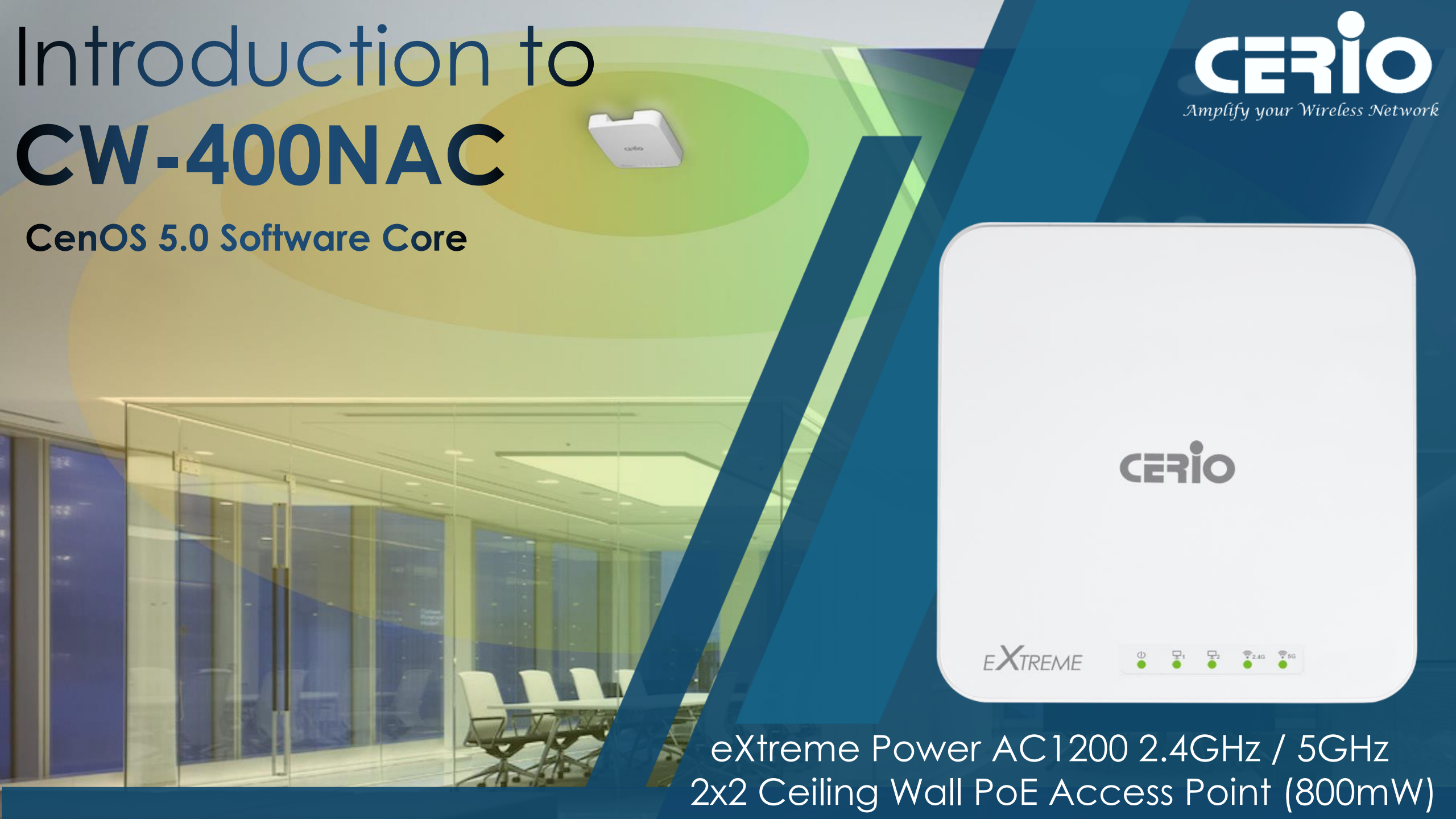
Introduction to
CW-400NAC

CenOS 5.0 Software Core

CERIO
Amplify your Wireless Network



eXtreme Power AC1200 2.4GHz / 5GHz
2x2 Ceiling Wall PoE Access Point (800mW)

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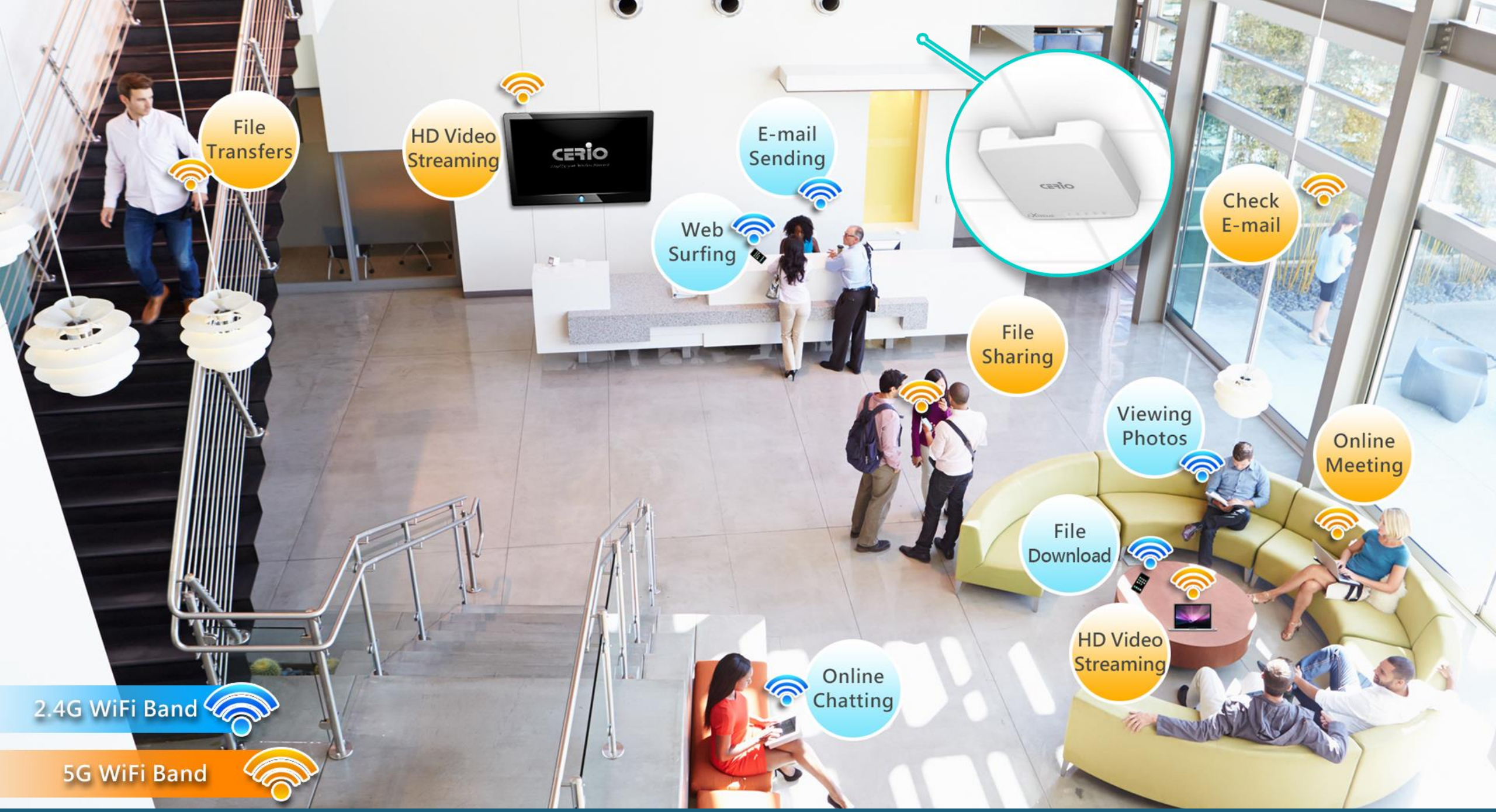

File Transfers
HD Video Streaming
E-mail Sending
Web Surfing
Check E-mail
File Sharing
Viewing Photos
Online Meeting
File Download
HD Video Streaming
Online Chatting
2.4G WiFi Band
5G WiFi Band

Product Overview

- 800mW AC1200 Dual Band Ceiling Access Point
- 2.4GHz Data Rate of up to 300Mbps (TxRx)
- 5GHz Data Rate of up to 867Mbps (TxRx) for 80MHz channel bandwidth
- Supports IEEE 802.3af/at Power over Ethernet
- 4 Built-in Smart Omni-directional Antennas (2x2 for 2.4GHz radio and 2x2 for 5GHz radio)
- Supports 4 Operation Modes (CenOS 5.0)
- Integrates a long-range power amplifier and high sensitivity receiver to deliver unmatched reliability and performance at large coverage application

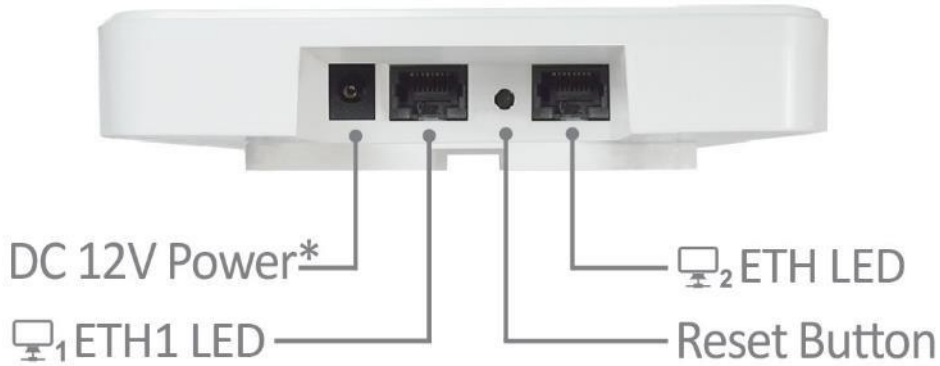
Advanced Features

- Supports up to 100 concurrent users
  - Approximately 60-65 Clients on the 5Ghz band
  - Approximately 35-40 Clients on the 2.4GHz band
- Supports 802.11ac/11n/11an/11a wireless standards
- Operation modes include: AP with WDS Mode, Control Access Point Mode, Client Bridge Mode, and WISP Mode
- Built-in 802.1x RADIUS Server authentication
- Supports Band Steering technology
- Incorporates 802.11r/k Fast Roaming Protocol
- Software includes LED Control
- Supports PoE Bridge function

