

CERIO Corporation

CW-400NAC

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

Quick Start Guide

1. Overview.....	3
2. Package Content.....	3
3. Hardware Specifications	4
4. Product Outward Appearance	6
5. Panel Function Description.....	7
6. LED Explanation.....	8
7. Mounting Installation	8
8. Uninstallation for Mounting kit.....	9
9. Software Configuration	10
10. Login CW-400NAC Web Page.....	14

1. Overview

The **CW-400NAC eXtreme Power AC1200 2.4GHz / 5GHz 2x2 Ceiling / Wall PoE Access Point** is an AC1200 Wireless concurrent dual band wifi device. CW-400NAC **bundles Cerio CenOS 3.0 Software Core** and supports Cerio Wireless Management Software (CWMS), enabling connection to Wireless Indoor Networks for service providers deploying last mile services to home, businesses, and residential broadband subscribers. Network administrators can create and centrally manage multiple subscriber service tiers using per-subscriber rate limiting features. The CW-400NAC Structure (Form Factor) supports both Ceiling and Wall mounting.

The **CW-400NAC eXtreme Power AC1200 2.4GHz / 5GHz 2x2 Ceiling / Wall PoE Access Point** hardware utilizes 800mW (2.4GHZ) / 500mW (5GHZ) eXtreme power and **built-in 2x2 Dual-Band Omni directional antennas**. The CW-400NAC Dual Band Wireless Access Point hardware with **Cerio CenOS 3.0 software may utilize CERIO's CWMS management software** to better organize and manage a network infrastructure. CW-400NAC can also provide subscribers with an Ethernet connection for a local access to extend the range and increase the performance of a wireless network. CW-400NAC hardware also includes **802.3af PoE** capabilities that allows power and data to be supplied to the unit using CAT5 Ethernet cable.

2. Package Content

CW-400NAC Main Unit	x1
Mounting Bracket	x1
Mounting Screw Pack	x1
Quick Installation Service Card	x1

Note: This product supports both Power 12V DC input and Power Over Ethernet (PoE PD) Power input design. However, the Package Content does not include a Power adapter or PoE(PSE) source. Power sources can be requested as an optional component, and includes 12V PoE adapter or 802.3af / at 48V PoE (PSE) devices. (PoE Injector or PoE Switch)

3. Hardware Specifications

Application Software

OS System Compatible edition

Cerio CentOS 3.0 and Cerio CentOS 4.0 Software Core

Specifications

Network Standards Conformance

IEEE 802.11 b/g/n/ac compliant

IEEE 802.3 / IEEE 802.3u

IEEE 802.11 b/g/n compliant

IEEE802.3af/at Power Over Ethernet compliant

IEEE 802.11Q VLAN

IEEE802.11r/IEEE802.11k Fast Roaming

IEEE802.11e WMM

Ethernet Configuration

10/100/1000BASE-TX Auto MDI/MDI-X Ethernet Connector
x 1

(Power over Ethernet 802.3.af/at PoE in)

LED Indicators

Power LED x 1

LAN 2 (PoE Bridge) LED x 1

LAN 1 (PoE In) LED x 1

2.4GHz Wifi LED x 1

5GHz Wifi LED x 1

Wireless Specifications

Data Transfer Rate

IEEE802.11b : 1 / 2 / 5.5 / 11Mbps (auto sensing)

IEEE801.11g : 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54Mbps (auto sensing)

IEEE802.11n: 300Mbps (at 40MHz), 150Mbps (at 20MHz)

IEEE802.11ac:, 867Mbps (at 80MHz) 400Mbps (at 40MHz)

