

Edge-core

Quick Installation Guide

EWS1000

Secure WLAN Controller

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FCC Caution

This equipment has been tested and proven to comply with the limits for a class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

CE Caution

The device has been tested and passed the requirements of the following standards, and hence fulfills the EMC and safety requirements within the CE marking requirement.

- ▶ EMC: EN 55032:2012 + AC:2013 Class A, EN 61000-3-2:2014 Class A, EN 61000-3-3:2013 including the followings:
 - EN 61000-4-2, EN 61000-4-3, EN 61000-4-4,
 - EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11

Safety: EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013

Preface

This Quick Installation Guide provides instructions and reference material for getting started with the Edgecore EWS1000 Secure WLAN Controller. This guide will also show how to connect Edgecore EWS1000 to other network equipment.

Package Contents

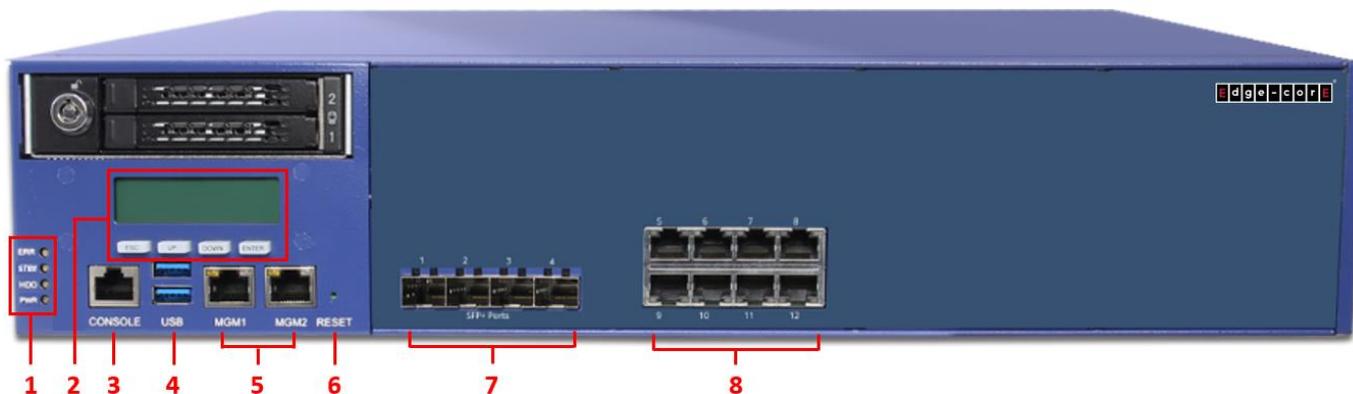
1. EWS1000 x 1
2. Quick Installation Guide (QIG) x 1
3. Power Cord x 2
4. Console Cable x 1
5. Cushion x 4
6. HDD Key x 2



It is highly recommended to use all the supplies in the package instead of substituting any components by other suppliers to guarantee best performance.

System Overview

Front Panel



1. **LED Indicators:** There are four kinds of LED to indicate the different status of the system.

ERR (Power Error)	LED on (orange)	Either one fail
	LED off	PSU status normal
STBY (System Standby)	LED on (orange)	Always on
HDD (Hard Disk)	LED blinking (green)	HDD Read/Write activity
	LED off	No data transferring
PWR (Power)	LED on (green)	Power on
	LED off	Power off

2. **LCD Display:** Allows network administrator to check important system settings such as network interface, SZ configurations, etc. The navigation buttons from left to right are “ESC”, “Up”, “Down”, and “Enter”.
3. **Console:** The system can be configured via a RJ-45 console port. The administrator can use a terminal emulation program such as Microsoft’s Hyper Terminal to login to the configuration console interface to change admin password or monitor system status, etc.
4. **USB:** Reserved for future use.
5. **MGM Ports:** For administrator to manage EWS1000.
6. **Reset:** Press the reset button to restart the system.
7. **SFP Ports:** Two WAN SFP ports are connected to the external network such as the ADSL Router from your ISP. The other two ports for the LAN connections.

1	WAN1
2	WAN2
3	LAN7
4	LAN8

8. **RJ45 Ethernet Ports:** Two 10/100/1000 Base-T WAN ports are connected to the external network, such as the ADSL Router from your ISP. The other six ports for the LAN connections.

