ELSA-E

Electronic Shelf Labeling System

RELIABLE CELLULAR-LIKE TECHNOLOGY
Unique tree network for optimal coverage without interference from existing Wi-Fi networks

EASY PLUG-AND-PLAY SYSTEM
Self-networking system enables easy infrastructure setup

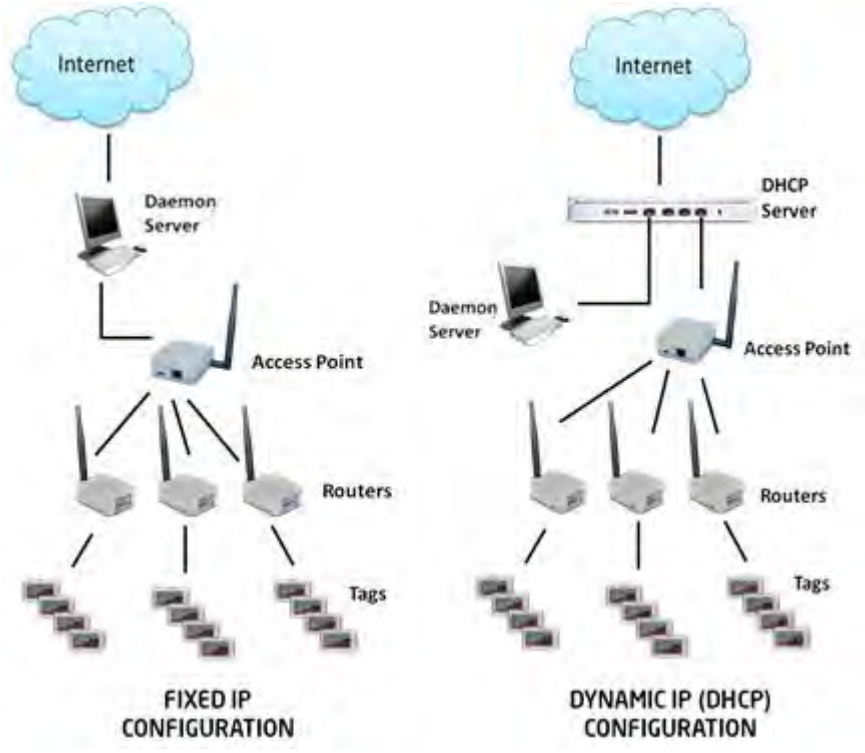
EXCEPTIONAL READABILITY
High resolution e-paper display for 180° viewing

LONG BATTERY LIFE & FAST UPDATES
Unique wireless protocol tuned to optimize the power consumption and network efficiency

ANTI-JAMMIMG FROM Wi-Fi
13,500 graphic tags are fully updated per hour

INTELLIGENT SYSTEM
Acknowledges updates; battery level and signal strength notifications

Ultra-thin · Full graphic
Autonomous system · Environmentally friendly



M2COMM

Technical Specification

Base Station

MODEL NAME: Base Station	
INFRASTRUCTURE	
SIZE (W x H x T) mm	99 x 68 x 23
WEIGHT, gm	84
ANTENNA	External SMA type x 2
LED	Tri-Color / GREEN / Blue
NETWORK	
INTERFACE	WIRELESS
FREQUENCY	SUB-GHz ISM
OPERATION MODE	SELF-NETWORKING (AUTOMATIC CONNECTION BUILT-UP AND RECOVERY)
ENCRYPTION	AES 128-bit
TRANSMISSION RANGE	200 METERS (LINE OF SIGHT)
OPERATING CONDITIONS	
OPERATING TEMP/HUMIDITY	0 ~ 70°C / 5 ~ 95% at 40℃(non-condensed)
STORAGE TEMP/HUMIDITY	0 ~ 70°C / 5 ~ 95% (non-condensed)
POWER	PoE / AC inlet
APPLICATIONS	Retail, Smart Display

Device Setup:

Access Point Setting

The Base station has a wired connection to the ELSA software (computer) and communicates wirelessly with other base station (as RT mode) via the M2COMM proprietary protocol.

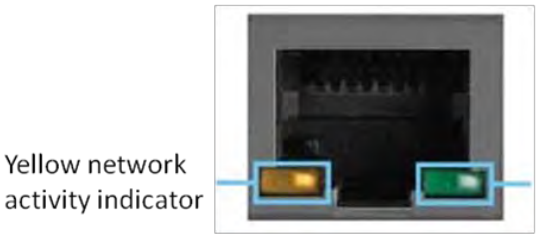
Since the base station operated as the AP mode in default, so user doesn't need to change the mode setting at this step.

Please refer to below procedure to setup your BS in Access Point mode.

Status Indicators and Assembly:

LED status:

Tri-Color (Mode Indicator): **Yellow** in AP mode
Green (Power Indicator): ON when BS was power on
Blue (Wireless Status Indicator): ON when AP is ready to communicate with RT

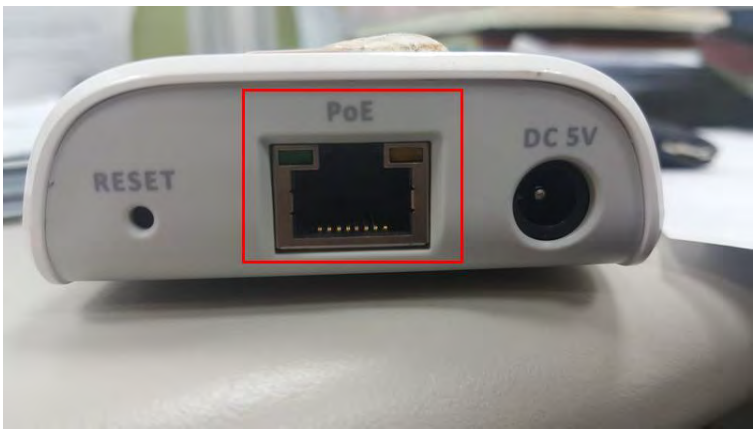


Access Point - PoE Port:

GREEN network activity indicator—turns on when a cable connects the port to another Gigabit Ethernet port

YELLOW activity indicator—Flashes to indicate network activity over that port

Attach included both Antennas



Plug one end of the supplied Cat 5E cable into the BS, the other end should be plugged into the PoE switch.

