Predator Connect W6d
Dual-band WiFi 6 Router
User Guide
v.0.1

Revision   Feb, 2023

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Contents

1. Overview

Acer Connect series W6, a whole new Wi-Fi 6 Dual-band wireless router, is optimized for gamers with intensive features and simple setup steps via a 1-2-3 wizard. A new stylish 4-antenna desktop wireless router tuned for optimal gaming experience and for your household. Network Security protection is embedded. Live updates ensure your network is immune from malware and vulnerability threats 24-7. Smart home (IoT) devices can be setup on their own WiFi network. ACS (Automatic Channel Selection) dynamically chooses the most suitable channel for the W6d when you experience interference from nearby 5GHz SSIDs. Port forwarding profiles for most game consoles (PS5, XBOX, etc.) are readily available inside for gameplay. Hybrid QoS is the best fit for your Predator router, ensuring prioritization of your gaming traffic and bandwidth utilization. The VPN feature provides a secure connection for your device when surfing the website.

2. Installation and Setup

2.1. Plug in AC adapter.
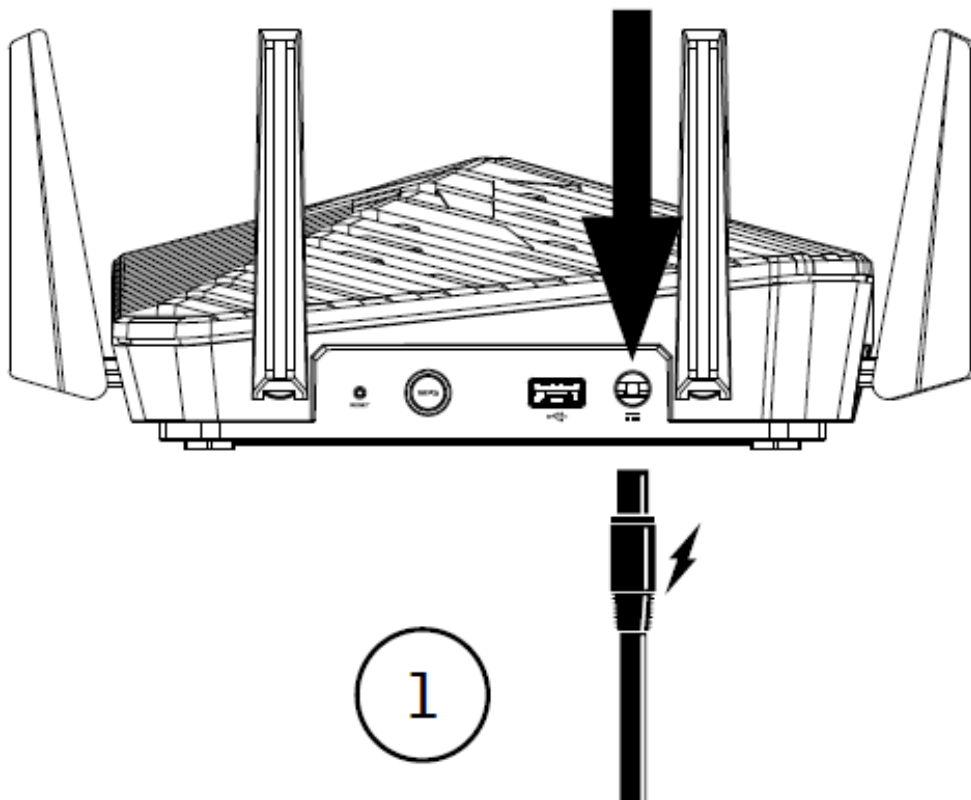
2.2. Plug into outlet.
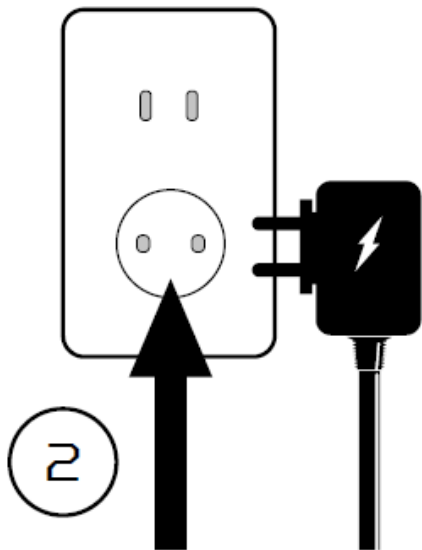
2.3 Plug in Internet cable.

INTERNET
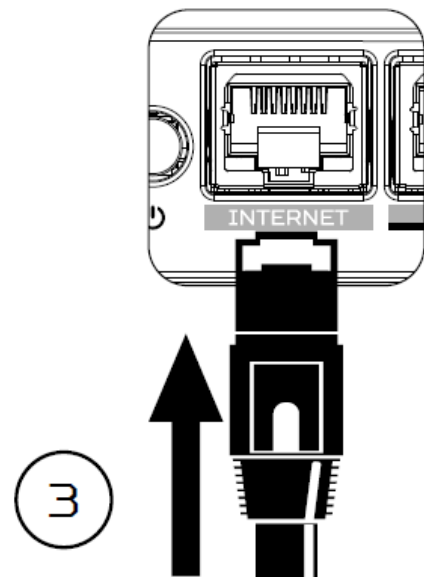
2.4 Power on device.

INTE
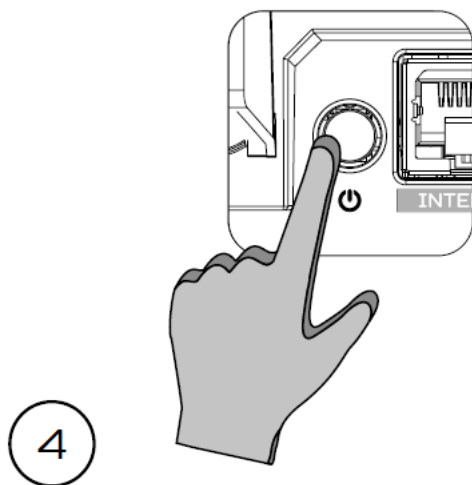
2.5 Connect to PredatorW6 WiFi.

PredatorWX-XXXX-X.XGHz

Connect

WiFi-1234
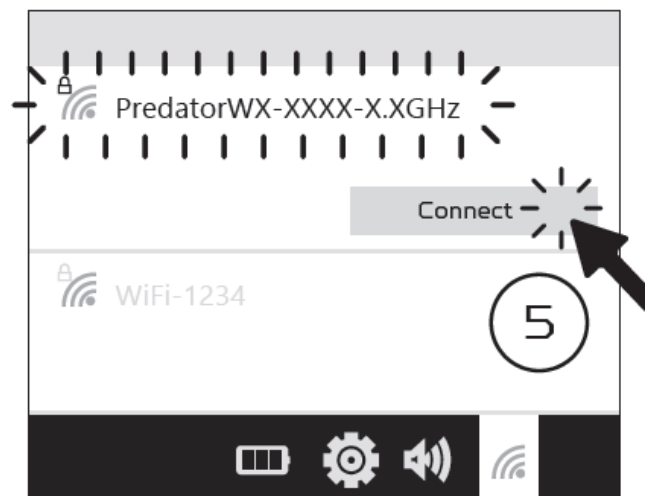
2.6 Important information is at the bottom of the device.

SMMVV

MFG Date: OCT.2022

Wi-Fi PredatorW6-XXXX
Wi-Fi PWD: ConnectXXXX
Admin PWD: AcerXXXX
http://acerconnect.com

Scan Here

Device Binding
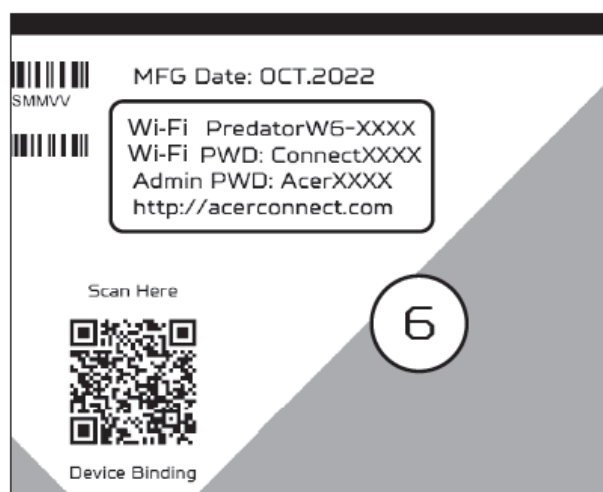
2.7 The device can be either setup via Predator Connect mobile App or via browser web admin.

How to setup the router via **Predator Connect mobile App**:

- Use a mobile device camera to scan the QR-code below. Download the Predator Connect mobile App via Play Store or App Store.

- Open the Predator Connect mobile App and follow the steps for registering an account. Go to your email inbox, review the registration email, and input the 4-digit registration code onto the mobile App. When the whole process is completed, you will be automatically signed in.
- Enable the mobile WiFi function and scan the device QR-code printed on the bottom label. The default admin and WiFi password will be automatically exported into the mobile app. (SSID: PredatorW6d-YYYY)
- Device setup completed.

Setup the router via browser:
- Please make sure that the wireless function on your laptop is already enabled.
- Check the device bottom label, and find the router default SSID (PredatorW6d-YYYY) and password and then connect.
- Open the browser on your laptop/desktop, input the device web admin URL: http://acerconnect.com or IP: http://192.168.76.1
- The device will automatically redirect to a quick setup wizard. Follow the easy 1-2-3 steps and get ready to access the internet.

  Note: The admin login password requires modification within the setup wizard for a first time use. Please create a strong password and keep it in a safe place. (New password cannot be same as the prior one.)

  Note: The router web admin portal will automatically lock after five consecutive incorrect attempts. You have to power cycle the router to unlock the web admin.

