

User's Guide

NAP Series

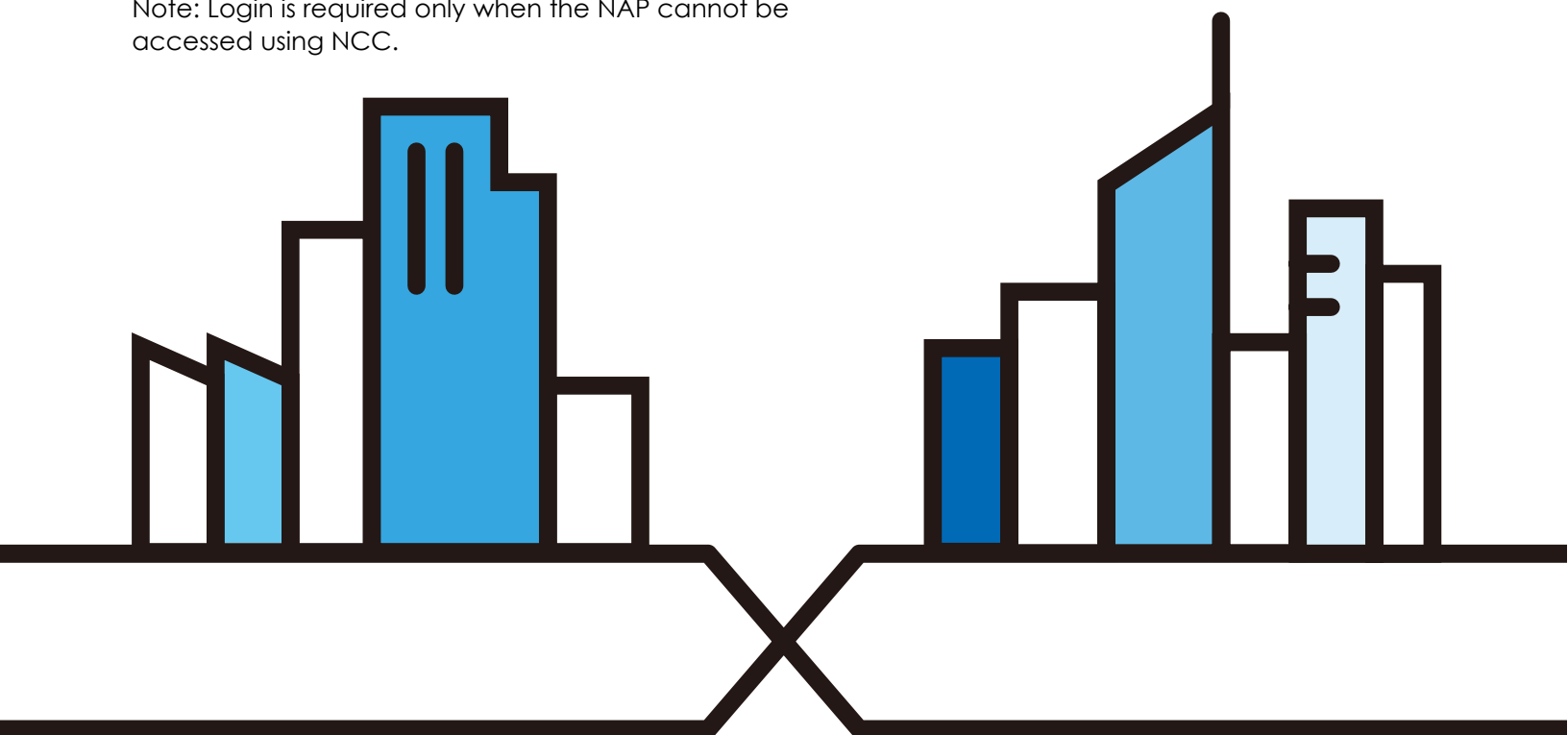
802.11ac Dual-Radio Nebula Cloud Managed Access Points

Default Login Details

Web Address	http://(DHCP-assigned IP) or http://192.168.1.2
User Name	admin
Password	Assigned by NCC or 1234

Version 6.0 Edition 1, 03/2020

Note: Login is required only when the NAP cannot be accessed using NCC.



IMPORTANT!

READ CAREFULLY BEFORE USE.

KEEP THIS GUIDE FOR FUTURE REFERENCE.

This is a User's Guide for a series of products. Not all products support all firmware features. Screenshots and graphics in this book may differ slightly from your product due to differences in your product firmware or your computer operating system. Every effort has been made to ensure that the information in this manual is accurate.

Related Documentation

- Quick Start Guide

The Quick Start Guide shows how to connect the NAP and register it with the Nebula Control Center (NCC) for cloud management.

- Web Configurator Online Help

Click the help icon in any screen for help in configuring that screen and supplementary information.

- Nebula Control Center User's Guide

This User's Guide shows how to manage the Nebula devices remotely. The features of these devices are managed through Nebula Control Center.

- More Information

Go to **support.zyxel.com** to find other information on the NAP.



Document Conventions

Warnings and Notes

These are how warnings and notes are shown in this guide.

Warnings tell you about things that could harm you or your device.

Note: Notes tell you other important information (for example, other things you may need to configure or helpful tips) or recommendations.

Syntax Conventions

- All models in this series may be referred to as the "NAP" in this guide.
- Product labels, screen names, field labels and field choices are all in **bold** font.
- A right angle bracket (>) within a screen name denotes a mouse click. For example, **Configuration > Network > IP Setting** means you first click **Configuration** in the navigation panel, then the **Network** sub menu and finally the **IP Setting** tab to get to that screen.

Icons Used in Figures

Figures in this guide may use the following generic icons. The NAP icon is not an exact representation of your device.

NAP 	Router 	Switch 	Internet 
Server 	Desktop 	Laptop 	IP Phone 
Printer 	Nebula Switch 	Nebula Gateway 	Smart T.V. 
Access Point 	Smartphone 	Set-top box 	

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CHAPTER 1

Introduction

1.1 Overview

This User's Guide covers the following models: NAP102, NAP203, NAP303 and NAP353. Your NAP is a wireless AP (Access Point). It extends the range of your existing wired network without additional wiring, providing easy network access to mobile users.

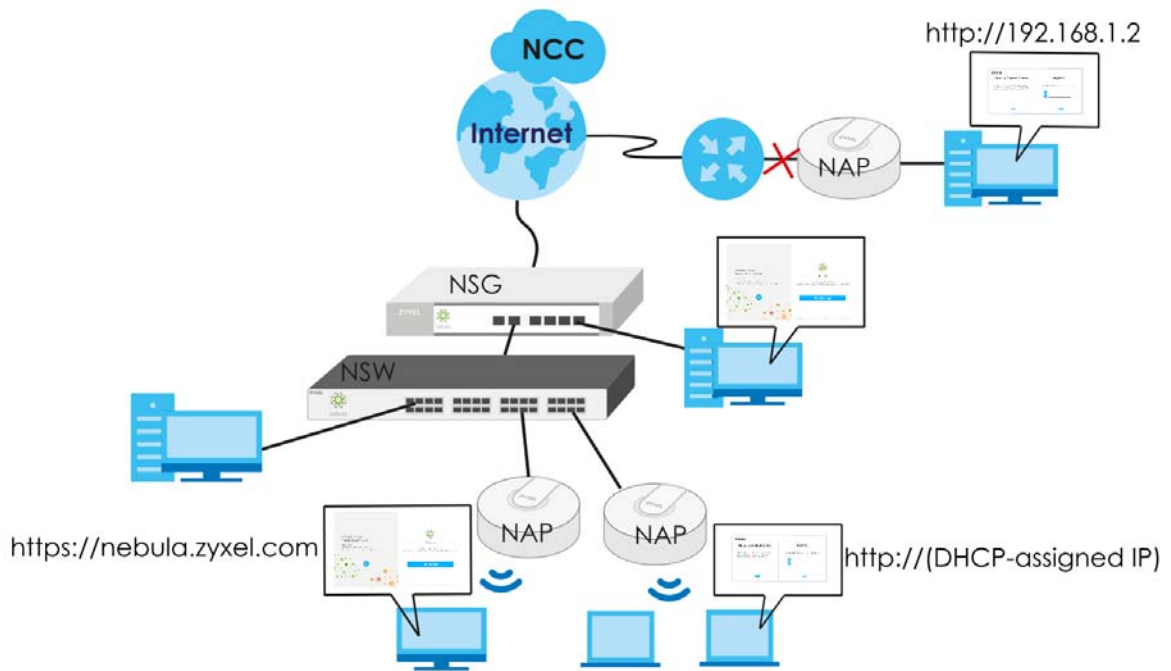
Table 1 NAP Series Comparison Table

FEATURES	NAP102	NAP203	NAP303	NAP353
One Ethernet LAN Port	No	Yes	Yes	No
One PoE Enabled Uplink Port	Yes	Yes	Yes	Yes
External Antennas	No	No	No	Yes
One DC Power Socket	Yes	No	Yes	No

1.1.1 Management

The NAP is managed and provisioned automatically by the [NCC \(Nebula Control Center\)](#) when it is connected to the Internet and has been registered to a site and organization. If you are having problems with accessing the Internet and the NCC, you may need to change the NAP's VLAN setting or manually set its IP address through its built-in web-based configuration tool (web configurator).

You can use the Zyxel ZON utility, or check the connected gateway for the NAP's current LAN IP address. Alternatively, disconnect the gateway or disable its DHCP server function, connect your computer to the NAP's LAN/Ethernet port and use the NAP's default static LAN IP address (192.168.1.2) to access the web configurator. Make sure your computer's IP address is in the same subnet as the NAP's IP address.

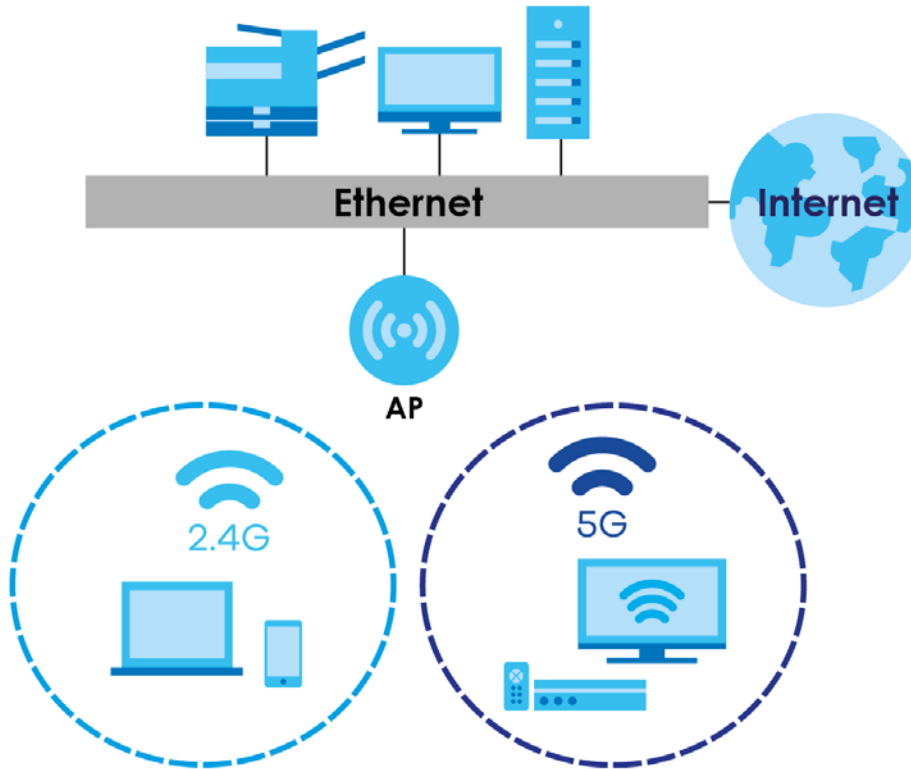


1.1.2 Dual-Radio

The NAP is equipped with dual wireless radios. This means you can configure two different wireless networks to operate simultaneously.

Note: A different channel should be configured for each WLAN interface to reduce the effects of radio interference.

You could use the 2.4 GHz band for regular Internet surfing and downloading while using the 5 GHz band for time sensitive traffic like high-definition video, music, and gaming.

Figure 1 Dual-Radio Application

1.2 Ways to Manage the NAP

You can use the following ways to manage the NAP. If you need to change the NAP's VLAN setting or manually set its IP address before connecting it to the Internet, use its built-in Web Configurator.

Web Configurator

The Web Configurator allows basic NAP setup and monitoring using an Internet browser. This User's Guide provides information about the Web Configurator.

NCC (Nebula Control Center)

With the NCC, you can remotely manage and monitor the NAP through a cloud-based network management system. See the NCC User's Guide for more information.

ZON Utility

Zyxel One Network (ZON) Utility is a utility tool that assists you to set up and maintain network devices in a more simple and efficient way. You can download the ZON Utility at www.zyxel.com and install it on your computer (Windows operating system). For more information on ZON Utility see [Section 1.3 on page 10](#).

Command-Line Interface (CLI)

The CLI allows you to use text-based commands to configure the NAP. You can access it using remote management (for example, SSH or Telnet). See the Command Reference Guide for more information.

File Transfer Protocol (FTP)

This protocol can be used for firmware upgrades and configuration backup and restore.

1.3 Zyxel One Network (ZON) Utility

ZON Utility is a program designed to help you deploy and manage a network more efficiently. It detects devices automatically and allows you to do basic settings on devices in the network without having to be near it.

The ZON Utility issues requests via Zyxel Discovery Protocol (ZDP) and in response to the query, the device responds back with basic information including IP address, firmware version, location, system and model name in the same broadcast domain. The information is then displayed in the ZON Utility screen and you can perform tasks like basic configuration of the devices and batch firmware upgrade in it. You can download the ZON Utility at www.zyxel.com and install it on your computer (Windows operating system).

1.3.1 Requirements

Before installing the ZON Utility on your PC, please make sure it meets the requirements listed below.

Operating System

At the time of writing, the ZON Utility is compatible with:

- Windows 7 (both 32-bit / 64-bit versions)
- Windows 8 (both 32-bit / 64-bit versions)
- Windows 8.1 (both 32-bit / 64-bit versions)
- Window 10 (both 32-bit / 64-bit versions)

Note: To check for your Windows operating system version, right-click on **My Computer > Properties**. You should see this information in the **General** tab.