Frequency Range	<p>2.412 ~ 2.462GHz (USA)</p> <p>2.412 ~ 2.484GHz (Japan)</p> <p>2.412 ~ 2.472GHz (Europe ETSI)</p> <p>2.457 ~ 2.462 GHz (Spain)</p> <p>2.457 ~ 2.472 GHz (France)</p> <p>IEEE802.11a/an/11ac :</p> <p>5.150 – 5.350 & 5.725 – 5.825 GHz(USA)</p> <p>4.900 – 5.250 GHz(Japan)</p> <p>5.150 – 5.350 & 5.470 – 5.725GHz (Europe ETSI)</p>
Channel Spacing	<p>IEEE802.11b/g/n : 20/40MHz</p> <p>IEEE802.11ac: 20/40/80MHz</p>
Media Access Protocol	CSMA / CA with ACK
Modulation Method	<p>IEEE802.11b : DSSS (DBPK,DQPSK,CCK)</p> <p>IEEE802.11a/g/n: OFDM(64-QAM,16-QAM,QPSK,BPSK)</p> <p>IEEE802.11ac : OFDM (256-QAM, 64,-QAM, 16-QAM, QPSK,BPSK)</p>
Operating Channels	<p>802.11b/g/n : 11 for FCC,14 for Japan,13 for Europe, 2 for Spain, 4 for France</p> <p>IEEE 802.11an/ac @ 5GHz :</p> <p>US : 12 (CH: 36, 40, 44, 48, 52, 56, 60, 64, 149, 153, 157, 161)</p> <p>Japan : 4 (CH: 34, 38, 42, 46)</p> <p>ETSI : 19 (CH: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140)</p>
Transmit Power Variation	2.4Ghz : Max : 29 ± 1 dBm 5Ghz : Max : 27 ± 1 dBm
Receiver Sensitivity	2.4Ghz : Max : -96 dBm 5Ghz : Max : -92 dBm

Environmental & Mechanical Characteristics

Operating Temperature	-10 °C ~ 55 °C
Storage Temperature	-20 °C ~ 65°C
Operating Humidity	10% - 90% Non-Condensing
Storage Humidity	10% - 90% Non-Condensing

Antenna	Build in 2x2 Dual Band Omni Directional Antenna
Form Factor	Supports both Ceiling Mounting and Wall mounting, installed using a provided Mounting Bracket.
System Power Consumption	12Watt Max.
Power Supply	110 – 220V AC Power;12 VDC Supports Power Over Ethernet (POE 48~57V voltage) Integratged IEEE 802.3af /at Power over Ethernet (PoE)
Input Power	AC to DC 12 VDC
Dimensions (W x H x D)	Main Unit : 33x158x158mm Main Unit with Bracket : 38x158x158mm
Unit Weight	276g
Certifications	FCC,CE, NCC, ROHS compliant