5	WAN1
6	LAN1
7	LAN2
8	LAN3

9	WAN2
10	LAN4
11	LAN5
12	LAN6

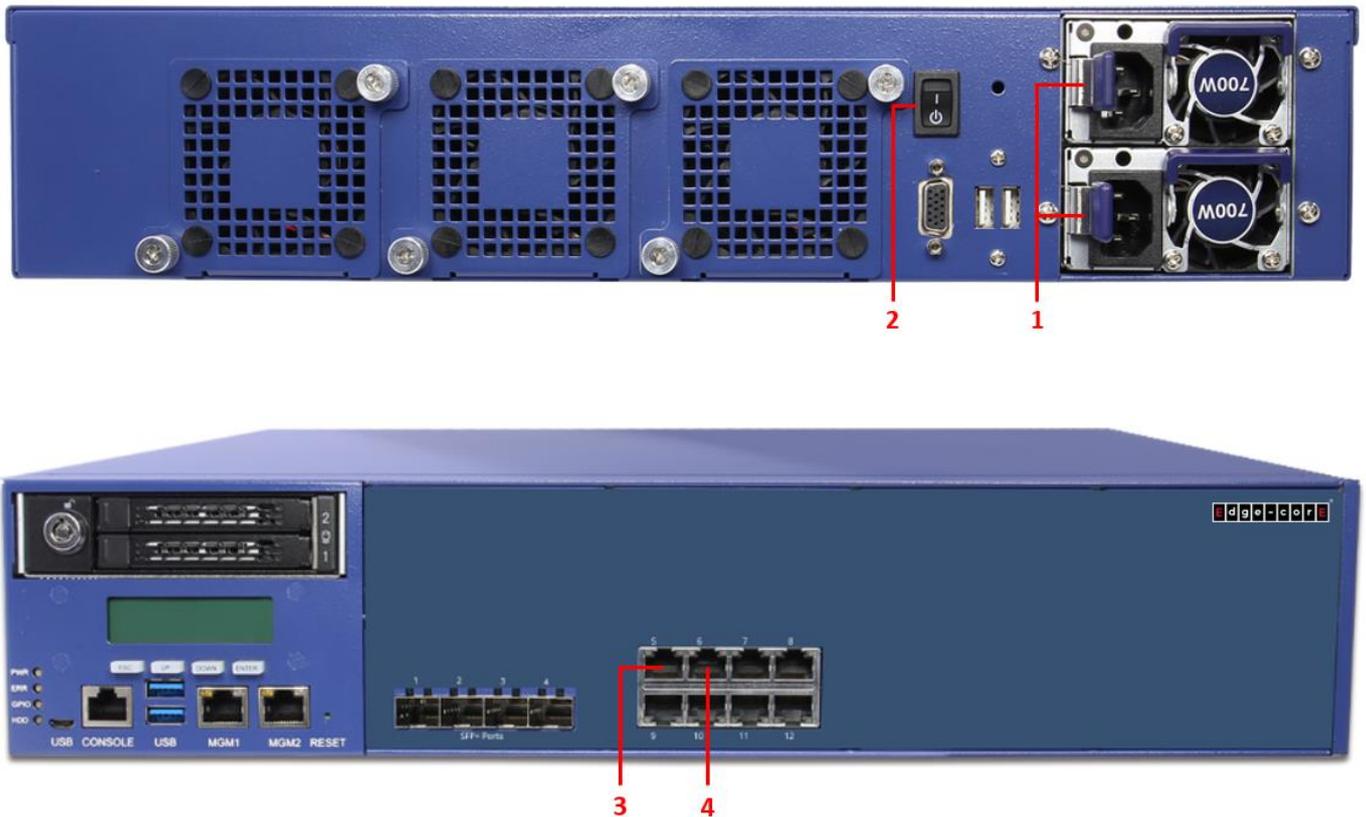
Rear Panel



9. **Power Switch:** For Powering the Device On/Off.
10. **VGA Connector:** For connection to a Monitor if needed.
11. **USB:** Reserved for future use.
12. **Power Supply Socket:** Connecting the power cord to the built-in power supply.