Hardware

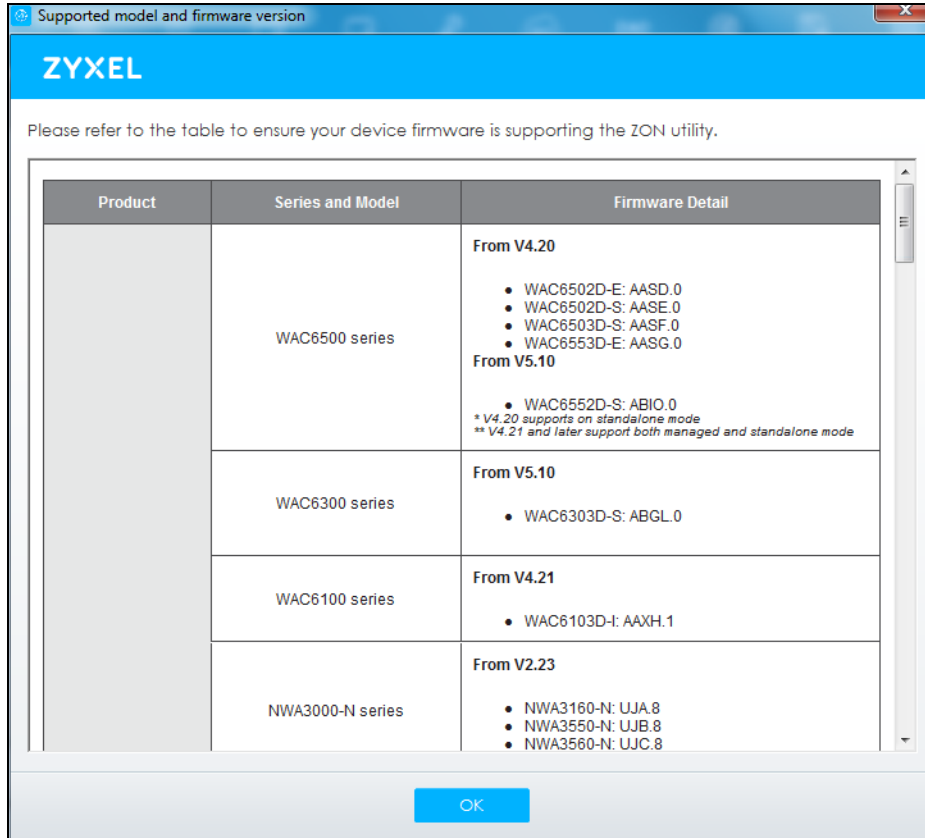
Here are the minimum hardware requirements to use the ZON Utility on your PC.

- Core i3 processor
- 2GB RAM
- 100MB free hard disk
- WXGA (Wide XGA 1280x800)

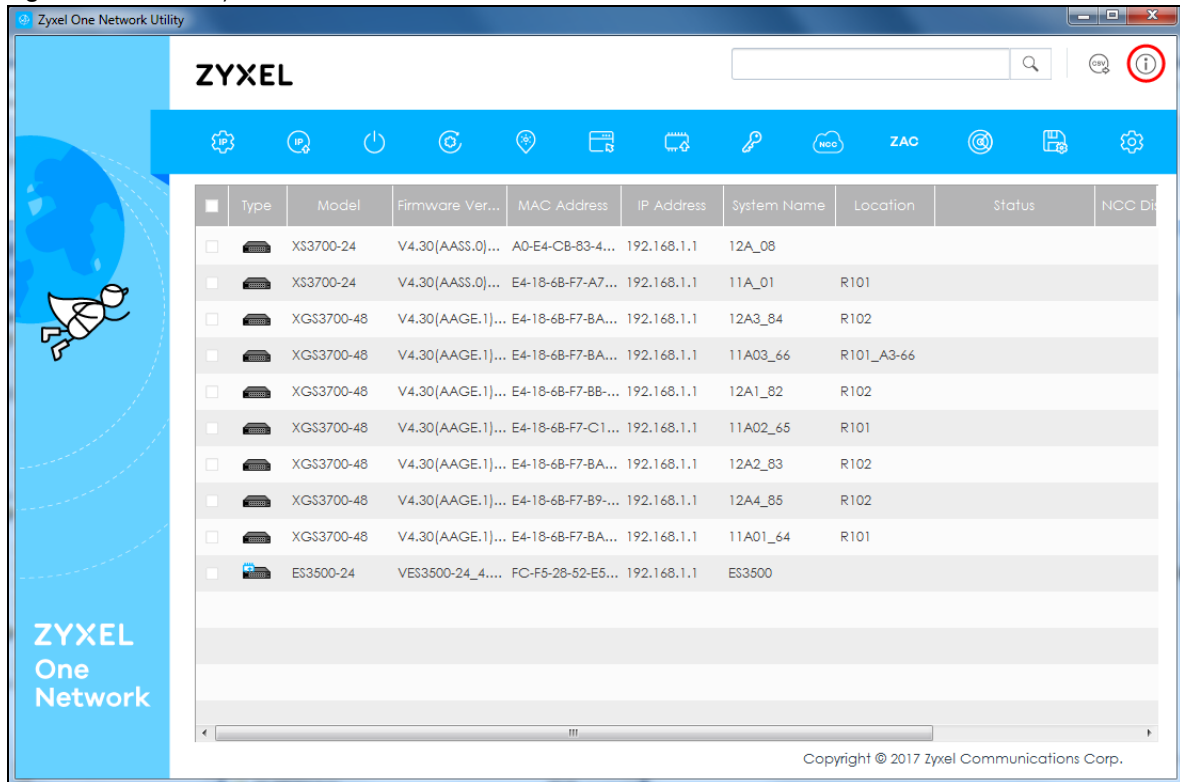
1.3.2 Run the ZON Utility

- 1 Double-click the ZON Utility to run it.
- 2 The first time you run the ZON Utility, you will see if your device and firmware version support the ZON Utility. Click the **OK** button to close this screen.

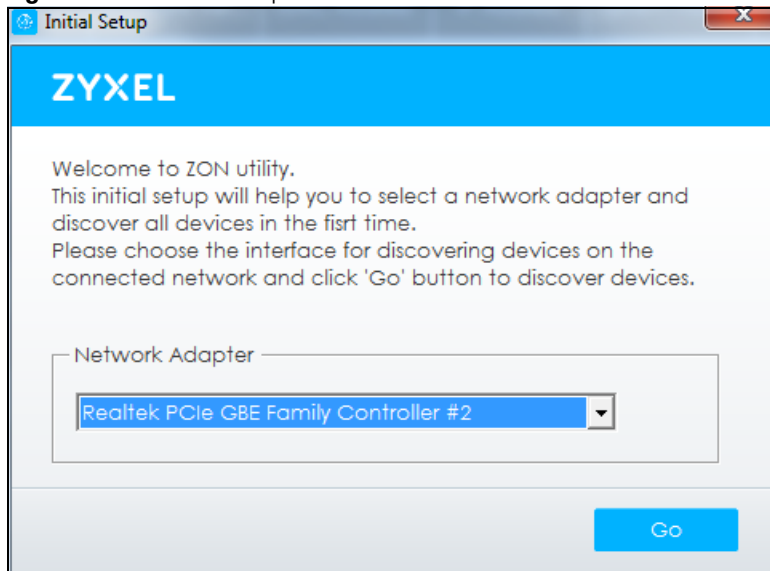
Figure 2 Supported Devices and Versions



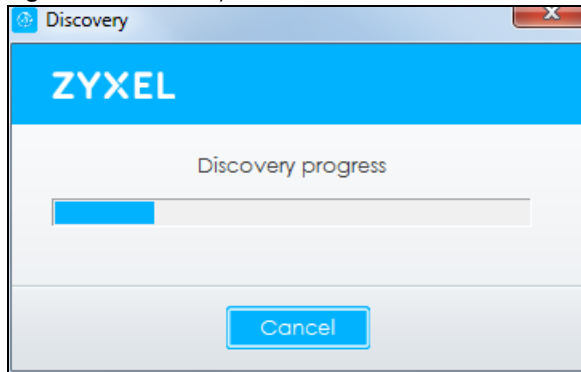
If you want to check the supported models and firmware versions later, you can click the **Show information about ZON** icon in the upper right hand corner of the screen. Then select the **Supported model and firmware version** link. If your device is not listed here, see the device release notes for ZON utility support. The release notes are in the firmware zip file on the Zyxel web site.

Figure 3 ZON Utility Screen

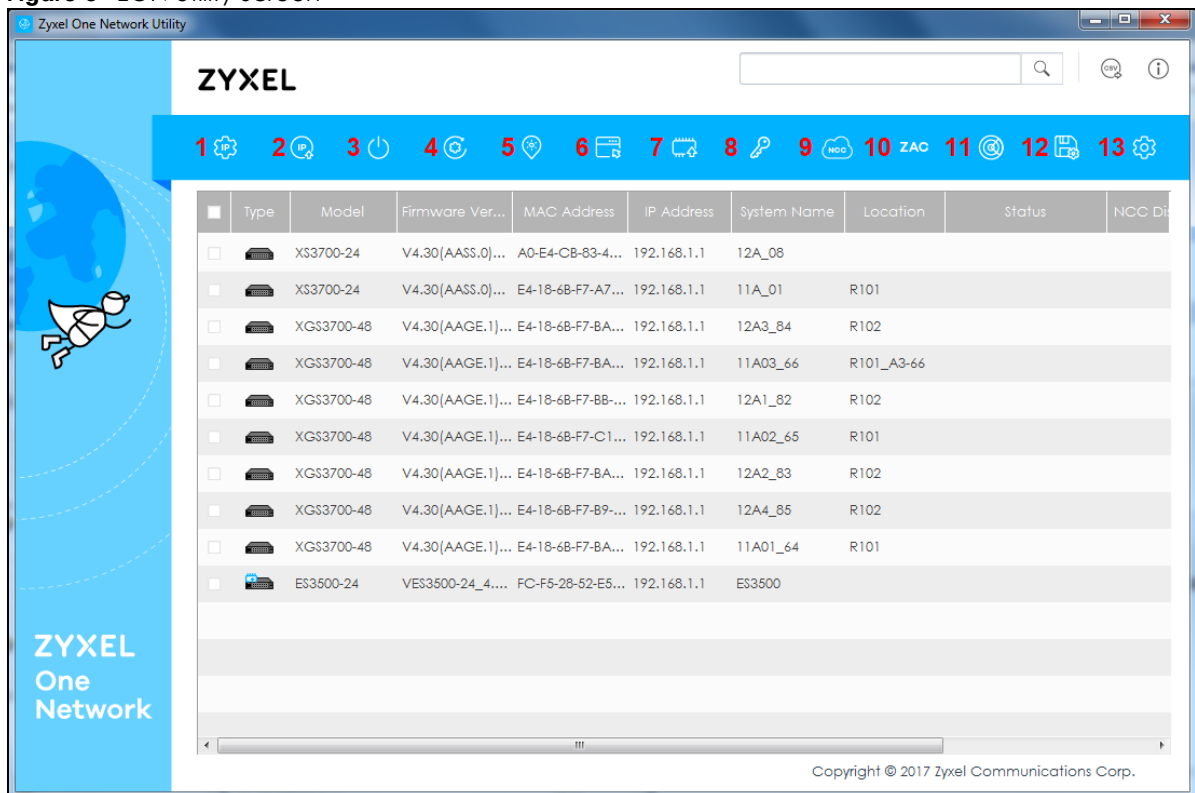
- 3 Select a network adapter to which your supported devices are connected.

Figure 4 Network Adapter

- 4 Click the **Go** button for the ZON Utility to discover all supported devices in your network.

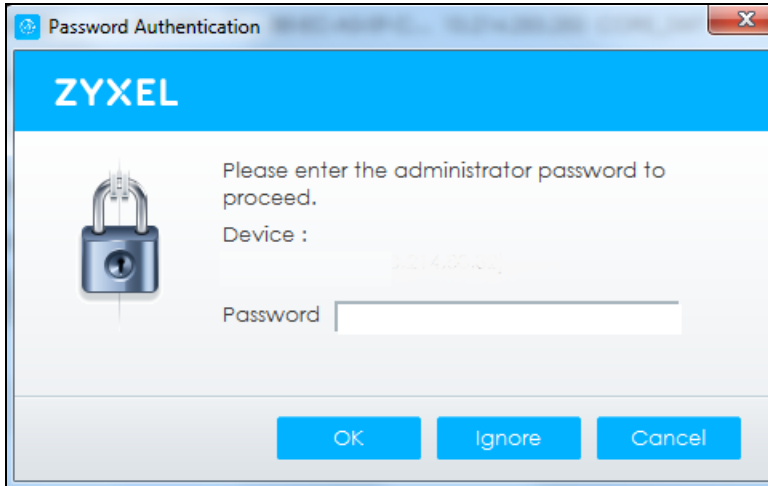
Figure 5 Discovery

- 5 The ZON Utility screen shows the devices discovered.

Figure 6 ZON Utility Screen

- 6 Select a device and then use the icons to perform actions. Some functions may not be available for your devices.

Note: You must know the selected device admin password before taking actions on the device using the ZON utility icons.

Figure 7 Password Prompt

The following table describes the icons numbered from left to right in the ZON Utility screen.

Table 2 ZON Utility Icons

ICON	DESCRIPTION
1 IP configuration	Change the selected device's IP address.
2 Renew IP Address	Update a DHCP-assigned dynamic IP address.
3 Reboot Device	Use this icon to restart the selected device(s). This may be useful when troubleshooting or upgrading new firmware.
4 Reset Configuration to Default	Use this icon to reload the factory-default configuration file. This means that you will lose all previous configurations.
5 Locator LED	Use this icon to locate the selected device by causing its Locator LED to blink.
6 Web GUI	Use this to access the selected device web configurator from your browser. You will need a username and password to log in.
7 Firmware Upgrade	Use this icon to upgrade new firmware to selected device(s) of the same model. Make sure you have downloaded the firmware from the ZyXel website to your computer and unzipped it in advance.
8 Change Password	Use this icon to change the admin password of the selected device. You must know the current admin password before changing to a new one.
9 Configure NCC Discovery	You must have Internet access to use this feature. Use this icon to enable or disable the Nebula Control Center (NCC) discovery feature on the selected device. If it's enabled, the selected device will try to connect to the NCC. Once the selected device is connected to and has registered in the NCC, it'll go into the Nebula cloud management mode.
10 ZAC	Use this icon to run the ZyXel AP Configurator of the selected AP.
11 Clear and Rescan	Use this icon to clear the list and discover all devices on the connected network again.
12 Save Configuration	Use this icon to save configuration changes to permanent memory on a selected device.
13 Settings	Use this icon to select a network adaptor for the computer on which the ZON utility is installed, and the utility language.