4. Product Outward Appearance

Product Front



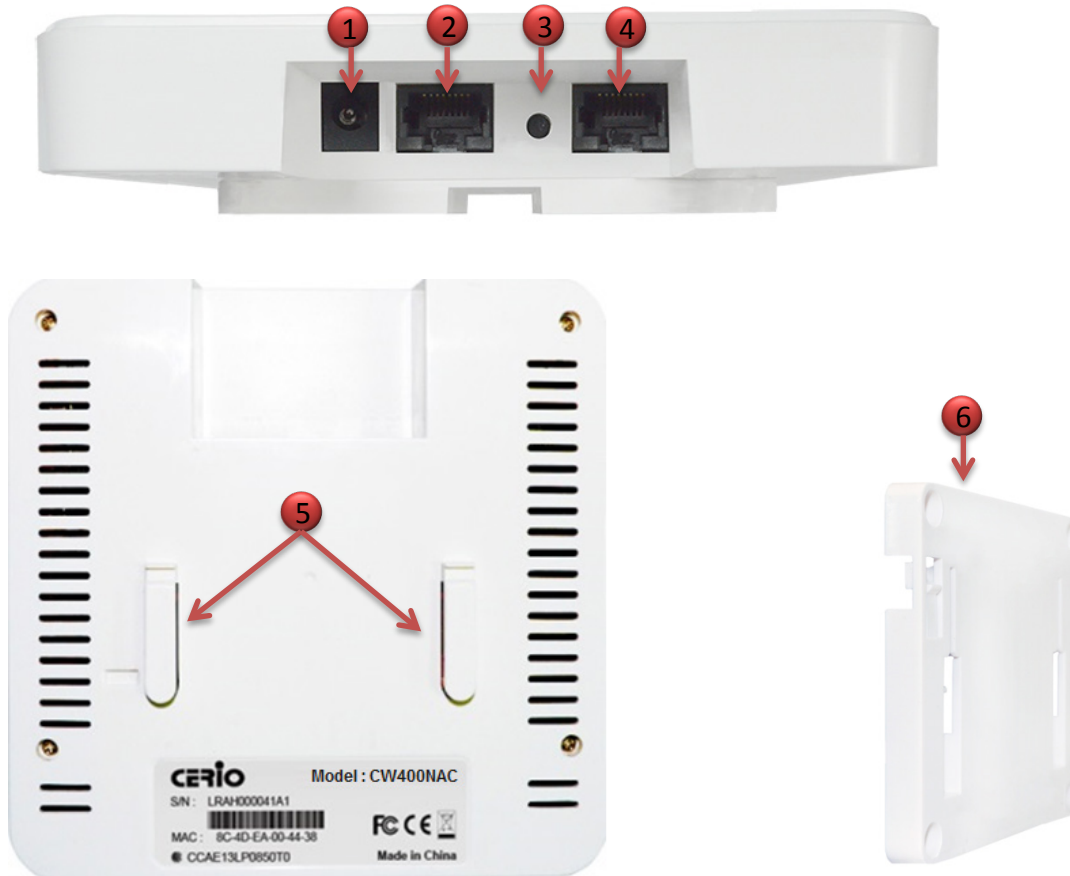
Product Reverse side



Product Side

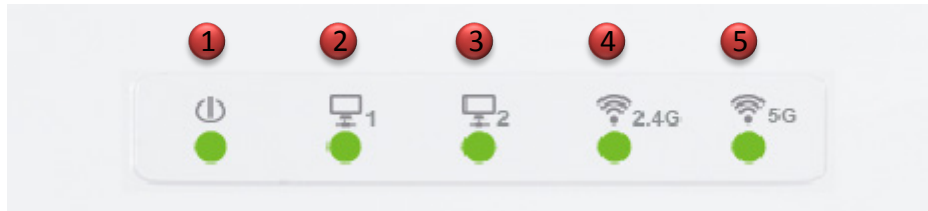


5. Panel Function Description



1. 12V / 1A DC input power (The power adapter by optional)
2. The Ethernet connect by LAN1 Port, Support PoE in.
3. Reset button (Please press and hold for about 15 seconds and then release)
4. The Ethernet connect by LAN2 Port, Support PoE Bridge function.
5. Mounting Clips.
6. Mounting Bracket

6. LED Explanation

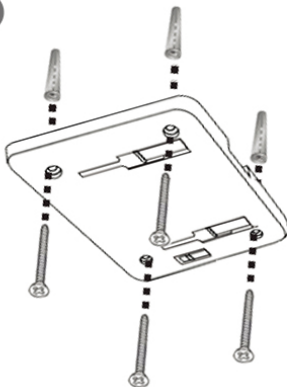


- (1) Power LED
- (2) RJ-45 Ethernet LED of the LAN1 connection
- (3) RJ-45 Ethernet LED of the LAN2 connection
- (4) 2.4G Wi-Fi LED
- (5) 5G Wi-Fi LED

