EWS5204

Wireless LAN Controller

Product Overview

The EWS5204 is an enterprise-grade wireless LAN controller that provides establishments such as hotels, universities, or even complete municipalities with a comprehensive set of managed Wi-Fi features at a competitive license-free price point. With AP management, user authentication, policy assignment, traffic shaping, firewall features, and much more all packaged into a single box, the EWS5204 provides network administrators with a reliable, easy-to-use, and centralized management console for an entire organization's wireless network infrastructure.

The EWS5204 is capable of managing up to 600 wireless access points and can be directly integrated with unified access switches, all of which can be deployed and configured easily by anyone, including non-wireless savvy users. For example, automated AP discovery prevents network administrators from having to go through the hassle of individually adding and configuring each access point. Access points, as well as connected Wi-Fi devices, can then be monitored and managed from a centralized point, with extensive logging and reporting features to assist in troubleshooting and maintenance.

As Wi-Fi enabled handheld devices such as smartphones and tablets become ever so prevalent in our daily lives, businesses and network operators alike are faced with a mind-boggling dilemma – how to simultaneously address the needs of BYOD (Bring Your Own Device), manage Wi-Fi users, and maintain network service quality for mission-critical applications. The EWS5204 is designed exactly with these requirements in mind, and with a total cost of ownership that satisfies even the most price conscious, organizations are guaranteed to receive an unmatched ROI on their wireless LAN infrastructure.

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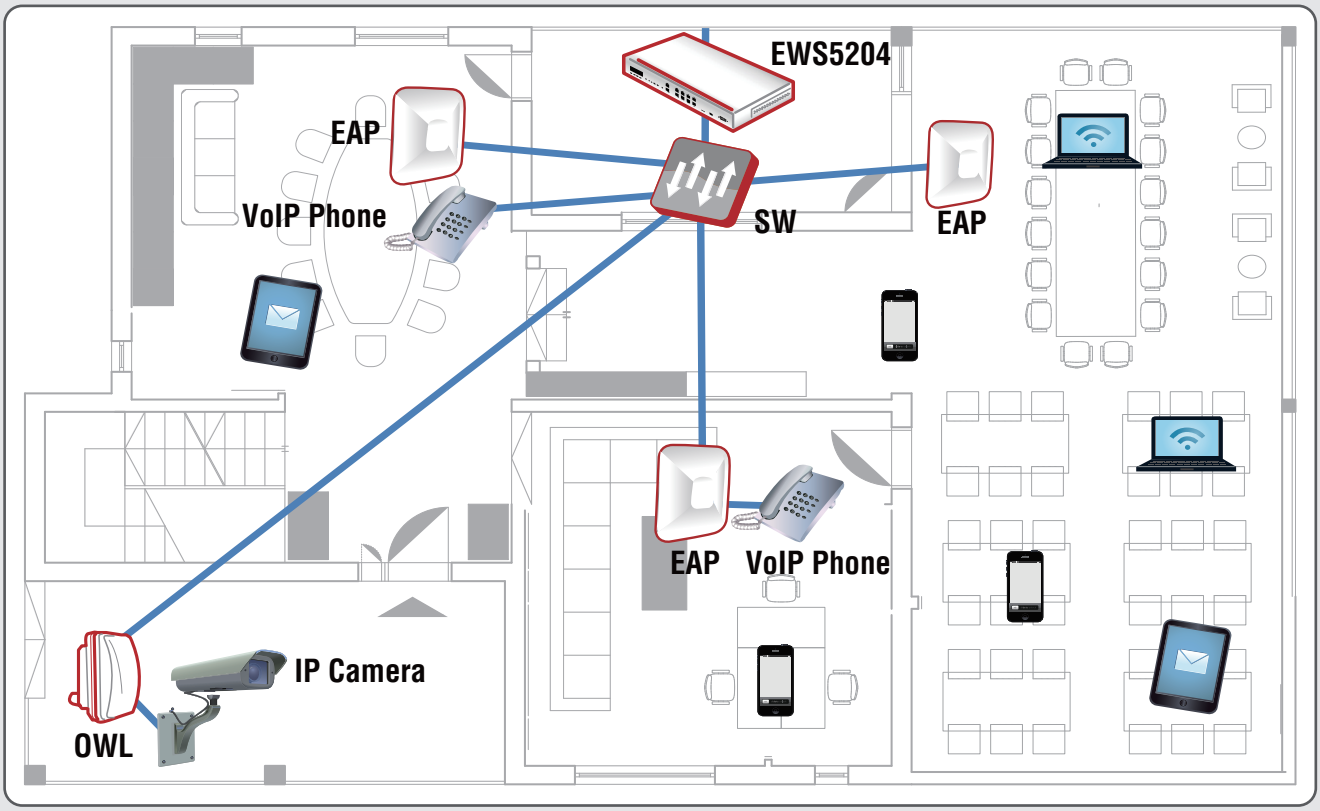

EWS5204 Product Specifications

Features

Security

Security is often one of the most important concerns when it comes to enterprise wireless networks. From the most basic need of preventing network access by unauthorized users to performing rogue AP detection and enforcing network isolation, the Edgecore controllers provide a complex set of features that prevent malicious activities in an organization's network.