  Note: The SSID WiFi password can't be same as admin login password.

3. Initial Configuration

Please log in to the Predator Connect W6d Web Portal (http://acerconnect.com or IP: http://192.168.76.1) by using the current valid Admin password. You can select the language of Web UI by clicking on the drop down arrow.
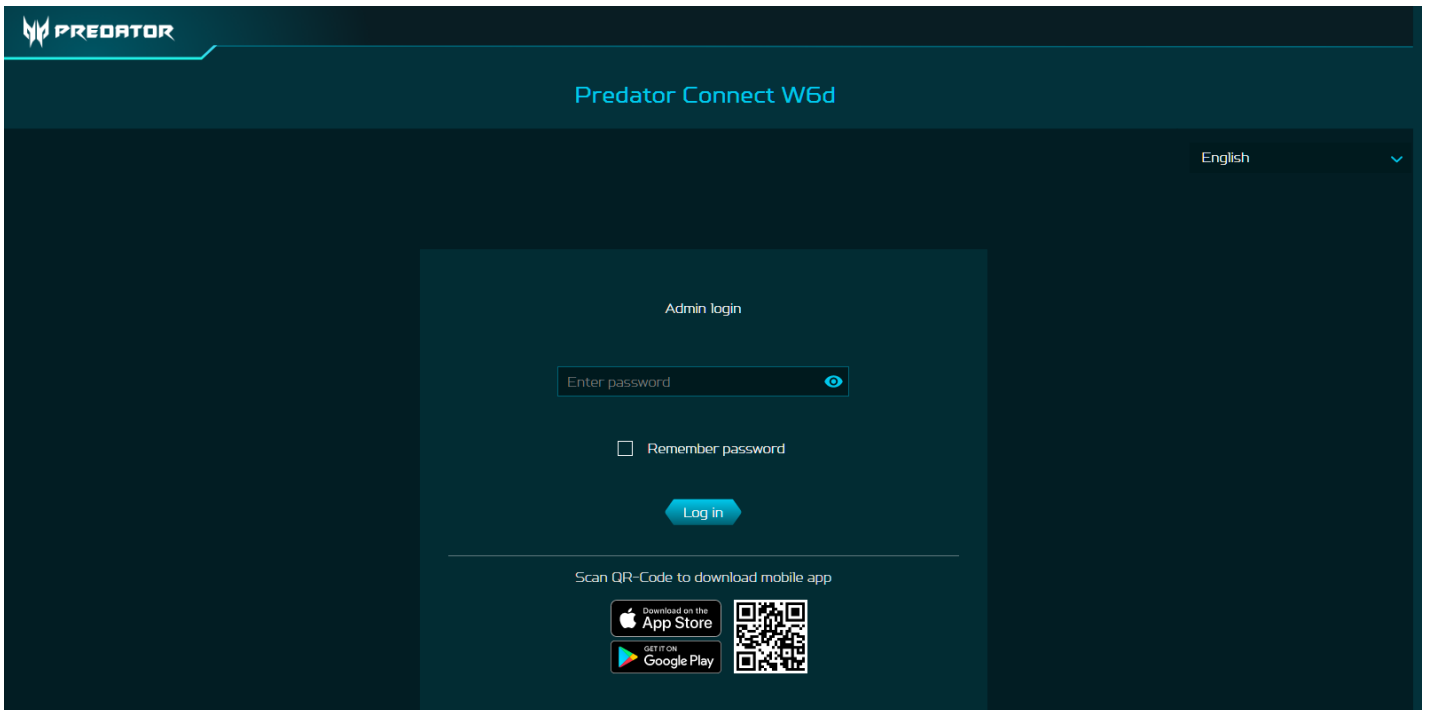
Enter the login password to see the dashboard and other settings of your Predator Connect W6d. The router will automatically guide you step by step how to setup and configure internet access and basic network settings.

You can scan the QR code (on the login screen using your android mobile or iPhone) to download the mobile app and manage your router remotely.

3.1 Dashboard

Once you have successfully logged in, the following key information will be displayed on the Predator Connect W6d dashboard.
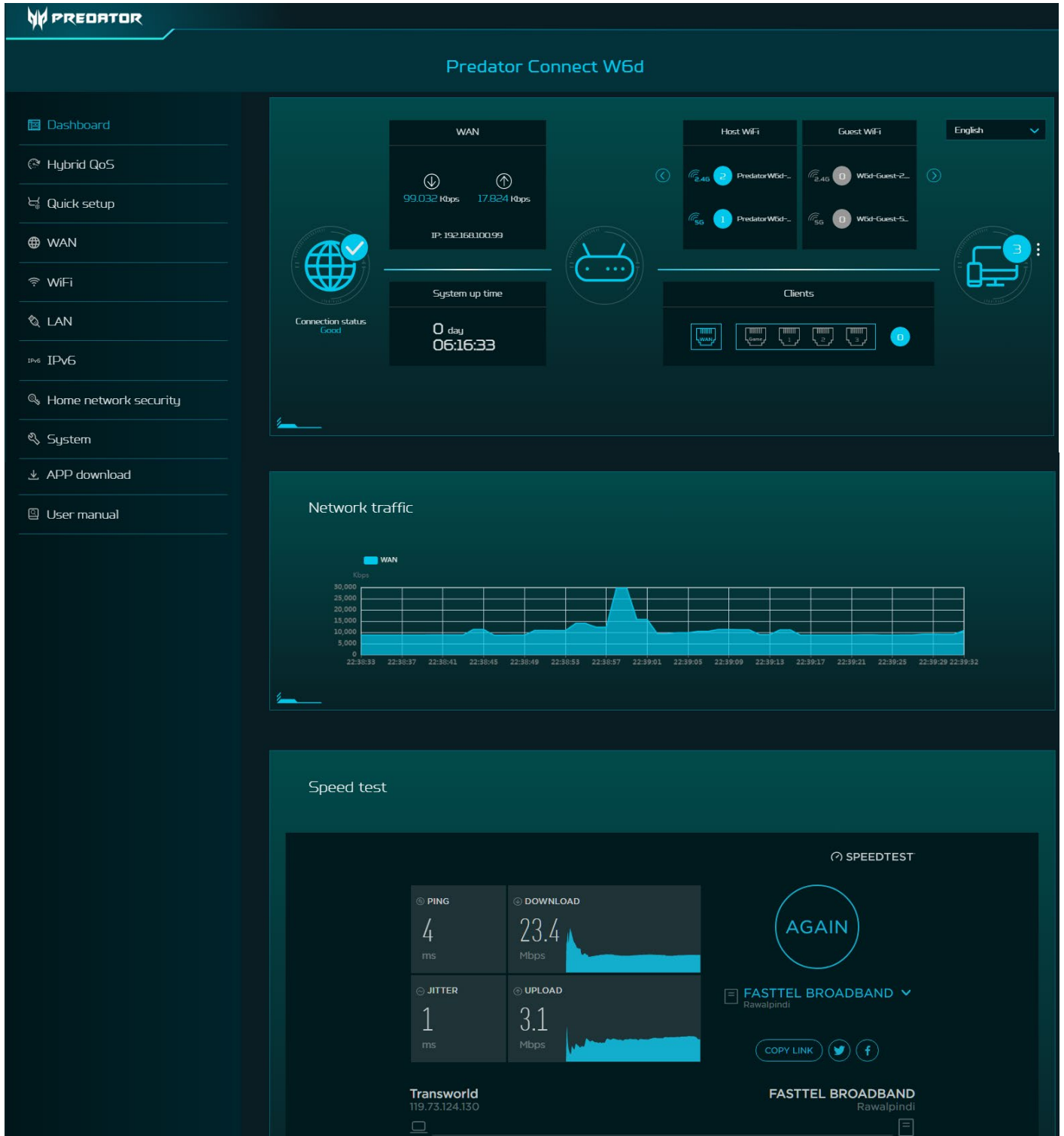
Connection Status: shows the current connection status of Internet.
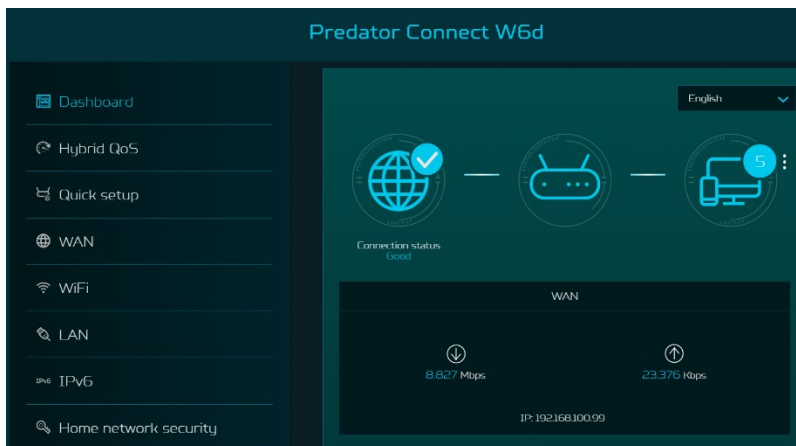
**WAN Status:** shows WAN connectivity and Download/Upload speed and WAN IP.

System Up time: shows system up time since last reboot.

WiFi Status: shows number of wireless client devices connected with 2.4GHz and 5GHz bands.

LAN Status: quickly indicates the status of LAN ports. Predator Connect W6d has one WAN port, one Game port and three LAN ports i.e. LAN 1, LAN 2, LAN 3.