The following table describes the fields in the ZON Utility main screen.

Table 3 ZON Utility Fields

LABEL	DESCRIPTION
Type	This field displays an icon of the kind of device discovered.
Model	This field displays the model name of the discovered device.
Firmware Version	This field displays the firmware version of the discovered device.
MAC Address	This field displays the MAC address of the discovered device.
IP Address	This field displays the IP address of an internal interface on the discovered device that first received an ZDP discovery request from the ZON utility.
System Name	This field displays the system name of the discovered device.
Location	This field displays where the discovered device is.
Status	This field displays whether changes to the discovered device have been done successfully. As the NAP does not support IP Configuration , Renew IP address and Flash Locator LED , this field displays "Update failed", "Not support Renew IP address" and "Not support Flash Locator LED" respectively.
NCC Discovery	This field displays if the discovered device supports the Nebula Control Center (NCC) discovery feature. If it's enabled, the selected device will try to connect to the NCC. Once the selected device is connected to and has registered in the NCC, it'll go into the Nebula cloud management mode.
Serial Number	Enter the admin password of the discovered device to display its serial number.
Hardware Version	This field displays the hardware version of the discovered device.

1.4 Good Habits for Managing the NAP

Do the following things regularly to make the NAP more secure and to manage it more effectively.

- Change the system password through the NCC often. Use a password that's not easy to guess and that consists of different types of characters, such as numbers and letters.
- Write down the password and put it in a safe place.

1.5 Hardware Connections

See your Quick Start Guide and [Section 1.1.1 on page 7](#) for information on making hardware connections.

1.6 LEDs

The LEDs of your NAP303 or NAP203 can be controlled using the Suppression feature to turn LEDs on or off after the device is ready. This can be done through the NCC.

Following are LED descriptions for the NAP series models.

1.6.1 NAP303

The LEDs will stay ON when the NAP303 is ready. You can change this setting with LED suppression.

Figure 8 NAP303 LEDs



The following table describes the LEDs.

Table 4 NAP303 LEDs

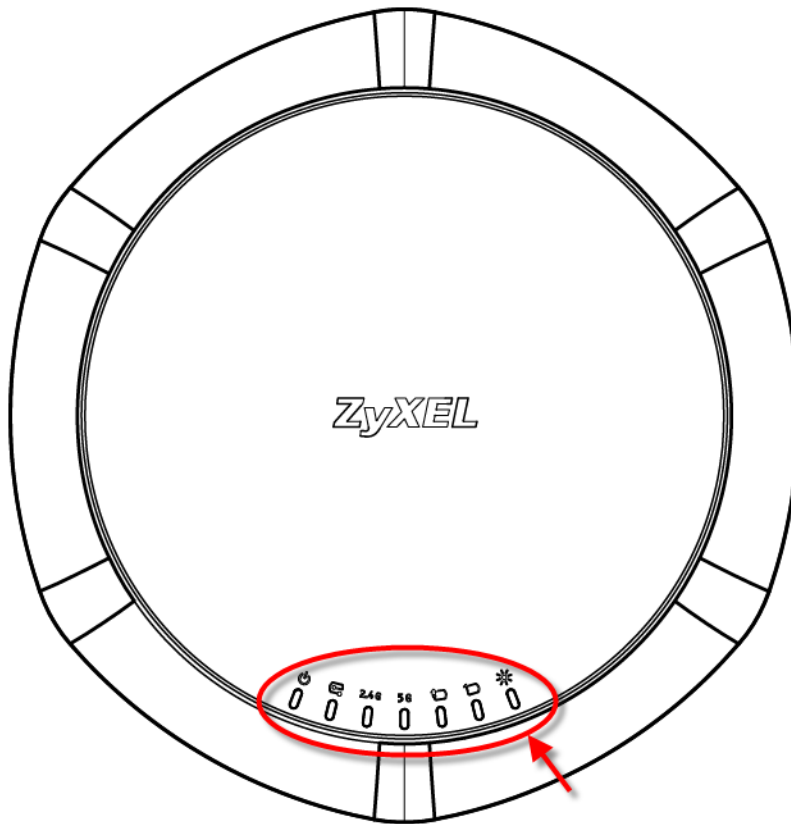
LED	COLOR	STATUS	DESCRIPTION
PWR/SYS 	Amber	Slowly blinks amber for one second and green for one second alternatively.	The NAP is booting up.
	Green		
	Green	On	The NAP is ready for use.
		Slow Blinking (on for 1s, off for 1s)	The wireless module of the NAP is disabled or failed.
	Red	On	There is system error and the NAP cannot boot up, or the NAP suffered a system failure.
		Fast Blinking (on for 50ms, off for 50ms)	The NAP is undergoing firmware upgrade.
		Slow Blinking (blink for 3 times, off for 3s)	The Uplink port is disconnected.

Table 4 NAP303 LEDs (continued)

LED	COLOR	STATUS	DESCRIPTION
Management 	Green	On	The NAP is managed by the NCC.
		Slow Blinking (On for 1s, Off for 1s)	The NAP is connected to the NCC, but not registered.
	Amber	Slowly blinks amber for one second and green for one second alternatively.	The NAP is searching for (discovering) the NCC.
	Green		
	Amber	Blinks amber and green alternatively 3 times and then turns solid green for 3 seconds.	The NCC is connecting to the registered NAP.
	Green		
WLAN  2.4G	Green	On	The 2.4 GHz WLAN is active.
		Off	The 2.4 GHz WLAN is not active.
WLAN  5G	Green	On	The 5 GHz WLAN is active.
		Off	The 5 GHz WLAN is not active.
UPLINK 	Amber/ Green	On	Amber - The port is operating as a 100-Mbps connection. Green - The port is operating as a Gigabit connection (1000 Mbps).
		Blinking	The NAP is sending/receiving data through the port.
		Off	The port is not connected.
LAN 	Amber/ Green	On	Amber - The port is operating as a 100-Mbps connection. Green - The port is operating as a Gigabit connection (1000 Mbps).
		Blinking	The LAN port is sending/receiving data through the port.
		Off	The LAN port is not connected.
Locator 	White	Blinking	The Locator is activated and will blink to show the actual location of the NAP between several devices in the network.
		Off	The Locator function is off.

1.6.2 NAP203

The LEDs will stay ON when the NAP203 is ready. You can change this setting with LED suppression.

Figure 9 NAP203 LEDs

The following table describes the LEDs.

Table 5 NAP203 LEDs

LED	COLOR	STATUS	DESCRIPTION
PWR/SYS ⏻	Red	Slowly blinks red for one second and green for one second alternatively.	The NAP is booting up.
	Green		
	Green	On	The NAP is ready for use.
	Red	On	There is system error and the NAP cannot boot up, or the NAP suffered a system failure.
		Fast Blinking (on for 50ms, Off for 50ms)	The NAP is undergoing firmware upgrade.
		Slow Blinking (blink for 3 times, Off for 3s)	The Uplink port is disconnected.
		Slow Blinking (blink for 2 times, Off for 3s)	The wireless module of the NAP is disabled or failed.

Table 5 NAP203 LEDs (continued)

LED	COLOR	STATUS	DESCRIPTION
Management 	Green	On	The NAP is managed by the NCC.
		Slow Blinking (On for 1s, Off for 1s)	The NAP is connected to the NCC, but not registered.
	Amber	Slowly blinks amber for one second and green for one second alternatively.	The NAP is searching for (discovering) the NCC.
	Green		
	Amber	Blinks amber and green alternatively 3 times and then turns solid green for 3 seconds.	The NCC is connecting to the registered NAP.
	Green		
WLAN 2.4G	Green	On	The antenna switch is set to "Ceiling" for the radio. The 2.4 GHz WLAN is active.
	Amber	On	The antenna switch is set to "Wall" for the radio. The 2.4 GHz WLAN is active.
		Off	The 2.4 GHz WLAN is not active.
WLAN 5G	Green	On	The antenna switch is set to "Ceiling" for the radio. The 5 GHz WLAN is active.
	Amber	On	The antenna switch is set to "Wall" for the radio. The 5 GHz WLAN is active.
		Off	The 5 GHz WLAN is not active.
UPLINK 	Amber/ Green	On	Amber - The port is operating as a 100-Mbps connection. Green - The port is operating as a Gigabit connection (1000 Mbps).
		Blinking	The NAP is sending/receiving data through the port.
		Off	The port is not connected.
LAN 	Amber/ Green	On	Amber - The port is operating as a 100-Mbps connection. Green - The port is operating as a Gigabit connection (1000 Mbps).
		Blinking	The LAN port is sending/receiving data through the port.
		Off	The LAN port is not connected.
Locator 	White	Blinking	The Locator is activated and will blink to show the actual location of the NAP between several devices in the network.
		Off	The Locator function is off.

1.6.3 NAP102

The following are the LED descriptions for your NAP102.

Figure 10 NAP102 LED

The following are the LED descriptions for your NAP102.

Table 6 NAP102 LED

COLOR		STATUS	DESCRIPTION
	Amber	Slowly blinks amber for one second and green for one second alternatively	The NAP is booting up or is connecting to the NCC.
	Green		
	Amber	Slowly blinks amber and green alternatively three times and turns steady green for three seconds	The NCC is connecting to the registered NAP.
	Green		
	Green	On	The NAP is ready for use and its wireless interface is activated.
		Slow Blinking (On for 1s, Off for 1s)	The NAP is connected to the NCC, but not registered or the wireless module failed or is disabled.
		Fast Blinking (On for 50ms, Off for 50ms)	The Locator LED is on.
	Red	On	The NAP failed to boot up or is experience system failure.
		Fast Blinking (On for 50ms, Off for 50ms)	The NAP is undergoing firmware upgrade.
		Slow Blinking (blink for 3 times, Off for 3s)	The Uplink port is disconnected.
	Amber	On	The NAP is powered up.

CHAPTER 2

The Web Configurator

2.1 Overview

The NAP Web Configurator allows easy management using an Internet browser. Use this for troubleshooting if your device cannot access the Internet.

In order to use the Web Configurator, you must:

- Use Internet Explorer 10.0 and later versions, Mozilla Firefox 36.0 and later versions, Safari 9.0 and later versions, or Google Chrome 38.0 and later versions.
- Allow pop-up windows.
- Enable JavaScript (enabled by default).
- Enable Java permissions (enabled by default).
- Enable cookies.

The recommended screen resolution is 1024 x 768 pixels and higher.

2.2 Access

- 1 Make sure your NAP (Nebula AP) hardware is properly connected. See the Quick Start Guide and [Section 1.1.1 on page 7](#).
- 2 Make sure your computer's IP address is in the same subnet as the NAP's IP address.
- 3 Browse to [http://\(NAP's IP address\)](http://(NAP's IP address)). See [Section 1.1 on page 7](#) for more information.
- 4 The **Login** screen appears.

ZYXEL

Nebula Control Center

Register your AP and enjoy the power of cloud controller, manage your AP anywhere, anytime from any device, and it is free.

Visit

NAP102

Enter User Name/Password and Click Login.

 _____

 _____

Login

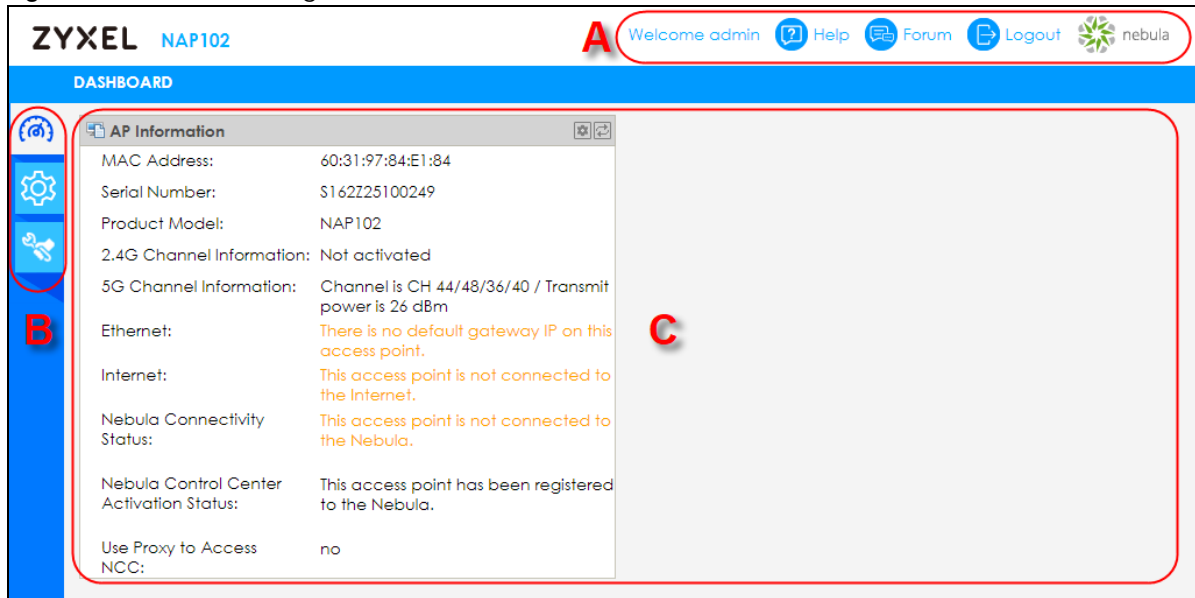
- 5 Enter the user name (default: "admin") and password (default: "1234"). If the NAP is being managed or has been managed by the NCC, check the NCC's **Site-Wide > Configure > General setting** screen for the NAP's current password.

Click the **Visit** button if you want to open the Zyxel Nebula Control Center (NCC) login page in a new tab or window. The NCC is a cloud-based network management system that allows you to remotely manage and monitor the NAP.

- 6 Click **Login**.

2.3 Navigating the Web Configurator

The following summarizes how to navigate the web configurator from the **Dashboard** screen. This guide uses the NAP102 screens as an example. The screens may vary slightly for different models.

Figure 11 The Web Configurator's Main Screen

The Web Configurator's main screen is divided into these parts:

- **A** - Title Bar
- **B** - Navigation Panel
- **C** - Main Window

2.3.1 Title Bar

The title bar provides some useful links that always appear over the screens below, regardless of how deep into the Web Configurator you navigate.