For deployment flexibility, the Edgecore controllers support user authentication via both the industry standard 802.1X as well as web-based captive portals. The highly customizable captive portals with integrated walled garden capability can be adapted to suit the needs of hotels, schools, and other public venues. For unregistered users without an account, guest access can be provided by simply entering an e-mail address, logging in with social media accounts, or purchasing a data plan through PayPal.

With various account generation methods, the Edgecore controllers are able to identify users and track user activities, ensuring network security in public Wi-Fi.

The Edgecore controllers also support remote access via VPN, which is crucial for travelling businessmen. At the same time, site-to-site VPN establishes secure connections between corporate headquarters and branch offices.

Mobility

The advent of the era of smartphones and tablets has opened a chasm between how the Internet is used and how organizations provide Internet connectivity. Wireless networks have transformed from a luxury to a necessity, in order to support devices that don't have legacy wired capability. Furthermore, additional features need to be provided in order to address the rapidly changing usage behavior.

The Edgecore controllers support a variety of mobility features that aim to make enterprise Wi-Fi both easier to use and simpler to manage. For example, by supporting fast roaming, users on mobile devices can be on-the-go without worrying about interrupted connections. It is also not uncommon to see a single user with multiple handheld devices - with the Edgecore controller all of the devices can log in to Wi-Fi using the same username and password. Finally, mobile-optimized captive portals and ticket-printed QR code automatic login are both easy methods for a user to get online from their mobile device.

Services

As wireless networks increasingly become the primary network used by organizations, it is crucial to take into consideration fundamental network services, such as DHCP, NAT, and routing. In addition to providing these functions, the Edgecore controller also implements the concept of a "Service Zone", which essentially segments the controller into multiple virtual controllers, each with its own associated network services, user policies, authentication settings, etc.

On the reliability end, the Edgecore controller supports WAN port failover, which helps businesses reduce the chance of network downtime and prevents lost productivity and revenue. Furthermore, load balancing between the WAN ports increases overall performance by alleviating congestion and distributing traffic between the two outgoing links.

Finally, the Edgecore controller provides unique value-added capabilities, such as a direct integration with Micros Opera PMS that greatly simplifies the overhead of providing managed Wi-Fi in hotels.

Management

In a wireless LAN, the Edgecore controller is the central point of management for network administrators, whether it is monitoring current online users or troubleshooting network connectivity issues. The management console of the Edgecore controller is a browser-based GUI that is simple and intuitive to operate. From this interface, network administrators can configure traffic shaping profiles, track previous network usage, perform system backup and restore, and much more.

From the user management perspective, one of the core benefits of the Edgecore controller is its ability to enforce different traffic profiles based on both the location (Service Zone) of the user and the time of access. For example, the profiles applied during work hours can be different from that of during after-work hours. From bandwidth limitations to specific routing rules, network administrators gain fine-grained control over Wi-Fi users.

For access points, the Edgecore controllers support automatic discovery and provisioning, eliminating many repetitive and cumbersome tasks often faced during initial network deployment. Centralized AP configuration and monitoring also greatly reduces maintenance overhead for IT staff.

Reporting

Whether it is real-time monitoring of network activity or tracking the usage of previous Wi-Fi users, network administrators need the appropriate tools at their disposal to increase efficiency and reduce workload. The Edgecore controllers have an extensive set of logging and reporting features that allow network administrators to easily find any information related to the wireless network.

The built-in system dashboard provides a quick overview of the current system status, along with graphical reports of network traffic and system performance. In addition, there is a simple interface for viewing online devices and their associated detailed statistics, including but not limited to the roles they belong to, enforced network policies, and packets transferred.

Alongside network monitoring, the Edgecore controller also performs detailed logging of all network activity. For example, the User HTTP Web Log allows network administrators to track users who visited malicious websites, while the DHCP Lease Log can assist in troubleshooting clients who cannot receive an IP address. Lastly, the Configuration Change Log shows administrators which settings have been modified in the past, in case there are configuration errors that need to be reverted.