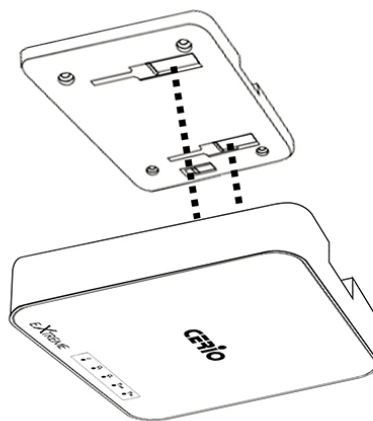
7. Mounting Installation

Ceiling Mount

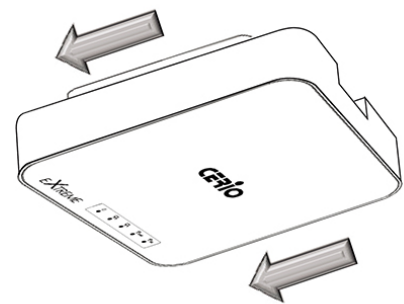
1



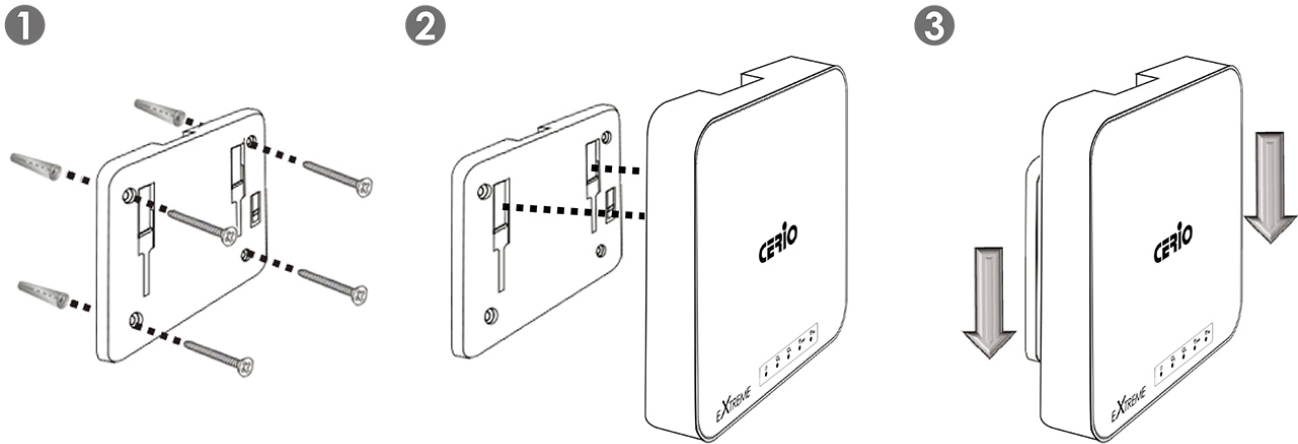
2



3

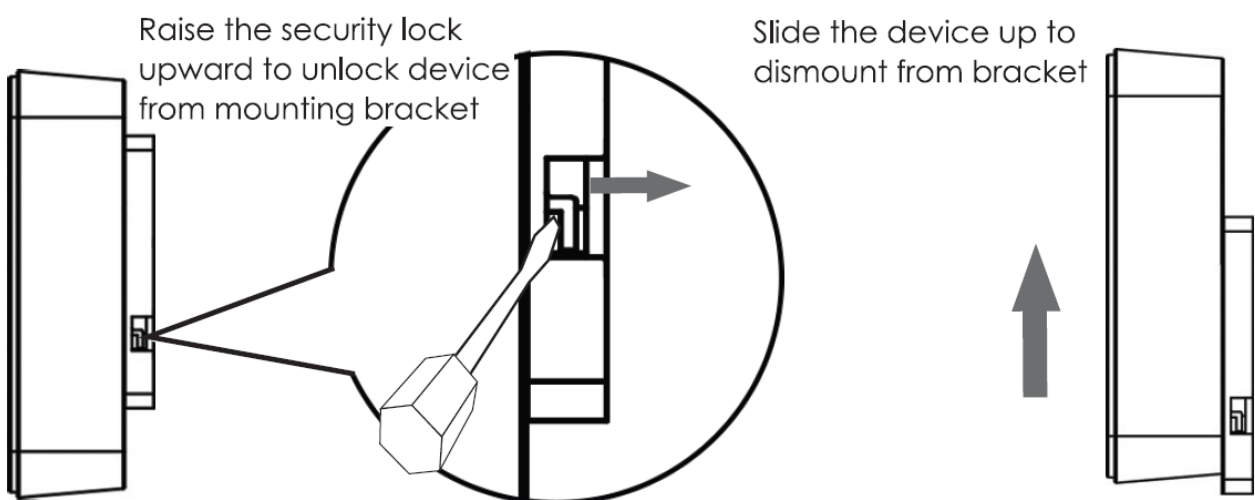


Wall Mount



1. Position the Mounting Bracket in the desired location. Use the screws and anchors in the mounting kit to secure the bracket into position.
2. Align the device with the mounting Hinges on the bracket. Ensure that the mounting clips fit correctly into each slot.
3. Slide the CW-300N down until the device is locked into place.