Once the BS had been powered on in AP mode, the tri-color LED will be shown “Yellow”.

Router Setting

The Router(s) operate wirelessly, via the M2COMM proprietary protocol, with the Access Point.

Please refer to below procedure to setup the BS in Router mode.

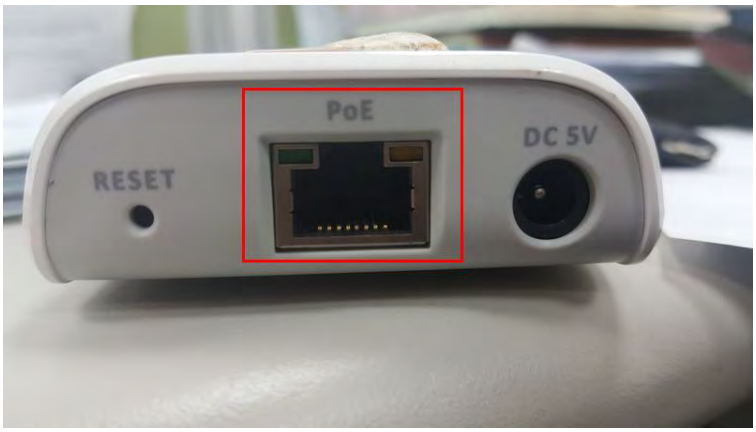
Status Indicators and Assembly:

LED status functions:

Tri-Color (Mode Indicator): **Purple** in RT mode
Green (Power Indicator): ON when BS was power on
Blue (Wireless Status Indicator): ON when RT is ready to communicate with ED; flash slowly during connecting process

Attach included both Antennas

Adjust the rotary switch at right side, from “A”(AP) to “R”(RT)



Plug one end of the supplied Cat 5E cable into the BS, the other end should be plugged into the PSE.

Once the BS had been powered on in RT mode, the tri-color LED will be shown “Purple”.

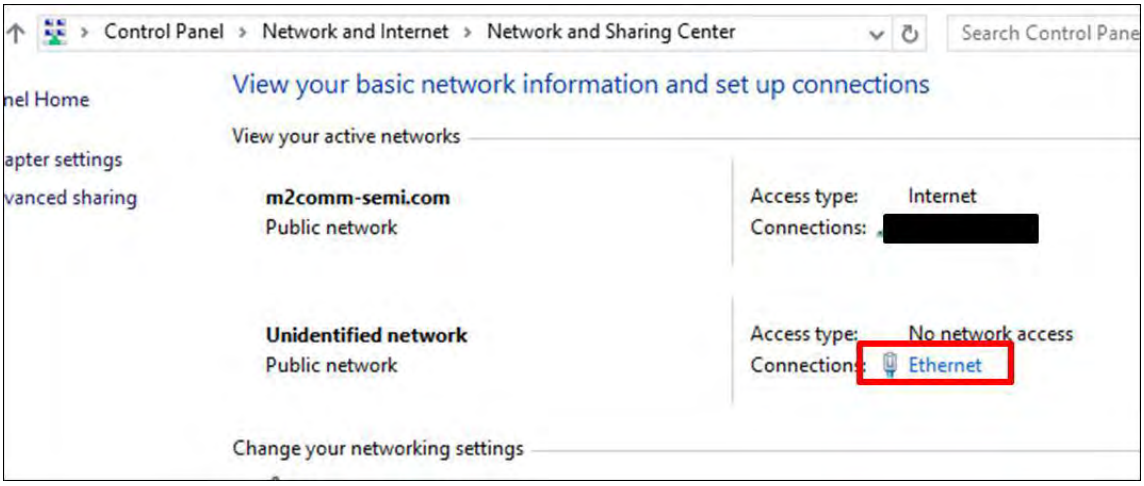
ELSA-E Demo System IP setting:

The ELSA-E demo system is designed to use dynamic IP address when Access Point was powered by PoE interface, or configure as static IP address when AC adapter used.

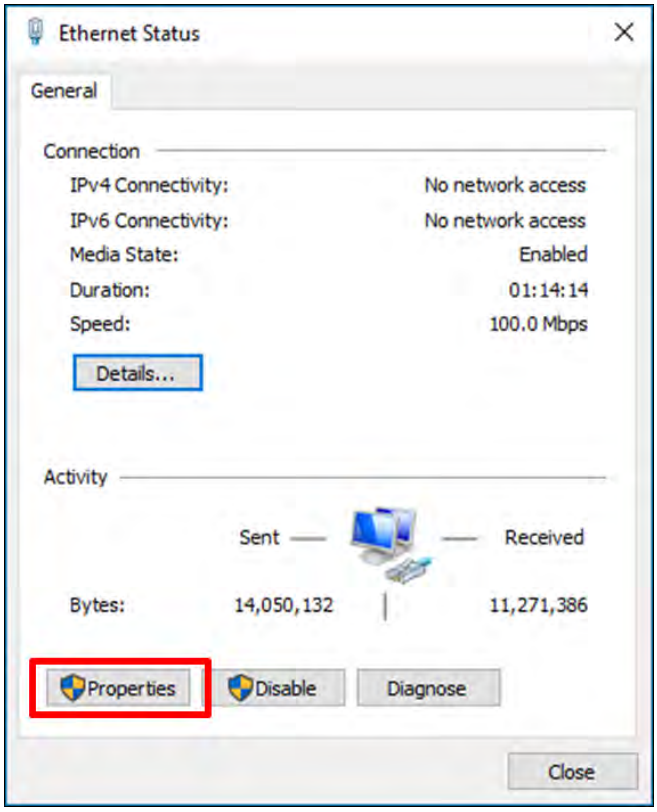
IP Address Configuration (Static IP):

Ensure that your Access Point is connected to your computer.