Figure 12 Title Bar

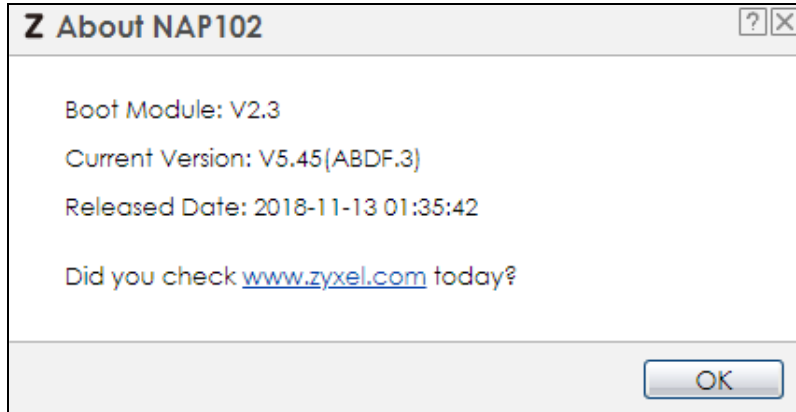
The icons provide the following functions.

Table 7 Title Bar: Web Configurator Icons

LABEL	DESCRIPTION
Logout	Click this to log out of the Web Configurator.
Help	Click this to open the help page for the current screen.
About	Click this to display basic information about the NAP.
nebula	Click this to open the NCC web site login page in a new tab or window.

About

Click **About** to display basic information about the NAP.

Figure 13 About

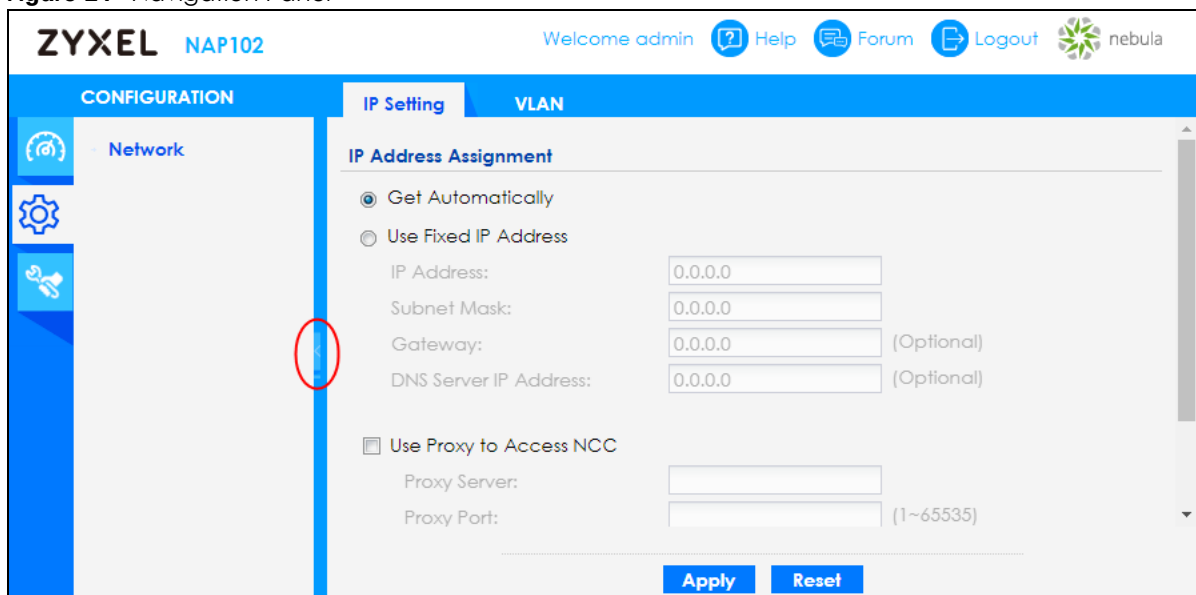
The following table describes labels that can appear in this screen.

Table 8 About

LABEL	DESCRIPTION
Boot Module	This shows the version number of the software that handles the booting process of the NAP.
Current Version	This shows the firmware version of the NAP.
Released Date	This shows the date (yyyy-mm-dd) and time (hh:mm:ss) when the firmware is released.
OK	Click this to close the screen.

2.3.2 Navigation Panel

Use the menu items on the navigation panel to open screens to configure NAP features. Click the arrow in the middle of the right edge of the navigation panel to hide the navigation panel menus or drag it to resize them. The following sections introduce the NAP's navigation panel menus and their screens.

Figure 14 Navigation Panel

Dashboard

The dashboard displays general device information, and AP information in widgets that you can re-arrange to suit your needs.

For details on the Dashboard's features, see [Chapter 3 on page 26](#).

Configuration Menu

Use the configuration menu screens to configure the NAP's features.

Table 9 Configuration Menu Screens Summary

FOLDER OR LINK	TAB	FUNCTION
Network	IP Setting	Configure the IP address for the NAP Ethernet interface.
	VLAN	Manage the Ethernet interface VLAN settings.

2.3.3 Warning Messages

Warning messages, such as those resulting from misconfiguration, display in a pop up window.

Figure 15 Warning Message



CHAPTER 3

Dashboard

3.1 Overview

Use the **Dashboard** screens to check status information about the NAP.

3.1.1 What You Can Do in this Chapter

The main **Dashboard** screen ([Section 3.2 on page 26](#)) displays the NAP's general device information, and client information.

3.2 Dashboard

This screen is the first thing you see when you log into the NAP. It also appears every time you click the **Dashboard** icon in the navigation panel. The Dashboard displays general AP information, and client information in widgets that you can re-arrange to suit your needs. You can also collapse, refresh, and close individual widgets.

Figure 16 Dashboard

DASHBOARD

AP Information
⚙️ ↺

MAC Address:	60:31:97:84:E1:84
Serial Number:	S162Z25100249
Product Model:	NAP102
2.4G Channel Information:	Channel is CH 6 / Transmit power is 23 dBm
5G Channel Information:	Channel is CH 36/40/44/48 / Transmit power is 24 dBm
Ethernet:	This access point is trying to join a network or find a working Ethernet connection.
Internet:	This access point is connected to the Internet.
Nebula Connectivity Status:	This access point is not connected to the Nebula.
Nebula Control Center Activation Status:	This access point has been registered to the Nebula.
Use Proxy to Access NCC:	no

The following table describes the labels in this screen.

Table 10 Dashboard

LABEL	DESCRIPTION
AP Information	
MAC Address	This field displays the MAC address of the NAP.
Serial Number	This field displays the serial number of the NAP.
Product Model	This field displays the model name of the NAP.
2.4G Channel Information	This field displays the channel number the NAP is using and its output power in the 2.4 GHz spectrum. This shows Not activated if the wireless LAN is disabled.
5G Channel Information	This field displays the channel number the NAP is using and its output power in the 5 GHz spectrum. This shows Not activated if the wireless LAN is disabled.
Ethernet	This field displays whether the NAP's Ethernet port is connected and the IP address of the gateway to which the NAP is connected.
Internet	This field displays whether the NAP is connecting to the Internet.
Nebula Connectivity Status	This field displays whether the NAP can connect to the Zyxel Nebula Control Center (NCC).
Nebula Control Center Activation Status	This field displays whether the NAP has been registered and can be managed by the NCC.
Use Proxy to Access NCC	This displays whether the NAP uses a proxy server to access the NCC (Nebula Control Center).

If the NAP cannot connect to the Internet or to NCC, an error message is shown on this screen, as in the following.

DASHBOARD

 **AP Information**

MAC Address:	60:31:97:84:E1:84
Serial Number:	S162Z25100249
Product Model:	NAP102
2.4G Channel Information:	Not activated
5G Channel Information:	Channel is CH 36/40/44/48 / Transmit power is 24 dBm
Ethernet:	There is no default gateway IP on this access point.
Internet:	This access point is not connected to the Internet.
Nebula Connectivity Status:	This access point is not connected to the Nebula.
Nebula Control Center Activation Status:	This access point has been registered to the Nebula.
Use Proxy to Access NCC:	no

CHAPTER 4

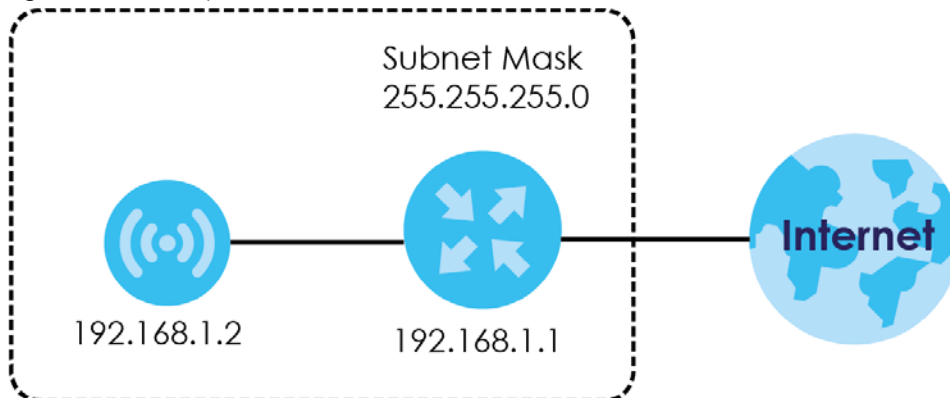
Network

4.1 Overview

This chapter describes how you can configure the management IP address and VLAN settings of your NAP.

The Internet Protocol (IP) address identifies a device on a network. Every networking device (including computers, servers, routers, printers, etc.) needs an IP address to communicate across the network. These networking devices are also known as hosts.

Figure 17 IP Setup



The figure above illustrates one possible setup of your NAP. The gateway IP address is 192.168.1.1 and the managed IP address of the NAP is 192.168.1.2 (default), but if the NAP is assigned an IP address by a DHCP server, the default (192.168.1.2) will not be used. The gateway and the NAP must belong in the same IP subnet to be able to communicate with each other.

4.1.1 What You Can Do in this Chapter

- The **IP Setting** screen ([Section 4.2 on page 29](#)) configures the NAP's LAN IP address.
- The **VLAN** screen ([Section 4.3 on page 31](#)) configures the NAP's VLAN settings.

4.2 IP Setting

Use this screen to configure the IP address for your NAP. To access this screen, click **Configuration > Network > IP Setting**.

Figure 18 Configuration > Network > IP Setting

Each field is described in the following table.

Table 11 IP Setting

LABEL	DESCRIPTION
IP Address Assignment	
Get Automatically	Select this to make the interface a DHCP client and automatically get the IP address, subnet mask, and gateway address from a DHCP server.
Use Fixed IP Address	Select this if you want to specify the IP address, subnet mask, and gateway manually.
IP Address	Enter the IP address for this interface.
Subnet Mask	Enter the subnet mask of this interface in dot decimal notation. The subnet mask indicates what part of the IP address is the same for all computers in the network.
Gateway	Enter the IP address of the gateway. The NAP sends packets to the gateway when it does not know how to route the packet to its destination. The gateway should be on the same network as the interface.
DNS Server IP Address	Enter the IP address of the DNS server.
Use Proxy to Access NCC	If the NAP is behind a proxy server, you need to select this option and configure the proxy server settings so that the NAP can access the NCC through the proxy server.
Proxy Server	Enter the IP address of the proxy server.
Proxy Port	Enter service port number used by the proxy server.

Table 11 IP Setting (continued)

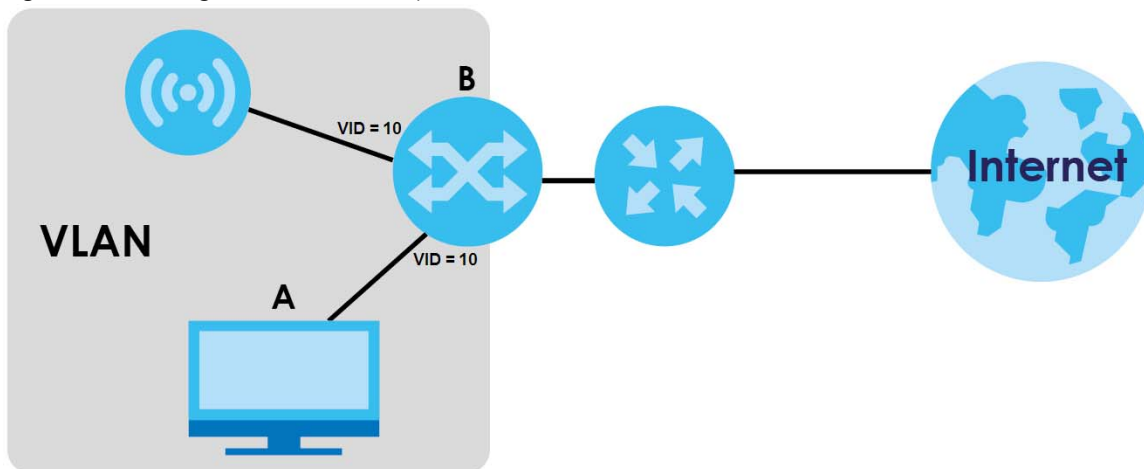
LABEL	DESCRIPTION
Authentication	Select this option if the proxy server requires authentication before it grants access to the Internet.
User Name	Enter your proxy user name.
Password	Enter your proxy password.
Apply	Click Apply to save your changes back to the NAP.
Reset	Click Reset to return the screen to its last-saved settings.

4.3 VLAN

This section discusses how to configure the NAP's VLAN settings. The management VLAN assigned to the NAP should allow it to connect to the Internet through your network.

Note: Misconfiguring the management VLAN settings in your NAP can make it inaccessible. If this happens, you will have to reset the NAP.

Figure 19 Management VLAN Setup



For example, to access and manage the NAP from a computer (A), the NAP and the switch B's ports to which computer A and the NAP are connected should be in the same VLAN, as shown in the figure above.

Note: Make sure your VLAN settings allow the NAP to connect to the Internet.

A Virtual Local Area Network (VLAN) allows a physical network to be partitioned into multiple logical networks. Devices on a logical network belong to one group. A device can belong to more than one group. With VLAN, a device cannot directly talk to or hear from devices that are not in the same group(s); the traffic must first go through a router.

VLAN also increases network performance by limiting broadcasts to a smaller and more manageable logical broadcast domain. In traditional switched environments, all broadcast packets go to each and every individual port. With VLAN, all broadcasts are confined to a specific broadcast domain.