Hardware Installation

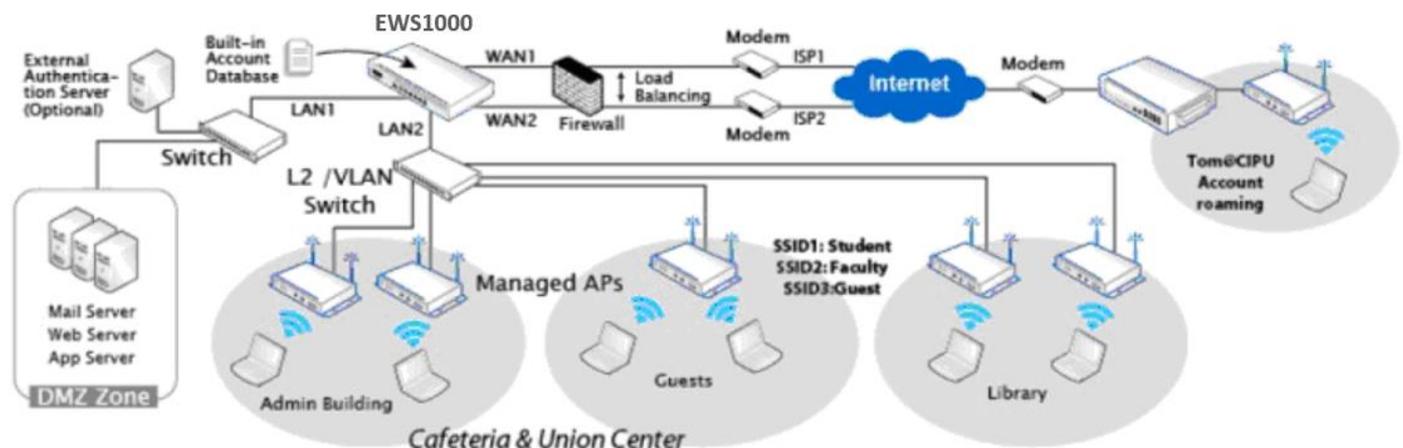
Please follow the following steps to install EWS1000:



1. Connect the power cord to the power socket on the rear panel.
2. Turn on the power switch on the rear panel. The Power LED should be on to indicate a proper connection.
3. Connect an Ethernet cable to the WAN1 Port on the front panel. Connect the other end of the Ethernet cable to an xDSL/cable modem, or a switch/hub of an internal network. The LED of this port should be on to indicate a proper connection.
4. Connect an Ethernet cable to any LAN Port on the front panel. Connect the other end of the Ethernet cable to an administrator PC for configuring the EWS1000 system, an AP for extending wireless coverage, a switch for connecting more wired clients, or a client PC. The LED of this LAN port should be on to indicate a proper connection.

College Dormitories, Apartments or Hotels Networking

For college dormitories, apartments or hotels who want to cater for their tenants' Internet access needs, EWS1000 makes it easy to manage new tenant registrations and share bandwidth equally among tenants. Also, it is convenient to set up EWS1000 to offer wireless Internet service at large events, such as conventions, trade shows, and student spring break gatherings.



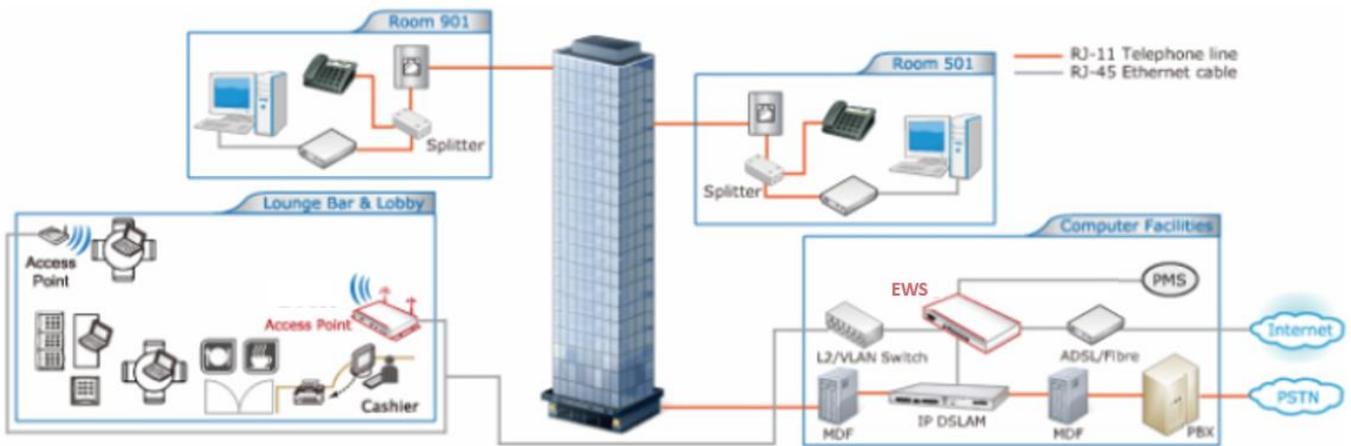
【An example of managed network in a Campus environment】