8. Uninstallation for Mounting kit



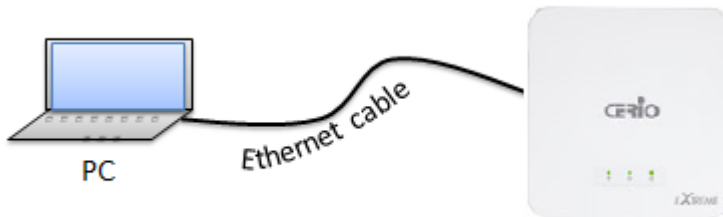
Raise the security lock upward to unlock device from mounting bracket

Slide the device up to dismount from bracket

9. Software Configuration

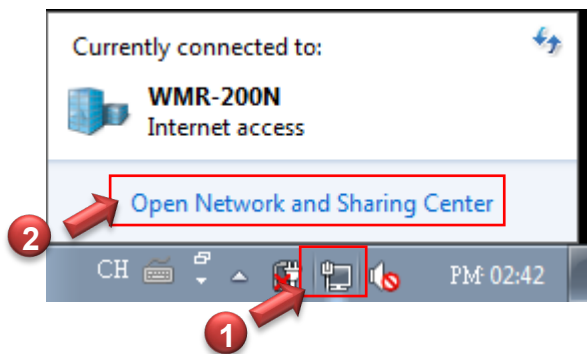
PC link to device setup by OS Windows7

Please PC link to Device used cat5/6 Ethernet cable.



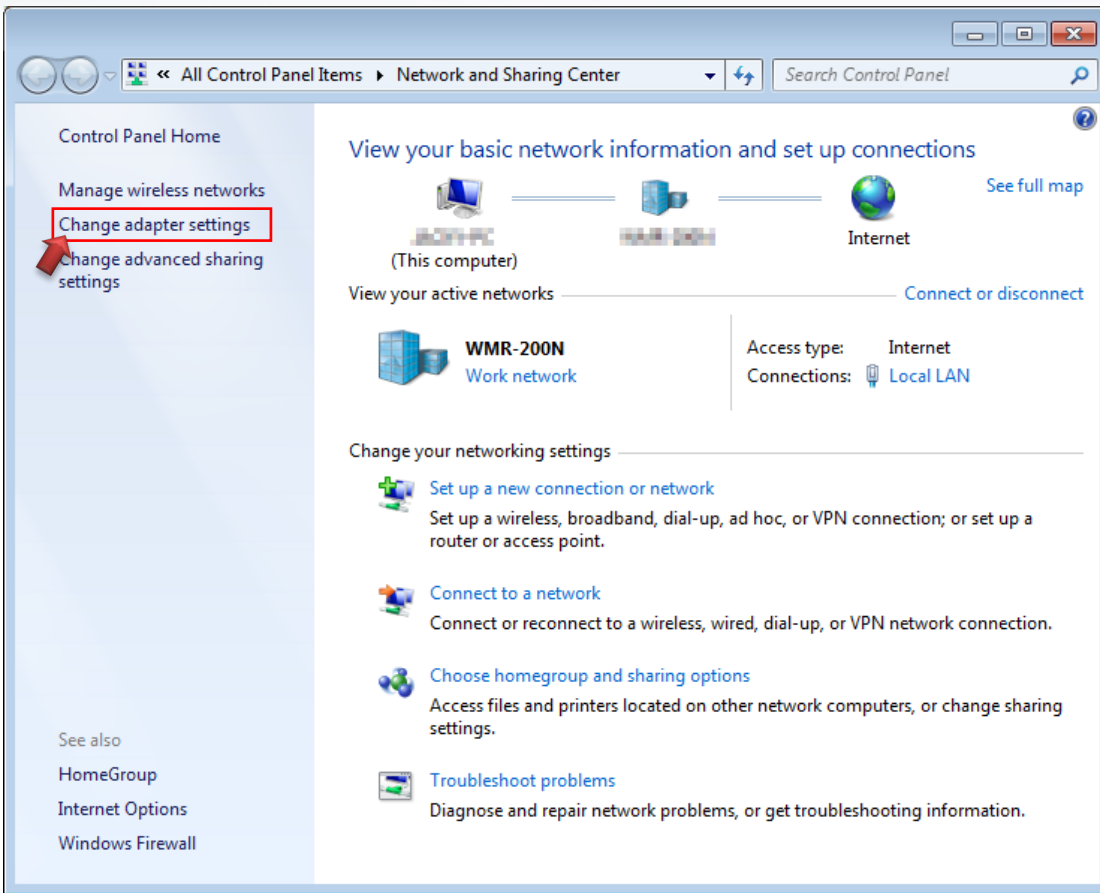
Step 1 :