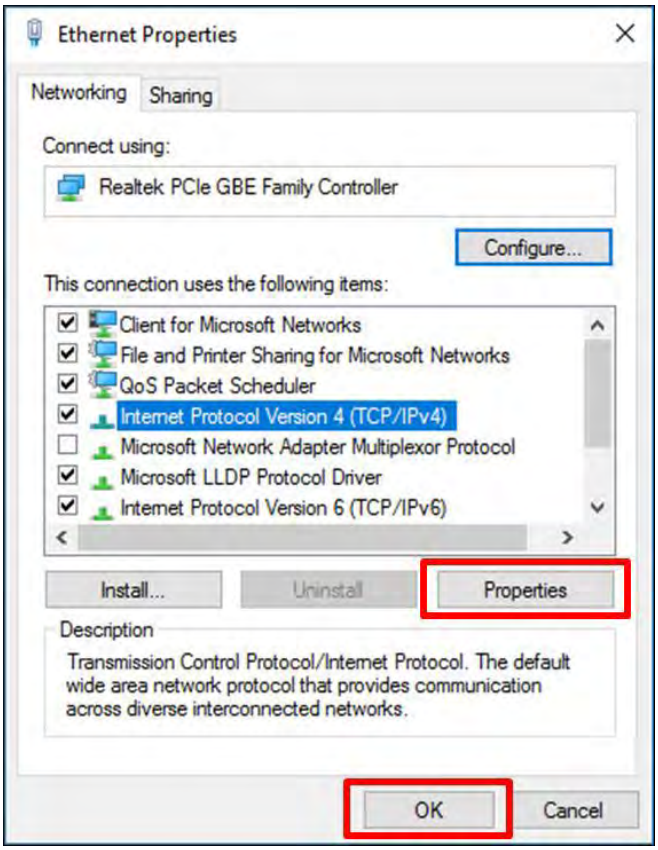
The Access Point comes pre-configured with a default IP Address (192.168.2.1). It's necessary to modify the IP Address of the Ethernet port on your computer that is cabled to the M2COMM Access Point so that they can communicate with one another.



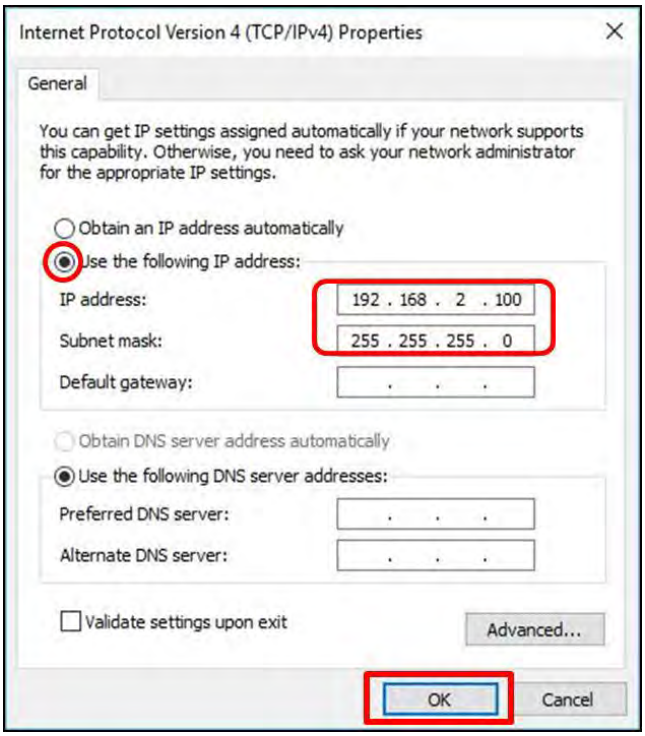
Using your computer mouse, click on Ethernet



Select Properties



Select Internet Protocol Version 4 (TCP/IPv4), and select Properties



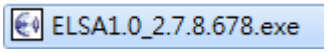
Check Use the following IP address and enter information shown above. Select OK to apply new settings

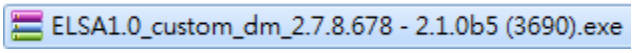
IP Address Configuration (Dynamic IP):

For installations that contain multiple Access Points an external TCP/IP Ethernet hub is required. And please contact M2COMM for further details.

M2COMM ELSA-E Demo Installation:

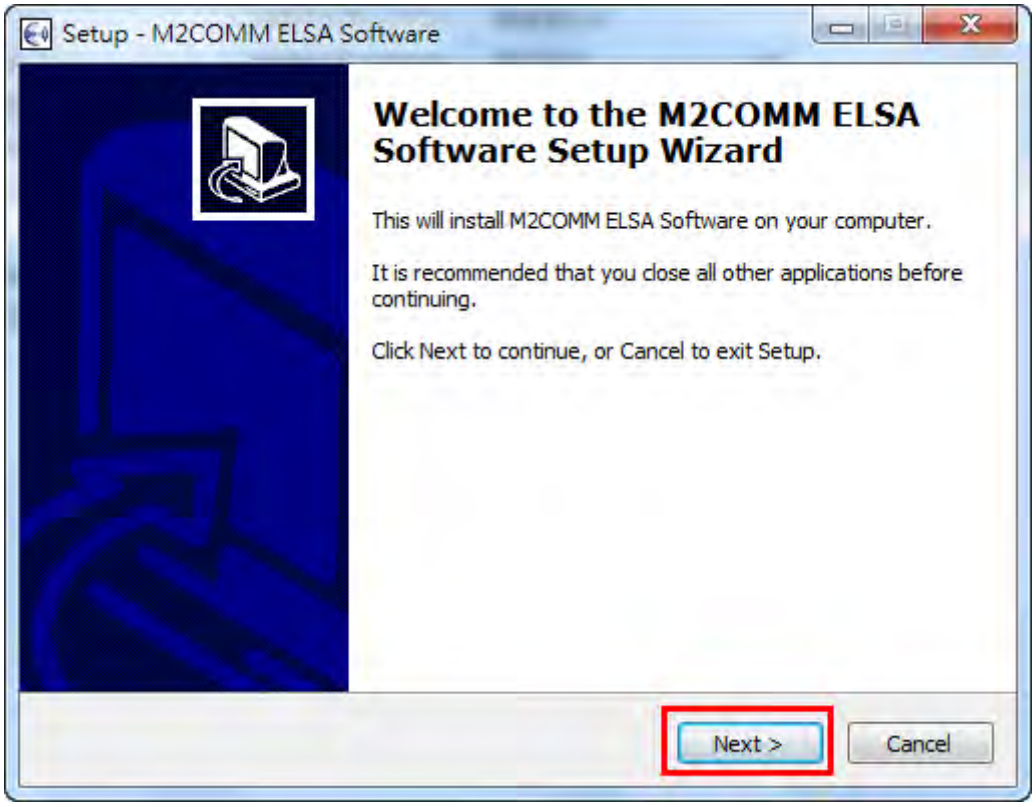
Software Installation:
Put below two executable files into the same folder on your computer. And double-click the "**ELSA1.0_2.7.8.678.exe**" file to begin the installation.