The "icon" (at the far right) represents the number of devices connected to the W6d router. Clicking on this icon will display the table shown below.
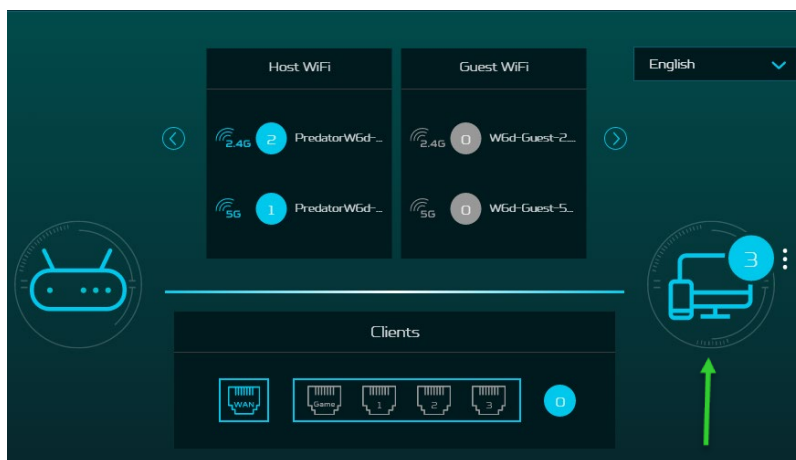
Connected Devices: shows how many client devices are connected with your Predator Connect W6d through WiFi or LAN.

You can also modify the device name by clicking on the pencil icon.

This tab displays client device name, IP address allocated by the router, MAC address of the device, mode of connection (whether the device is connected with router through Ethernet or WiFi), and duration of device connectivity with the router. You can even block the device from accessing the Internet by clicking on "block" button.
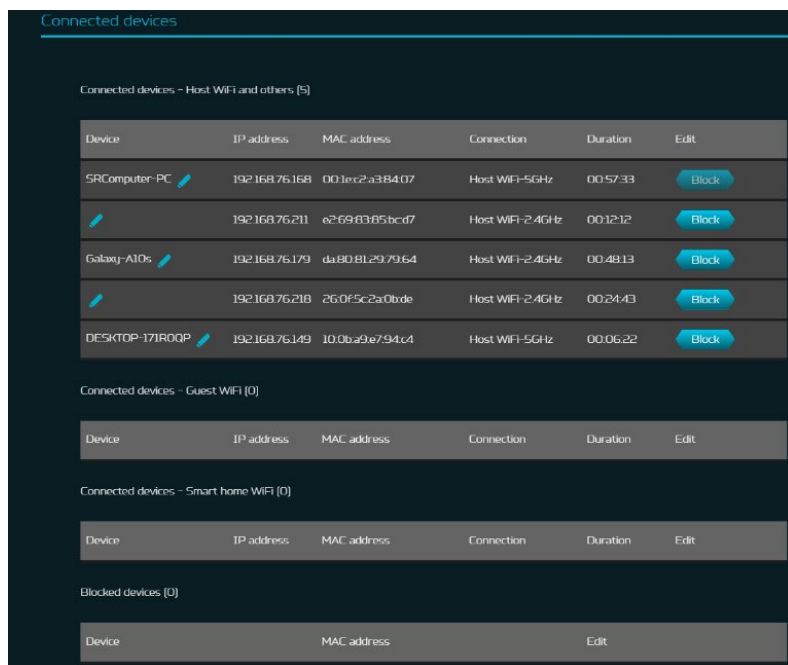
Network Traffic: helps indicate real time status of the Download (DL) and Upload (UL) speeds across the WAN.

Network Speed Test:
1) Powered by Ookla. A single push of the "GO" button tests the speed of the WAN connectivity.
2) You can even manually select the server option. Click on the dropdown arrow and it will display the available servers.
3) Clicking the "Go" Button will test the network speed and display the results as shown in the image below.
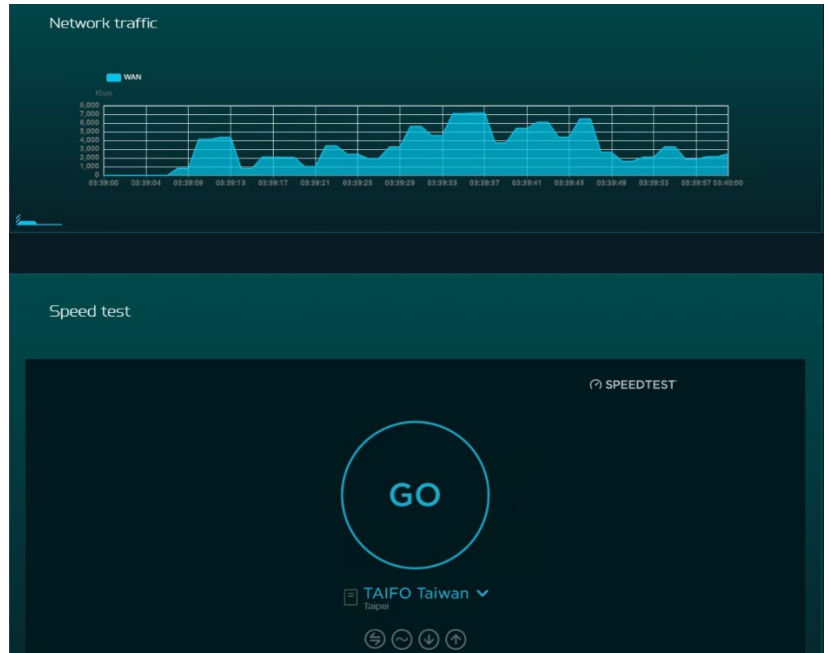
It will test and clearly show the network download and upload speed in Mbps, ping rate and jitter in milliseconds.

After getting the speed test results, you have the option to run the speed test again.

4. Hybrid QoS

Hybrid QoS combines application priority and device priority. The Killer-Enabled PC can set applications priority and send packets with DSCP values to the Predator Connect W6d router, then the router will classify packets and set priority for all different applications based on the below definition.

For non-Killer-Enabled devices, Predator Connect W6d can identify game consoles, streaming devices, computers, and smartphones and IoT devices in the network and allocate them to priority group according to the default settings, or the user can manually set priority for devices connected to the router.

*Note: Device identification requires network security engine option enable.
Application based QoS* priority: (Enabled by default)
*Note: Application Priority will use the DSCP value in the IP header for packet classification. Laptop/desktop with Killer™ embedded traffic priorities in four grades by application. I.e. Extreme (Games), High (Streaming), Normal (Browsing), Low (Download).

Priority	Extreme (Games)	High (Streaming)	Normal (Browsing)	Low (Download)
Applications (DSCP) Intel Killer Teams/Zoom, GT-Booster	· Killer Priority 1 (Games) · Killer Priority 2 (Real Time)	· Killer Priority 3 (Streaming)	· Killer Priority 4 (Browsing)	· Killer Priority 5 & 6 (Cloud Download)
	· Teams/Zoom Voice	· Teams/Zoom Video	· Teams Shared Screen	
NVIDIA GeForce NOW	· GeForce NOW (Video/Data)	· GeForce NOW (Audio)		
Devices	· Game Port Connected · Game Console: PS, Xbox, Switch	· Chromecast, FireTV, Roku · SmartTV	· Computers, Smartphones · Other Devices	· IoT Devices, Wearable

Device priority:
Note 1: Killer-Enabled PC is set to default extreme priority whether connected by wired Ethernet or by wireless.
Note 2: You may drag and drop connected clients into the desired priority level. The change is effective immediately.

For the upload and download **bandwidth** configuration, please contact your ISP to get the exact value of upload and download bandwidth. Once the bandwidth is configured, QoS will reserve the bandwidth according to the weighting percentage of each priority queue.
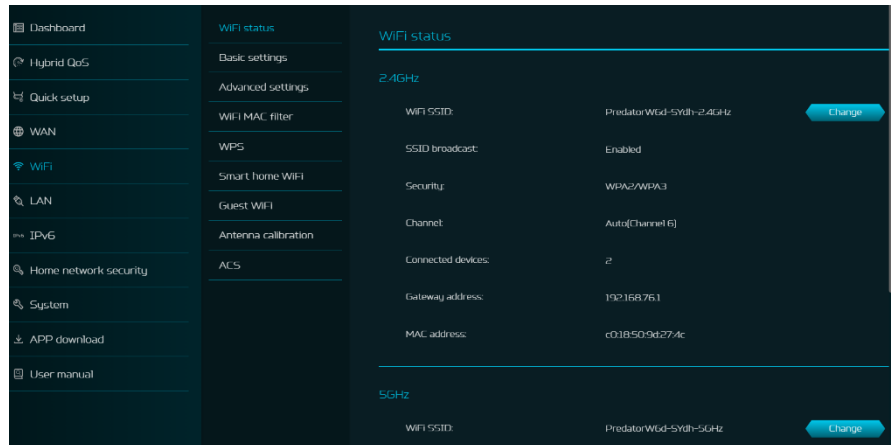
You may select "use default configuration" and click on "Apply bandwidth". Otherwise, you can select "setting manually" and enter the required upload and download bandwidth with priority weighting.

5.   WiFi

WiFi Status
Displays key information such as:
• WiFi SSID
• SSID Broadcast
• Security
• Channel
• Connected devices
• Gateway address
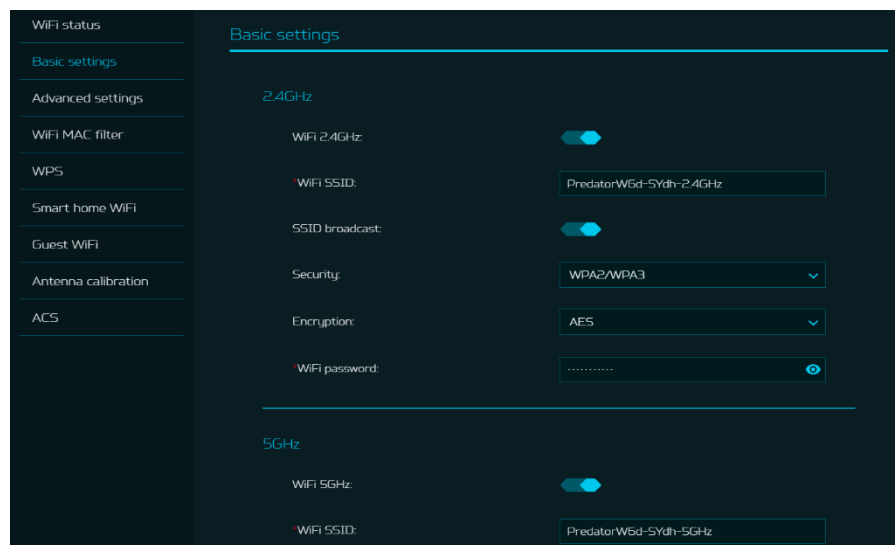• Mac address of 2.4GHz, 5GHz

5.1. Basic Settings
In this page, you can edit WiFi SSID and enable or disable SSID broadcast and use the following security parameters for 2.4GHz and 5GHz bands

WPA, WPA2, WPA/WPA2, WPA3 personal, WPA2/WPA3, Enhanced open;

Encryption option: AES, Auto, TKIP. Auto and TKIP are available only, when WPA, WPA/WPA2 security option applied.