EWS5204 Product Specifications

www.edge-core.com

Features

User Security

Authentication Types:
- 802.1X
- UAM (browser-based)
- IP or MAC-based

Authentication Servers:
- Local
- On-demand
- Guest
- RADIUS
- LDAP
- NT Domain
- SIP
- POP3

Customizable captive portal
Customizable wild card walled garden
User blacklisting

Account Generation

On-demand Account:
- SMS registration
- Purchase via PayPal
- Hotel PMS integration
- Selectable billing plans
- Keypad-based account ticket printer

Guest Wi-Fi Account:
- Limitation by duration
- Configurable reactivation time
- E-mail registration and activation

Social media login

Network Security

VPN:
- Remote
- Local
- Site-to-Site

Tunneling Protocols:
- IPSec
- PPTP

Network Isolation:
- Intra-VLAN or port
- Inter-VLAN or port

Rogue AP Detection
Certificates: Built-in Root CA

Device Mobility

Fast roaming between access points
Cross gateway roaming
WISPr smart client
Mobile device recognition for optimized captive portal
Multiple device logins per account
QR Code automatic login
Device Plug-and-Play

System Management

Browser-based configuration
Administrator Accounts:
- Multiple tiered access privileges
- Monitor each admin's current accessed page

System Time:
- NTP synchronization
- Manually configured

System backup and restore
SNMP: v2c
Network Utilities: built-in packet capture

AP Management

Automatic AP discovery
Automatic AP Provisioning: Template-based
AP configuration backup and restore
AP firmware batch upgrade
Tunneled AP management: both L2 and L3 APs
AP load balancing

Switch Management

Automatic switch discovery
Automatic Switch Provisioning: Template-based
Switch configuration backup and restore
Switch power scheduling

User Management

User Policy Assignment:
- Role-based
- Time and location dependent

Bandwidth limitation
Traffic classification/remarking: 802.1p/DSCP
Stateful Firewall: Each rule with individual enforcement schedules
Static route assignment
Concurrent session limit
IP Address Reassignment: Allow clients to obtain different IP address after authentication

Network Service

Redundancy (High Availability): N+1 with automatic synchronization
Internet Protocols Supported: IPv4, IPv6
DHCP server/DHCP relay
Network address translation
Built-in HTTP proxy server
WAN port load balancing
Dynamic routing
Local DNS records
Hotel PMS Integration: Direct interface with Micros Opera PMS
Integrated billing and accounting system
Billing Quota Types: By duration, by traffic volume

EWS5204 Product Specifications

Features

System and Network Status

System dashboard
Graphical system performance reports
Traffic volume reports
System process monitor
Online device monitoring
Active sessions list
Configurable syslog severity
SMTP (e-mail) notifications
Multiple concurrent e-mail notification receivers

Network Activity Logs

System log (SYSLOG)
CAPWAP log
Configuration change log
RADIUS server log
User events log
User HTTP web log
Firewall log
DHCP server/lease log
PMS interface log
On-demand billing report
AP status e-mail notification
Logging to external FTP
Configurable logs and reporting intervals

System Capacity*[1]

Managed APs: Up to 600
Local Accounts: Up to 30,000
On-demand accounts: Up to 30,000
Managed Switches: 30

Hardware Specifications

Form Factor: 19" (1U) rack mount (mounting bracket included)
Dimensions (W x D x H): 43.8 cm x 30.0 cm x 4.4 cm
Weight: 5.2 kg (11.46 lbs)
Power Input: 100-240 VAC, 50/60 Hz (power cord included)
Interfaces:

- WAN: 2 x 10/100/1000Base-T Ethernet, Auto-MDIX, RJ-45
- WAN: 2 x 100/1000 SFP
- LAN: 6 x 10/100/1000Base-T Ethernet, Auto-MDIX, RJ-45
- LAN: 2 x 100/1000 SFP
- USB: 2 x USB3.0
- Console: 1 x RJ-45; 1 x micro USB

LED Indicators: Power, HDD
LCD display
Environmental Conditions:

- Operating Temperature: 0°C (32°F) to 40°C (104°F)
- Operating Humidity: 10% to 90% non-condensing

*[1]: Capacity limits may vary depending on configuration parameters

Warranty

Please check www.edge-core.com for the warranty terms in your country.

For More Information

To find out more about Edgecore Networks Corporation products and solutions, visit www.edge-core.com.

About Edgecore Networks Corporation

Edgecore Networks Corporation is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edgecore Networks Corporation delivers the software and systems that transform the way the world connects. Edgecore Networks Corporation serves customers and partners worldwide. Additional information can be found at www.edge-core.com.

Edgecore Networks Corporation is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edgecore data center switches are developed and manufactured by Accton.

To purchase Edgecore Networks solutions, please contact your Edgecore Networks Corporation representatives at +886 3 563 8888 (HQ) or +1 (949)-336-6801 or authorized resellers.

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