Hardware Overview

Front Panel

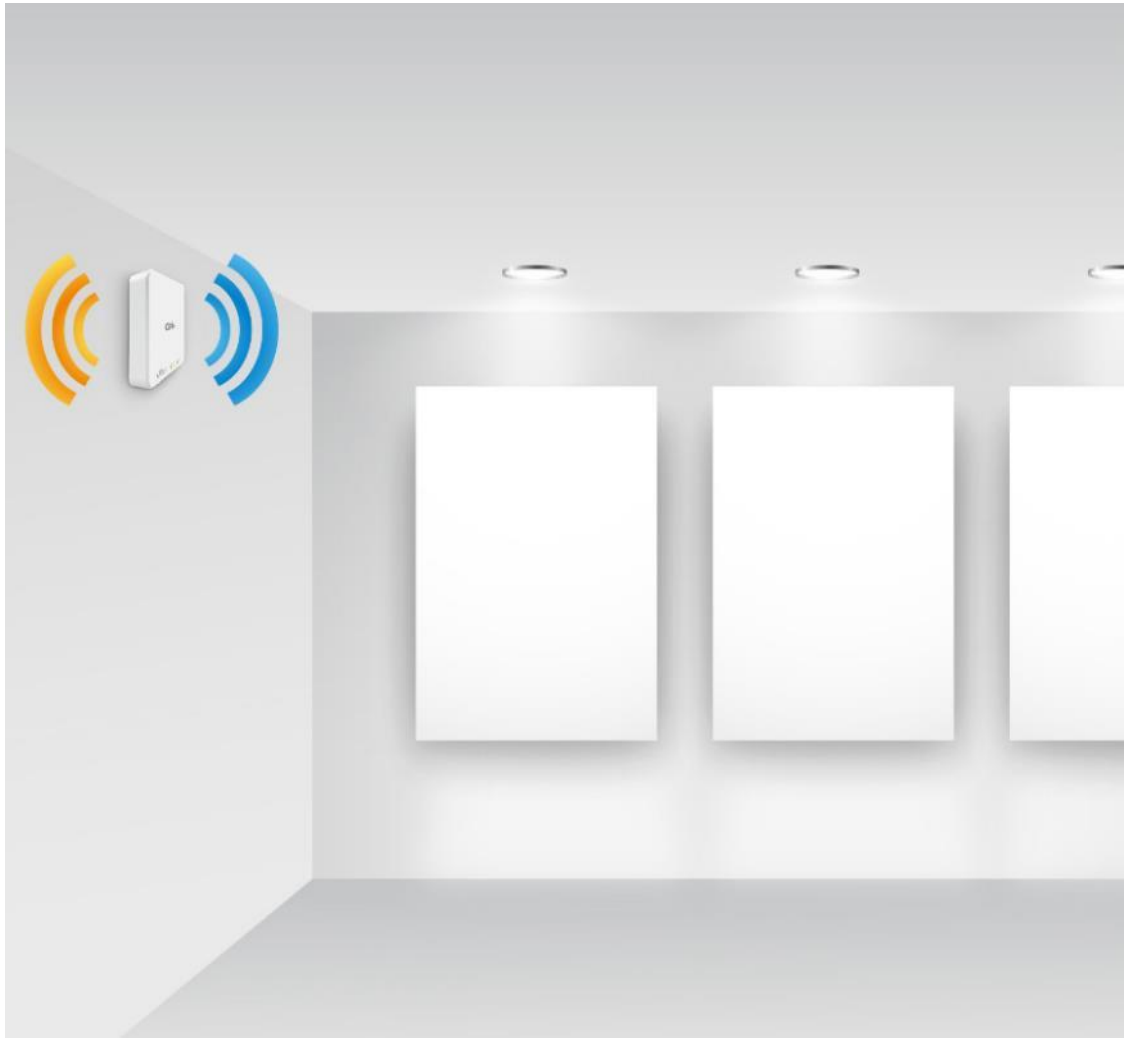
Side Panel



Versatile Mounting

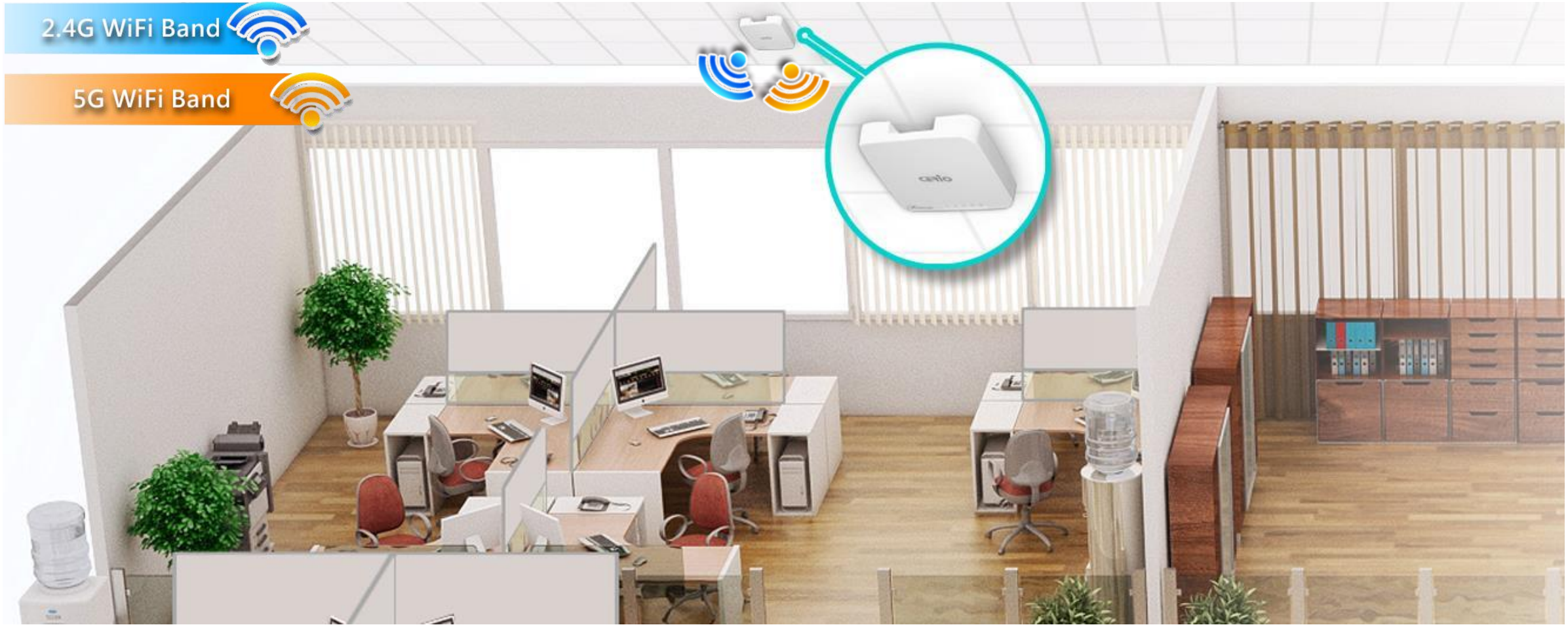
Ceiling Mount Supported

Wall Mount Supported



Interference Reduction

CW-400NAC's ceiling mount design **reduces line-of-sight signal interferences** and ensures deployment environments such as offices **do not have Wi-Fi dead zones**.



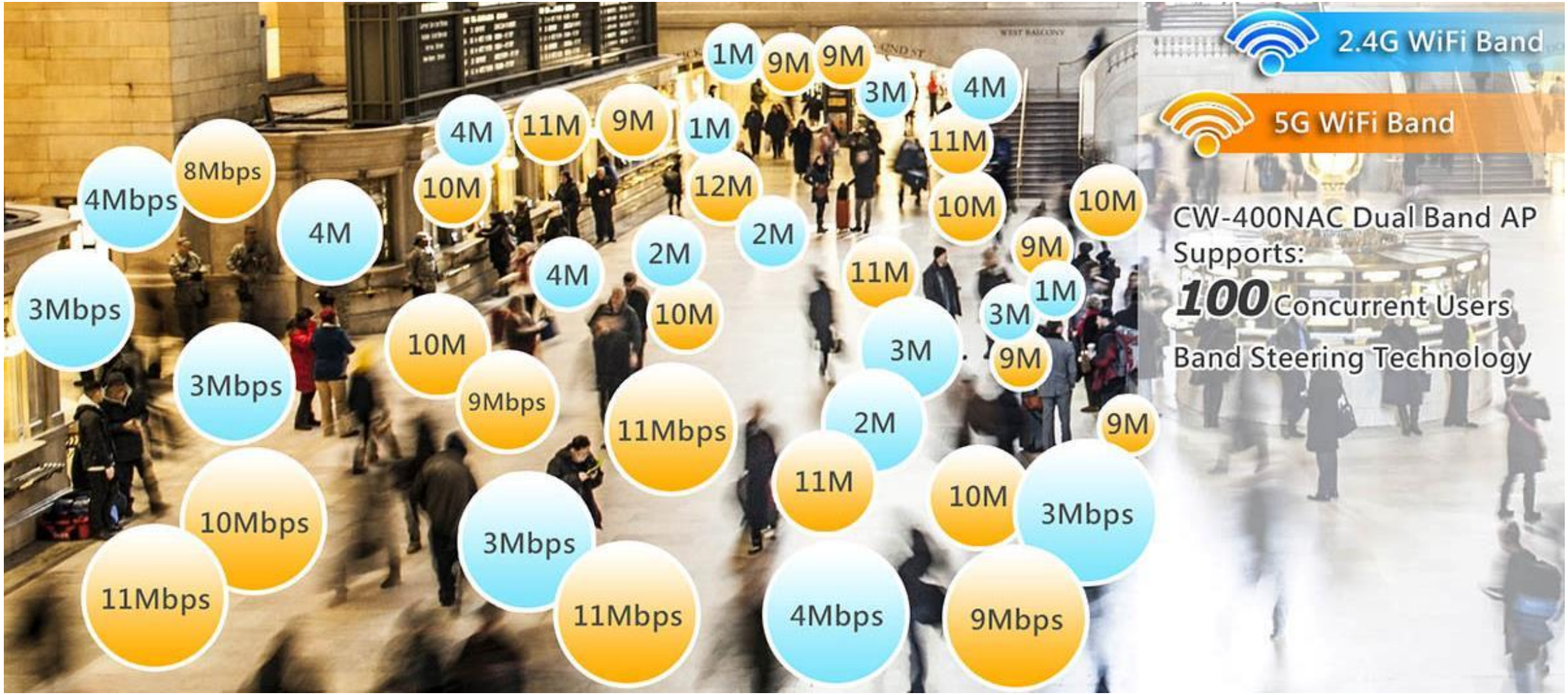
Seamless Integration

CW-400NAC's elegant design makes it perfect for a wide range of deployments. The device also looks similar to a smoke detector, allowing it to reduce visibility and blend into it's environment.