Telcos or Wireless ISP (WISP)'s Large Hotspot Deployment

For Telcos or large hotspot operators, EWS1000 brings in a convenient and economical way to deploy distributed hotspot services. While most of the operators prefer to use external RADIUS servers as authentication database, EWS1000 in this architecture can play the role of a central RADIUS-NAS. For quick deployment, EWS1000 supports two authentication methods: Web UAM and 802.1X. It is capable of supporting customized web UAM pages uploaded locally as well as external web UAM pages residing on external web servers. Furthermore, the concept of Service Zones of EWS1000 allows one Controller to manage multiple franchised hotspots simultaneously.

Hotel with Property Management System (PMS)

For hotels using Property Management System (PMS) such as Micros Fidelio/Opera, EWS1000 even enables Internet access charges to be incorporated into the room bill. Moreover, customers are able to purchase Internet service in room anytime or at the front counter. With a single account, a hotel guest can log on the Internet in room through a wired Ethernet port or enjoy wireless access throughout the hotel property. Before the account expires or the quota purchased reaches its limit, the guest who wants to surf the Internet in his/her room does not need to retype the password. EWS1000 stands for the most cost-effective and easy-to-setup Internet Access Controller for hotels. Not only can EWS1000 manage and bill both wireless and in-room wired Internet services for properties that have adopted modern IP network infrastructure, but it works for those who only utilize traditional phone lines coupled with DSLAM and DSL modem equipment to deliver Internet to each room.



【EWS1000 in a Hotel – Capable of integrating with DSLAM and PMS】

In summary, the feature-rich EWS1000 supports multiple business models of Internet Access Services - be it for managing wireless or wired clients. It can be configured to fit for private corporations, government agencies, academic campuses, multi-tenant units (MTU), hotels, WISP or telco's hotspot operations. The Edgecore EWS-series products aim to offer the best price-performance among all access controllers on nowadays market.

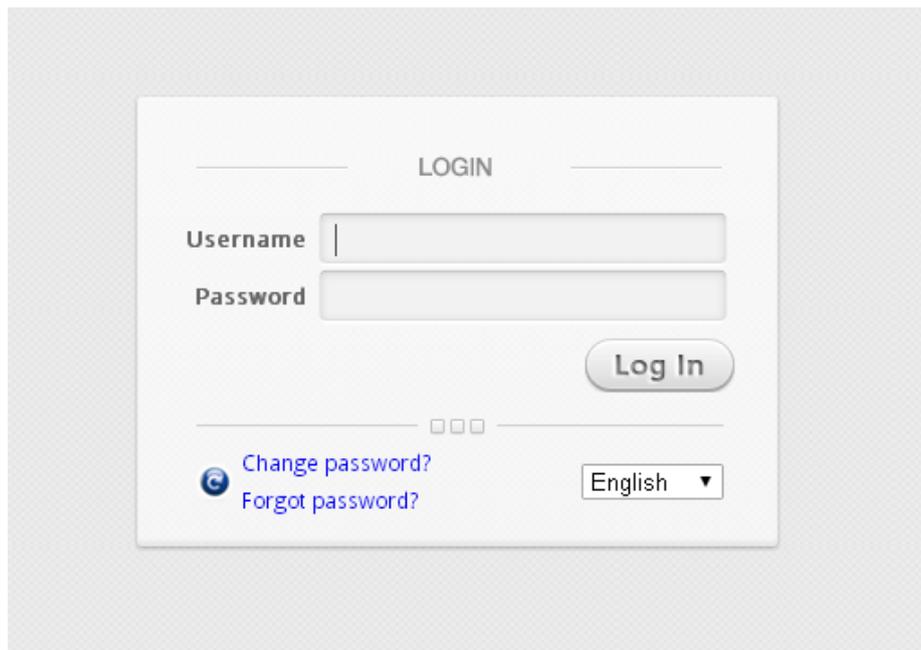
< Web Management Interface >

Edgecore EWS1000 supports web-based management interface. Upon the completion of hardware installation, EWS1000 can be configured via web browsers with JavaScript enabled such as Internet Explorer version 9.0 and above or Firefox.