Please click on the computer icon in the bottom right window, and click **“Open Network and Sharing Center”**



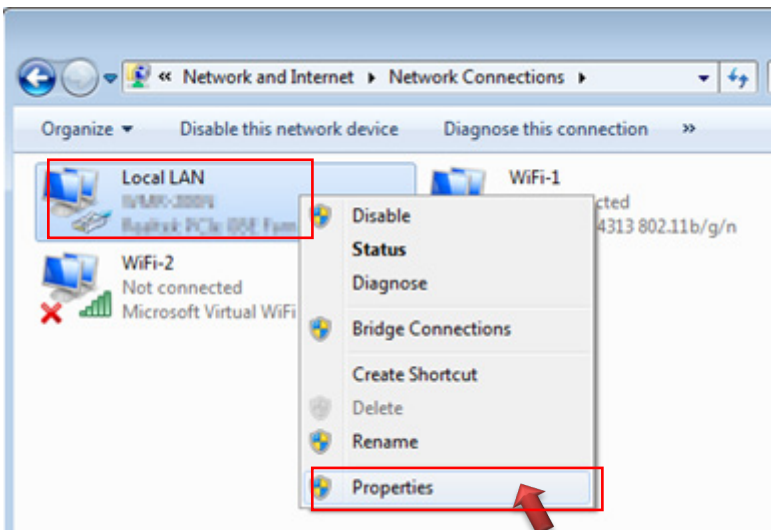
Step 2 :

In the Network and Sharing Center page, Please click on the left side of **“Change adapter setting”** button



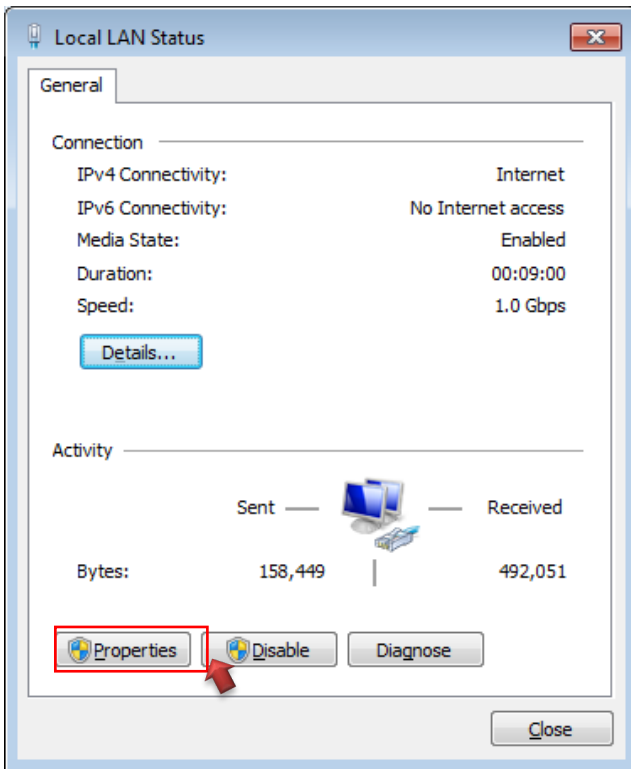
Step 3 :

In “**Change adapter setting**” Page. Please find Local LAN and Click the right button on the mouse and Click “**Properties**”



