faraday networks

Spectrum

Spectrum is a scalable on premise WiFi management solution that support controller-based architecture. It's built-in multi-vendor support for controllers enables Spectrum to be used with any existing wireless infrastructure.

Managing your WiFi is extremely simple with Spectrum's multivendor architecture running in Access Layer, using your existing Controller and Access Point. Spectrum helps you to manage your wireless network by running in your private cloud. It can serve you as an all-in-one WiFi management tool with its integrated subcomponents.

Self-registration enables your client to log in to your network easily, without putting a heavy burden on staff. Credentials are delivered via SMS text on registration. Once logged in, client can automatically connect to your network on the next visit. Accounts can be set to expire automatically after a specified number of days.

Designed to support multiple organizations of all sizes under single roof, Spectrum offers the security and automation to support a flexible architecture, while also reducing the threats that come with unauthorized client access and possible risks.

SPECTRUM ADVANTAGES

Spectrum can serve you as an all-in-one WiFi management tool with its integrated subcomponents like Visualize (Custom Captive Portal Design Tool), ProLog (Lawful Interception), Management Interface and SmartGate (Captive Portal). This ensures that the platform's scalability, redundancy, management and reporting features can be leveraged for any WiFi network management needs. It's possible to manage your network without a need of any other products.
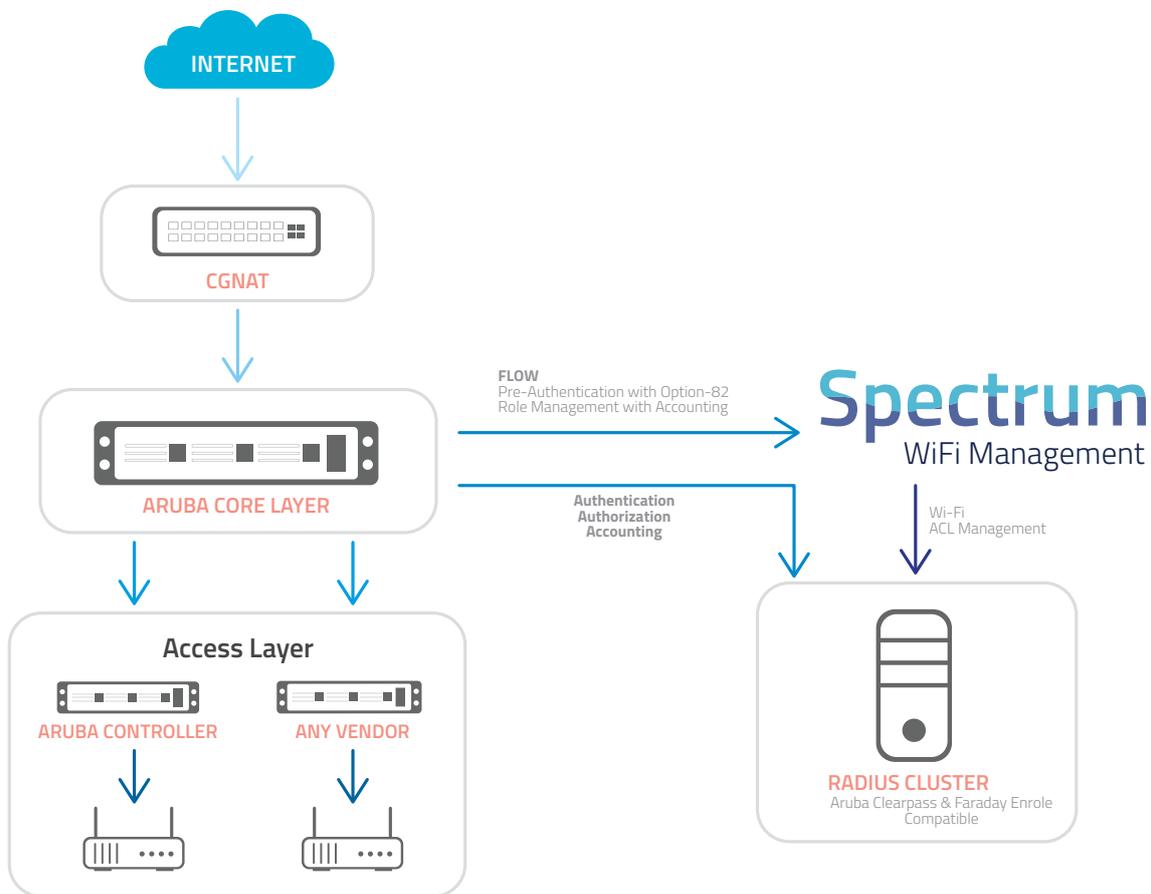
INTERNET