1. To access the web management interface, connect a PC to one of the LAN ports, and then launch a browser. **Make sure you have set DHCP in TCP/IP of your PC to get an IP address dynamically.**
2. Next, enter the gateway IP address of EWS1000 default Service Zone in the address field. The default gateway IP address is "**http://192.168.1.254**" ("**https**" is used for a secured connection).



3. The administrator login page will appear. Enter "**admin**", the default username, and "**admin**", the default password, in the User Name and Password fields. Click **Login** to log in.

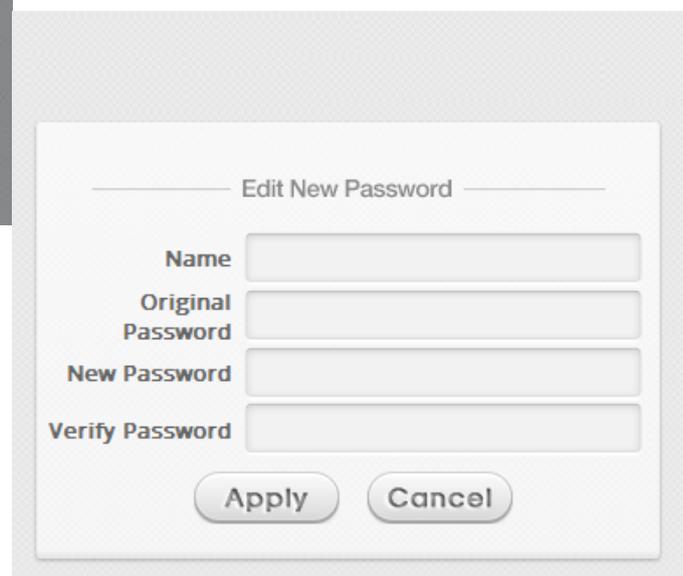


A login form titled "LOGIN" with two input fields: "Username" and "Password". A "Log In" button is positioned to the right of the password field. Below the fields are three small square icons, a "Change password?" link with a blue circular icon, a "Forgot password?" link, and a language dropdown menu currently set to "English".

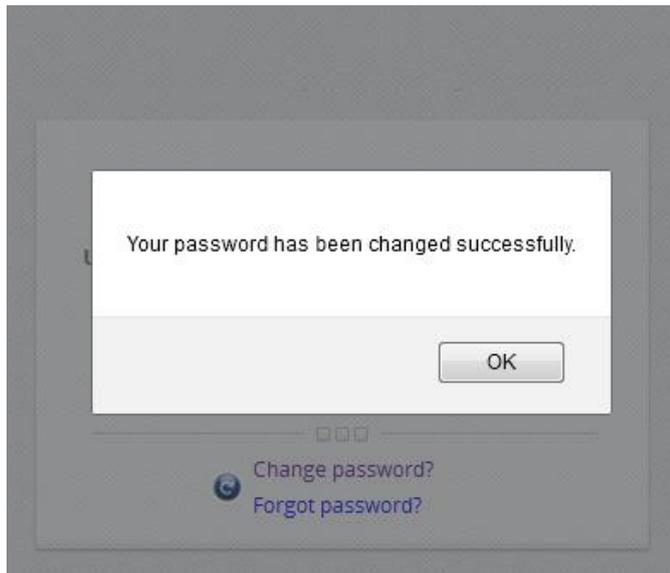
4. After a successful login, the system prompts for the administrator to change password to enforce system security. The password needs to be at least 6 characters long and include at least one alphabet and one number.



A dialog box with a white background and a grey border. The text inside reads: "Please change the default password for 'admin' account." At the bottom, there are two buttons: "OK" and "Cancel". Below the dialog box, there are three small square icons, a "Change password?" link with a blue circular icon, and a "Forgot password?" link.



An "Edit New Password" form with four input fields: "Name", "Original Password", "New Password", and "Verify Password". At the bottom, there are two buttons: "Apply" and "Cancel".



5. When the password has been successfully changed, the main welcome page of the administrator interface will appear.

Welcome to System Main Menu

This Administrative Web Interface allows you to set various networking parameters, to customize network services, to manage user accounts and to monitor user status.