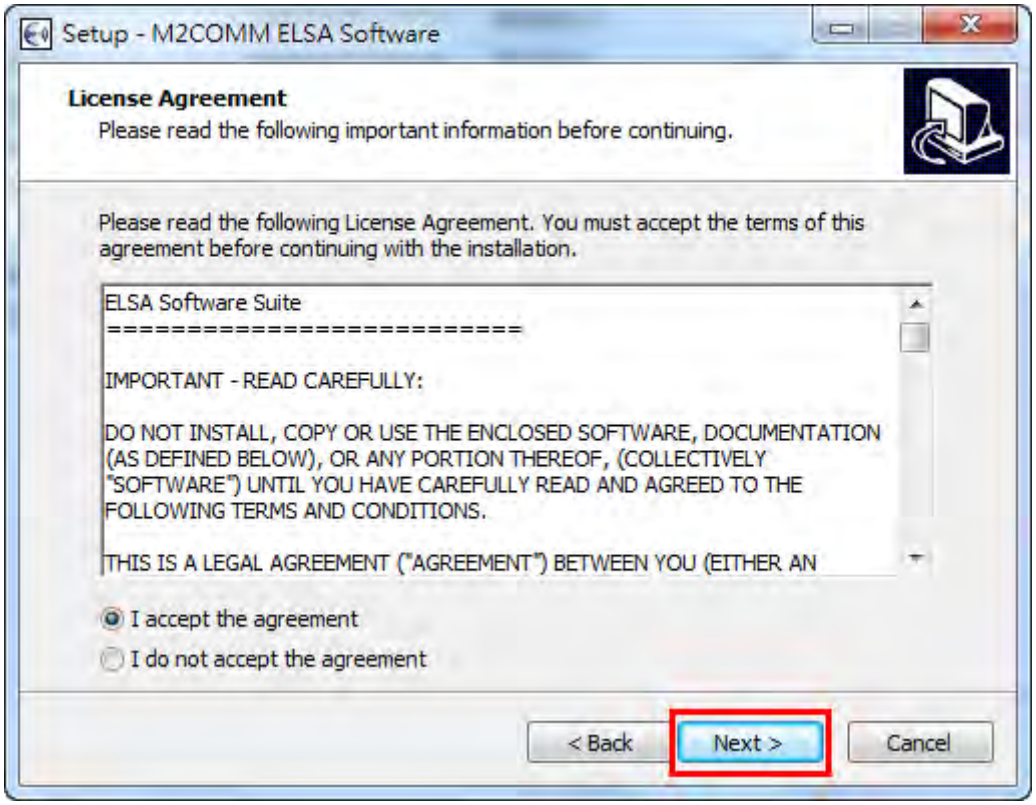


You may be asked for permission to allow the program to make changes to your computer; you must agree to this to enable installation to start.

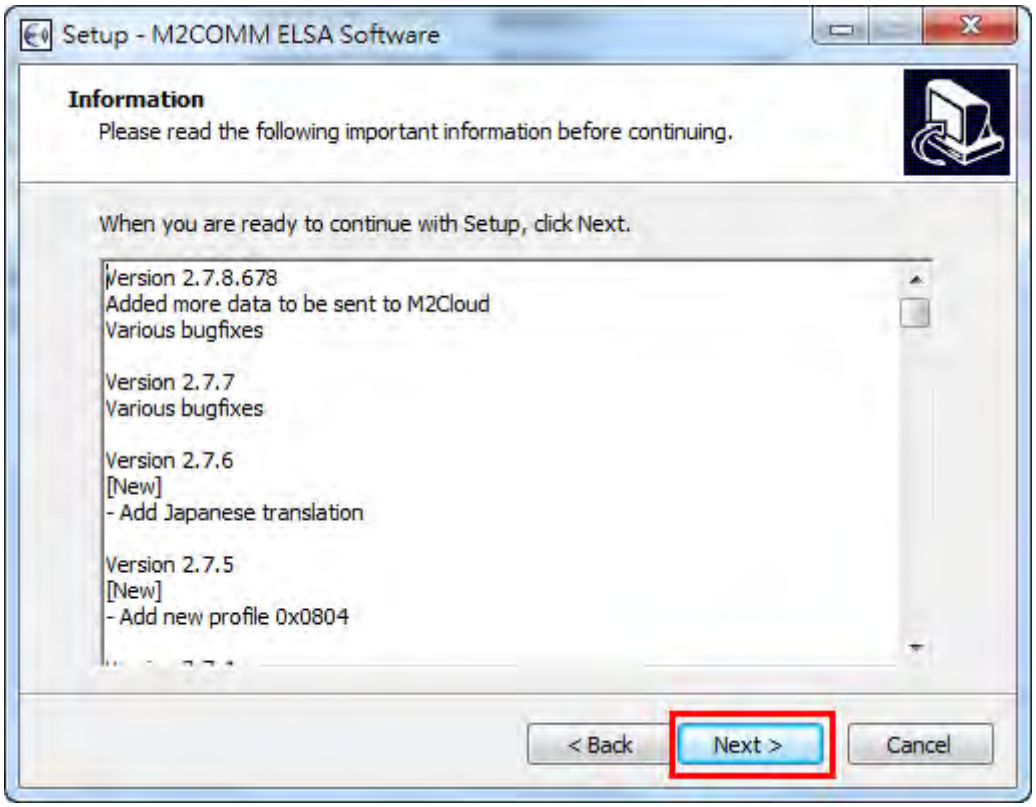
Follow the on-screen instructions to finish the installation process.