CenOS 5.0

Powerful Performance

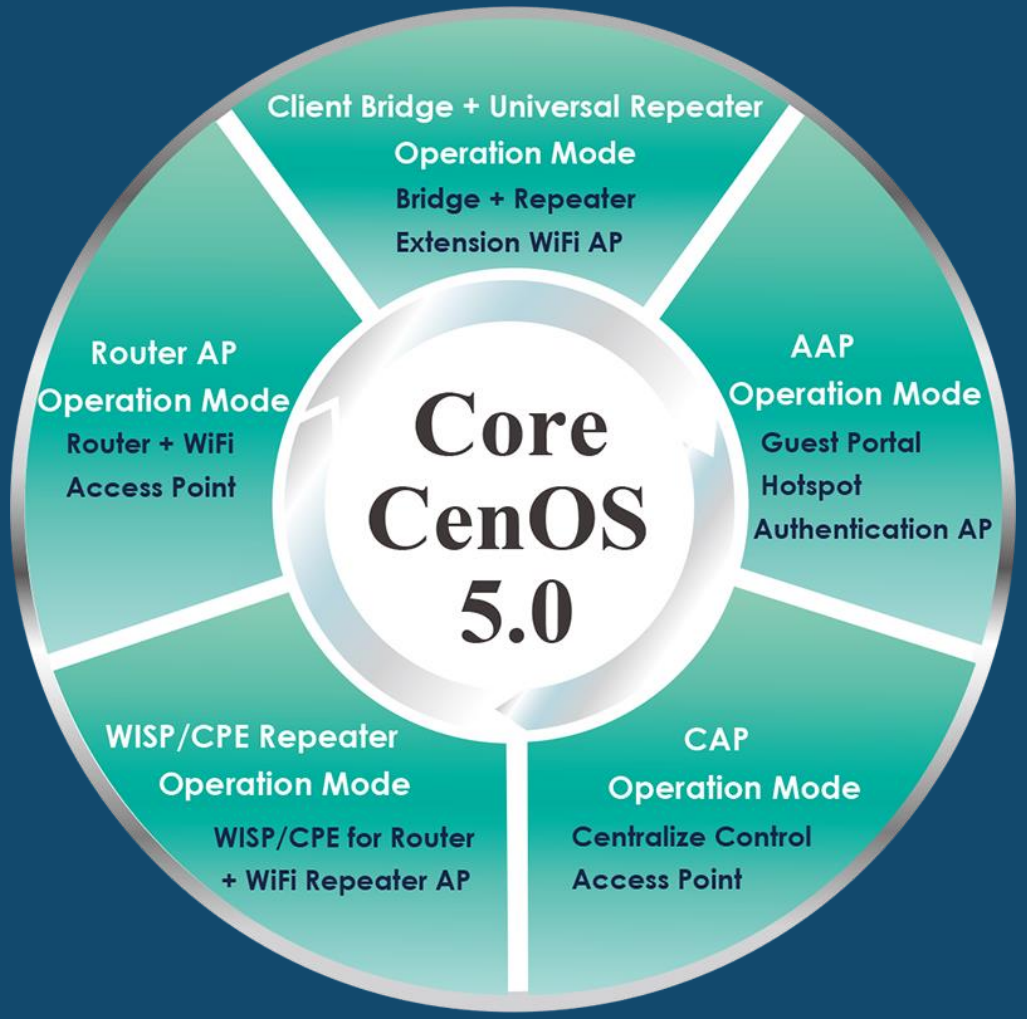
CERIO



Ideal Deployment

CERIO

Software Overview

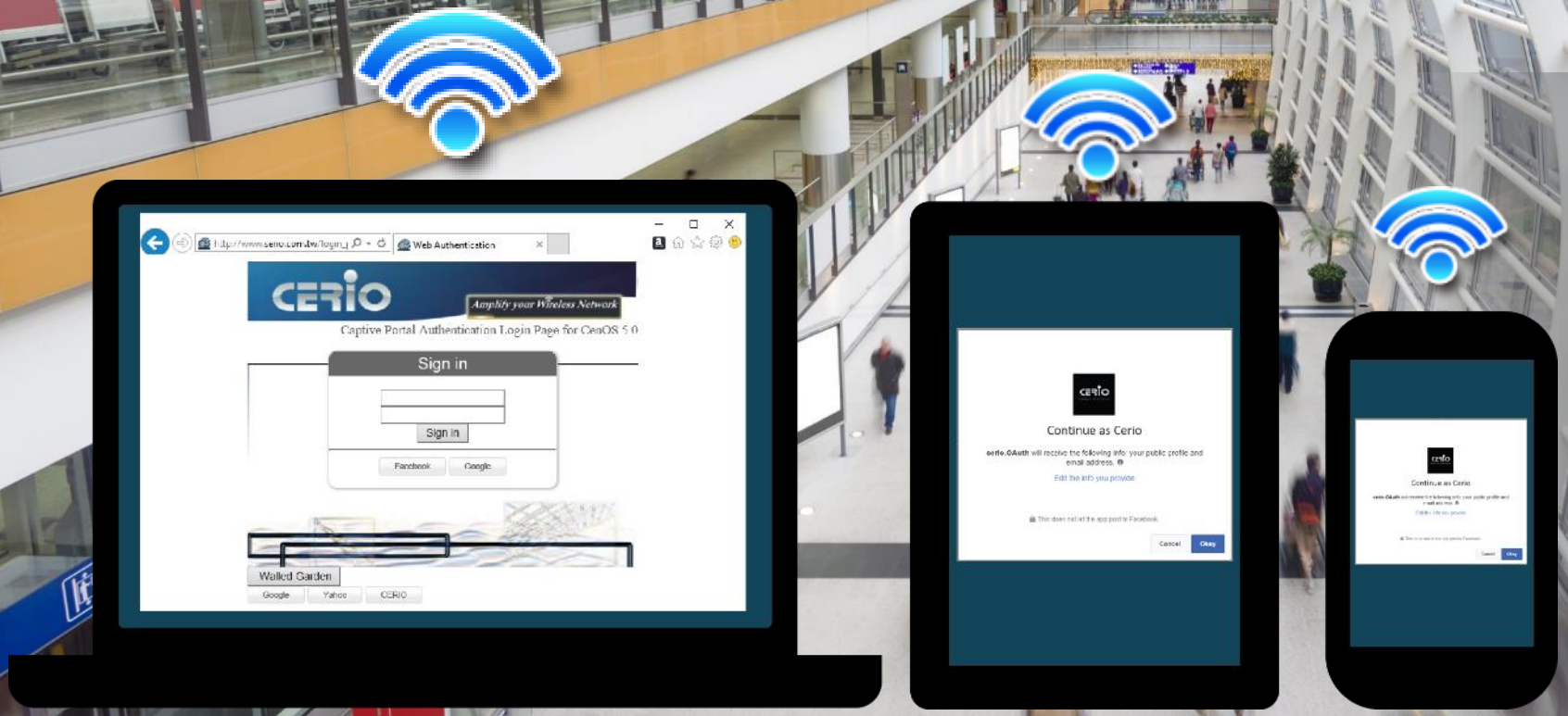


Only Cerio's special model supports CAP / Router mode

CenOS 5.0

Captive Portal Authentication

Captive Portal Authentication conveniently allows wireless clients to access the network through a customized web login portal.



Administrators can deploy a customized Captive Portal with the following login methods