Functions are separated into the following main categories:
[System](#), [Users](#), [Devices](#), [Network](#), [Utilities](#), and [Status](#).

For a quick overview of the system, please refer to the [Dashboard](#).

For shortcut links to the Dashboard, you may click the 4ipnet Logo on the top-left, or click the ['Dashboard'](#) icon on the top-right.

The ['Star'](#) icon on the top right is a [Setup Wizard](#) that provides a quick step-by-step guide on setting up your system.

For help with your system configuration, click the ['?](#) Icon for Online Help.

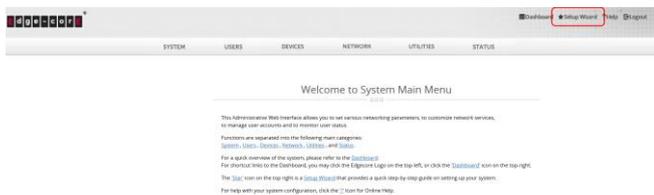


*If you can't get the login screen, the reasons may be: (1) The PC is set incorrectly so that the PC can't obtain the IP address automatically from the LAN port; (2) The IP address and the default gateway are not under the same network segment. Please use default IP address such as 192.168.1.xx in your network and then try it again. For the configuration on PC, please refer to **EWS User's Manual**.*

Common Settings

< Setup Wizard >

EWS1000 provides a **Setup Wizard** for quick configuration. To quickly configure EWS1000 by using the **Setup Wizard**, click on the **Setup Wizard** button on the top right corner to start the configuration process.



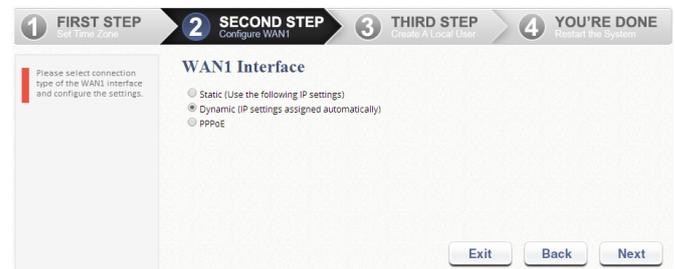
Step 1: General

- **Time Zone** drop-down list box to set up the system time.
- Click **Next** to continue.



Step 2: WAN1 Interface

- Select a proper type of Internet connection for WAN1 interface from the following three available connections: **Static**, **Dynamic**, or **PPPoE**. Your ISP or network administrator can advise on the connection type available to you. Below depicts an example of **Dynamic**.
- Click **Next** to continue.



Step 3: Local User Account (Optional)

New local accounts can be created and added into the database via this optional function. If local user accounts are not required, click **Skip** to go directly to **Step 4**. However, It is recommended to create at least one local user account in order to verify the system's readiness upon completion of this **Setup Wizard**.

- Enter the **Username** (e.g. **testuser**), **Password** (e.g. **testuser**) to create a new local account.
- Click **Next** to continue.
- More local accounts can be added by clicking the **Back** button in **Step 4**.

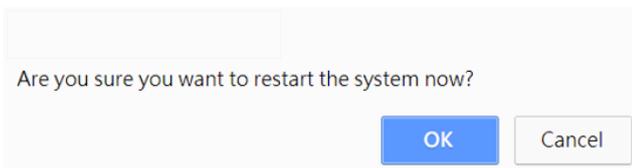


Step 4: Confirm and Restart EWS1000

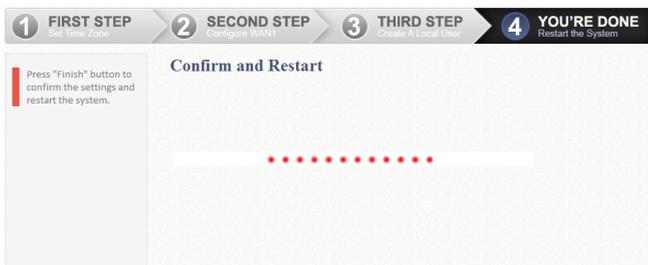
- Click **Finish** to save current settings and restart the system.



- A confirmation dialog box will then appear. Click **OK** to continue.