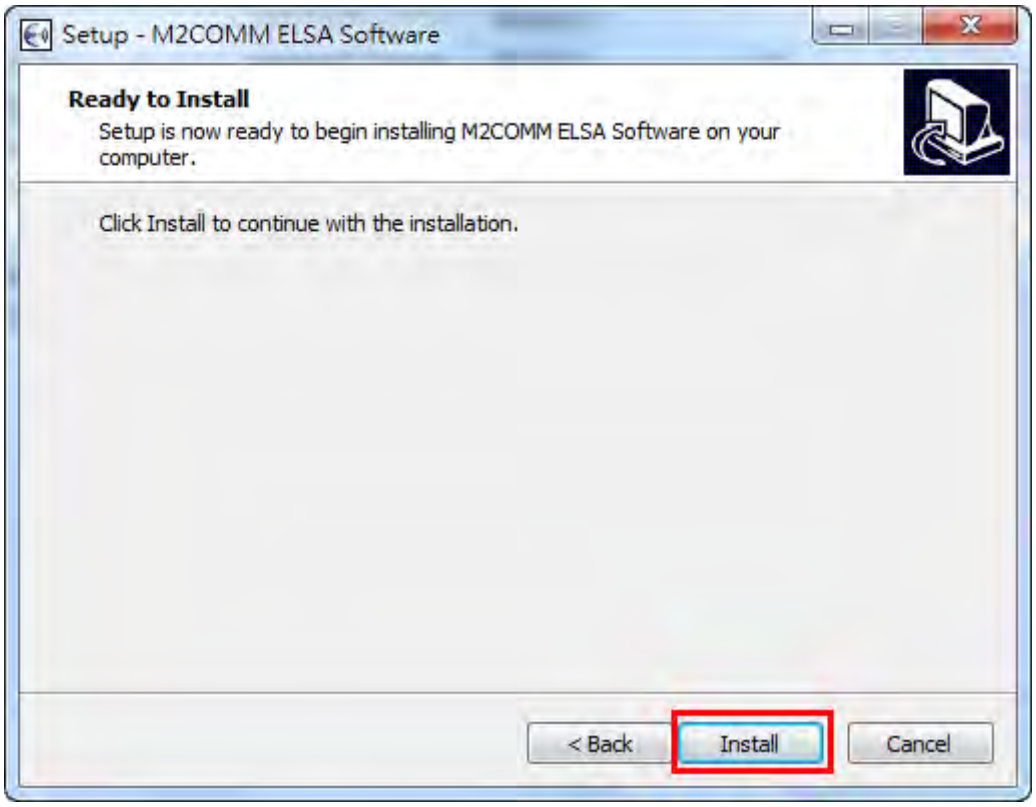
Click ***Next>*** to continue



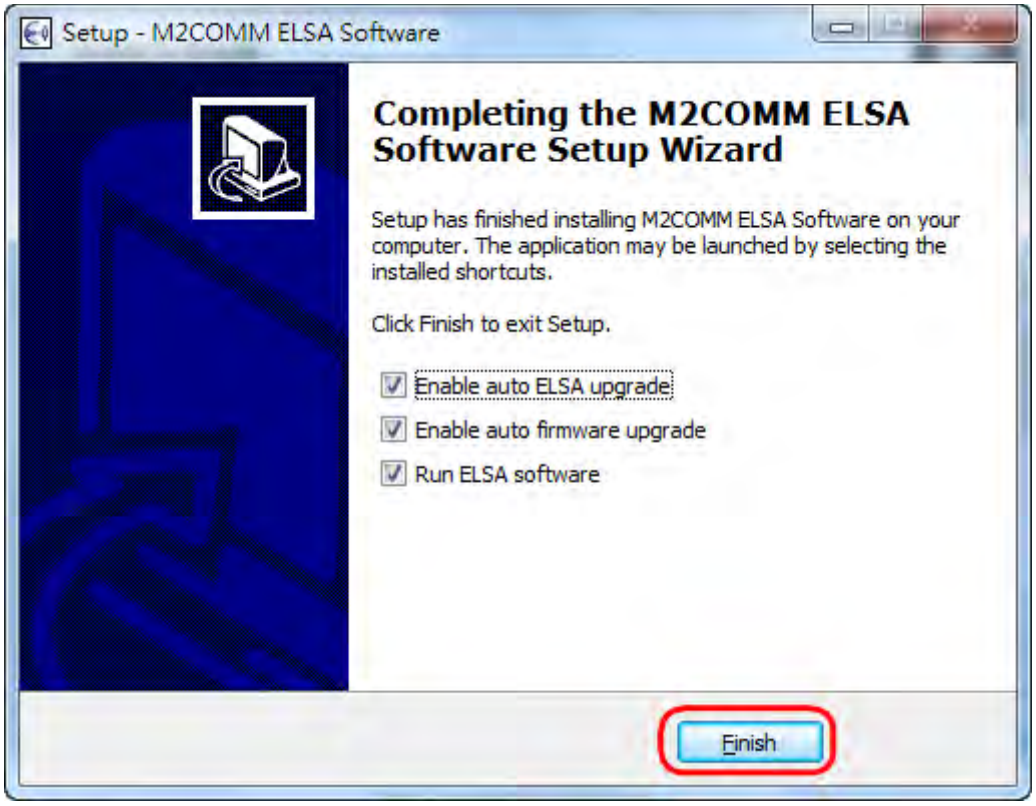
Select **Accept**, and Click **Next**> to continue



Click **Next** to continue

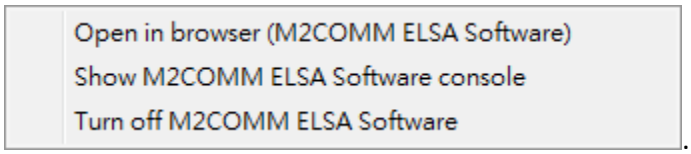


Click ***Install*** to start



Click ***Finish*** to complete the installation

The ELSA-E Demo system has now been installed and executed on your computer. The icon will be hidden inside the toolbar, and you should now be able to locate this icon on your computer screen, by right click.