IEEE 802.1Q Tag

The IEEE 802.1Q standard defines an explicit VLAN tag in the MAC header to identify the VLAN membership of a frame across bridges. A VLAN tag includes the 12-bit VLAN ID and 3-bit user priority. The VLAN ID associates a frame with a specific VLAN and provides the information that devices need to process the frame across the network.

Use this screen to configure the VLAN settings for your NAP. To access this screen, click **Configuration > Network > VLAN**.

Figure 20 Configuration > Network > VLAN

The screenshot shows the 'VLAN Settings' configuration page. At the top, there are two tabs: 'IP Setting' and 'VLAN', with 'VLAN' being the active tab. Below the tabs, the title 'VLAN Settings' is displayed. The main configuration area contains a 'Management VLAN ID' field with the value '1' and a range '(1~4094)'. Below this field are two radio buttons: 'Untagged' (which is selected) and 'Tagged'. At the bottom of the page, there are two buttons: 'Apply' and 'Reset'.

Each field is described in the following table.

Table 12 VLAN

LABEL	DESCRIPTION
VLAN Settings	
Management VLAN ID	Enter a VLAN ID for the NAP.
Untagged/Tagged	Set whether the NAP adds the VLAN ID to outbound traffic transmitted through its Ethernet port.
Apply	Click Apply to save your changes back to the NAP.
Reset	Click Reset to return the screen to its last-saved settings.

CHAPTER 5

Maintenance

5.1 Overview

The **Maintenance** screens let you manage shell script files on the NAP, generate a diagnostic file, or view log messages.

5.1.1 What You Can Do in this Chapter

- The **Shell Script** screen (Section 5.2 on page 33) stores, names, downloads, and uploads shell script files.
- The **Diagnostics** screen (Section 5.3 on page 34) generates a file containing the NAP's configuration and diagnostic information if you need to provide it to customer support during troubleshooting.
- The **Log > View Log** screen (Section 5.4 on page 35) displays the NAP's current log messages when it is disconnected from the NCC.

5.2 Shell Script

A shell script is a list of commands which output diagnostic information on the NAP. Customer support might request that you upload and run a shell script during troubleshooting. All uploaded shell scripts run when you click **Diagnostic > Collect Now**.

- You can create a shell script on your local computer using a text editor.
- Shell script files must have a ".zysh" filename extension.
- The file name of the shell script must consist of 1–25 characters including letters, numbers, and the following special characters: '~!@#\$\$%^&()_+[]{}',.,=

Click **Maintenance > Shell Script** to open this screen. Use the **Shell Script** screen to store, name, download, and upload shell script files.

Figure 21 Maintenance > Shell Script

#	File Name	Size	Last Modified
1	Show_Version_Interface.zysh	34	2020-03-11 06:39:49

Page 1 of 1 | Show 50 items | Displaying 1 - 1 of 1

Upload Shell Script

To upload a shell script, browse to the location of the file (.zysh) and then click Upload.

File:

Each field is described in the following table.

Table 13 Maintenance > Shell Script

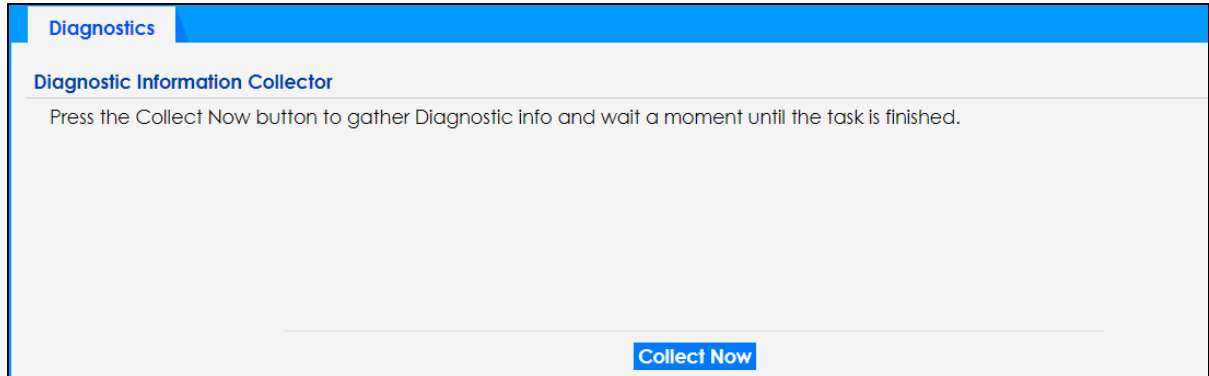
LABEL	DESCRIPTION
Rename	Use this button to change the name of a shell script file on the NAP. - The name must consist of 1–25 characters including letters, numbers, and the following special characters: '~!@#\$\$%^&()_+[]{}',.,= - The name must be unique.
Remove	Click a shell script file's row to select it and click Delete to delete the shell script file from the NAP. A pop-up window asks you to confirm that you want to delete the shell script file. Click OK to delete the shell script file or click Cancel to close the screen without deleting the shell script file.
Download	Click a shell script file's row to select it and click Download to save the configuration to your computer.
Copy	Use this button to create a duplicate of a shell script file. Select a shell script, click Copy , and then enter a name for the duplicate file. - The name must consist of 1–25 characters including letters, numbers, and the following special characters: '~!@#\$\$%^&()_+[]{}',.,= - The name must be unique.
#	This column displays the number for each shell script file entry.
File Name	This column displays the label that identifies the shell script file.
Size	This column displays the size of the shell script file, in KB.
Last Modified	This column displays the date and time that the shell script file was last changed or saved.
Upload Shell Script	The bottom part of the screen allows you to upload a new or previously saved shell script file from your computer to your NAP.
File	Enter the path of the file you want to upload, or click Browse... to find it.
Browse...	Click Browse... to find the .zysh file you want to upload.
Upload	Click Upload to start uploading the file. This process may take several minutes.

5.3 Diagnostics

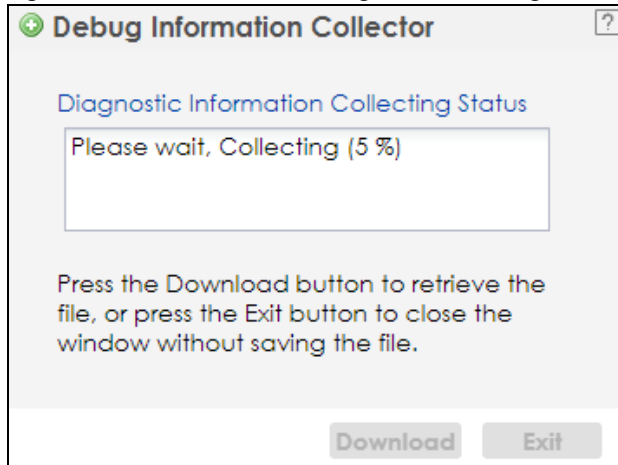
This screen allows you to download a file containing the NAP's configuration and diagnostic information. You might need to send this file to customer support for troubleshooting.

Note: When you click **Collect Now**, the NAP runs all uploaded shell scripts and includes their output in the diagnostic file. For information on uploading shell scripts, see [Section 5.2 on page 33](#).

Click **Maintenance > Diagnostics** to open the **Diagnostics** screen. Click **Collect Now** to start creating a new diagnostic file.

Figure 22 Maintenance > Diagnostics

The **Debug Information Center** window shows the progress of data collection. When the data collection process is finished, click **Download** to save the most recent diagnostic file to your computer.

Figure 23 Maintenance > Diagnostics: Debug Information Collector

5.4 View Log

Nebula Control Center (NCC) downloads log messages from the NAP periodically, and then deletes the downloaded log messages from the NAP. The **Maintenance > Log** screen allows you to view log messages that have not yet been downloaded by NCC. This can with troubleshooting when the NAP is disconnected from NCC.

Note: After the log reaches the maximum number of log messages, each new log message automatically overwrites the oldest log message.

Events that generate an alert as well as a log message are displayed in red. Regular log messages are displayed in black. Click a column header to sort all rows in the table using that column. Click the cell header again to reverse the sort order.

Figure 24 Maintenance > Log > View Log

View Log

☐ Hide Filter

Logs

Log will be displayed when this access point is not connected to the Nebula.

Display: Priority:

Source Address: Destination Address:

Source Interface: Destination Interface:

Protocol: Keyword:

Search

#...	Time	P...	C...	Message	Source	Destination	Note
20	2019-11-27 06:4...	a...	S...	Port 0 is up! The link speed is 1000M/Full.			
26	2019-11-27 06:4...	a...	S...	Port 0 is down!			
62	2019-11-27 06:3...	i...	S...	EnterpriseWLAN is configured successfully with s...			
83	2019-11-27 06:3...	a...	S...	Port 0 is up! The link speed is 1000M/Full.			
85	2019-11-27 06:3...	a...	S...	Port 0 is down!			

Page 1 of 1 | Show 20 items | Displaying 1 - 5 of 5

The following table describes the labels in this screen.

Table 14 Maintenance > Log > View Log

LABEL	DESCRIPTION
Show Filter / Hide Filter	Click this button to show or hide the filter settings. If the filter settings are hidden, the Display , Email Log Now , Refresh , and Clear Log fields are available. If the filter settings are shown, the Display , Priority , Source Address , Destination Address , Source Interface , Destination Interface , Protocol , Keyword , and Search fields are available.
Display	Select the category of the log messages you want to view. You can also view All Logs or view the Debug Log .
Priority	Select the priority of log messages to display. The log displays the log messages with this priority or higher. Possible values from highest priority to lowest priority are: • any • emerg (emergency) • alert • crit (critical) • error • warn (warning) • notice • info (information) Note: This field is read-only if Display is set to Debug Log .
Source Address	Enter the source IP address of the incoming packet that generated the log message. Do not include the port in this filter.
Destination Address	Enter the IP address of the destination of the incoming packet when the log message was generated. Do not include the port in this filter.
Source Interface	Select the source interface of the packet that generated the log message.

Table 14 Maintenance > Log > View Log (continued)

LABEL	DESCRIPTION
Destination Interface	Select the destination interface of the packet that generated the log message.
Protocol	Select a service protocol whose log messages you would like to see.
Keyword	Enter a keyword to search the Message , Source , Destination and Note fields of all log messages. If a match is found in any field, the log message is displayed. The keyword must consist of 1–63 characters including letters, numbers, and the following special characters: _() ' , ; : ? ! + - * / = # \$ % @
Search	Click this button to apply the current filter settings to the log.
Refresh	Click this button to update the list of log messages.
Clear Log	Click this button to clear the whole log, regardless of what is currently displayed on the screen.
#	This field is a sequential value, and it is not associated with a specific log message.
Time	This field displays the time the log message was recorded.
Priority	This field displays the priority of the log message. Possible values from highest priority to lowest priority are: • any • emerg (emergency) • alert • crit (critical) • error • warn (warning) • notice • info (information)
Category	This field displays the log that generated the log message. It is the same value used in the Display and (other) Category fields.
Message	This field displays the reason the log message was generated. The text "[count=x]", where x is a number, appears at the end of the Message field if log consolidation is enabled and multiple entries were combined in the log message.
Source	This field displays the source IP address and the port number in the event that generated the log message.
Destination	This field displays the destination IP address and the port number of the event that generated the log message.
Protocol	This field displays the service protocol in the event that generated the log message.
Note	This field displays any additional information about the log message.

CHAPTER 6

Troubleshooting

6.1 Overview

This chapter offers some suggestions to solve problems you might encounter. The potential problems are divided into the following categories.

- [Power, Hardware Connections, and LED](#)
- [NAP Access and Login](#)
- [Internet Access](#)
- [Wireless Connections](#)
- [Resetting the NAP](#)

6.2 Power, Hardware Connections, and LED

[The NAP does not turn on. The LED is not on.](#)

- 1 Make sure you are using the power adapter included with the NAP or a PoE power injector/switch.
- 2 Make sure the power adapter or PoE power injector/switch is connected to the NAP and plugged in to an appropriate power source. Make sure the power source is turned on.
- 3 Disconnect and re-connect the power adapter or PoE power injector/switch.
- 4 Inspect your cables for damage. Contact the vendor to replace any damaged cables.
- 5 If none of these steps work, you may have faulty hardware and should contact your NAP vendor.

[The LED does not behave as expected.](#)

- 1 Make sure you understand the normal behavior of the LED. See [Section 1.6 on page 15](#).
- 2 Check the hardware connections. See the Quick Start Guide.
- 3 Inspect your cables for damage. Contact the vendor to replace any damaged cables.
- 4 Disconnect and re-connect the power adapter or PoE power injector to the NAP.

- 5 If the problem continues, contact the vendor.

6.3 NAP Access and Login

I forgot the IP address for the NAP.

- 1 The default static IP address is 192.168.1.2. If you changed the IP address and have forgotten it, you have to reset the device to its factory defaults. See [Section 6.6 on page 43](#).
- 2 If your NAP is a DHCP client, you can find your IP address from the DHCP server. This information is available from the DHCP server which allocates IP addresses on your network. Find this information directly from the DHCP server or contact your system administrator for more information.
- 3 If the NCC has managed the NAP, you can also check the NCC's **AP > Monitor > Access Point** screen for the NAP's current LAN IP address.

I cannot see or access the **Login** screen in the web configurator.

- 1 Make sure you are using the correct IP address.
 - The default static IP address is 192.168.1.2.
 - If you changed the IP address, use the new IP address.
 - If you changed the IP address and have forgotten it, see the troubleshooting suggestions for [I forgot the IP address for the NAP](#).
 - If the NCC has managed the NAP, you can check the NCC's **AP > Monitor > Access Point** screen for the NAP's current LAN IP address.
- 2 Check the hardware connections, and make sure the LED is behaving as expected. See the Quick Start Guide and [Section 1.6 on page 15](#).
- 3 Make sure your Internet browser does not block pop-up windows and has JavaScript and Java enabled.
- 4 Make sure your computer is in the same subnet as the NAP. (If you know that there are routers between your computer and the NAP, skip this step.)
 - If there is a DHCP server on your network, make sure your computer is using a dynamic IP address.
 - If there is no DHCP server on your network, make sure your computer's IP address is in the same subnet as the NAP.
- 5 Reset the device to its factory defaults, and try to access the NAP with the default IP address. See [Section 6.6 on page 43](#).
- 6 If the problem continues, contact the network administrator or vendor, or try one of the advanced suggestions.