CGNAT

FLOW
Pre-Authentication with Option-82
Role Management with Accounting

ARUBA CORE LAYER

Spectrum
WiFi Management

Authentication
Authorization
Accounting

Wi-Fi
ACL Management

Access Layer

ARUBA CONTROLLER

ANY VENDOR

RADIUS CLUSTER
Aruba Clearpass & Faraday Enrole
Compatible

Figure 1: Spectrum Network Architecture

MULTI-VENDOR   SCALABLE   ALL-IN-ONE

Multi Vendor: Spectrum has built-in support for controllers from multiple vendors. It's possible for you to use Spectrum with your existing wireless infrastructure which does not cause additional payment. Hence, this leads you benefit from a cost-efficient service. It also supports Aruba's new OS 8 for core and access controllers.

Access Layer

ARUBA CONTROLLER   ANY VENDOR
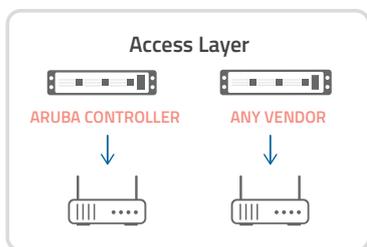
Scalable: Spectrum has been designed in accordance with the cloud architecture. You can transform it into a telco-grade structure by adding as many nodes as you want.

All-in-One: SSIDs can be customized to enforce different bandwidth/time/quota limits for different date and time periods. Spectrum automatically assigns visitors to correct roles according to rules defined. Also Spectrum lets you to define who and which devices can access to your WiFi. It's possible to restrict devices of a manufacturer or only let some users into your WiFi. You can allow or restrict usage based on MAC address or GSM number by flexible rule definition feature. Also SSIDs can be customized to enforce different limitations for defined date and time periods.
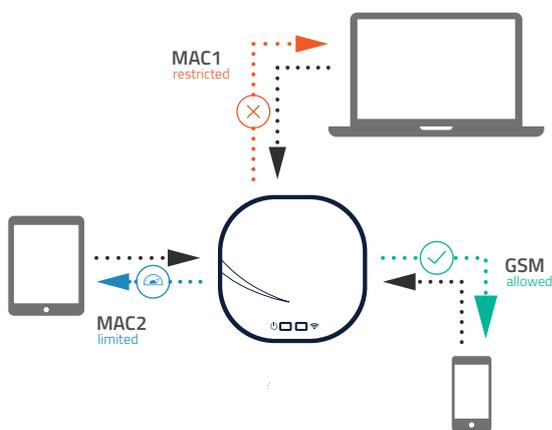

MAC1
restricted

MAC2
limited

GSM
allowed

Figure 2: ACL Management

EnRole
Policy Management

Figure 3: Tıme, Qutoa, Bandwith and Role-based Policy Management

VISUALIZE

Visualize is the new way of Captive Portal Design which provides a very unique opportunity for flexible design for enterprises. It includes different layout options which are fully customizable and component-based. Every component can be managed and adjusted via drag&drop feature that facilitates users to decide on the ultimate design according to their target customers.
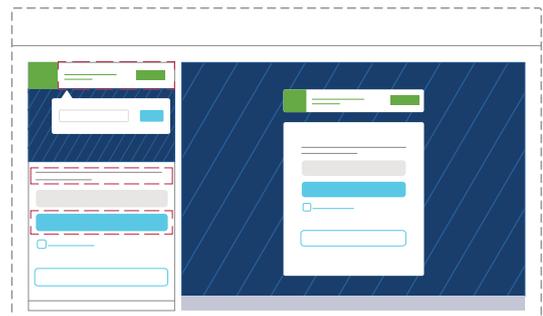

Figure 2: Visualize - Drag&Drop Design Tool for SmartGate

VENUE MANAGEMENT

You can manage all your APs and venues in the very same interface with "venue management" feature of Spectrum. This enables you to see all the information about your venues and APs such as data usage per AP, venue location on map, number of networks and more. Having all information together facilitates venue management in advance.