5.2. Guest WiFi
This tab provides information about the Internet connection for guests and their devices accessing your network.

When enabling Guest WiFi on any band, it will ask to provide Guest WiFi SSID and security parameters. You can select security and encryption option by clicking drop down arrows.
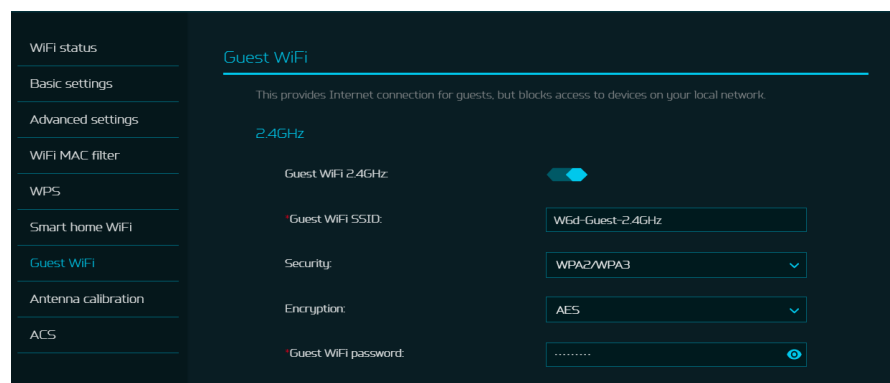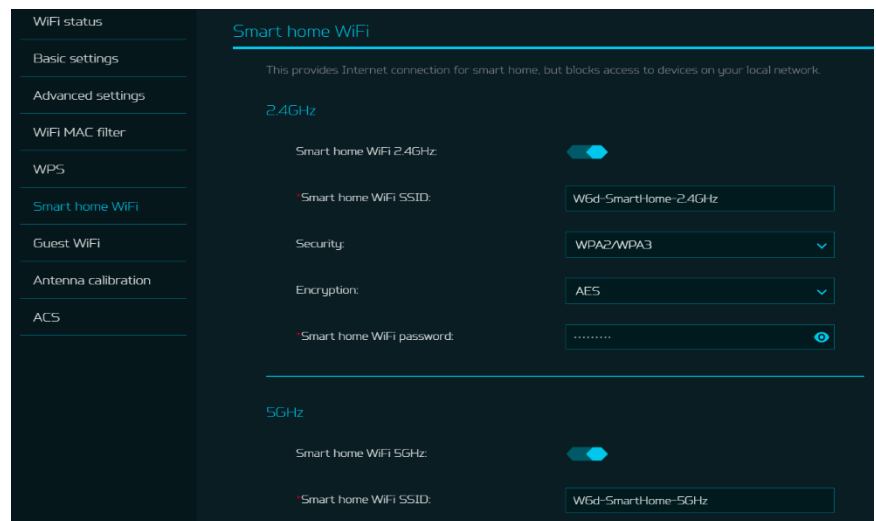
Guest WiFi password is set by default for all bands, so it is suggested to change the passwords for security reasons.
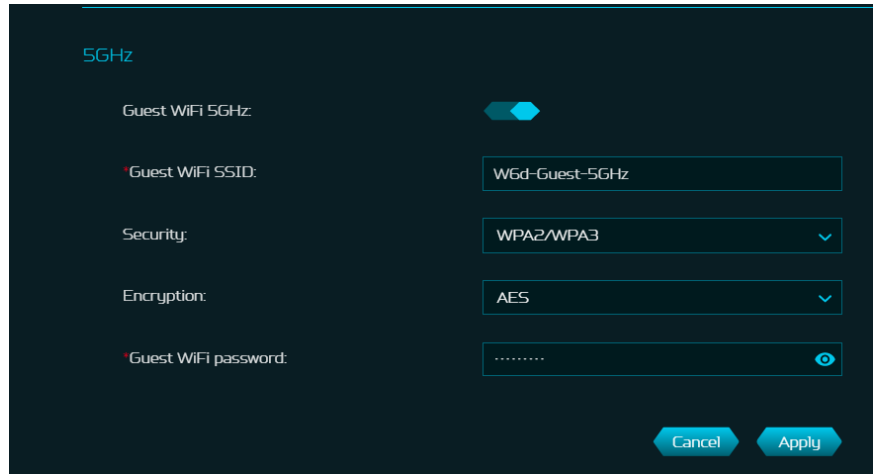
5.3. Smart home WiFi

This tab provides Internet connection for smart home WiFi, but blocks access to devices on your local network.

Choose to enable between 2.4GHz/ 5GHz band and set the WiFi SSID and security parameters for smart home WiFi.

5.4. WPS

WPS (WiFi Protected Setup) provides an easy way to connect your device to the network by pushing the WPS button (next to the USB port) or entering a PIN code.

In this page, you can configure the WPS settings of 2.4GHz and 5GHz bands. There are two methods to configure WPS i.e. using a PIN (client's pin or Router's pin) or you can choose a second method, in which you need to click on "Start WPS", then enable WPS on your wireless device within two minutes. WPS will be disabled, if WiFi set to WPA3, WPA or TKIP mode, or if SSID broadcast is turned off.
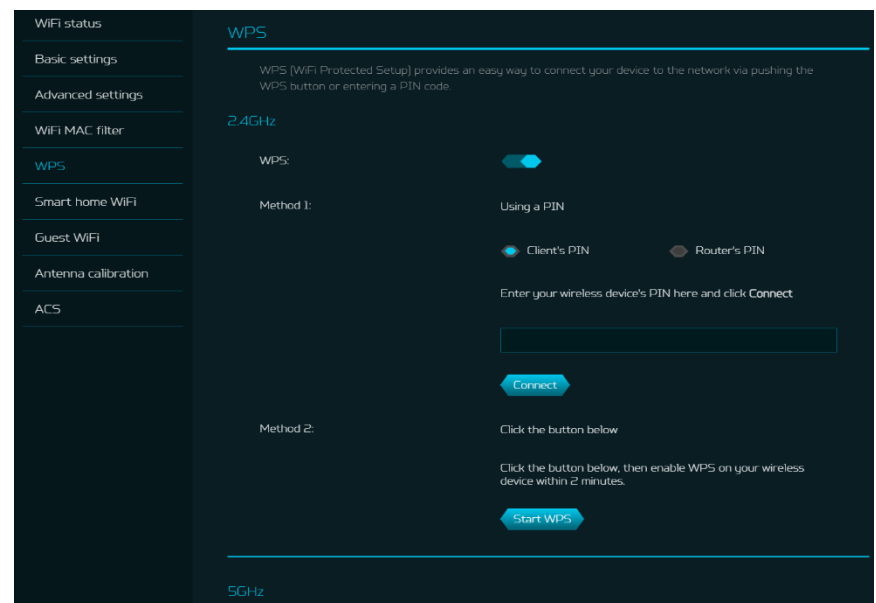
5.5. Antenna Calibration
In general, we suggest putting all four router antennas up (90 degree vertical with surface) toward the ceiling when positioned on a flat desk. However, if you want a specific client to benefit with lower latency for better gaming experience, you can follow the steps below to adjust antenna angle accordingly.

Step 1:
Put the mobile or laptop in a position where you want the best coverage, and then enable the calibration option.
Note: Walls and floors effect the signal between router and your device. For optimal signal, it is recommended to put your device in the line of sight with the router.

Step 2:
LED indicators adjacent to the router antenna use color to reflect the signal strength: blue is good; green is normal; red is weak.
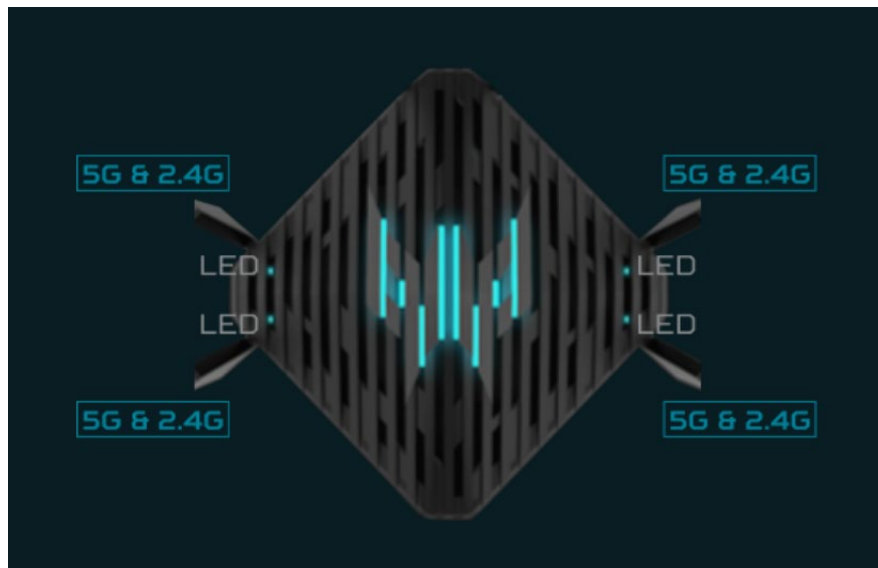
Note 1: Please make sure that your mobile device or computer is wirelessly connected to the router. The feature is not applicable when connected via Ethernet LAN.