Advanced Suggestions

- If your computer is connected wirelessly, use a computer that is connected to a **LAN/ETHERNET** port.

I forgot the password.

- 1 The default password is **1234**. If the NAP is connected to the NCC and registered, check the NCC for the password.
- 2 If this does not work, you have to reset the device to its factory defaults. See [Section 6.6 on page 43](#).

I can see the **Login** screen, but I cannot log in to the NAP.

- 1 Make sure you have entered the user name and password correctly. These fields are case-sensitive, so make sure [Caps Lock] is not on.
- 2 Disconnect and re-connect the power adaptor or PoE power injector to the NAP.
- 3 If this does not work, you have to reset the device to its factory defaults. See [Section 6.6 on page 43](#).

The NAP is already registered with NCC but it cannot connect to the NCC.

- 1 Check your network's firewall settings. Make sure the following TCP ports are allowed: 443, 4335, and 6667.
- 2 Check your network's VLAN settings (see [Section 4.3 on page 31](#)). You may have to change the Management VLAN settings of the NAP to allow it to connect to the Internet and access the NCC.

Note: Changing the management VLAN and IP address settings on the NAP also pushes these changes to the NCC. Do this only if your device cannot otherwise connect to the NCC.

- 3 Make sure your NAP doesn't have to go through network authentication such as a captive portal. If your network uses a captive portal, the network administrator may have to create a new VLAN without this requirement. Change your NAP's management VLAN settings as necessary.

6.4 Internet Access

I cannot access the Internet.

- 1 Check the hardware connections, and make sure the LED is behaving as expected. See the Quick Start Guide and [Section 6.2 on page 38](#).
- 2 Make sure the NAP is connected to a broadband modem or router with Internet access and your computer is set to obtain a dynamic IP address.
- 3 If you are trying to access the Internet wirelessly, make sure the wireless settings on the wireless client are the same as the settings on the NAP.
- 4 Disconnect all the cables from your device, and follow the directions in the Quick Start Guide again.
- 5 If the problem continues, contact your ISP.

[I cannot access the Internet anymore. I had access to the Internet \(with the NAP\), but my Internet connection is not available anymore.](#)

- 1 Check the hardware connections, and make sure the LED is behaving as expected. See the Quick Start Guide and [Section 1.6 on page 15](#).
- 2 Reboot the NAP.
- 3 If the problem continues, contact your ISP.

[The Internet connection is slow or intermittent.](#)

- 1 There might be a lot of traffic on the network. Look at the LED, and check [Section 1.6 on page 15](#). If the NAP is sending or receiving a lot of information, try closing some programs that use the Internet, especially peer-to-peer applications.
- 2 Check the signal strength. If the signal is weak, try moving the NAP closer to the NAP (if possible), and look around to see if there are any devices that might be interfering with the wireless network (microwaves, other wireless networks, and so on).
- 3 Reboot the NAP.
- 4 If the problem continues, contact the network administrator or vendor, or try one of the advanced suggestions.

6.5 Wireless Connections

[I cannot access the NAP or ping any computer from the WLAN.](#)

- 1 Make sure the wireless LAN (wireless radio) is enabled on the NAP.
- 2 Make sure the wireless adapter (installed on your computer) is working properly.
- 3 Make sure the wireless adapter (installed on your computer) is IEEE 802.11 compatible and supports the same wireless standard as the NAP's active radio.
- 4 Make sure your computer (with a wireless adapter installed) is within the transmission range of the NAP.
- 5 Check that both the NAP and your computer are using the same wireless and wireless security settings.

Hackers have accessed my WEP-encrypted wireless LAN.

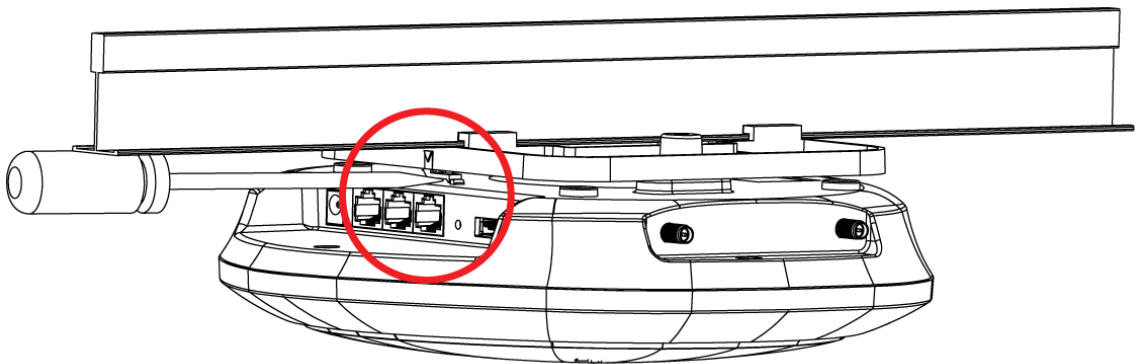
WEP is extremely insecure. Its encryption can be broken by an attacker, using widely-available software. It is strongly recommended that you use a more effective security mechanism. Use the strongest security mechanism that all the wireless devices in your network support. WPA2 or WPA2-PSK is recommended.

The wireless security is not following the re-authentication timer setting I specified.

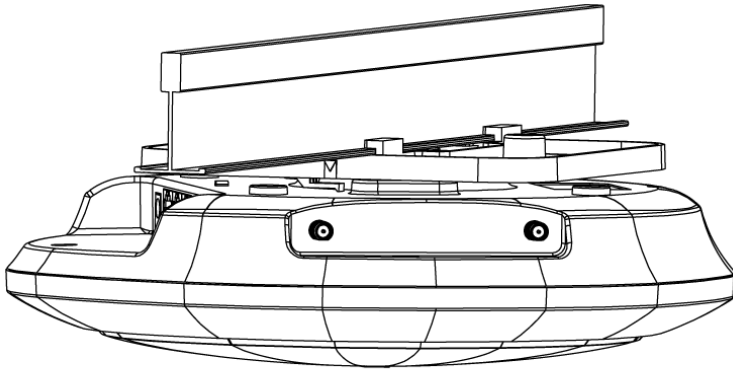
If a RADIUS server authenticates wireless stations, the re-authentication timer on the RADIUS server has priority. Change the RADIUS server's configuration if you need to use a different re-authentication timer setting.

How do I remove the NAP203 or NAP303 indoor AP from its mounting bracket?

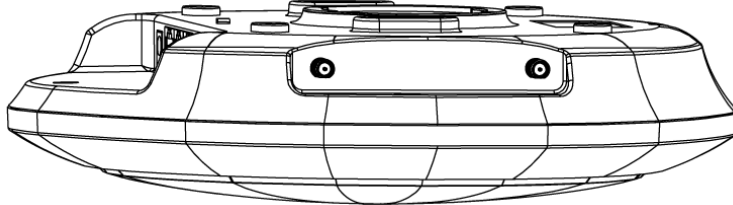
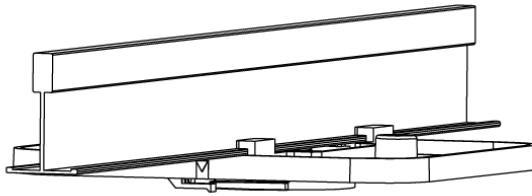
- Find the down arrow close to the Ethernet ports, then use a thin flat tool (for example, a flat screw driver) to lift up a clip beneath the down arrow.



- Turn the NAP203 or NAP303 indoor AP counter-clockwise.



- Detach the NAP203 or NAP303 indoor AP from the mounting bracket.



6.6 Resetting the NAP

If you cannot access the NAP by any method, try restarting it by turning the power off and then on again. If you still cannot access the NAP by any method or you forget the administrator password(s), you can reset the NAP to its factory-default settings. Any configuration files or shell scripts that you saved on the NAP should still be available afterwards.

Use the following procedure to reset the NAP to its factory-default settings. This overwrites the settings in the `startup-config.conf` file with the settings in the `system-default.conf` file.

Note: This procedure removes the current configuration.

- 1 Make sure the Power LED is on and not blinking.

- 2 Press the **RESET** button and hold it until the Power LED begins to blink. (This usually takes about ten seconds.)
- 3 Release the **RESET** button, and wait for the NAP to restart.

You should be able to access the NAP using the default settings.

6.7 Getting More Troubleshooting Help

Search for support information for your model at www.zyxel.com for more troubleshooting suggestions.

APPENDIX A

Customer Support

In the event of problems that cannot be solved by using this manual, you should contact your vendor. If you cannot contact your vendor, then contact a Zyxel office for the region in which you bought the device.

See <https://www.zyxel.com/homepage.shtml> and also https://www.zyxel.com/about_zyxel/zyxel_worldwide.shtml for the latest information.

Please have the following information ready when you contact an office.

Required Information

- Product model and serial number.
- Warranty Information.
- Date that you received your device.
- Brief description of the problem and the steps you took to solve it.

Corporate Headquarters (Worldwide)

Taiwan

- Zyxel Communications Corporation
- <http://www.zyxel.com>

Asia

China

- Zyxel Communications (Shanghai) Corp.
- Zyxel Communications (Beijing) Corp.
- Zyxel Communications (Tianjin) Corp.
- <https://www.zyxel.com/cn/zh/>

India

- Zyxel Technology India Pvt Ltd
- <https://www.zyxel.com/in/en/>

Kazakhstan

- Zyxel Kazakhstan
- <https://www.zyxel.kz>

Korea

- Zyxel Korea Corp.
- <http://www.zyxel.kr>

Malaysia

- Zyxel Malaysia Sdn Bhd.
- <http://www.zyxel.com.my>

Pakistan

- Zyxel Pakistan (Pvt.) Ltd.
- <http://www.zyxel.com.pk>

Philippines

- Zyxel Philippines
- <http://www.zyxel.com.ph>

Singapore

- Zyxel Singapore Pte Ltd.
- <http://www.zyxel.com.sg>

Taiwan

- Zyxel Communications Corporation
- <https://www.zyxel.com/tw/zh/>

Thailand

- Zyxel Thailand Co., Ltd
- <https://www.zyxel.com/th/th/>

Vietnam

- Zyxel Communications Corporation-Vietnam Office
- <https://www.zyxel.com/vn/vi>

Europe

Belarus

- Zyxel BY
- <https://www.zyxel.by>

Belgium

- Zyxel Communications B.V.
- <https://www.zyxel.com/be/nl/>

- <https://www.zyxel.com/be/fr/>

Bulgaria

- Zyxel България
- <https://www.zyxel.com/bg/bg/>

Czech Republic

- Zyxel Communications Czech s.r.o
- <https://www.zyxel.com/cz/cs/>

Denmark

- Zyxel Communications A/S
- <https://www.zyxel.com/dk/da/>

Estonia

- Zyxel Estonia
- <https://www.zyxel.com/ee/et/>

Finland

- Zyxel Communications
- <https://www.zyxel.com/fi/fi/>

France

- Zyxel France
- <https://www.zyxel.fr>

Germany

- Zyxel Deutschland GmbH
- <https://www.zyxel.com/de/de/>

Hungary

- Zyxel Hungary & SEE
- <https://www.zyxel.com/hu/hu/>

Italy

- Zyxel Communications Italy
- <https://www.zyxel.com/it/it/>

Latvia

- Zyxel Latvia
- <https://www.zyxel.com/lv/lv/>

Lithuania

- Zyxel Lithuania
- <https://www.zyxel.com/lt/lt/>

Netherlands

- Zyxel Benelux
- <https://www.zyxel.com/nl/nl/>

Norway

- Zyxel Communications
- <https://www.zyxel.com/no/no/>

Poland

- Zyxel Communications Poland
- <https://www.zyxel.com/pl/pl/>

Romania

- Zyxel Romania
- <https://www.zyxel.com/ro/ro/>

Russia

- Zyxel Russia
- <https://www.zyxel.com/ru/ru/>

Slovakia

- Zyxel Communications Czech s.r.o. organizacna zlozka
- <https://www.zyxel.com/sk/sk/>

Spain

- Zyxel Communications ES Ltd
- <https://www.zyxel.com/es/es/>

Sweden

- Zyxel Communications
- <https://www.zyxel.com/se/sv/>

Switzerland

- Studerus AG
- <https://www.zyxel.ch/de>
- <https://www.zyxel.ch/fr>

Turkey

- Zyxel Turkey A.S.
- <https://www.zyxel.com/tr/tr/>

UK

- Zyxel Communications UK Ltd.
- <https://www.zyxel.com/uk/en/>

Ukraine

- Zyxel Ukraine
- <http://www.ua.zyxel.com>

South America

Argentina

- Zyxel Communications Corporation
- <https://www.zyxel.com/co/es/>

Brazil

- Zyxel Communications Brasil Ltda.
- <https://www.zyxel.com/br/pt/>

Colombia

- Zyxel Communications Corporation
- <https://www.zyxel.com/co/es/>

Ecuador

- Zyxel Communications Corporation
- <https://www.zyxel.com/co/es/>

South America

- Zyxel Communications Corporation
- <https://www.zyxel.com/co/es/>

Middle East

Israel

- Zyxel Communications Corporation
- <http://il.zyxel.com/>

Middle East

- Zyxel Communications Corporation
- <https://www.zyxel.com/me/en/>

North America

USA

- Zyxel Communications, Inc. - North America Headquarters
- <https://www.zyxel.com/us/en/>

Oceania

Australia

- Zyxel Communications Corporation
- <https://www.zyxel.com/au/en/>

Africa

South Africa

- Nology (Pty) Ltd.
- <https://www.zyxel.com/za/en/>

APPENDIX B

Legal Information

Copyright

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Your use of the NAP is subject to the terms and conditions of any related service providers.

Trademarks

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Regulatory Notice and Statement

UNITED STATES of AMERICA



The following information applies if you use the product within USA area.

FCC EMC Statement

- The device complies with Part 15 of 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.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.
- This product has been tested and complies with the specifications 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 device generates, uses, and can radiate radio frequency energy and, if not installed and used according to 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 device does cause harmful interference to radio or television reception, which is found by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna
 - Increase the separation between the devices
 - Connect the equipment to an outlet other than the receiver's
 - Consult a dealer or an experienced radio/TV technician for assistance

The following information applies if you use the product with RF function within USA area.