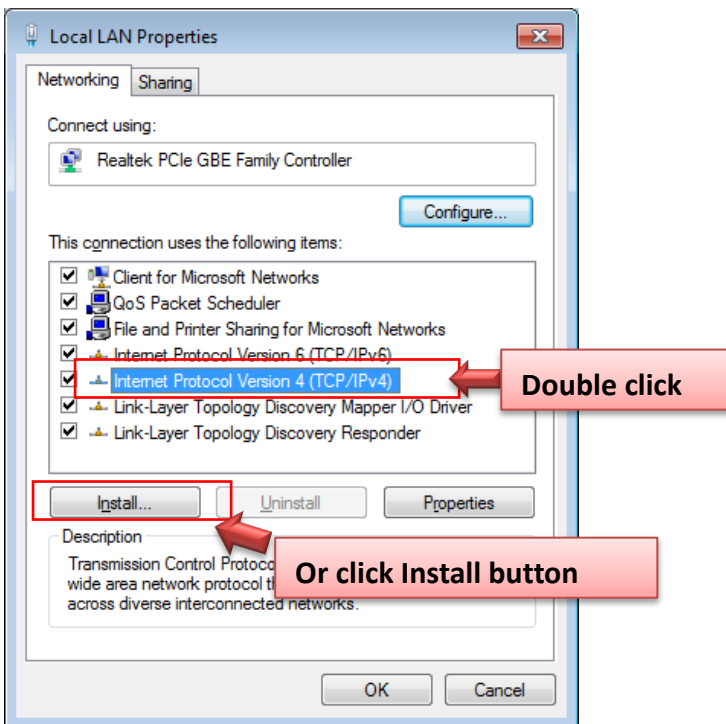
Step 4 :

In “**Properties**” page, please Click “**Properties**” button to TCP/IP setting



Step 5 :

In Properties page to setting IP address, please find “**Internet Protocol Version 4 (TCP/IPv4)**” and double click or click “**Install**” button.

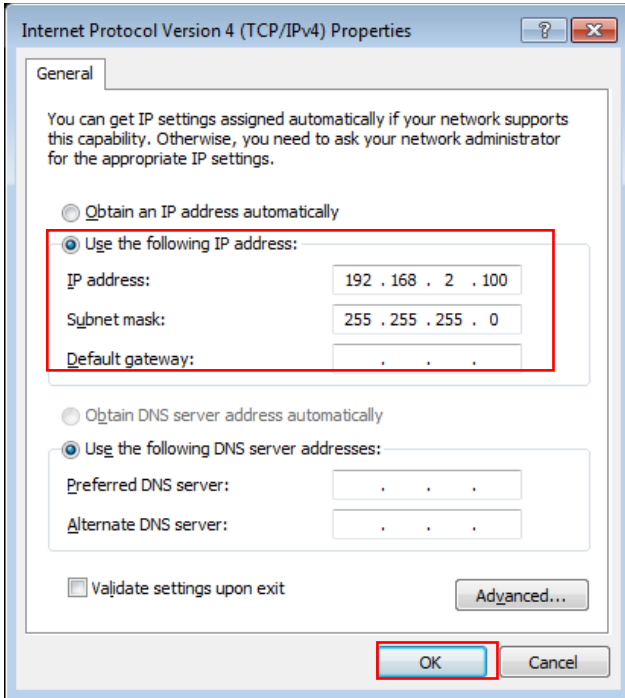


Step 6 :

Select **"Use the following IP address"**, and fix in IP Address : 192.168.2.#
ex. The # is any number by 1 to 253

Subnet mask : 255.255.255.0

And Click **"OK"** to complete the fixed computer IP setting



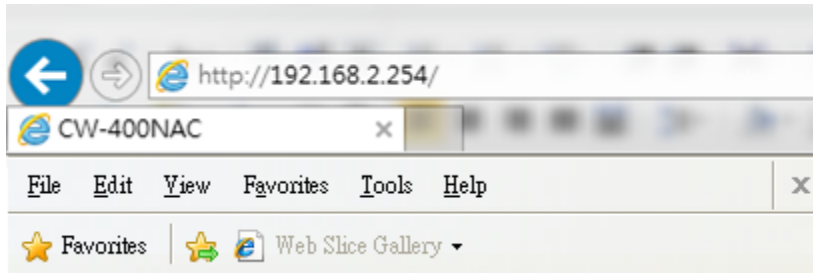
Please Open Web Browser

Without a valid certificate, users may encounter the following problem in IE7 when they try to access system's WMI (<https://192.168.2.254>). There will be a "Certificate Error", because the browser treats system as an illegal website.

10. Login CW-400NAC Web Page

Launch Web Browser

Launch as web browser to access the web management interface of system by entering the default IP Address, <http://192.168.2.254/>, in the URL field, and then press Enter.



System Login



Please use default Users name: “**root**” and default password “**default**” to login.