Note 2: Four signal strength LEDs will be ON when the client is associated with 5GHz and calibrated.

Step 3:
Adjust each antenna direction to get better performance.

5.6. ACS (Automatic Channel Selection)
ACS is a mechanism to optimize the channel assignment. It selects the best working channel dynamically. One that is clear and has the least traffic.

Note 1: There will be a small delay, rescanning and then cycling OFF and ON if the client is associated within the ACS enablement band. Please check your device wireless connection and select the best WiFi W6d router SSID after ACS process is completed.
Note 2: The ACS is not applicable if all the bands (2.4GHz, 5GHz) are configured as fixed channel.

5.7 Advanced Settings

This tab will help you to setup advanced WiFi parameters for 2.4GHz and 5GHz bands.

AP isolation is a feature that enables you to create a separate virtual network preventing client communicating with each other and preventing unwanted hacking. This feature is disabled by default.


DFS (Dynamic Frequency Selection) is a function of using 5GHz Wi-Fi frequencies that are generally reserved for radar, such as satellite communication, weather radar etc.
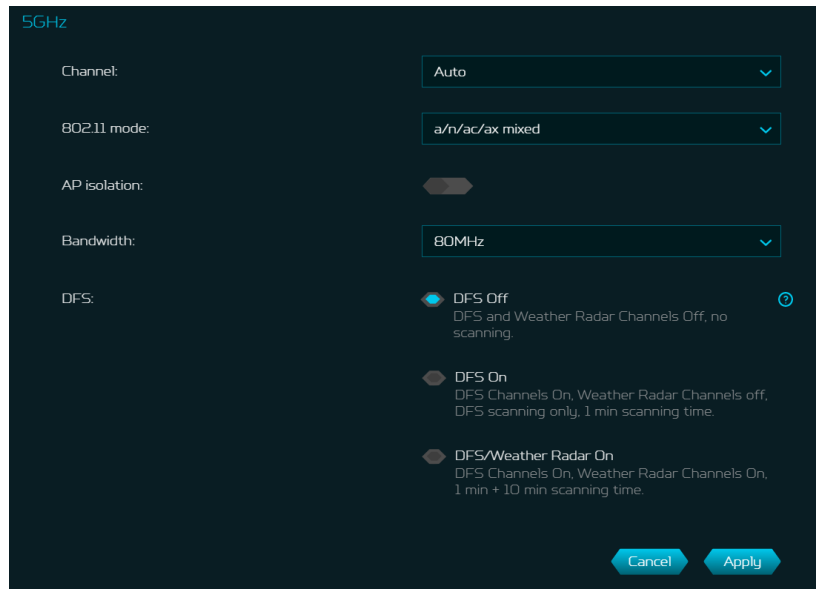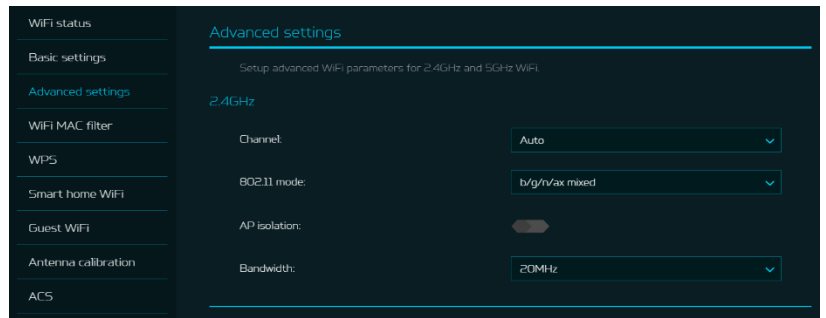
5.8 WiFi MAC filter

Devices which are added in WiFi MAC filter will be blocked from accessing the Internet.

Click on (+) icon to add the device in filter table by entering its name & MAC address. Up to 32 devices can be added in the MAC filter table.
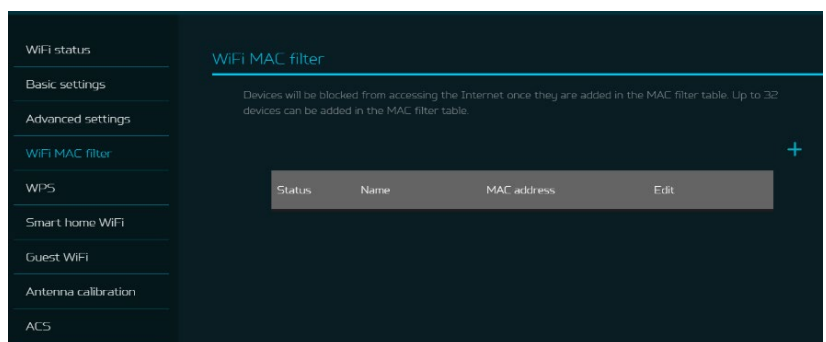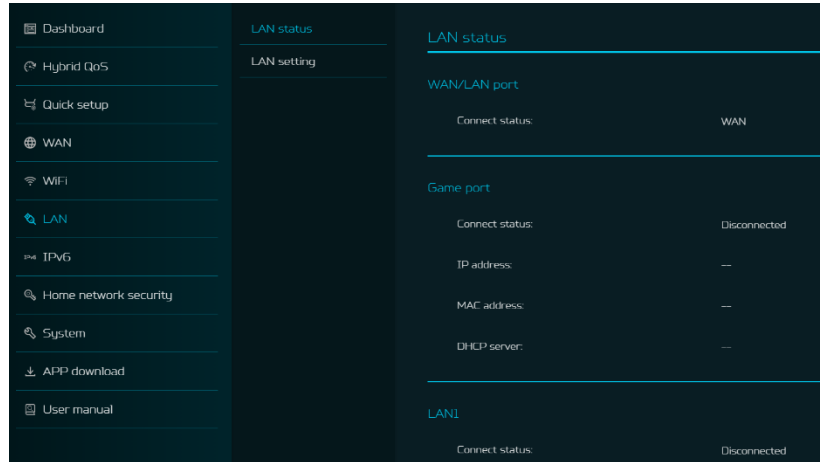
6. LAN

LAN status
In this page, you can view each LAN port status including its associated IP address, MAC address and DHCP server.

The Predator Connect W6d has one Game port and three LAN ports.

LAN Setting
This tab allows you to setup LAN IP gateway address with an option to enable or disable DHCP server feature.

You can enter/edit gateway address and subnet mask. DHCP server provides and assigns IP addresses, default gateways and other network parameters to client devices. DHCP server can be enabled or disabled as per the network requirement.

Following subnets are reserved for default services. Please do not use as gateway address.
1. 192.168.7.x   (IPsec VPN)
2. 192.168.8.x   (Open VPN)
3. 192.168.10.x (Guest WiFi)
4. 192.168.20.x (Smart Home WiFi)
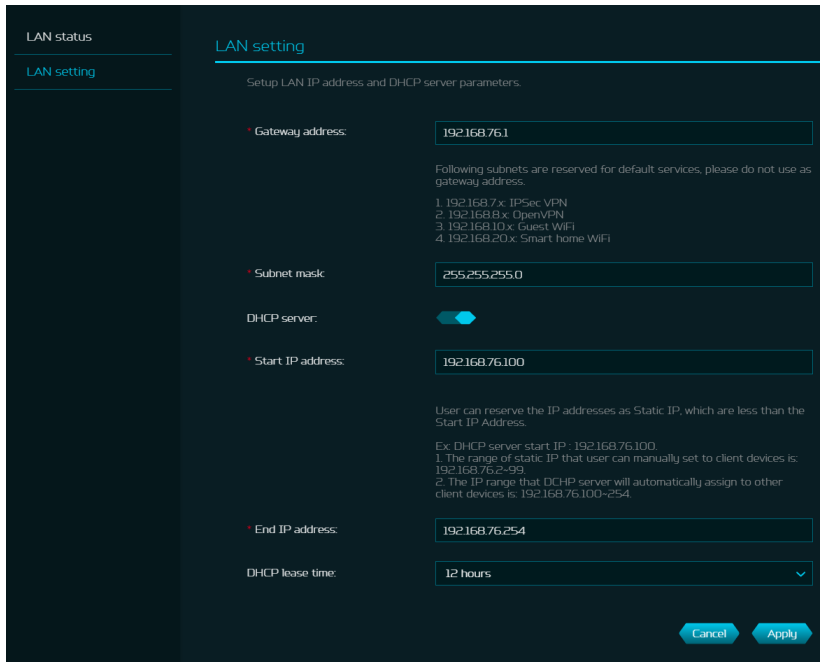
7. Home Network Security

Home network security tab includes network security setting and web and app controller within parental control feature. These two features must accept the Trend Micro license agreement before enablement.