1. Guest Login
2. Local Account Login
3. OAuth2.0 Login (Facebook/Google/etc.)

Local Account Login

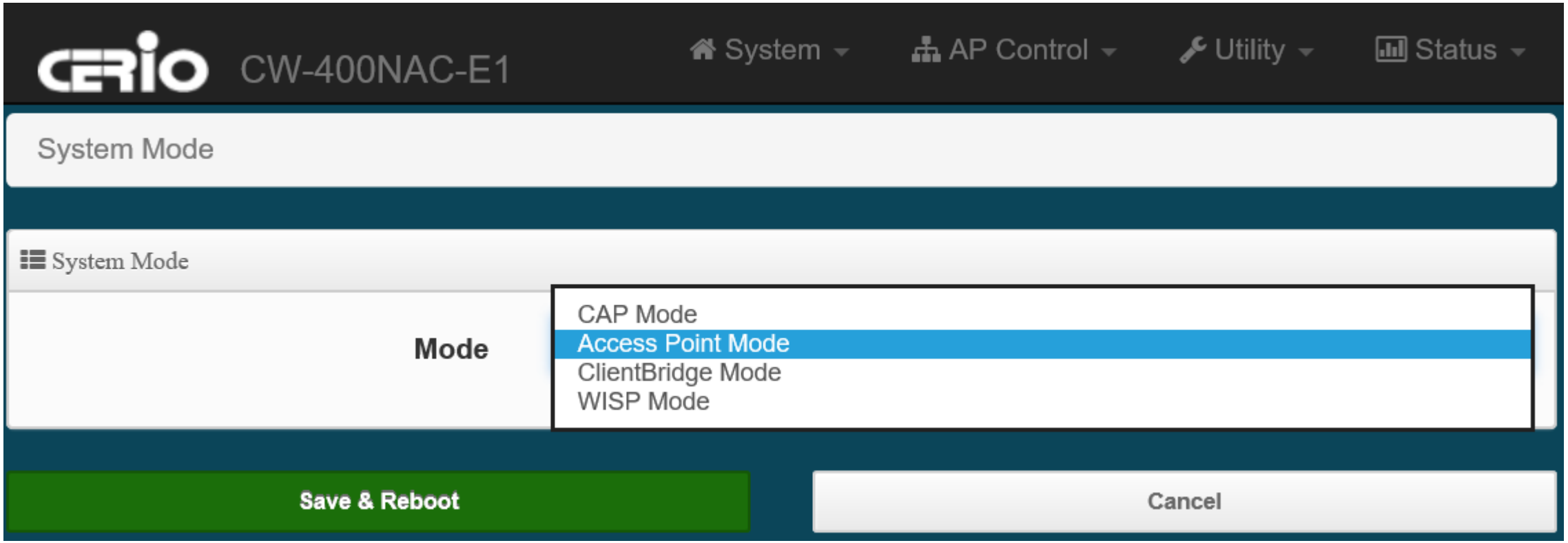
Facebook Login

Integrated AP Management

Captive Portal Authentication

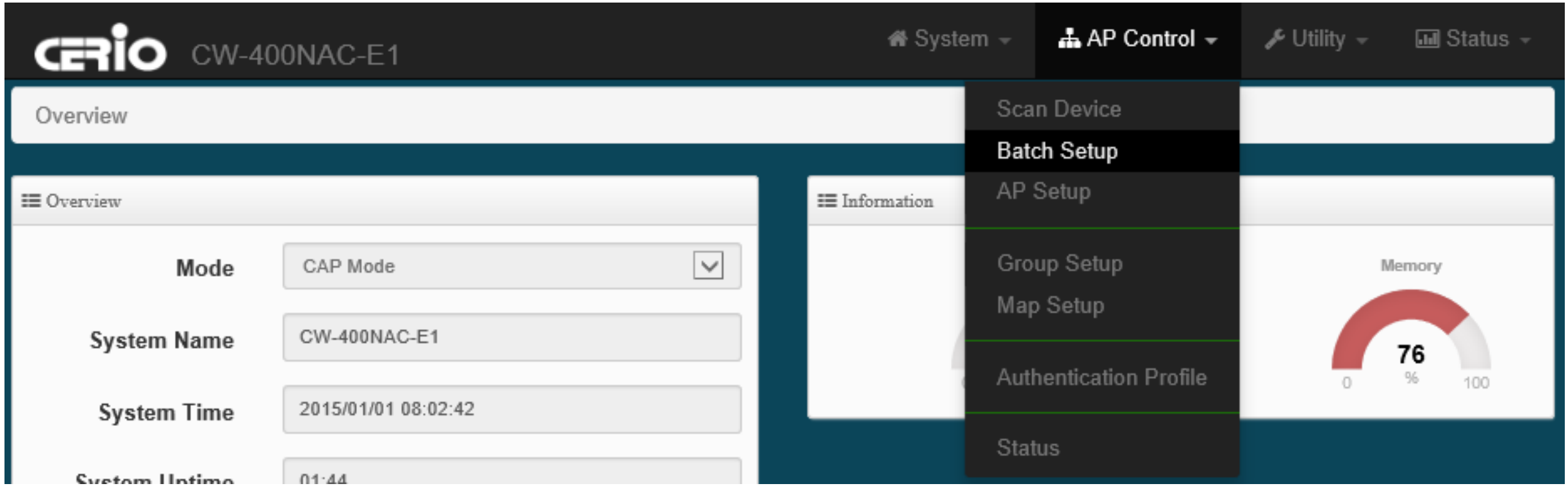
Operation Modes

CW-400NAC supports four different Operation Modes: Control Access Point, Access Point Mode with WDS and Captive Portal Authentication, Client Bridge + Repeater Mode, and WISP/CPE Repeater AP Mode

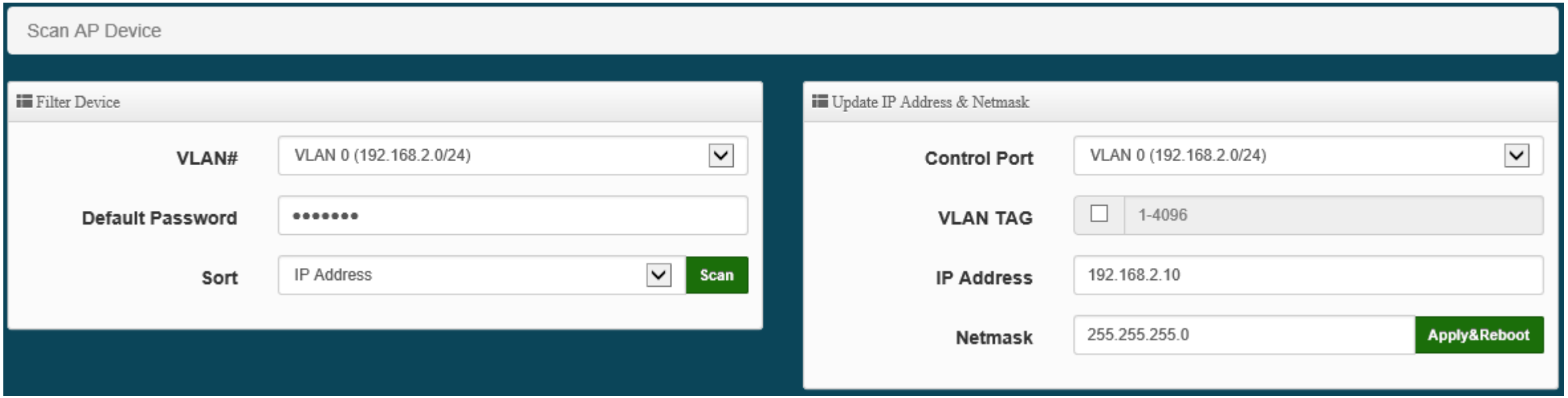


Control Access Point

Control Access Point (CAP) Mode's converts the device into a centralized AP management controller. When CW-400NAC is in CAP Mode, it can centrally manage up to **128 AP devices.**

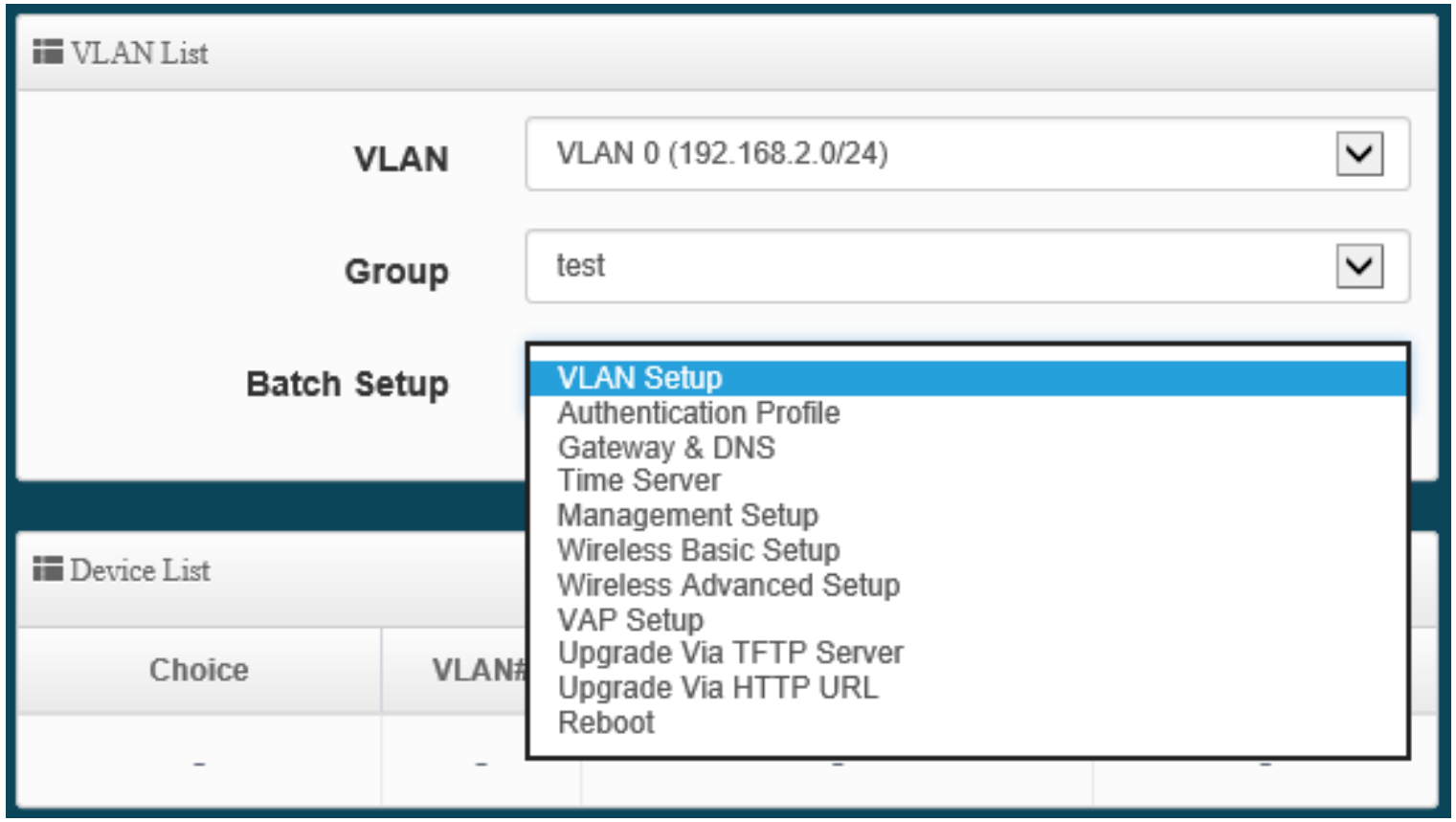


Scan and Import



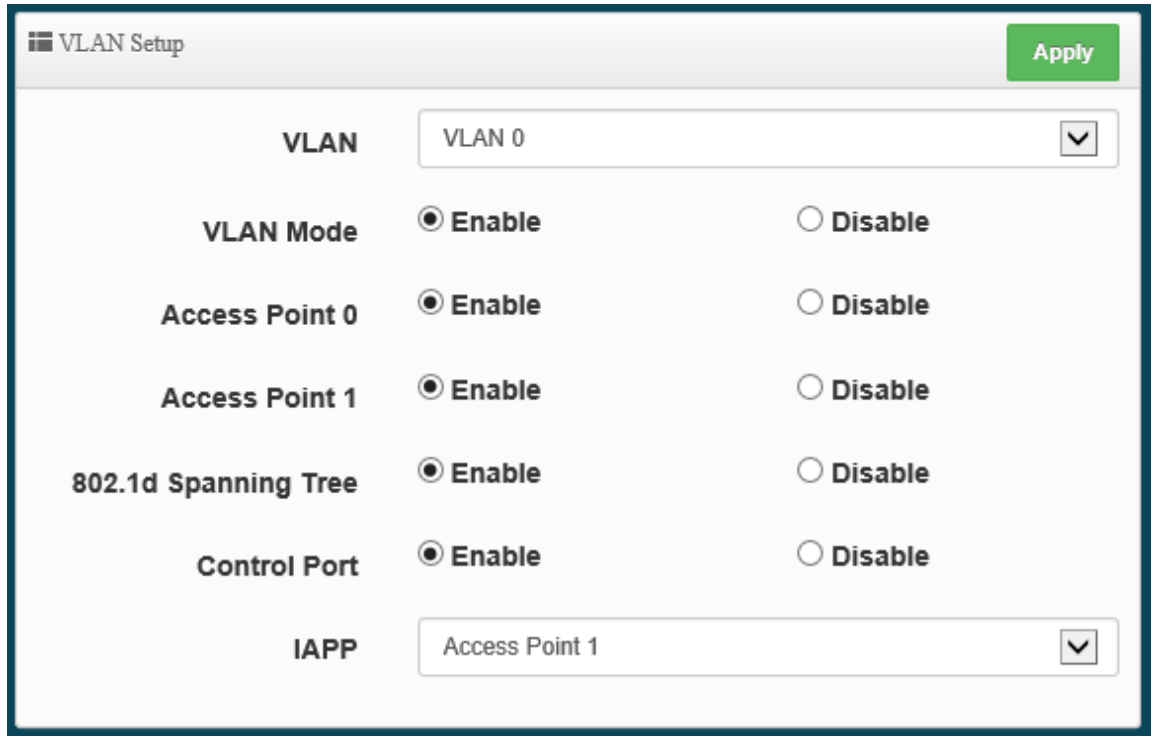
CAP Mode allows administrators to scan for AP devices within their virtual LAN and import them into the management database. Once imported, administrators can make quick changes such as changing IP addresses for organization and easy management