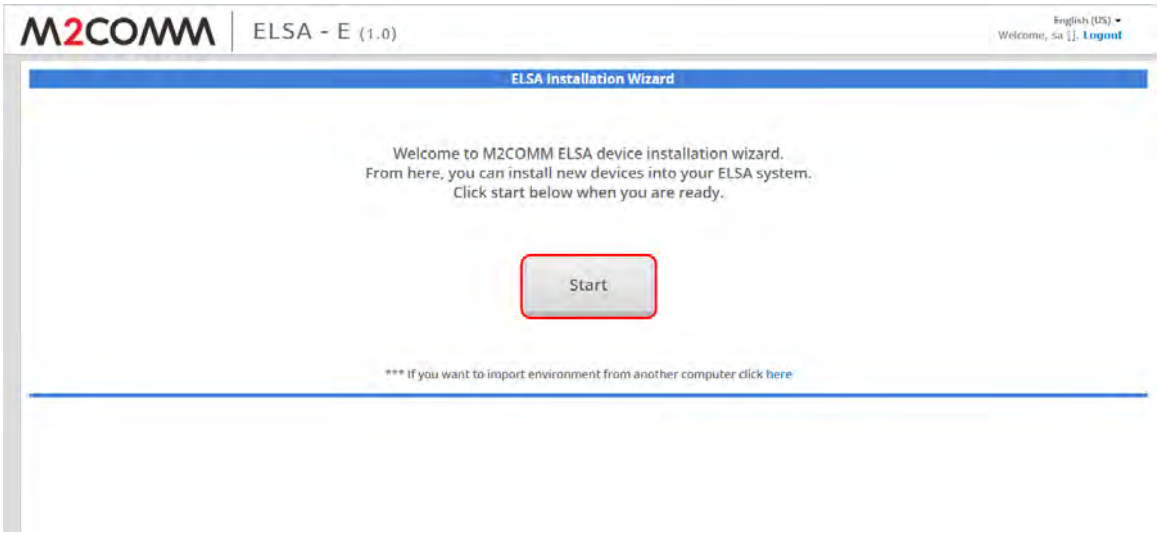
And you can also launch the ELSA software by double click the icon on desktop.

Setting Up the AP and RT

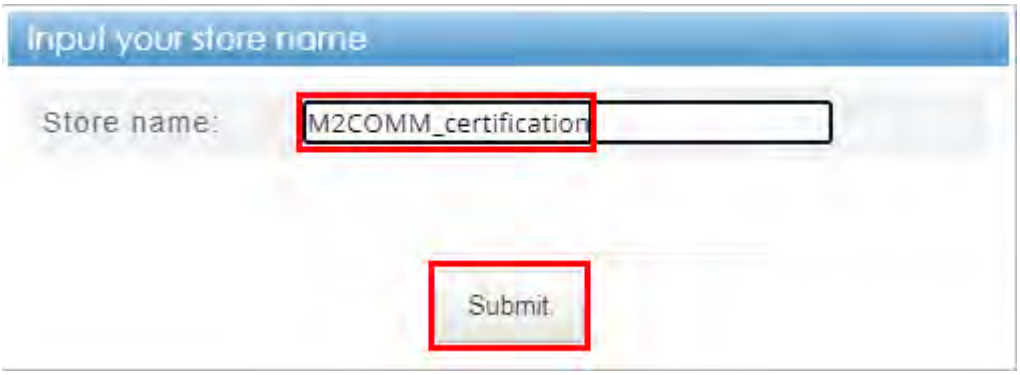
Ensure that the Access Point is connected to your computer that the Router(s) is installed throughout your premises and are powered on.

- **Install the AP**

Input "***sa***" for user name and "***passw0rd***" for password, to access the ELSA web.

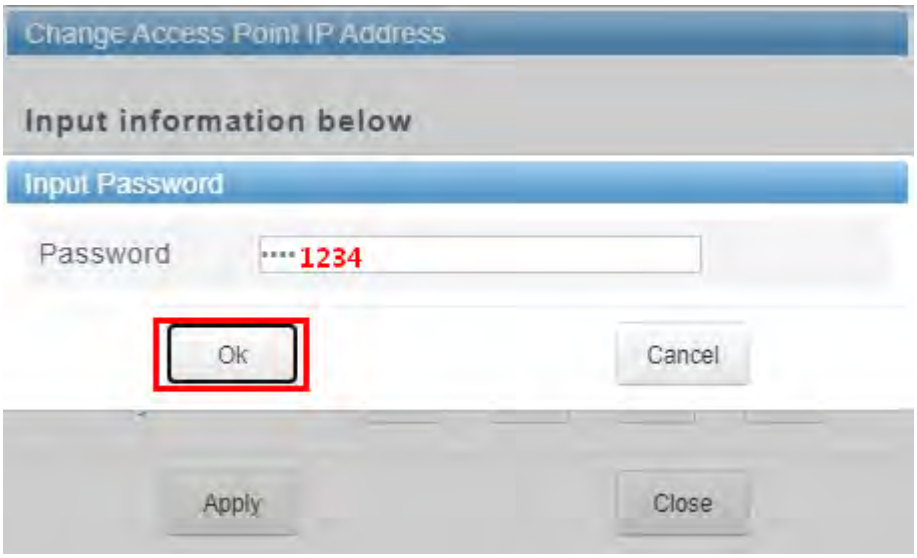


Press "***Start***" to initial the ELSA system installation process.