7.1 Network Security Setting

This tab contains network security related information, powered by Trend Micro, where you can turn on/off the security engine and enable protection against malicious sites, network attacks and harmful connections coming from IoT devices.
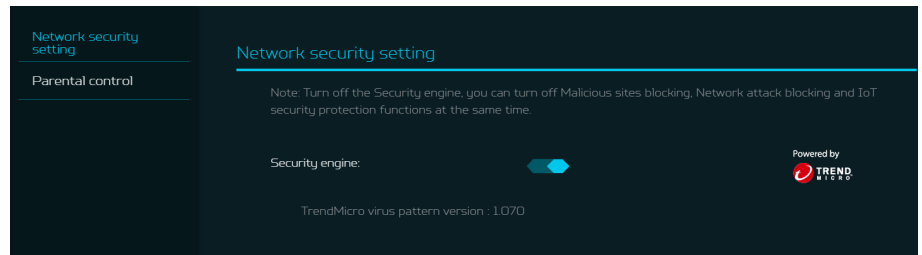

Malicious site blocking prevents from unwanted sites to open and hence protecting your computer from being infected with Trojans. There is a feature called "Trend Micro's Web Reputation Service (WRS) that identifies malicious URLs and allow you to take action against infected URLs.
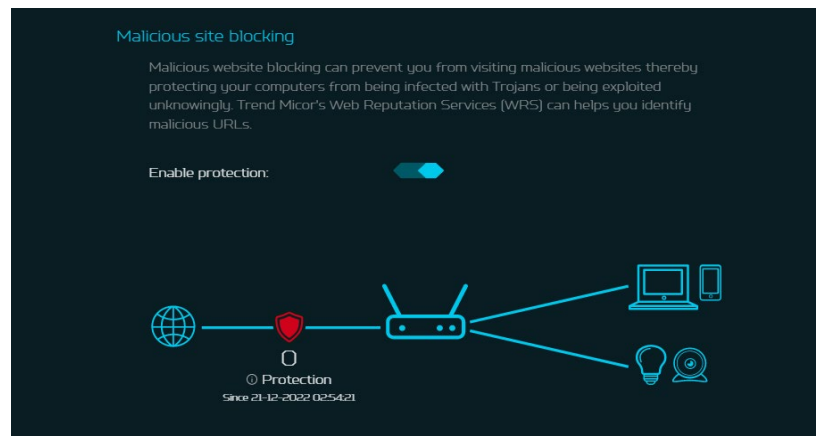

By enabling **Network attack blocking** feature, the router detects the infected devices and block its network behavior to prevent infection to other devices.
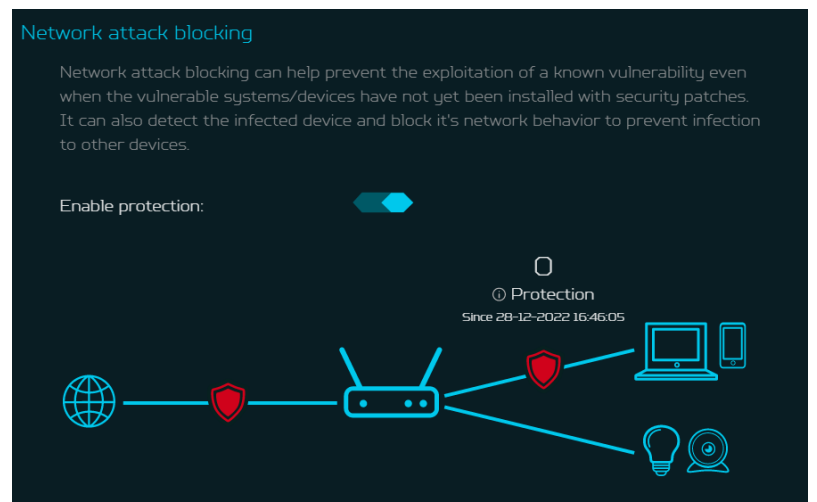
Enabling **IoT security protection** feature detects and blocks harmful connections from compromised IoT devices by using Trend Micro's smart protection network.

It's a continuously updated IoT device reputation database that prevents the network from false connections.
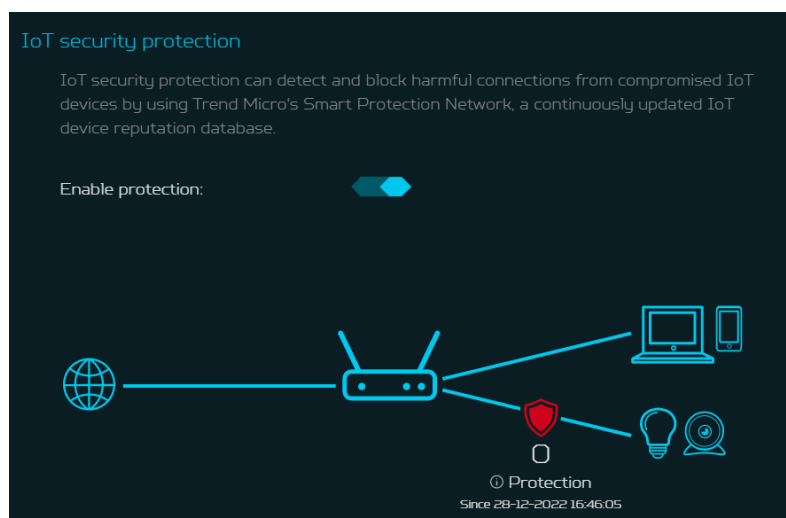
7.2 Parental Control

This feature allows you to control and block unwanted sites on specific devices.
You can enable/disable Web & App controller & URL controller.

Once you click on (+) icon, following window will appear and here you can enter device list, device name, its MAC address, status and select the following categories for blocking websites.
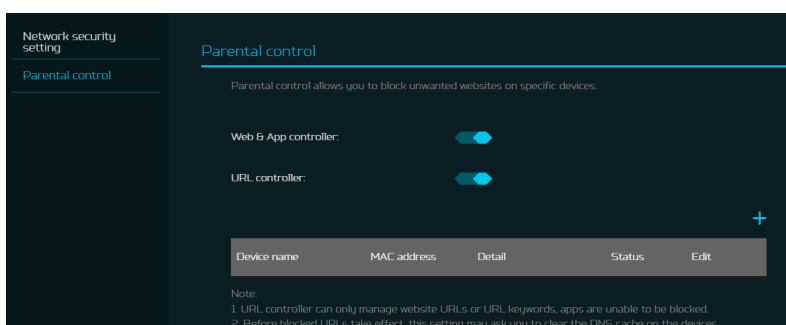

- **Adult**
  Block websites and Apps which include Adult, Mature, Illegal, Prohibited, Alcohol, Tobacco, Gambling, Violence, Hate, Racism, Weapons, Illegal Drugs related content.

- **Instant Messaging and Communication**
  Block websites and Apps related to Social Networking and Instant Messaging like Facebook, Instagram, Twitter etc.

- **P2P and File Transfer**
  Block websites and Apps which include P2P or File transfer.
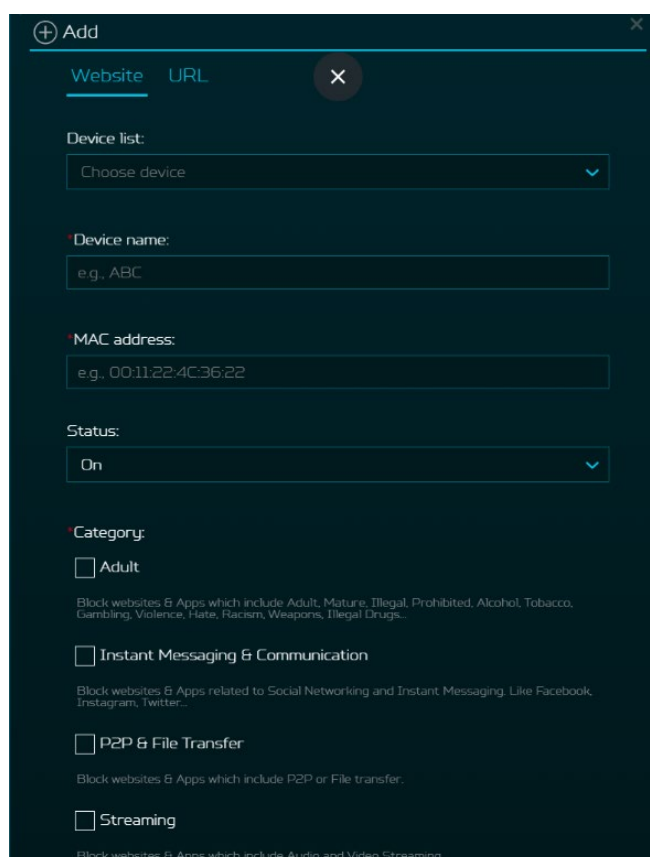
- **Streaming**
  Block websites and Apps which include Audio and Video streaming.

  Under the URL tab (see adjacent image) you can enter device list, device name,
  its MAC address and URL, which you want to forbid access to e.g. www.aaaa.com.
  Or you can add a keyword e.g. AAAA to forbid any URL containing the keyword.

  You can also enter the Internet access time limit by setting the start time and end time.

Note: If the end time is earlier than the start time, the block time will cross to the next day. If the start time is the same as the end time, the block will be for a full day.

8. WAN

8.1 WAN Status
This tab provides information about WAN connectivity status and following key information:
- Time duration (format HH:MM:SS)
- MAC address
- Connection Mode: DHCP, static IP, PPPoE, switch WAN port to LAN (switch/bridge).
- IP address
- Subnet mask
- Default gateway
- Primary & Secondary DNS server

8.2 WAN Setting:
In this page, you can set up Ethernet WAN connection mode to DHCP, Static IP, PPPoE or switch WAN port to LAN, depending on your connection usage.

Click on down arrow to reveal the drop down menu to select your preferred WAN settings. You can select "Switch WAN port to LAN (Switch/Bridge mode)", if you are using the router in repeater mode in which the WAN port is not required. As a result, you can have one more LAN port.

Note: After switching to Bridge mode,
1) Please disable the DHCP Server on the Predator Connect W6d according to your network topology.
2) Some functions may not work as how it does in router mode. E.g. Home network security, Hybrid QoS, Guest WiFi, Smart Home WiFi, IPv6, DMZ, Firewall, NAT pass-through, Port forwarding, VPN, WAN ping, WAN setting.
3) To access Predator Connect W6d's web portal, it is recommended to setup IP under your client network device and connect to W6d via Ethernet cable. The LAN gateway of W6d should also be configured as the client network device's gateway and DNS server.