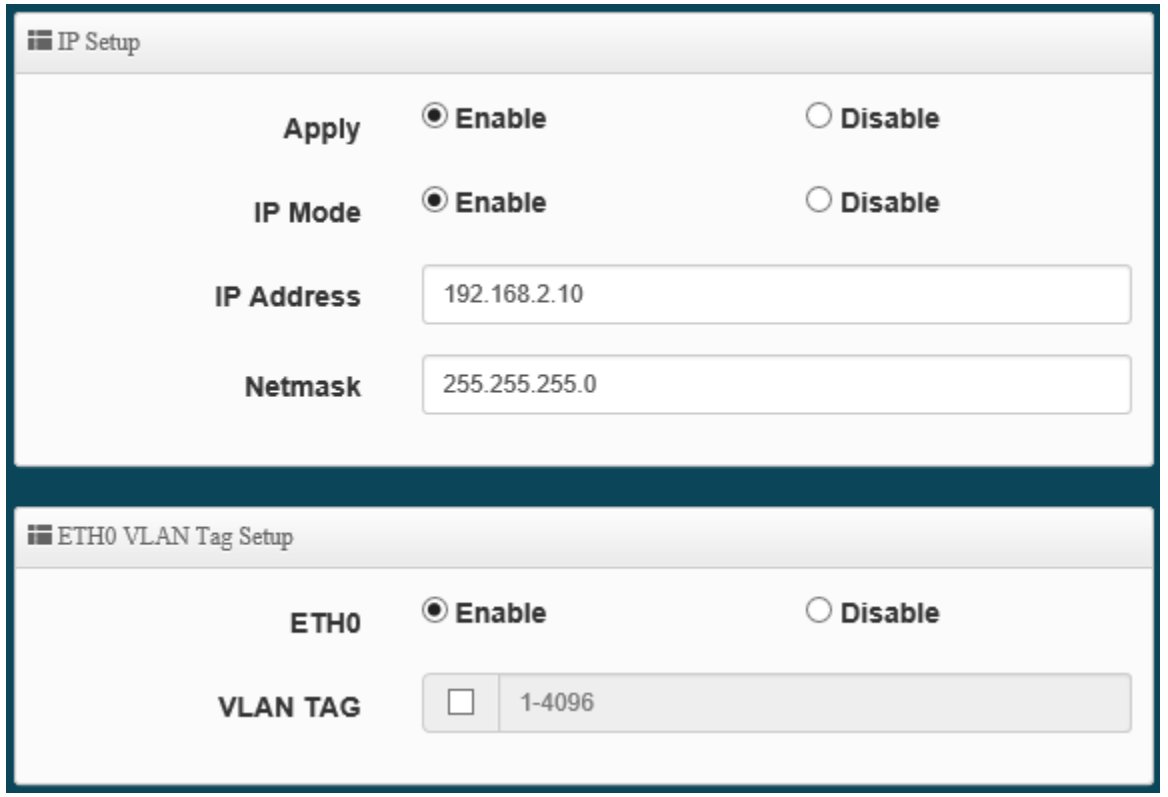
Batch Setup



CAP Mode's control function supports centralized configuration of managed APs. This allows administrators to make convenient batch changes to the network of AP devices from one centralized location. This main function of CAP mode can save time and cost by reducing servicing and installation time.

Batch Setup

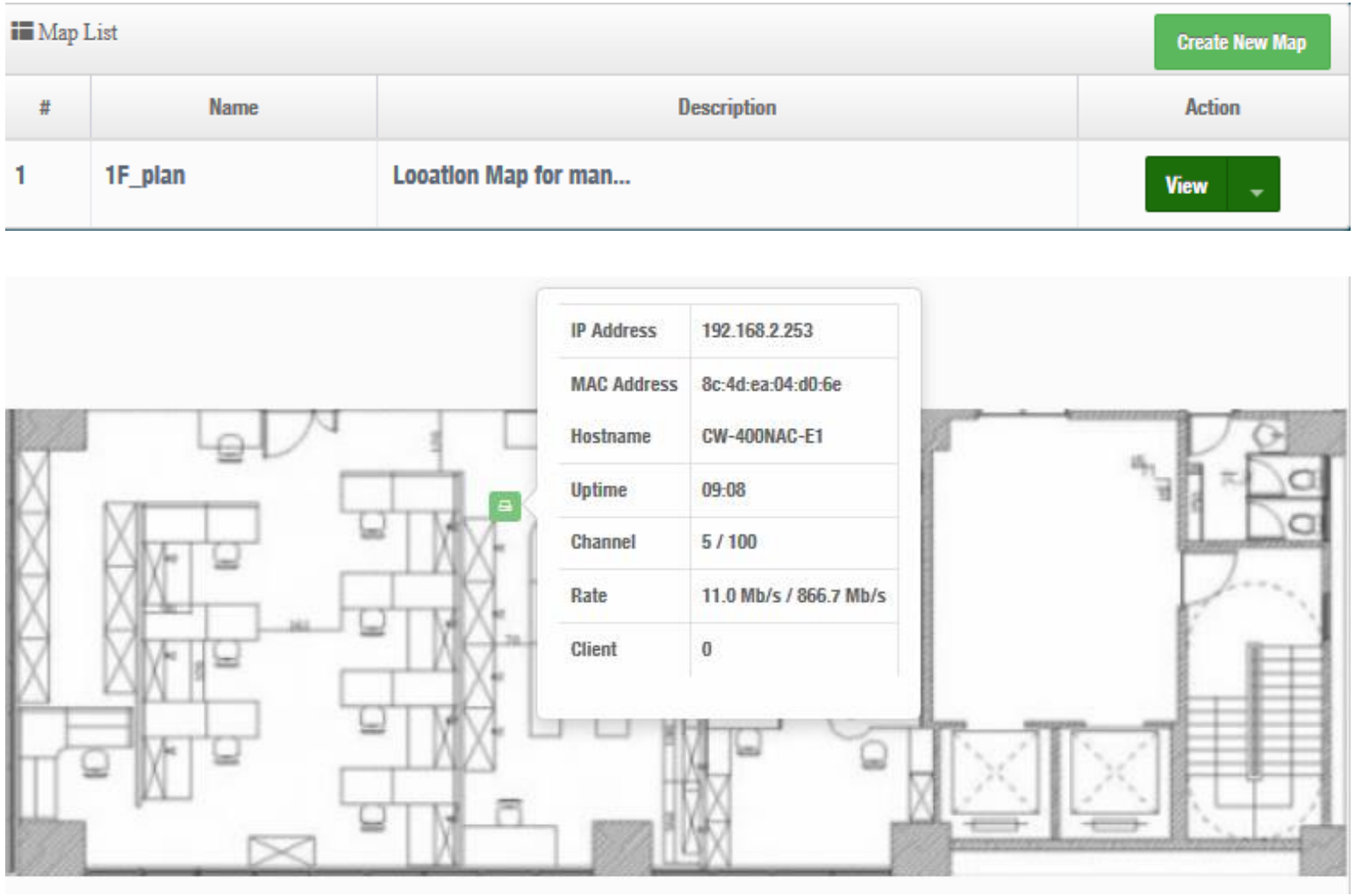




Administrators can enable VLAN Mode, Spanning tree, Control Port capabilities, IAPP Roaming, change IP settings and setup VLAN tag for batches of access points. These changes can be implemented differently for each VLAN, allowing for both centralized and organized control.

Map Setup

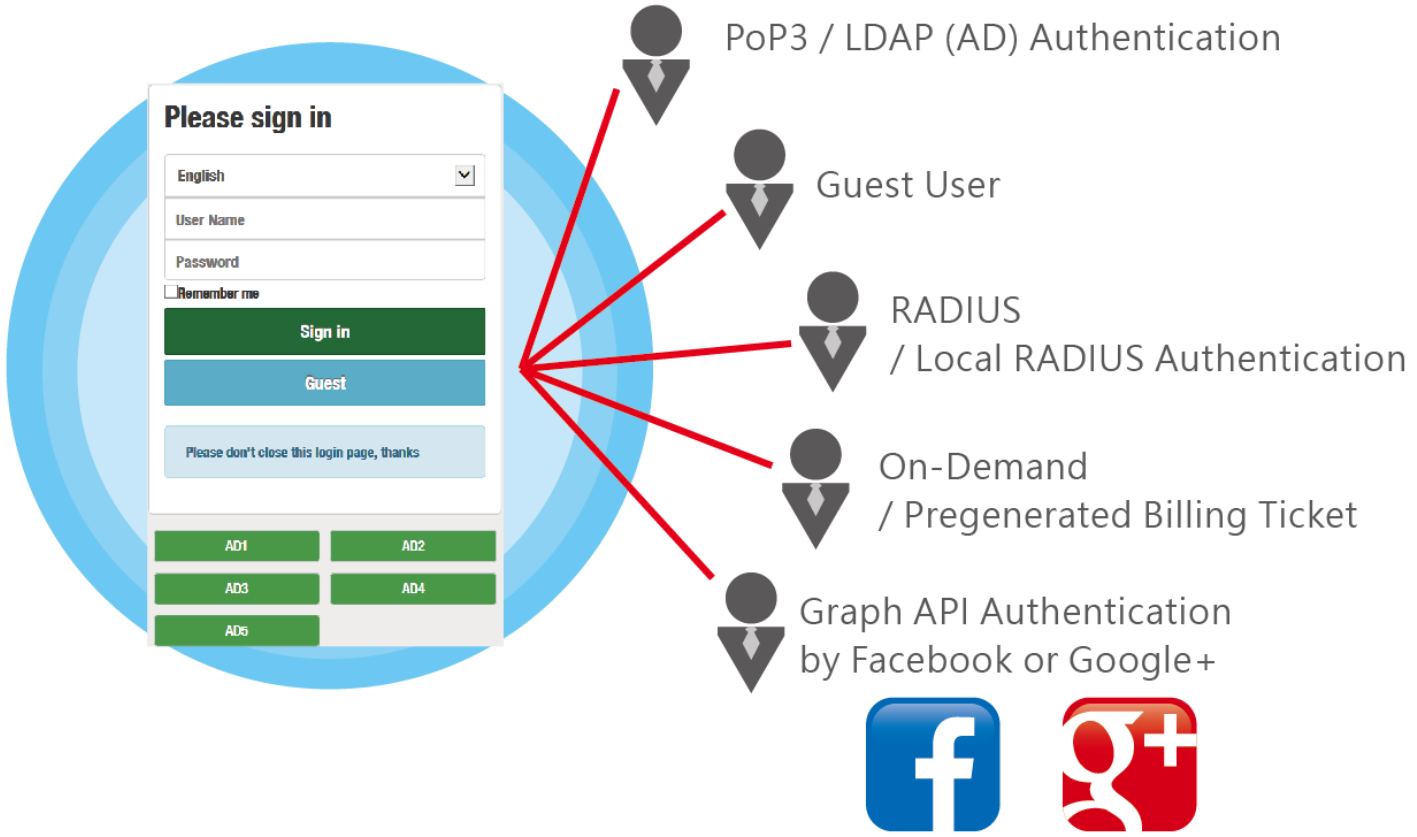
CAP Mode also supports Map Setup function for organizing your AP network. Administrators can create maps by uploading floor plan URLs and dragging APs to the correct location. Once complete, administrators can monitor AP statuses such as uptime, data rates, and connected clients