FCC Radiation Exposure Statement

- This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.
- This transmitter must be at least 20 cm (NAP102, NAP203, NAP303) or 30 cm (NAP353) from the user and must not be co-located or operating in conjunction with any other antenna or transmitter.
- Country Code selection feature to be disabled for products marketed to the US/CANADA.
- Operation of this device is restricted to indoor use only, except for relevant user's manual mention that this device can be installed into the external environment. (NAP353 is a device for outdoor use.)

BRAZIL

The following applies if you use the product within Brazil.

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

CANADA

The following information applies if you use the product within Canada area.

Innovation, Science and Economic Development Canada ICES Statement

CAN ICES-3 (B)/NMB-3(B)

Innovation, Science and Economic Development Canada RSS-GEN & RSS-247 statement

- This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
- This radio transmitter (2468C-NWA5123AC (NAP102), 2468C-WAC6503DS (NAP303), 2468C-WAC6553DE (NAP353), 2468C-WAC6103DI (NAP203)) has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed, are strictly prohibited for use with this device.

Antenna Information

ANTENNA MODEL	NO.	TYPE	CONNECTOR	2.4 G GAIN	5 G GAIN	REMARK
NAP102 2.4 GHz Antenna	1	PIFA	U.FL	3.08 (2400-2483.5MHz)		
	2	PIFA	U.FL	3.07 (2400-2483.5MHz)		
NAP102 5 GHz Antenna	3	PIFA	U.FL		4.06 (5150-5250 MHz) 3.91 (5725-5850 MHz)	
	4	PIFA	U.FL		3.99 (5150-5250 MHz) 3.79 (5725-5850 MHz)	
NAP303		Dipole	IPEX	4	6	
NAP353 ZXL04-22008A		Dipole	N type	4.5	7	
NAP203 SINBON / 2.4 G & 5 G Metal & PCB Antenna	1	PIFA	U.FL	3.28		Ceiling Mounted: Antenna 1, 2, 3 Wall Mounted: Antenna 1, 2, 4
	2	PIFA	U.FL	3.37		
	3	PIFA	U.FL	3.15		
	4	Dipole	U.FL	4.33		
	5	Loop	U.FL		4.38 (5150-5250 MHz) 4.23 (5725-5850 MHz)	Ceiling Mounted: Antenna 5, 6, 7 Wall Mounted: Antenna 5, 6, 8
	6	Loop	U.FL		4.31 (5150-5250 MHz) 4.22 (5725-5850 MHz)	
	7	Loop	U.FL		4.38 (5150-5250 MHz) 4.36 (5725-5850 MHz)	
	8	Dipole	U.FL		5.12 (5150-5250 MHz) 5.20 (5725-5850 MHz)	

If the product with 5G wireless function operating in 5150-5250 MHz and 5725-5850 MHz, the following attention must be paid.

- The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.
- For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate; and
- Where applicable, antenna type(s), antenna models(s), and the worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in Section 6.2.23 of RSS 247 shall be clearly indicated.

If the product with 5G wireless function operating in 5250-5350 MHz and 5470-5725 MHz, the following attention must be paid.

- For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit.
- L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage; (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
- Le présent émetteur radio (2468C-NWA5123AC (NAP102), 2468C-WAC6503DS (NAP303), 2468C-WAC6553DE (NAP353), 2468C-WAC6103DI (NAP203)) a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antenne énumérés ci dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué pour tout type figurant sur la liste, sont strictement interdits pour l'exploitation de l'émetteur.

Informations Antenne

MODELE D'ANTENNE	NOMBRE	TYPE	CONNECTEUR	2.4 G GAIN	5 G GAIN	REMARQUE
NAP102 2.4 GHz Antenna	1	PIFA	U.FL	3.08 (2400-2483.5MHz)		
	2	PIFA	U.FL	3.07 (2400-2483.5MHz)		
NAP102 5 GHz Antenna	3	PIFA	U.FL		4.06 (5150-5250 MHz) 3.91 (5725-5850 MHz)	
	4	PIFA	U.FL		3.99 (5150-5250 MHz) 3.79 (5725-5850 MHz)	
NAP303		Dipole	IPEX	4	6	
NAP353 ZXL04-22008A		Dipole	N type	4.5	7	
NAP203 SINBON / 2.4 G & 5 G Metal & PCB Antenna	1	PIFA	U.FL	3.28		Ceiling Mounted: Antenna 1, 2, 3
	2	PIFA	U.FL	3.37		
	3	PIFA	U.FL	3.15		Wall Mounted: Antenna 1, 2, 4
	4	Dipole	U.FL	4.33		
	5	Loop	U.FL		4.38 (5150-5250 MHz) 4.23 (5725-5850 MHz)	Ceiling Mounted: Antenna 5, 6, 7 Wall Mounted: Antenna 5, 6, 8
	6	Loop	U.FL		4.31 (5150-5250 MHz) 4.22 (5725-5850 MHz)	
	7	Loop	U.FL		4.38 (5150-5250 MHz) 4.36 (5725-5850 MHz)	
	8	Dipole	U.FL		5.12 (5150-5250 MHz) 5.20 (5725-5850 MHz)	

Lorsque la fonction sans fil 5G fonctionnant en 5150-5250 MHz and 5725-5850 MHz est activée pour ce produit , il est nécessaire de porter une attention particulière aux choses suivantes

- Les dispositifs fonctionnant dans la bande de 5 150 à 5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- Pour les dispositifs munis d'antennes amovibles, le gain maximal d'antenne permis (pour les dispositifs utilisant la bande de 5 725 à 5 850 MHz) doit être conforme à la limite de la p.i.r.e. spécifiée, selon le cas;
- Lorsqu'il y a lieu, les types d'antennes (s'il y en a plusieurs), les numéros de modèle de l'antenne et les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, énoncée à la section 6.2.2.3 du CNR-247, doivent être clairement indiqués.

Lorsque la fonction sans fil 5G fonctionnant en 5250-5350 MHz et 5470-5725 MHz est activée pour ce produit , il est nécessaire de porter une attention particulière aux choses suivantes.

- Pour les dispositifs munis d'antennes amovibles, le gain maximal d'antenne permis pour les dispositifs utilisant les bandes de 5 250 à 5 350 MHz et de 5 470 à 5 725 MHz doit être conforme à la limite de la p.i.r.e..

Industry Canada radiation exposure statement

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm (NAP102, NAP203, NAP303) between the radiator and your body.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 30 cm (NAP353) between the radiator and your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm (NAP102, NAP203, NAP303) de distance entre la source de rayonnement et votre corps.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 30 cm (NAP353) de distance entre la source de rayonnement et votre corps.

Caution:

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit; and

(iii) the maximum antenna gain permitted for devices in the band 5725-5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.

(iv) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

(v) NAP353 is an outdoor device and only uses 5G Band 4 (5725-5850 MHz).

Avvertimento:

(i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz et 5 470-5 725 MHz doit se conformer à la limite de p.i.r.e.;

(iii) le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725-5825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

(iv) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

(v) NAP353 est un appareil extérieur et seulement utilise 5G Bane 4 (5725-5850 MHz).

EUROPEAN UNION

The following information applies if you use the product within the European Union.

Declaration of Conformity with Regard to EU Directive 2014/53/EU (Radio Equipment Directive, RED)

- Compliance information for wireless products relevant to the EU and other Countries following the EU Directive 2014/53/EU (RED). And this product may be used in all EU countries (and other countries following the EU Directive 2014/53/EU) without any limitation except for the countries mentioned below table:
- In the majority of the EU and other European countries, the 5GHz bands have been made available for the use of wireless local area networks (LANs). Later in this document you will find an overview of countries in which additional restrictions or requirements or both are applicable. The requirements for any country may evolve. Zyxel recommends that you check with the local authorities for the latest status of their national regulations for the 5GHz wireless LANs.
- If this device for operation in the band 5150-5350 MHz, it is for indoor use only.
- This equipment should be installed and operated with a minimum distance of 20 cm between the radio equipment and your body.
- The maximum RF power operating for each band as follows:

NAP102

- The band 2,400 to 2,483.5 MHz is 97.95 mW,
- The bands 5,150 MHz to 5,350 MHz is 199.07 mW,
- The 5,470 MHz to 5,725 MHz is 743.02 mW.

NAP303

- The band 2,400 to 2,483.5 MHz is 99.54 mW,
- The bands 5,150 MHz to 5,350 MHz is 183.65 mW,
- The 5,470 MHz to 5,725 MHz is 941.89 mW.

NAP353

- The band 2,400 to 2,483.5 MHz is 92.26 mW,
- The bands 5,150 MHz to 5,350 MHz is 198.61 mW,
- The 5,470 MHz to 5,725 MHz is 995.41 mW.

NAP203

- The band 2,400 to 2,483.5 MHz is 92.68 mW,
- The bands 5,150 MHz to 5,350 MHz is 192.75 mW,
- The 5,470 MHz to 5,725 MHz is 966.05 mW.

Български (Bulgarian)	С настоящото Zyxel декларира, че това оборудване е в съответствие със съществените изисквания и другите приложими разпоредбите на Директива 2014/53/ЕС. National Restrictions - The Belgian Institute for Postal Services and Telecommunications (BIPT) must be notified of any outdoor wireless link having a range exceeding 300 meters. Please check http://www.bipt.be for more details. - Draadloze verbindingen voor buitengebruik en met een reikwijdte van meer dan 300 meter dienen aangemeld te worden bij het Belgisch Instituut voor postdiensten en telecommunicatie (BIPT). Zie http://www.bipt.be voor meer gegevens. - Les liaisons sans fil pour une utilisation en extérieur d'une distance supérieure à 300 mètres doivent être notifiées à l'Institut Belge des services Postaux et des Télécommunications (IBPT). Visitez http://www.ibpt.be pour de plus amples détails.
Español (Spanish)	Por medio de la presente Zyxel declara que el equipo cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 2014/53/UE..
Čeština (Czech)	Zyxel tímto prohlašuje, že tento zařízený je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 2014/53/EU.

Dansk (Danish)	Undertegnede Zyxel erklærer herved, at følgende udstyr overholder de væsentlige krav og øvrige relevante krav i direktiv 2014/53/EU. National Restrictions - In Denmark, the band 5150 - 5350 MHz is also allowed for outdoor usage. - I Danmark må frekvensbåndet 5150 - 5350 også anvendes udendørs.
Deutsch (German)	Hiermit erklärt Zyxel, dass sich das Gerät Ausstattung in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 2014/53/EU befindet.
Eesti keel (Estonian)	Käesolevaga kinnitab Zyxel seadme vastavust direktiivi 2014/53/EU põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
Ελληνικά (Greek)	ΜΕ ΤΗΝ ΠΑΡΟΥΣΙΑ Zyxel ΔΗΛΩΝΕΙ ΟΤΙ εξοπλισμός ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 2014/53/EU.
English	Hereby, Zyxel declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.
Français (French)	Par la présente Zyxel déclare que l'appareil équipements est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 2014/53/EU.
Hrvatski (Croatian)	Zyxel ovime izjavljuje da je radijska oprema tipa u skladu s Direktivom 2014/53/EU.
Íslenska (Icelandic)	Hér með lýsir, Zyxel því yfir að þessi búnaður er í samræmi við grunnkröfur og önnur viðeigandi ákvæði tilskipunar 2014/53/EU.
Italiano (Italian)	Con la presente Zyxel dichiara che questo attrezzatura è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 2014/53/EU. National Restrictions - This product meets the National Radio Interface and the requirements specified in the National Frequency Allocation Table for Italy. Unless this wireless LAN product is operating within the boundaries of the owner's property, its use requires a "general authorization." Please check http://www.sviluppoeconomico.gov.it/ for more details. - Questo prodotto è conforme alla specifiche di Interfaccia Radio Nazionali e rispetta il Piano Nazionale di ripartizione delle frequenze in Italia. Se non viene installato all'interno del proprio fondo, l'utilizzo di prodotti Wireless LAN richiede una "Autorizzazione Generale". Consultare http://www.sviluppoeconomico.gov.it/ per maggiori dettagli.
Latviešu valoda (Latvian)	Ar šo Zyxel deklarē, ka iekārtas atbilst Direktīvas 2014/53/EU būtiskajām prasībām un citiem ar to saistītajiem noteikumiem. National Restrictions - The outdoor usage of the 2.4 GHz band requires an authorization from the Electronic Communications Office. Please check http://www.esd.lv for more details. 2.4 GHz frekvenču joslas izmantošanai ārpus telpām nepieciešama atļauja no Elektronisko sakaru direkcijas. Vairāk informācijas: http://www.esd.lv.
Lietuvių kalba (Lithuanian)	Šiuo Zyxel deklaruoja, kad šis įranga atitinka esminius reikalavimus ir kitas 2014/53/EU Direktyvos nuostatas.
Magyar (Hungarian)	Alulírott, Zyxel nyilatkozom, hogy a berendezés megfelel a vonatkozó alapvető követelményeknek és az 2014/53/EU irányelv egyéb előírásainak.
Malti (Maltese)	Hawnhekk, Zyxel, jiddikjara li dan tagħmir jikkonforma mal-ftiġijiet essenzjali u ma provvedimenti oħrajn rilevanti li hemm fid-Direttiva 2014/53/EU.
Nederlands (Dutch)	Hierbij verklaart Zyxel dat het toestel uitrusting in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 2014/53/EU.
Polski (Polish)	Niniejszym Zyxel oświadcza, że sprzęt jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 2014/53/EU.
Português (Portuguese)	Zyxel declara que este equipamento está conforme com os requisitos essenciais e outras disposições da Directiva 2014/53/EU.
Română (Romanian)	Prin prezenta, Zyxel declară că acest echipament este în conformitate cu cerințele esențiale și alte prevederi relevante ale Directivei 2014/53/EU.
Slovenčina (Slovak)	Zyxel týmto vyhlasuje, že zariadenia spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 2014/53/EU.
Slovenščina (Slovene)	Zyxel izjavlja, da je ta oprema v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 2014/53/EU.
Suomi (Finnish)	Zyxel vakuuttaa täten että laitteet tyyppinen laite on direktiivin 2014/53/EU oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska (Swedish)	Härmed intygar Zyxel att denna utrustning står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 2014/53/EU.
Norsk (Norwegian)	Erklærer herved Zyxel at dette utstyret er i samsvar med de grunnleggende kravene og andre relevante bestemmelser i direktiv 2014/53/EU.

Notes:

1. Although Norway, Switzerland and Liechtenstein are not EU member states, the EU Directive 2014/53/EU has also been implemented in those countries.