8.3 DMZ

DMZ is a physical or logical sub network that contains and exposes firm's facing services to an untrusted, usually larger, network such as the Internet.

If external users can't access certain network services provided by the Local Area Network (LAN), use the DMZ function to set the client that provides the required network services as the DMZ host. DMZ host IP address needs to be entered and then external users will have access to all services.
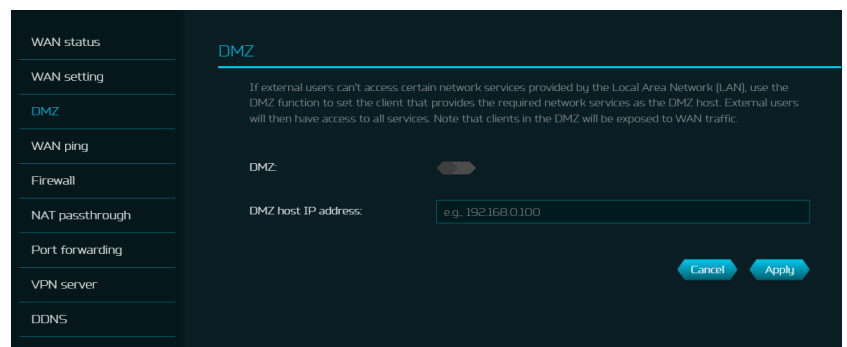
8.4 NAT pass-through

NAT pass-through allows a Virtual Private Network (VPN) connection to pass through the router to the external network.
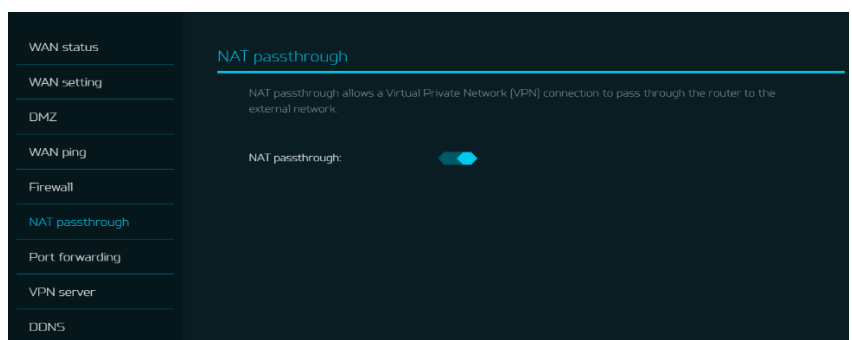
8.5 Port Forwarding

This feature allows external users to connect to Local Area Network (LAN) services using Hypertext Transfer Protocol (HTTP), File transfer protocols (FTP), and other protocols.
To add any application, click on (+) icon and select a required service.

You can select any service profile from common services tab and it will then automatically show its name, LAN & WAN port number and its protocol.

Enter the LAN IP address and select the status ON/OFF and click on "Apply" button to activate the service.

We have added new game console profile including:

- Xbox network
- Play Station 5
- Play Station 4
- Nintendo SWITCH
- Nvidia GeForce Now
- Steam

8.6 VPN Server

Setup VPN server on Predator Connect W6d for remote VPN connection over the Internet. This router offers two VPN services:

    5.6.1. OpenVPN
    5.6.2. IPsec VPN

User needs to generate certificate before enabling VPN server. Once you create a VPN server, VPN connection link establish and status with be shown. It will display the connection type, remote & local IP address and duration.

OPEN VPN Config. **IPsec VPN Config.**
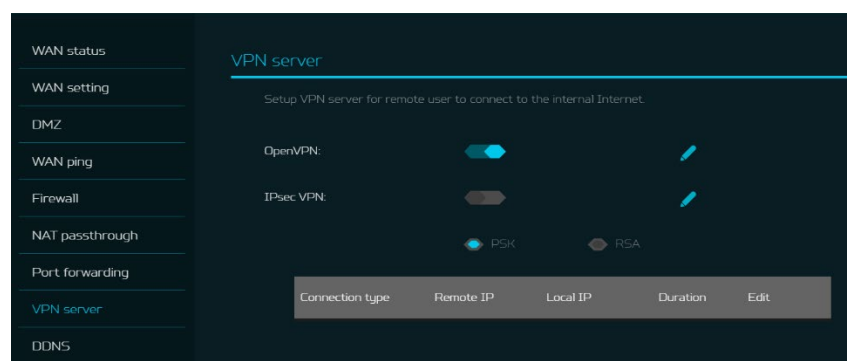
Open VPN is a SSL VPN and uses a chosen UDP or TCP port, allowing for flexible configuration choices.
User access comes with two different options; Home network, Internet and home network.

User can also export OpenVPN configuration file (client.ovpn).

IPsec VPN uses predefined communication channels, UDP 500 and UDP 4500, to establish the encrypted tunnel and ESP for the transmission of encrypted data.

8.7 Firewall

Setup firewall rule to accept or drop network request from Internet.
In order to setup a firewall, click on (+) icon and enter the name, source and destination port and IP address, protocol, target and status info.

8.8 WAN Ping

By enabling this feature, WAN port of Predator Connect W6d will respond to ping requests that are sent to the WAN IP address from the Internet.

For better security, keep this feature turned OFF, and the device will not respond to a WAN ping.

8.9 DDNS

A DDNS service provides a fixed domain name for your router's dynamic IP address. You will need to register with a DDNS services among the following ones.

1. Dyn.com
2. No IP
3. Google domain
4. Cloudflare.com

9. IPv6

You can setup IPv6 settings from this tab.

The Predator Connect W6d supports IPv6 mode below: DHCPv6, static IPv6, PPPoE, 464xlat, 6rd, DS-Lite. Connection mode will be disabled by default.

Please consult local Internet Service Provider before enabling and configuring the option.

10. SYSTEM

10.1 Firmware Update

In this tab, you can check the existing firmware version and also click on "check new", to see if there is an update available.

10.2 Login Password

You can change the login password of your Predator Connect W6d from this page.

To make a new password, you need to enter current password first. Please use a strong password to keep it secure.

10.3 Backup and Restore

In this tab, you can check how to save the configuration:
Click on "Backup" to backup current device configuration.
On both Windows and MAC OS, this is saved to your 'Downloads' folder.

How to restore the configuration:
1) Click Browse to select a file
2) Click Restore

10.4 System Log

System log will display here all the latest 100 activities you have done with the router.

You can save the system log by clicking the "Save log" button at the bottom of the page.

10.5 System Time
This tab allows you to synchronize the device time with the system time by enabling "Automatically set time zone".

By enabling "daylight savings time", device will automatically adjust the time according to the time zone.
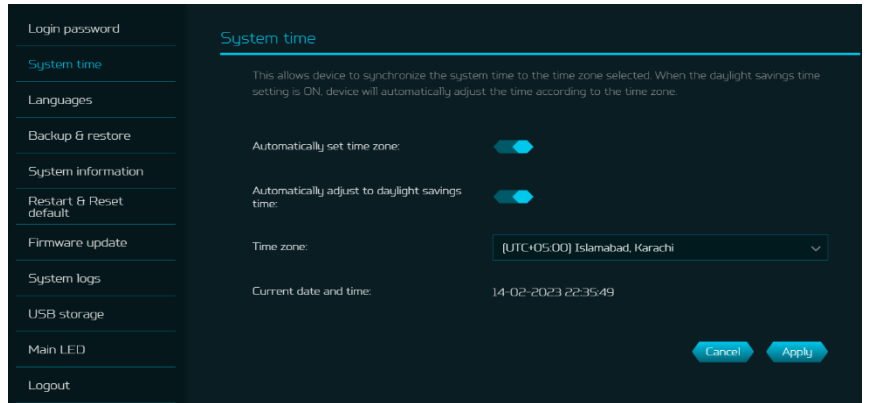
10.6 Main LED
This tab displays information about LED colors and its indication. These LED indicators will help you to know and understand router behavior.
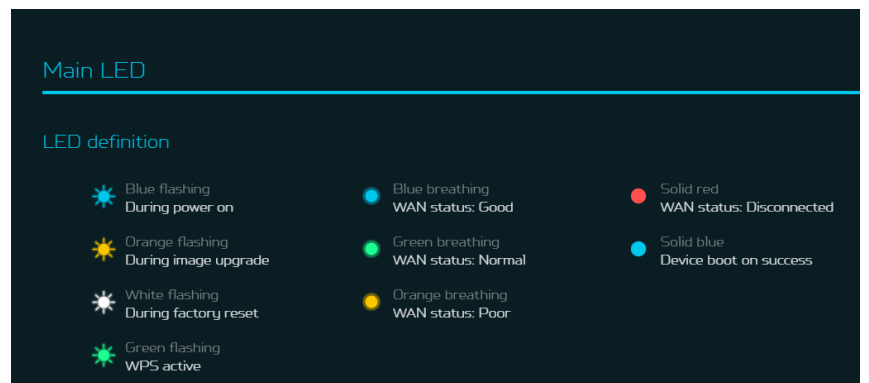
Congestion Detection test helps you to identify the Internet connection status; whether it is good, normal or poor. Different LED lights will indicate different statuses.

LED is OFF, if congestion detection is disabled.