Authentication AP

CenOS 5.0 supports Authentication Access Point Mode for versatile AP deployment. Administrators can choose from many authentication options to best suit their network needs.

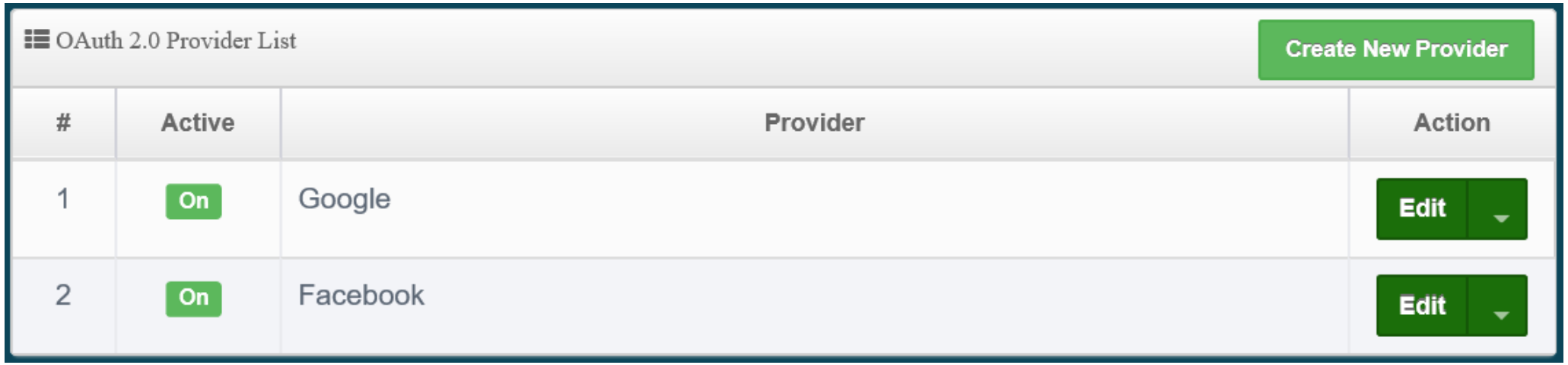
This enables convenient access to the wireless network for public clients, as well as improved management and organization for network administrators



Authentication

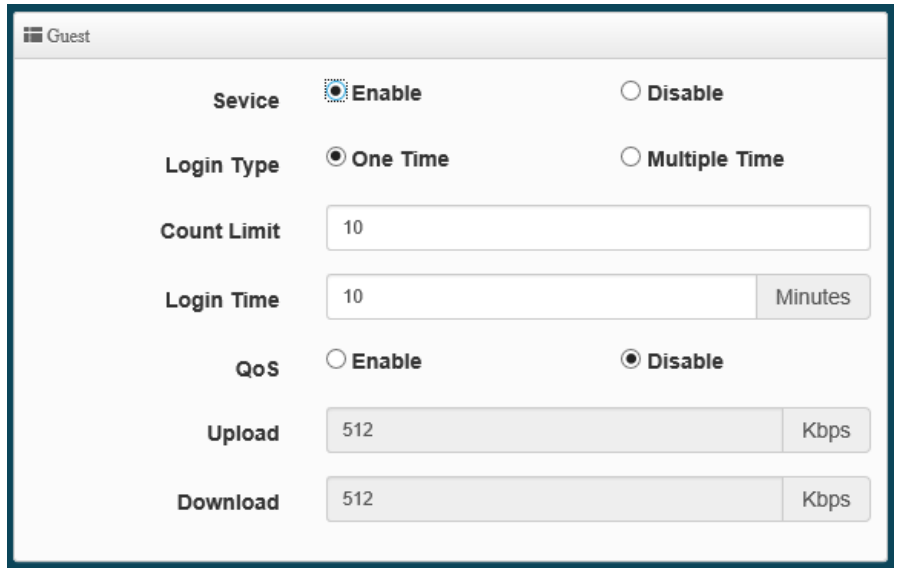
CenOS 5.0 supports multiple methods of authentication for user management, security and convenience.

OAuth2.0 : Allows devices to use third-party credentials such as Facebook and Google+ for user authentication. This provides login convenience for public clients and also allows administrators to collect data through Facebook / Google analytics.

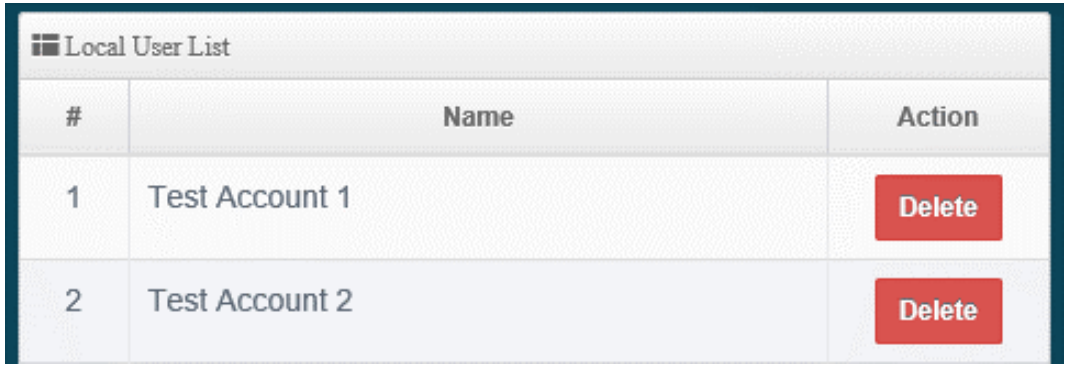


Authentication

Guest Login : Provides limited Wifi connection to clients to an open network. Limitations can be put in place to manage client limits, connection time, and control bandwidth



Local User: Provides fixed authentication user accounts for controlled client login and data management. Administrators can track Local Account usage, connection time, etc. CenOS 5.0 supports up to 10 Local User accounts



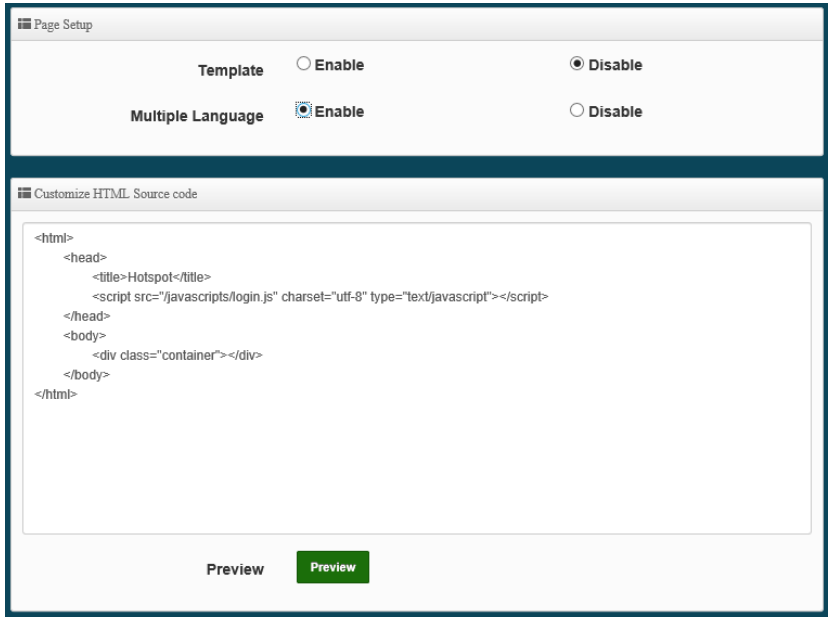
Customized Login Page

Administrators can create a customized Login Page which can become a platform for:

(1.) Promotions **(2.)** Brand Exposure **(3.)** Advertisements **(4.)** Platform for providing Information

This customized Captive Portal supports login through **1.** Guest Users **2.** Local Accounts **3.** Facebook, Google+, etc using OAuth2.0.