2. The regulatory limits for maximum output power are specified in EIRP. The EIRP level (in dBm) of a device can be calculated by adding the gain of the antenna used (specified in dBi) to the output power available at the connector (specified in dBm).

List of national codes

COUNTRY	ISO 3166 2 LETTER CODE	COUNTRY	ISO 3166 2 LETTER CODE
Austria	AT	Liechtenstein	LI
Belgium	BE	Lithuania	LT
Bulgaria	BG	Luxembourg	LU
Croatia	HR	Malta	MT
Cyprus	CY	Netherlands	NL
Czech Republic	CR	Norway	NO
Denmark	DK	Poland	PL
Estonia	EE	Portugal	PT
Finland	FI	Romania	RO
France	FR	Serbia	RS
Germany	DE	Slovakia	SK
Greece	GR	Slovenia	SI
Hungary	HU	Spain	ES
Iceland	IS	Sweden	SE
Ireland	IE	Switzerland	CH
Italy	IT	Turkey	TR
Latvia	LV	United Kingdom	GB

Professional installation instruction (NAP353)

Please be advised that due to the unique function supplied by this product, the device is intended for use with our interactive entertainment software and licensed third-party only. The product will be distributed through controlled distribution channel and installed by trained professional and will not be sold directly to the general public through retail store.

- 1 Installation personal**
This product is designed for specific application and needs to be installed by a qualified personal who has RF and related rule knowledge. The general user shall not attempt to install or change the setting.
- 2 Installation location**
The product shall be installed at a location where the radiating antenna can be kept 30 cm from nearby person in normal operation condition to meet regulatory RF exposure requirement.
- 3 External antenna**
Use only the antennas which have been approved by Zyxel Communications Corporation. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC/IC limit and is prohibited.
- 4 Installation procedure**
Please refer to user's manual for the detail.
- 5 Warning**
Please carefully select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to serious federal penalty.

Instructions d'installation professionnelle (NAP353)

Veuillez noter que l'appareil étant dédié à une fonction unique, il doit être utilisé avec notre logiciel propriétaire de divertissement interactif. Ce produit sera proposé par un réseau de distribution contrôlé et installé par des professionnels; il ne sera pas proposé au grand public par le réseau de la grande distribution.

- 1 Installation**
Ce produit est destiné à un usage spécifique et doit être installé par un personnel qualifié maîtrisant les radiofréquences et les règles s'y rapportant. L'installation et les réglages ne doivent pas être modifiés par l'utilisateur final.
- 2 Emplacement d'installation**
En usage normal, afin de respecter les exigences réglementaires concernant l'exposition aux radiofréquences, ce produit doit être installé de façon à respecter une distance de 30 cm entre l'antenne émettrice et les personnes.
- 3 Antenne externe.**
Utiliser uniquement les antennes approuvées par le fabricant. L'utilisation d'autres antennes peut conduire à un niveau de rayonnement essentiel ou non essentiel dépassant les niveaux limites définis par FCC/IC, ce qui est interdit.
- 4 Procédure d'installation**
Consulter le manuel d'utilisation.
- 5 Avertissement**
Choisir avec soin la position d'installation et s'assurer que la puissance de sortie ne dépasse pas les limites en vigueur. La violation de cette règle peut conduire à de sérieuses pénalités fédérales.

Safety Warnings

- Do not use this product near water, for example, in a wet basement or near a swimming pool.
- Do not expose your device to dampness, dust or corrosive liquids.
- Do not store things on the device.
- Do not obstruct the device ventilation slots as insufficient airflow may harm your device. For example, do not place the device in an enclosed space such as a box or on a very soft surface such as a bed or sofa.
- Do not install, use, or service this device during a thunderstorm. There is a remote risk of electric shock from lightning.
- Connect ONLY suitable accessories to the device.
- Do not open the device or unit. Opening or removing covers can expose you to dangerous high voltage points or other risks. ONLY qualified service personnel should service or disassemble this device. Please contact your vendor for further information.
- Make sure to connect the cables to the correct ports.
- Place connecting cables carefully so that no one will step on them or stumble over them.
- Always disconnect all cables from this device before servicing or disassembling.
- Do not remove the plug and connect it to a power outlet by itself; always attach the plug to the power adaptor first before connecting it to a power outlet.
- Do not allow anything to rest on the power adaptor or cord and do NOT place the product where anyone can walk on the power adaptor or cord.
- Please use the provided or designated connection cables/power cables/ adaptors. Connect it to the right supply voltage (for example, 110V AC in North America or 230V AC in Europe). If the power adaptor or cord is damaged, it might cause electrocution. Remove it from the device and the power source; repairing the power adapter or cord is prohibited. Contact your local vendor to order a new one.
- Do not use the device outside, and make sure all the connections are indoors. There is a remote risk of electric shock from lightning. (NAP303, NAP203 and NAP102)
- Antenna Warning! This device meets ETSI and FCC certification requirements when using the included antenna(s). Only use the included antenna(s).
- If you wall mount your device, make sure that no electrical lines, gas or water pipes will be damaged.
- The PoE (Power over Ethernet) devices that supply or receive power and their connected Ethernet cables must all be completely indoors.
- This product is for indoor use only (utilisation intérieure exclusivement). (NAP303, NAP203 and NAP102)
- FOR COUNTRY CODE SELECTION USAGE (WLAN DEVICES)
Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all Wi-Fi product marketed in US must fixed to US operation channels only.
- The following warning statements apply, where the disconnect device is not incorporated in the device or where the plug on the power supply cord is intended to serve as the disconnect device,
 - For permanently connected devices, a readily accessible disconnect device shall be incorporated external to the device;
 - For pluggable devices, the socket-outlet shall be installed near the device and shall be easily accessible.

Environment statement

ErP (Energy-related Products) (NAP303 and NAP102)

Zyxel products put on the EU market in compliance with the requirement of the European Parliament and the Council published Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products (recast), so called as "ErP Directive (Energy-related Products directive) as well as ecodesign requirement laid down in applicable implementing measures, power consumption has satisfied regulation requirements which are:

- Network standby power consumption < 8W, and/or
- Off mode power consumption < 0.5W, and/or
- Standby mode power consumption < 0.5W.

(Wireless settings, please refer to the chapter about wireless settings chapter for more detail.)

European Union - Disposal and Recycling Information

The symbol below means that according to local regulations your product and/or its battery shall be disposed of separately from domestic waste. If this product is end of life, take it to a recycling station designated by local authorities. At the time of disposal, the separate collection of your product and/or its battery will help save natural resources and ensure that the environment is sustainable development.

Die folgende Symbol bedeutet, dass Ihr Produkt und/oder seine Batterie gemäß den örtlichen Bestimmungen getrennt vom Hausmüll entsorgt werden muss. Wenn Sie sich an eine Recyclingstation, wenn dieses Produkt das Ende seiner Lebensdauer erreicht hat. Zum Zeitpunkt der Entsorgung wird die getrennte Sammlung von Produkt und/oder seiner Batterie dazu beitragen, natürliche Ressourcen zu sparen und die Umwelt und die menschliche Gesundheit zu schützen.

El símbolo de abajo indica que según las regulaciones locales, su producto y/o su batería deberán depositarse como basura separada de la doméstica. Cuando este producto alcance el final de su vida útil, llévelo a un punto limpio. Cuando llegue el momento de desechar el producto, la recogida por separado éste y/o su batería ayudará a salvar los recursos naturales y a proteger la salud humana y medioambiental.

Le symbole ci-dessous signifie que selon les réglementations locales votre produit et/ou sa batterie doivent être éliminés séparément des ordures ménagères. Lorsque ce produit atteint sa fin de vie, amenez-le à un centre de recyclage. Au moment de la mise au rebut, la collecte séparée de votre produit et/ou de sa batterie aidera à économiser les ressources naturelles et protéger l'environnement et la santé humaine.

Il simbolo sotto significa che secondo i regolamenti locali il vostro prodotto e/o batteria deve essere smaltito separatamente dai rifiuti domestici. Quando questo prodotto raggiunge la fine della vita di servizio portarlo a una stazione di riciclaggio. Al momento dello smaltimento, la raccolta separata del vostro prodotto e/o della sua batteria aiuta a risparmiare risorse naturali e a proteggere l'ambiente e la salute umana.

Symbolen innebär att enligt lokal lagstiftning ska produkten och/eller dess batteri kastas separat från hushållsavfallet. När den här produkten når slutet av sin livslängd ska du ta den till en återvinningsstation. Vid tiden för kasseringen bidrar du till en bättre miljö och mänsklig hälsa genom att göra dig av med den på ett återvinningsställe.



台灣



以下訊息僅適用於產品具有無線功能且銷售至台灣地區

- 第十二條 經型式認證合格之低功率射頻電機，非經許可，公司，商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
- 第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。
- 使用無線產品時，應避免影響附近雷達系統之操作。
- 高增益指向性天線只得應用於固定式點對點系統。
- 無線資訊傳輸設備忍受合法通信之干擾且不得干擾合法通信；如造成干擾，應立即停用，俟無干擾之虞，始得繼續使用。
- 無線資訊傳輸設備的製造廠商應確保頻率穩定性，如依製造廠商使用手冊上所述正常操作，發射的信號應維持於操作頻帶中。

NCC Statement:

1) 下列產品使用時建議應距離人體 20 cm

- 電磁波曝露量 MPE 標準值 (MPE) 1 mW/cm^2 ，送測產品實值為 0.539 mW/cm^2 for NAP102。
- 電磁波曝露量 MPE 標準值 (MPE) 1 mW/cm^2 ，送測產品實值為 0.756 mW/cm^2 for NAP203。
- 電磁波曝露量 MPE 標準值 (MPE) 1 mW/cm^2 ，送測產品實值為 0.872 mW/cm^2 for NAP303。

2) 下列產品使用時建議應距離人體 30 cm

- 電磁波曝露量 MPE 標準值 (MPE) 1 mW/cm^2 ，送測產品實值為 0.539 mW/cm^2 for NAP353。

以下訊息僅適用於產品屬於專業安裝並銷售至台灣地區 (NAP353)

- 本器材須經專業工程人員安裝及設定，始得設置使用，且不得直接販售給一般消費者。

安全警告 - 為了您的安全，請先閱讀以下警告及指示：

- 請勿將此產品接近水、火焰或放置在高溫的環境。
- 避免設備接觸：
 - 任何液體 - 切勿讓設備接觸水、雨水、高濕度、污水腐蝕性的液體或其他水份。
 - 灰塵及污物 - 切勿接觸灰塵、污物、沙土、食物或其他不合適的材料。
- 雷雨天氣時，不要安裝，使用或維修此設備。有遭受電擊的風險。
- 切勿重摔或撞擊設備，並勿使用不正確的電源變壓器。
- 若接上不正確的電源變壓器會有爆炸的風險。
- 請勿隨意更換產品內的電池。
- 如果更換不正確之電池型式，會有爆炸的風險，請依製造商說明書處理使用過之電池。
- 請將廢電池丟棄在適當的電器或電子設備回收處。
- 請勿將設備解體。
- 請勿阻礙設備的散熱孔，空氣對流不足將會造成設備損害。
- 請插在正確的電壓供給插座（如：北美 / 台灣電壓 110V AC，歐洲是 230V AC）。
- 假若電源變壓器或電源變壓器的纜線損壞，請從插座拔除，若您還繼續插電使用，會有觸電死亡的風險。
- 請勿試圖修理電源變壓器或電源變壓器的纜線，若有毀損，請直接聯絡您購買的店家，購買一個新的電源變壓器。
- 請勿將此設備安裝於室外，此設備僅適合放置於室內。
- 請勿隨一般垃圾丟棄。
- 請參閱產品背貼上的設備額定功率。
- 請參考產品型錄或是彩盒上的作業溫度。
- 產品沒有斷電裝置或者採用電源線的插頭視為斷電裝置的一部分，以下警語將適用：
 - 對永久連接之設備，在設備外部須安裝可觸及之斷電裝置；
 - 對插接式之設備，插座必須接近安裝之地點而且是易於觸及的。

About the Symbols

Various symbols are used in this product to ensure correct usage, to prevent danger to the user and others, and to prevent property damage. The meaning of these symbols are described below. It is important that you read these descriptions thoroughly and fully understand the contents.

Explanation of the Symbols

SYMBOL	EXPLANATION
	Alternating current (AC): AC is an electric current in which the flow of electric charge periodically reverses direction.
	Direct current (DC): DC is the unidirectional flow or movement of electric charge carriers.
	Earth; ground: A wiring terminal intended for connection of a Protective Earthing Conductor.
	Class II equipment: The method of protection against electric shock in the case of class II equipment is either double insulation or reinforced insulation.

Viewing Certifications

Go to <http://www.zyxel.com> to view this product's documentation and certifications.

Zyxel Limited Warranty

Zyxel warrants to the original end user (purchaser) that this product is free from any defects in material or workmanship for a specific period (the Warranty Period) from the date of purchase. The Warranty Period varies by region. Check with your vendor and/or the authorized Zyxel local distributor for details about the Warranty Period of this product. During the warranty period, and upon proof of purchase, should the product have indications of failure due to faulty workmanship and/or materials, Zyxel will, at its discretion, repair or replace the defective products or components without charge for either parts or labor, and to whatever extent it shall deem necessary to restore the product or components to proper operating condition. Any replacement will consist of a new or re-manufactured functionally equivalent product of equal or higher value, and will be solely at the discretion of Zyxel. This warranty shall not apply if the product has been modified, misused, tampered with, damaged by an act of God, or subjected to abnormal working conditions.

Note

Repair or replacement, as provided under this warranty, is the exclusive remedy of the purchaser. This warranty is in lieu of all other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular use or purpose. Zyxel shall in no event be held liable for indirect or consequential damages of any kind to the purchaser.

To obtain the services of this warranty, contact your vendor. You may also refer to the warranty policy for the region in which you bought the device at http://www.zyxel.com/web/support_warranty_info.php.

Registration

Register your product online to receive e-mail notices of firmware upgrades and information at www.zyxel.com.

Open Source Licenses

This product contains in part some free software distributed under GPL license terms and/or GPL like licenses. Open source licenses are provided with the firmware package. You can download the latest firmware at www.zyxel.com. If you cannot find it there, contact your vendor or Zyxel Technical Support at support@zyxel.com.tw.

To obtain the source code covered under those Licenses, please contact your vendor or Zyxel Technical Support at support@zyxel.com.tw.

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