired and wirelessly through mesh.

All devices are managed from the EnGenius Cloud platform.

For security purposes, once registered by the ISP as the owner of the hardware, only the ISP can unsubscribe the equipment on the platform to be used in a new installation.

Soon EnGenius will be releasing the ECW215 (Wi-Fi 6) version of the AP.

- **ECW115 (Indoor 11ac Wave 2 AP)**

  • Wall-Plate AP Supports High-Bandwidth Business Applications

Customer Testimonial

"In our constant quest to deliver the highest satisfaction to our customers and after a thorough due diligence testing period, we decided that EnGenius offered us the perfect solution as an ISP while ensuring rapid installation and adoption by both the installer and the user. We value the professional relationship with EnGenius and appreciate the willingness and genuine interest in our mutual success.

The deployment of EnGenius Access Points in our network and the integration through APIs have allowed us precise control over the status of our customers' Wi-Fi networks. We like that we can get all the devices pre-adopted in our system prior to their installation.
We expect to continue deploying thousands of devices in 2022."

— Tobias Solheim (IT-Consultant at Vitnett AS)