REPORTS

Besides different approaches to WiFi management of Spectrum, there is one main reports page which demonstrates the overall situation of network management. It includes daily user count on a bar chart which enables comparison between days. More data regarding to data usage by users is presented via charts as well such as more detailed information to get more insight about your networks.

EMPLOYEE WiFi ACCESS

Employee WLAN is an essential piece of the wireless network access. With Spectrum you can create employee SSIDs right from the Spectrum Management Interface. Clients in employee WLANs will have direct access to the customer wired network so to connect to the other wired devices in the network, and vice versa.

Key Features

SSID Management	Hardware Management	Role Management	Image&Video Ads
ACL	Survey	Live View	Dwell Time
Visitors Reports	Social Data	Location-based Data	CRM Integration
Social Login	Campaign Management	Custom Design	Employee Tracking

GUEST WiFi ACCESS (SMARTGATE)

SmartGate is the built-in enterprise-grade portal solution of Spectrum, providing a secure and scalable guest WiFi management platform integrated with the Spectrum Management Interface. It simplifies guest network login with various authentication methods like OTP and social login. SmartGate features some key components like Marketing add-ons which turn a Guest WiFi into a real marketing tool. With Marketing add-on, you can know your customers' needs, get real feedback and provide pinpoint benefits. Moreover, you could prepare surveys in any way you like and present it to your customers before or after authentication.

ADD-ON ARCHITECTURE

Spectrum's one of the distinctive aspect in the market is its All-in-one structure. Besides it has a scalable architecture which enables to embed additional tools in it. Hence, by embedding different add-ons to Spectrum, it becomes a very powerful WiFi Management software with all its aspects.
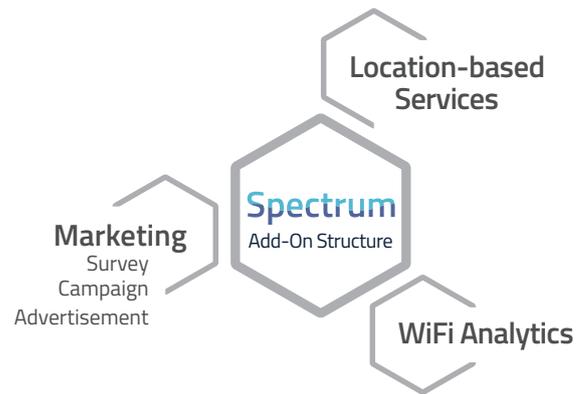
Figure 3: Spectrum Add-on Architecture

Marketing Add-on: Marketing add-on includes ads & surveys which create a new channel of marketing for enterprises. They can further promote their business via ads and learn more about their customer experience via creating short surveys. Both ads and surveys are designed to display on Captive Portal before or after authentication by using flexible drag & drop feature. Moreover, displaying details of all ads and surveys on one page provides a compact analysis. Besides ads & surveys, marketing add-on provides companies to create as many campaigns as firms wish. All the details regarding to campaign such as campaign name, campaign conditions which determines who will be targeting for that campaign, and campaign notification options can be managed in the same interface. In addition to that, listing and analysing all the campaigns at a time is feasible as well.

WiFi Analytics Add-On: Spectrum also gives you an opportunity to get deeper insight about your customers. WiFi analytics add-on presents some statistics as total number of visits, visitors, passerby and average dwell time. In addition to these insight, there are graph representations of visitor distributions, visit durations and repeated visitor distribution in selected date range. Besides that, comparing statistics between different time ranges and various venues.