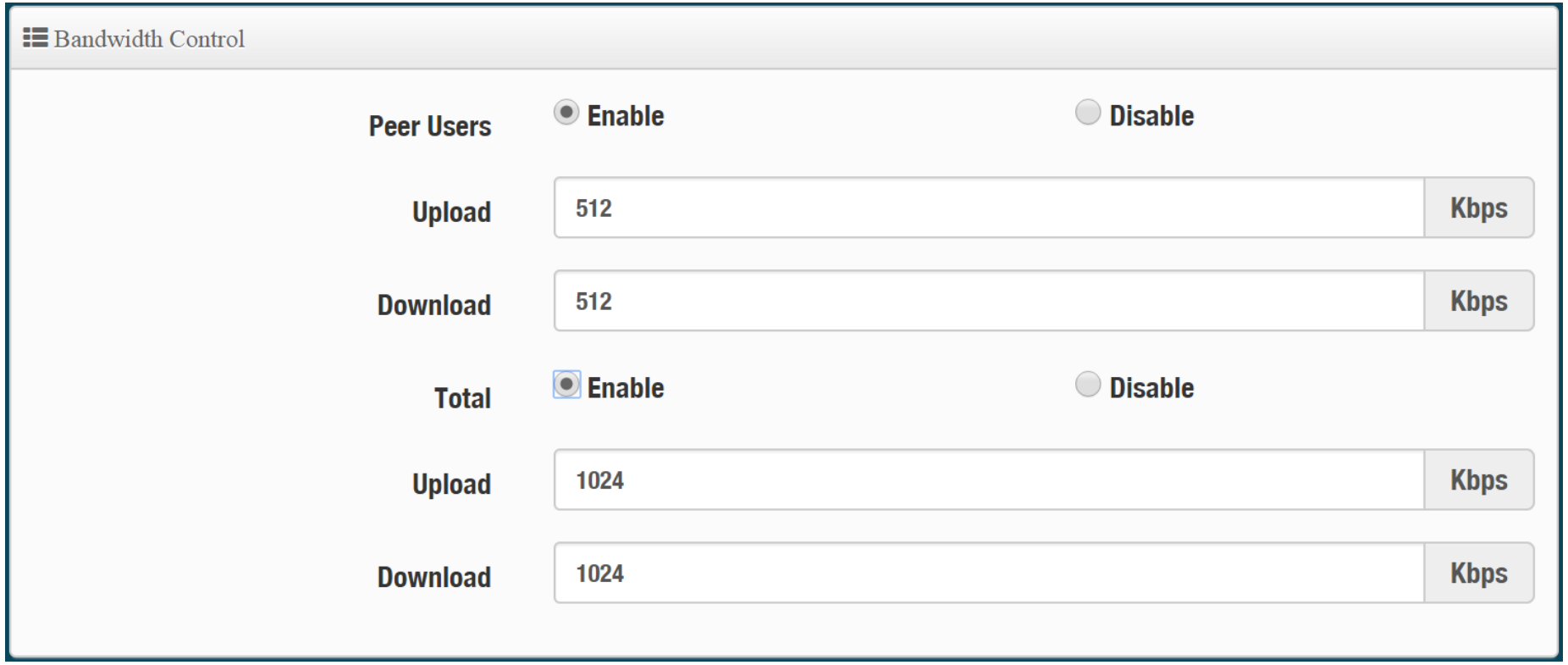
Customized Login Page



Customize through HTML Code

Bandwidth Control

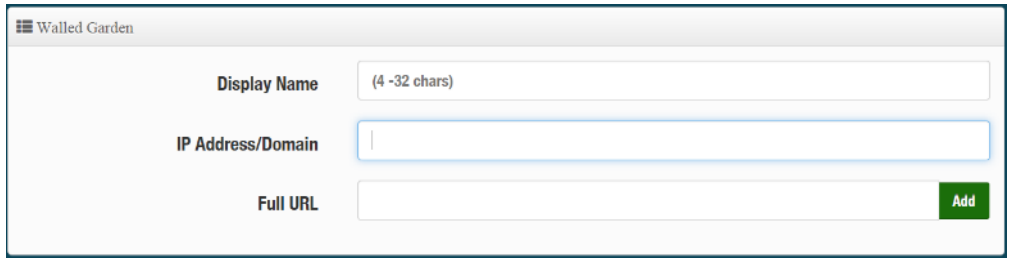
Bandwidth Control of connected clients allows administrators to control individual user upload and download speeds, as well as set a maximum limit on the total amount of bandwidth that can be used at a single time.



Walled Garden

Modes Walled Garden function allows administrators to create a browsing environment that controls user access and accessible information. This function is ideal for directing users to specific parts of the Web such as;

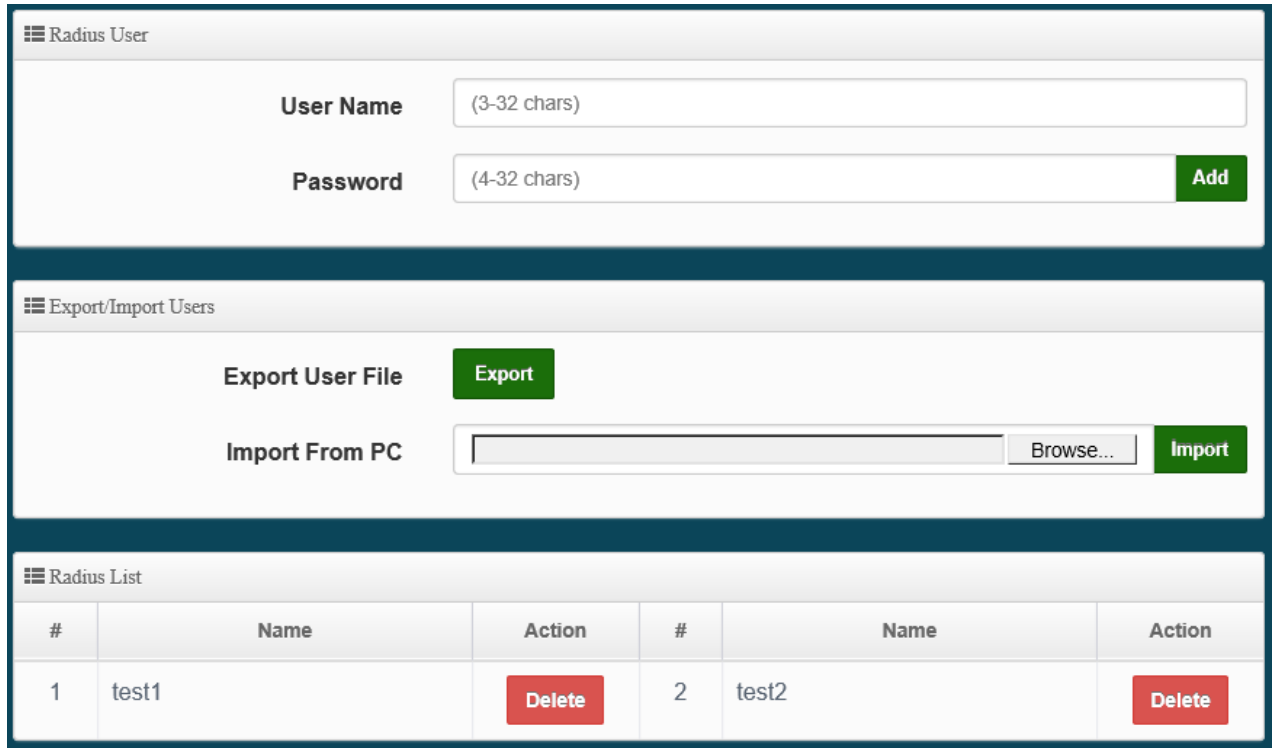
1. Paid Content
2. Self-Promotions
3. Free access to specific websites
4. Advertisement web pages



Enabled Walled Garden Websites

Built-in 802.1x RADIUS

Supports integrated 802.1x RADIUS Server authentication for small to medium network environments. This supports a maximum of 50 built-in RADIUS Users.

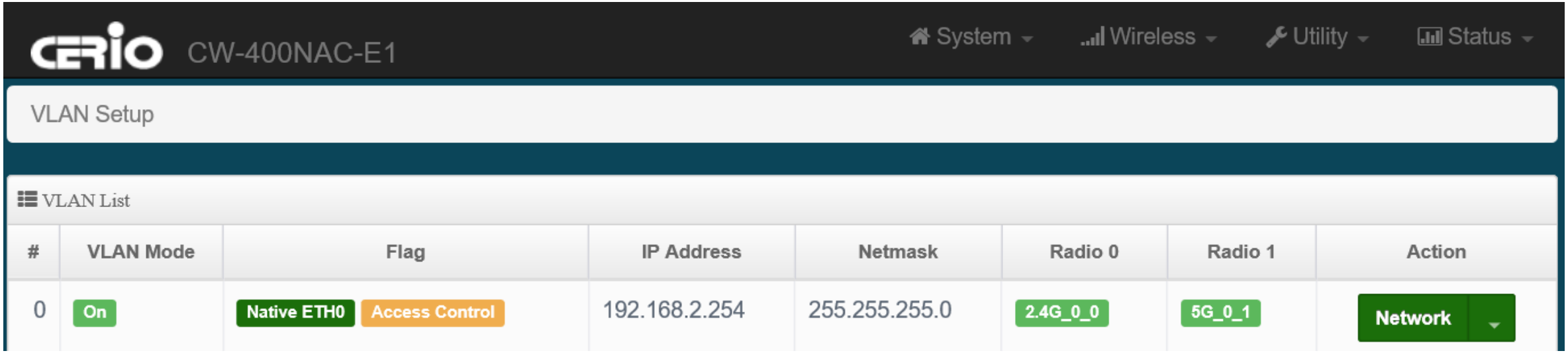


Increased Security- Individual user sessions are encrypted uniquely, which prevents other users from acquiring private information

Cost Efficient – The built-in RADIUS server design removes the need to purchase additional equipment such as external servers.

Virtual LANs & SSIDs

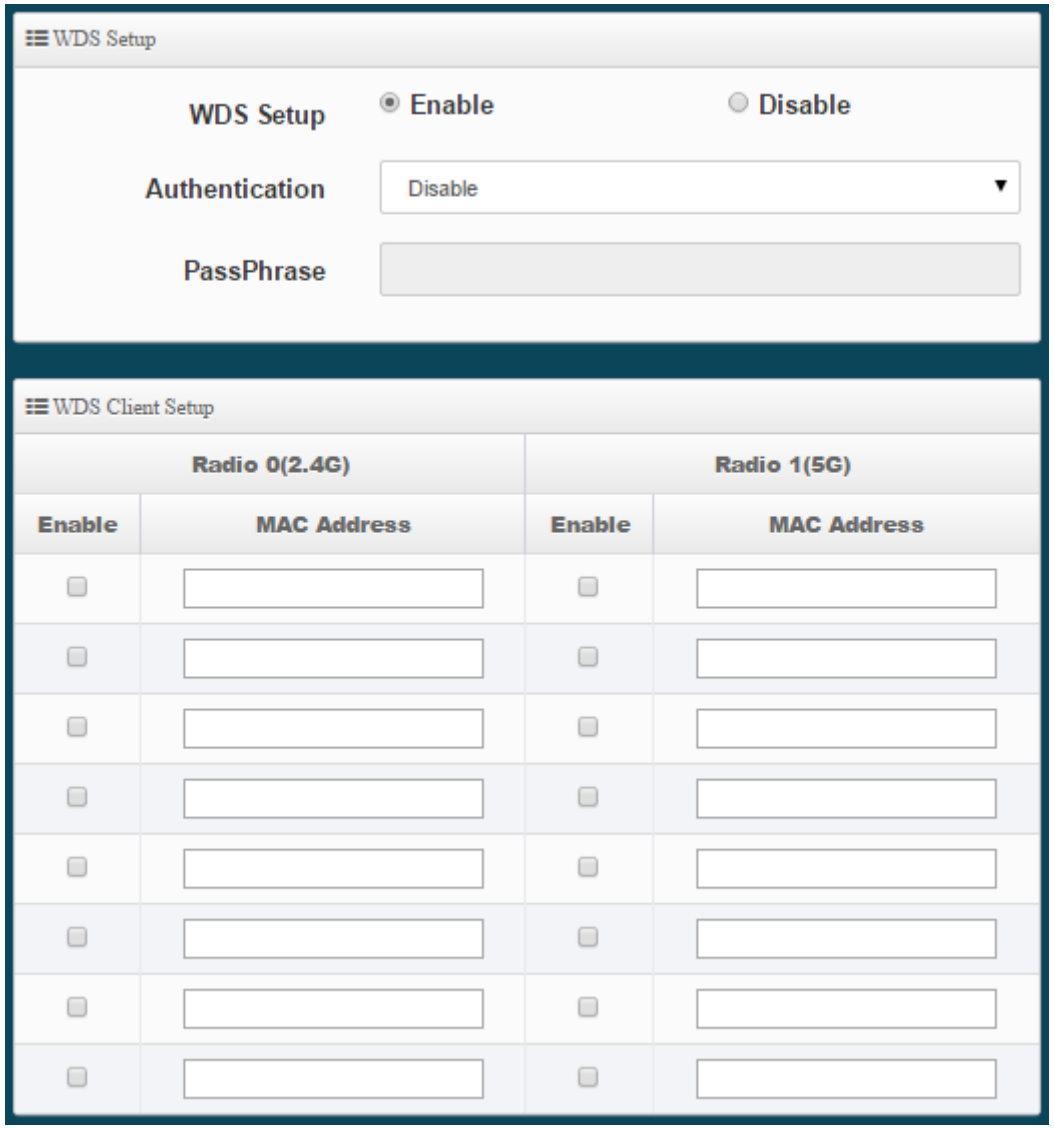
CW-400NAC's Dual Band radio design supports a total of 16 Virtual LANs (VLAN) and 32 SSIDs. Each VLAN supports two SSIDs, one on the 2.4GHz frequency band and one on the 5GHz frequency band.