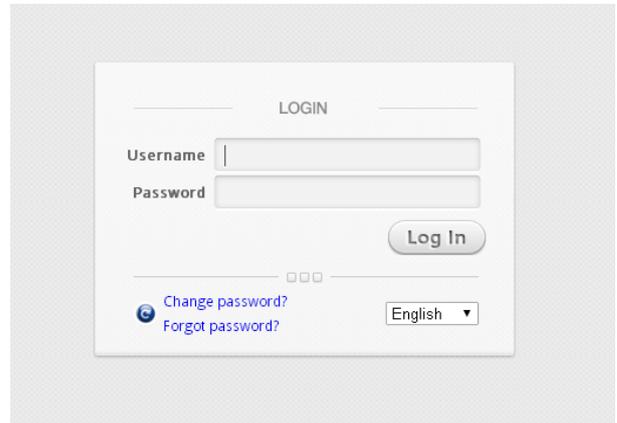
- A **Confirm and Restart** message will appear on the screen during the restarting process. Please do not interrupt the system until the Administrator Login Page appears.



➤ **Note:**

The system is trying to locate a DNS server at this stage. Therefore, a longer startup time is required if the configured DNS cannot be found.

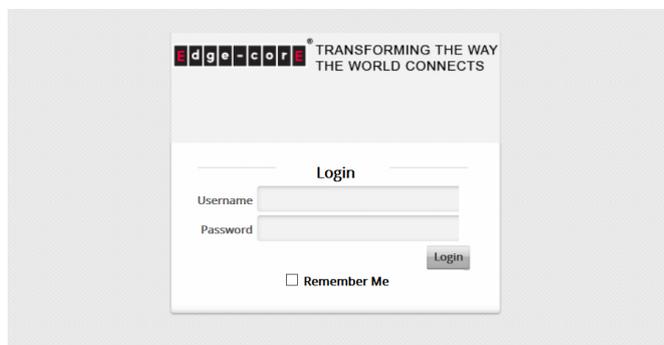
- When the following Administrator Login Page appears, it means the restart process is now completed.



< User Login >

To verify whether the configuration of the new local user account(s) created via the **Setup Wizard** has been completed successfully:

1. Connect a client device (e.g. laptop, PC) to any LAN Ports. The device will obtain an IP address automatically via DHCP
2. Open a web browser on a client device and access any URL, the default **User Login Page** will appear.
3. Enter the Username and Password of a local user account previously generated via Setup Wizard (e.g. “**testuser@local**” as the *Username* and “**testuser**” as the *Password*); then click **Login**.



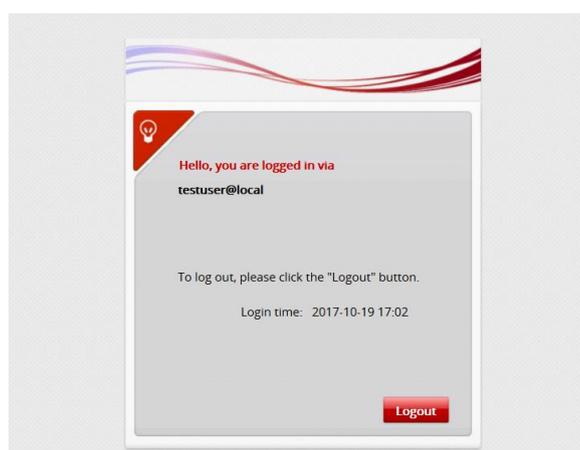
» **Note:**

1. EWS1000 supports multiple authentication options including built-in local user database and external authentication database (e.g. RADIUS). The system will automatically identify which authentication option is used from the full username entered.
2. The format of a full (valid) username is **userid@postfix**, where “**userid**” is the user ID and “**postfix**” is the name of the selected authentication option.
3. **Exception:** The postfix can be omitted only when the default authentication option is used. For example, “**LOCAL**” is the default authentication option at this system; therefore, you may enter either “**testuser**” or “**testuser@local**” in the *Username* field.

Congratulations!

The Login Success Page will appear after a client has successfully logged into EWS1000 and has been authenticated by the system.

The appearance of Login Success page means that EWS1000 has been installed and configured properly.



< Service Zone & AP Management >

Edgecore EWS1000 has introduced an important new concept called “**Service Zone**”. For how to set up Service Zones, please refer to the ***User’s Manual***.

EWS1000 can centrally manage multiple access points (APs). For how to set up the “**AP Management**” feature, please refer to the “**AP Management**” section of the User’s Manual.

For further configuration and information, please refer to the User’s Manual.

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