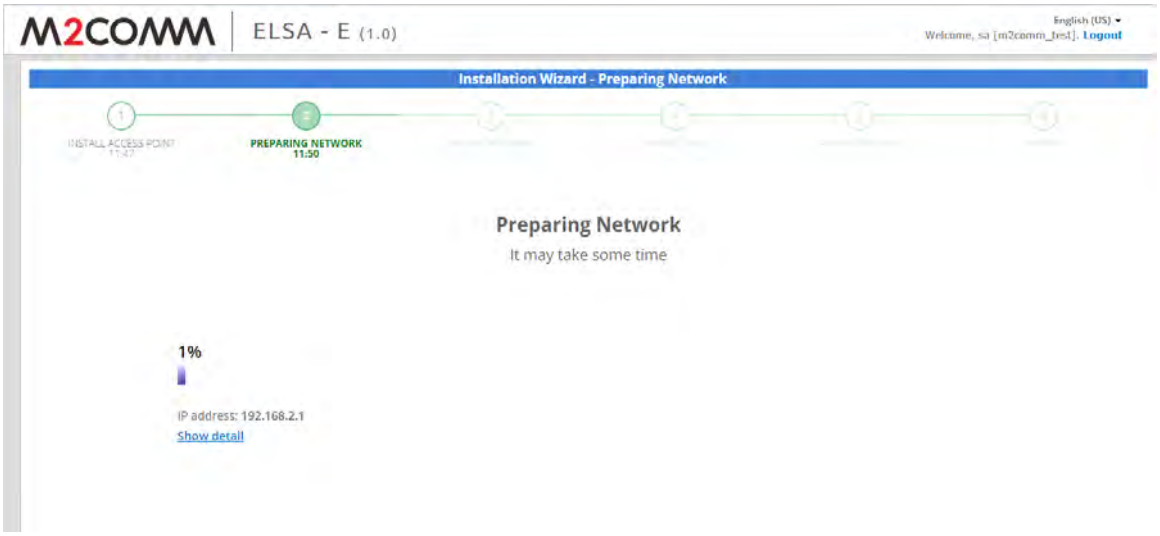
Input the store name, and press ***Submit***

ELSA system will list all the found AP, and pop out the suitable one for user to confirm. Press ***"Yes"*** when the AP info was confirmed



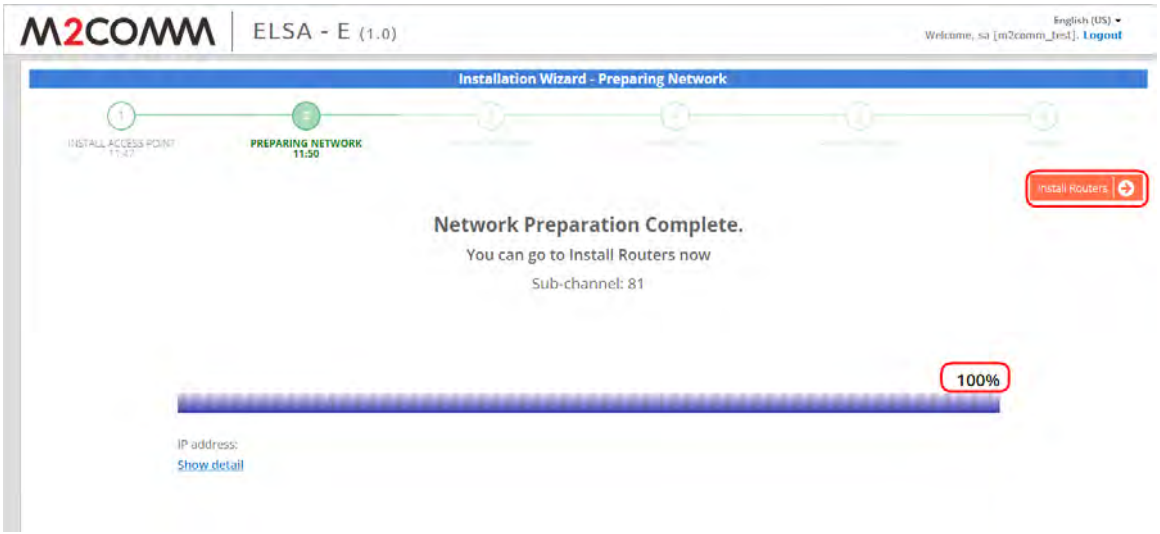
User can change the IP configuration of AP by double click the “pencil”. And type “1234” for the confirmation password following

- **Preparing the Network**



ELSA system will start to find the available wireless channel to use, and the whole process will take 1 hour.