Supports 16 VLANS (#0 to 15)

Each VLAN supports 2 SSIDs, one for 2.4G and one for 5G

WDS Support



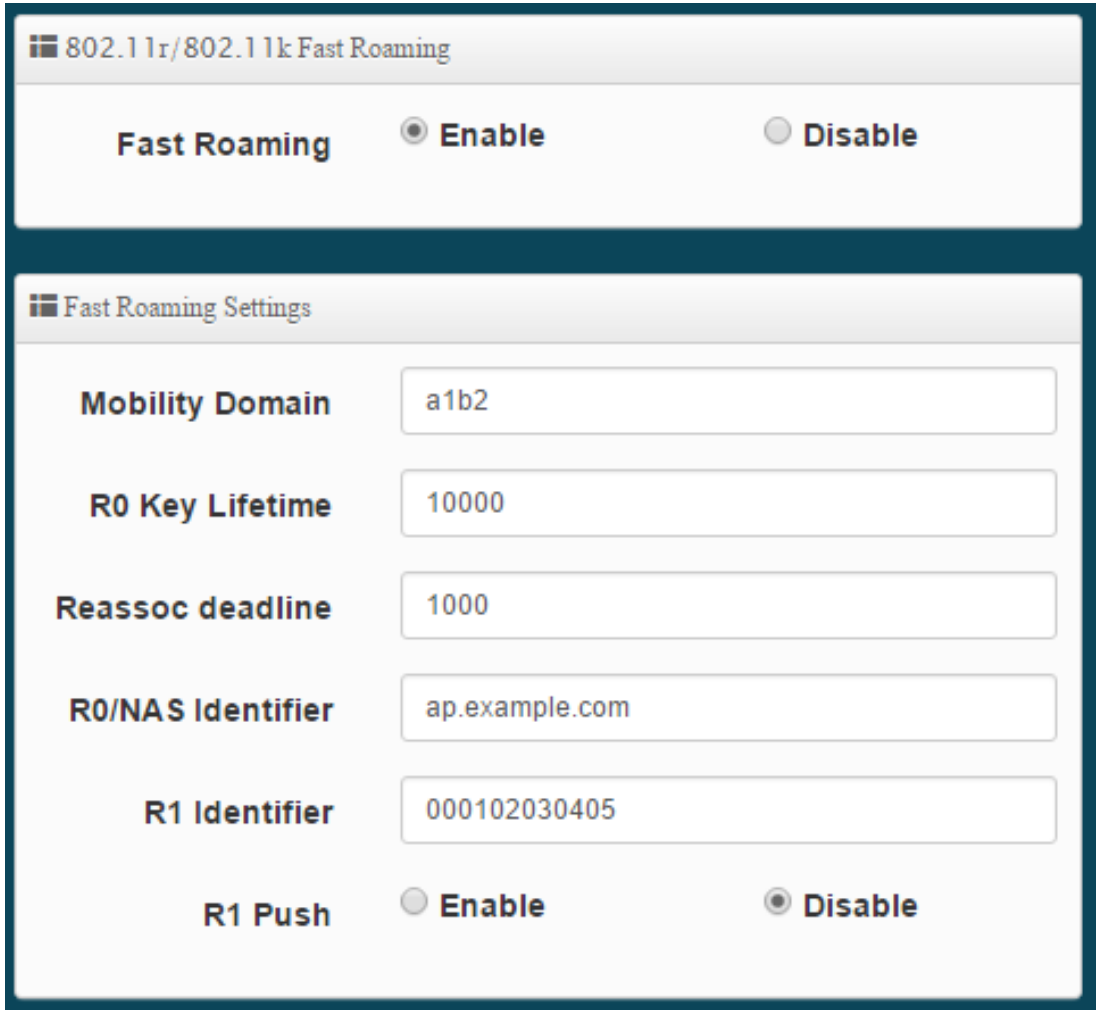
CW-400NAC with **CenOS 5.0** supports **WDS Setup** when operating in **Access Point Mode**

CW-400NAC's Access Point mode supports **8** WDS links per radio for a total of **16 links** per CW-400NAC

(*8x WDS on the 2.4GHz frequency band* ***)***

(*8x WDS on the 5GHz frequency band* ***)***

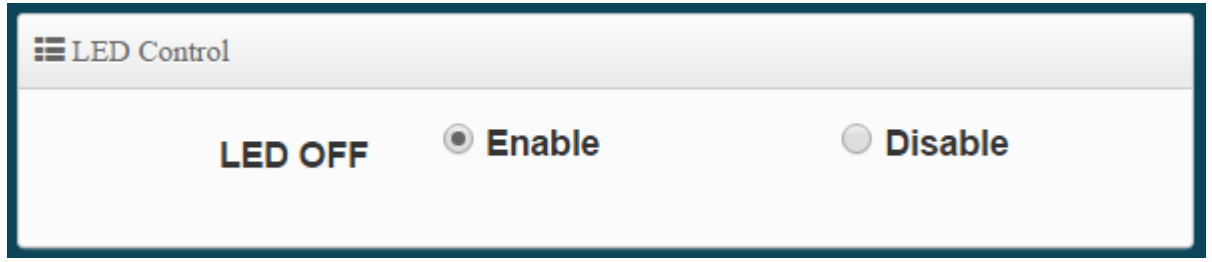
Fast Roaming



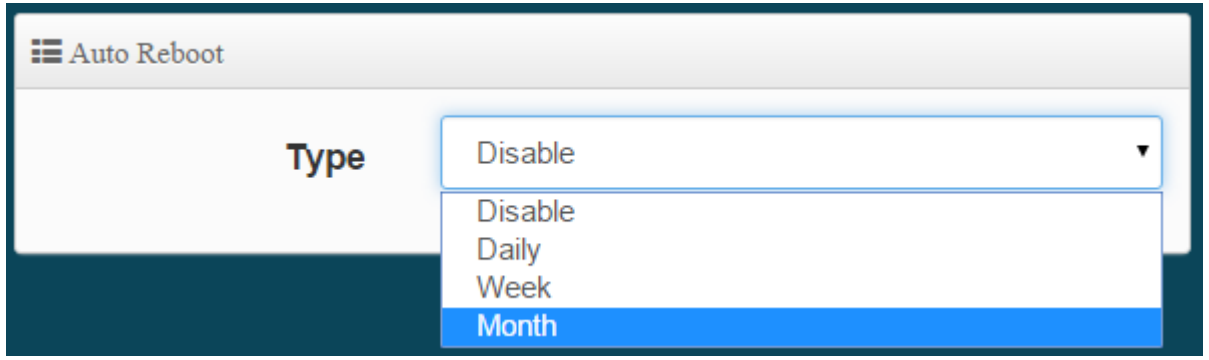
802.11k- Smartly provides roaming client with information regarding nearby APs and their channels, which prepares the client for easier roaming.

802.11r- Stores encryption keys on all the APs within the network. This simplifies the authentication process when clients roam to new APs, greatly reducing CPU loading and latency.

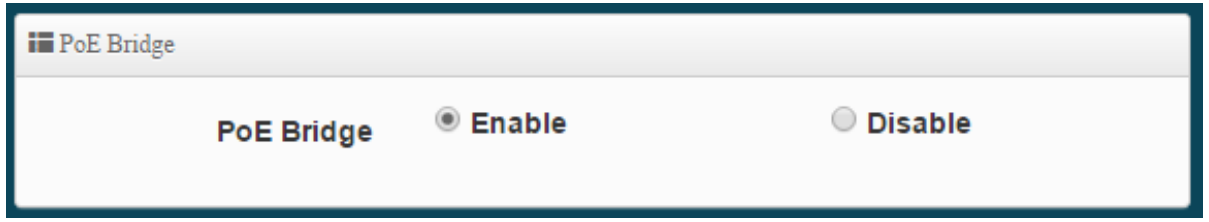
Additional Features



LED Control- Allows the devices LED lights to be disabled to reduce blinking irritation in sensitive environments.



Auto Reboot- Setup device auto reboot schedule to reduce CPU overloading and device crashes.



PoE Bridge- Supply power to subsequent devices such as IP Cameras and Access Points through RJ45 cabling.

What we do

Innovation & Design

Our R&D team continues to incorporate the newest wireless protocols and features to make our products perfect for enterprise deployment.

Wireless Solutions

Our Field Application Engineers and Specialists have unparalleled experience providing the perfect solution for any wireless projects (e.g. Hotels, Long Distance PTP Backhaul, Universities)

Software Development & Design

Our software provides a high featured and easily operated User Interface and also supports centralized AP Management for convenient device deployment.

Outstanding Customer Service

CERIO's customer service staff are experts on our products and possess clear and patient communication skills.

Contact Information

CERIO Corporation

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