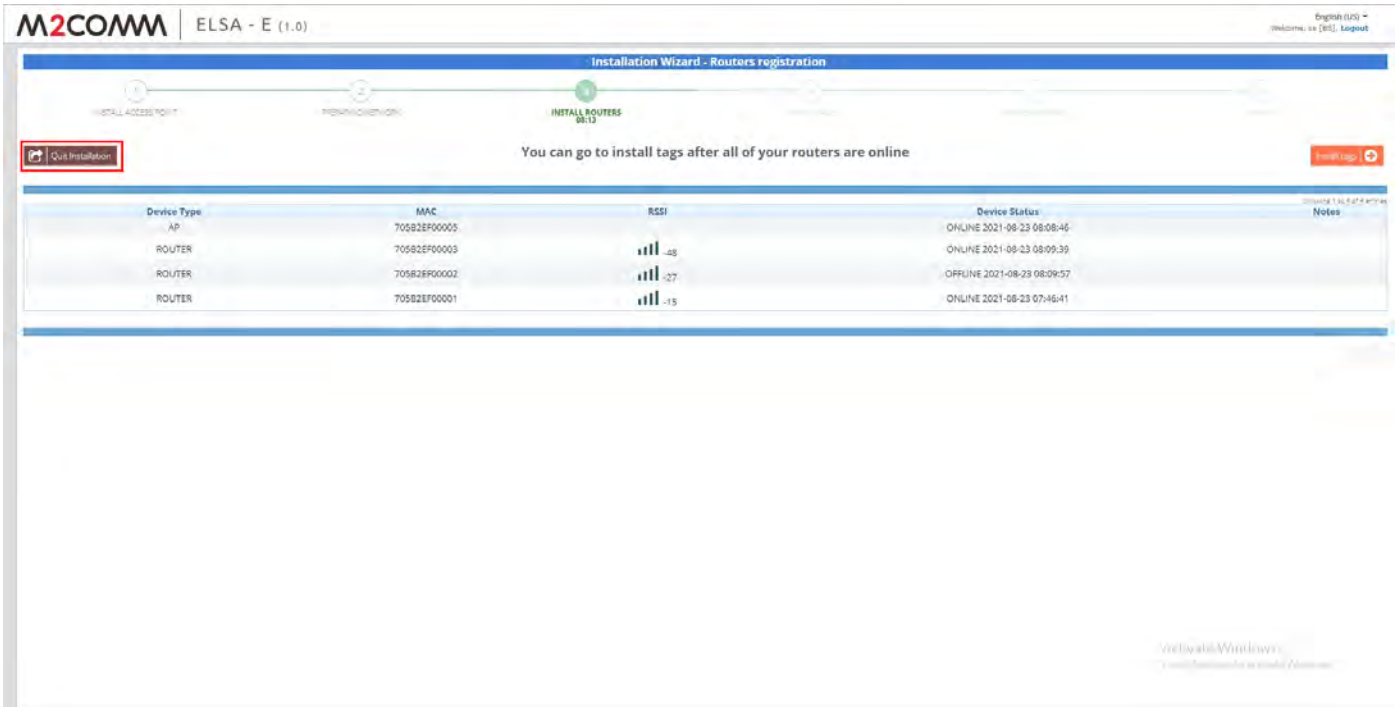
Press “Show detail” for more information.



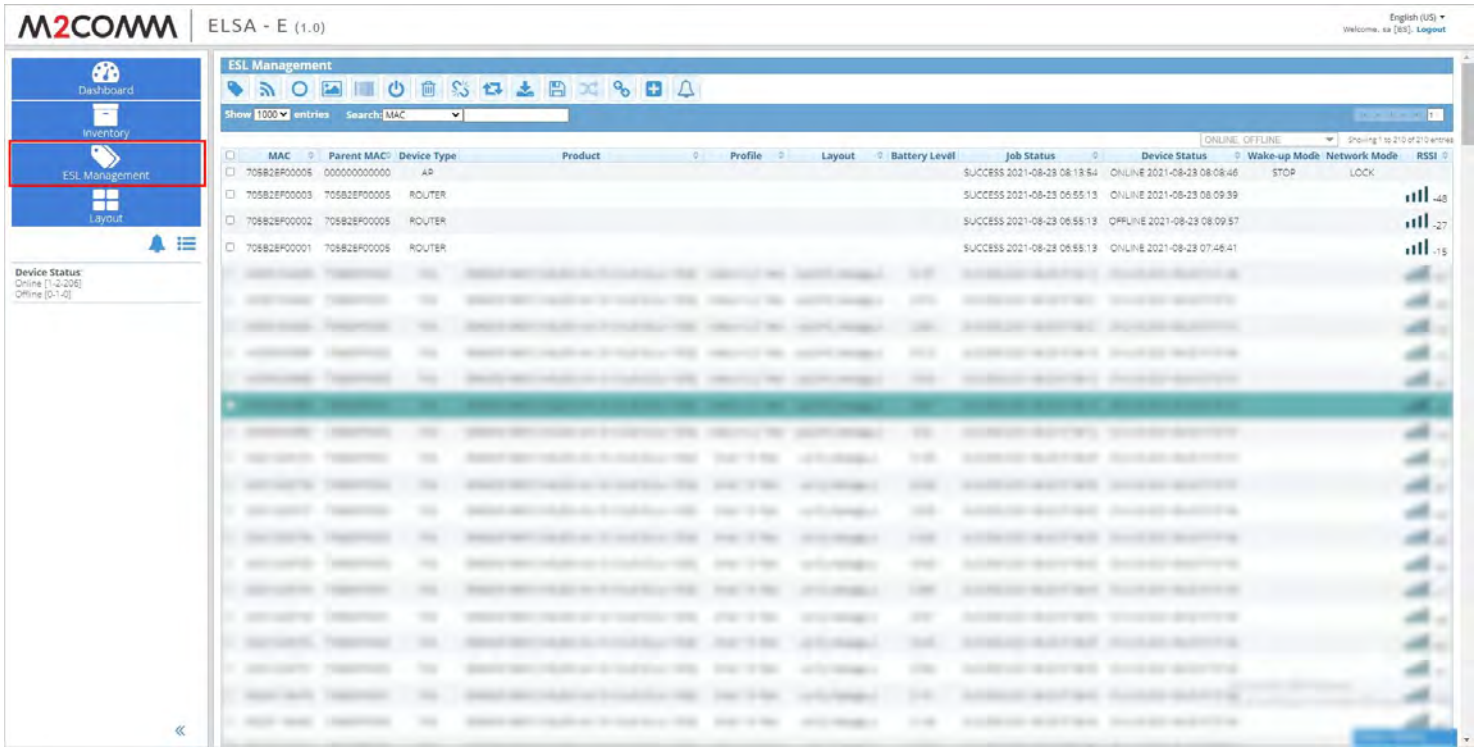
Press "***Install Routers***" for next step, when the progress bar reaches to 100%

- **Install Router**

Power on the Router



After the ELSA system install the Router automatically, press "***Quit Installation***"



Once the RT had been registered, user shall able to see the “AP” and “ROUTER” in “ESL_Management” page

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B 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. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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