Enter the host IP addresses for detection.
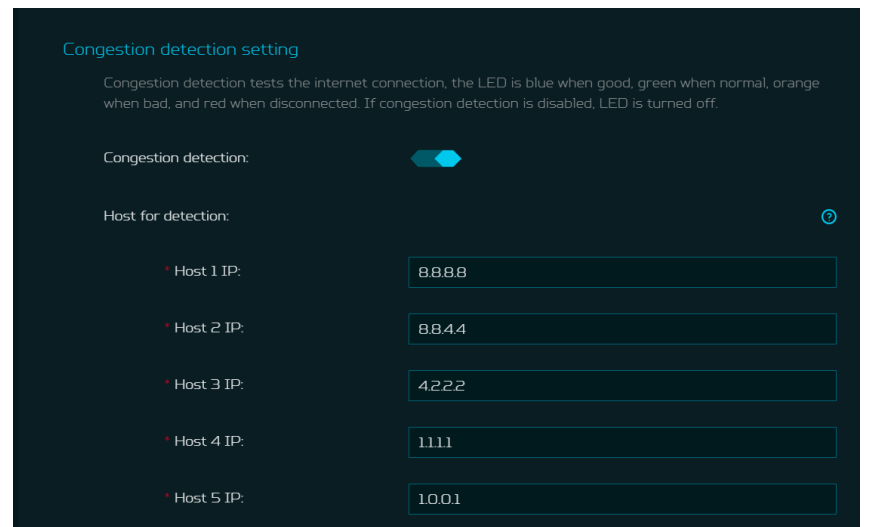
Enabling **LED night mode**,
only dims the device luminance.

Please check if you have already
setup the correct time zone
(auto/manual), before enabling
this option.

You can setup the daily
schedule as needed.

LED night mode setting

LED becomes breathing mode when night mode is enabled and current time is in night mode time intervals.

Night mode:

*Night mode from: 00:00 ∨ ~ 23:59 ∨

Note: If the end time is earlier than the start time, the LED
night mode duration will cross to the next day.

*Repeat: ☑ Mon ☑ Tue ☑ Wed ☑ Thu ☑ Fri ☑ Sat
             ☑ Sun

Cancel   Apply
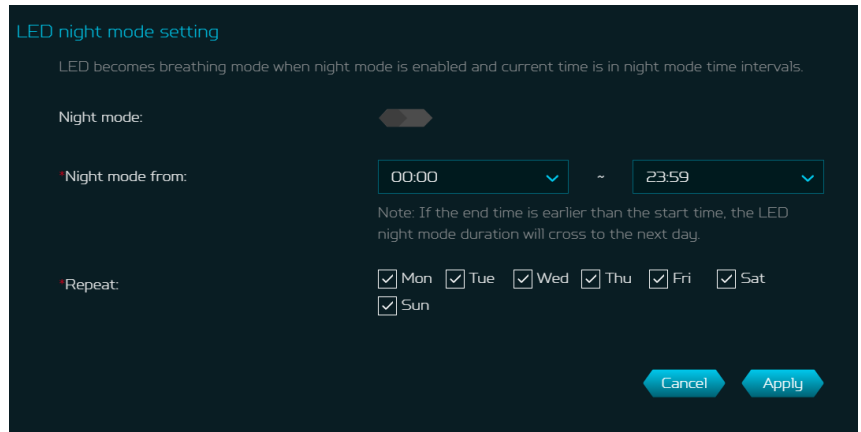
10.7 System Information

It shows key device information
of Predator Connect W6d, such
as:
  • Device name
  • Serial number
  • Firmware version

Login password

System time

Languages

Backup & restore

System information

Restart & Reset
default

Firmware update

System logs

USB storage

Main LED

Logout

System information

Device name: Predator Connect W6d

Serial number: FFG25AA0012310007069E1

Firmware version: W6d_0.03.251317D
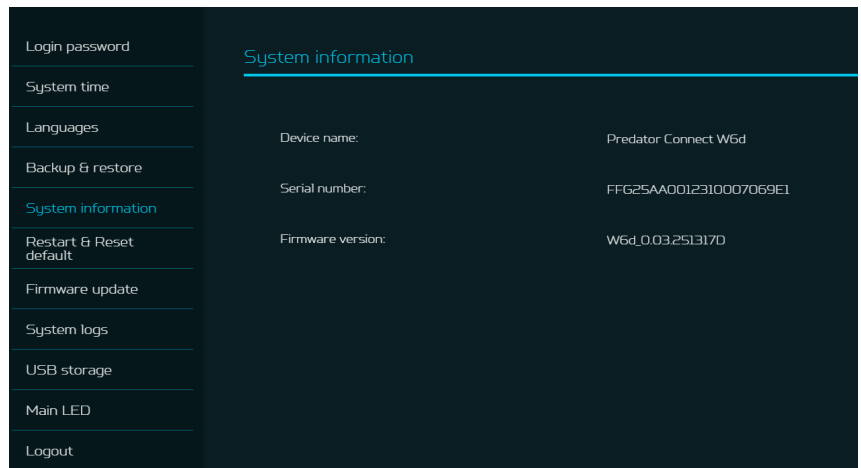
10.8 Restart and Reset Default

From this tab, you can click on
"Restart device" to reboot the
router and click on "Factory data
reset" to restore factory
default settings.

Please check if you have bind
your device with Predator
Connect Mobile App.

After factory reset, please don't
forget to unbind the device from
mobile app.

Login password

System time

Languages

Backup & restore

System information

Restart & Reset
default

Firmware update

System logs

USB storage

Main LED

Logout

Restart & Reset default

Click Restart to reboot the device and click "Reset" to restore factory default settings.

Restart device   Restart

Factory data reset   Reset
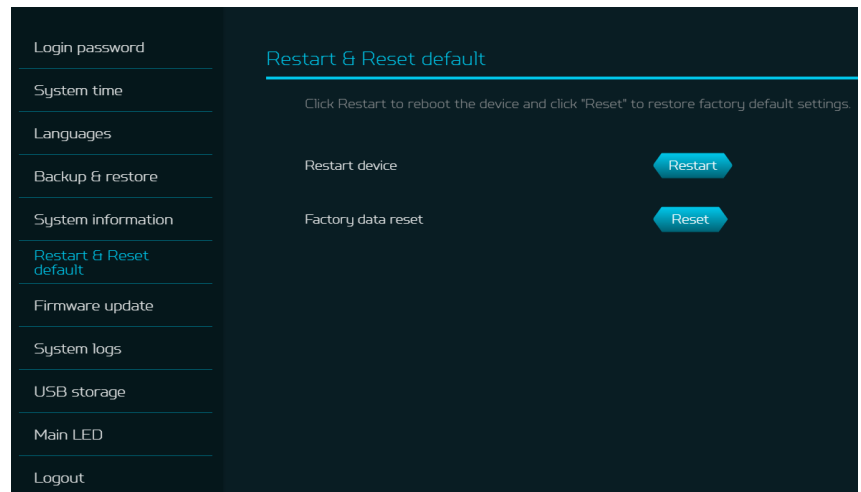
10.9 languages

You can select the language of your Predator Connect W6d from this tab.
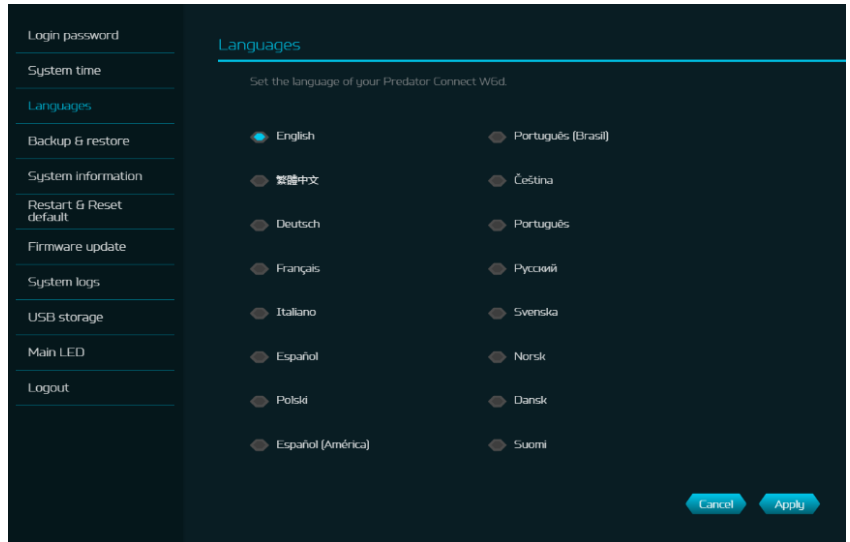
10.10 USB Storage

This router has a USB port where you can plug in a USB drive and allow all authorized users to access the files on your USB drive.

Once you plug in USB drive, it will display device type, size and free space available.

Enter the server name and login credentials for shared access to USB drive.

In sharing setting, there is an option to enable/disable Network neighborhood (Samba).
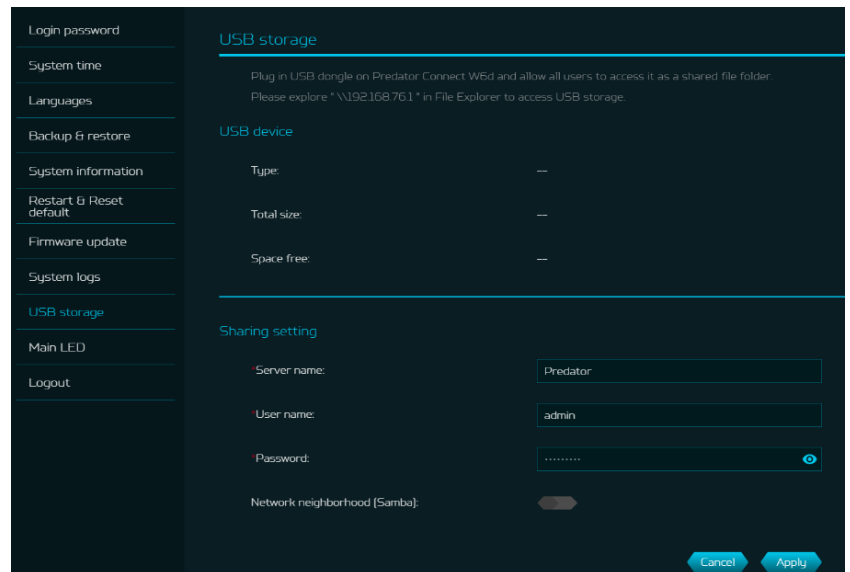
11. Troubleshooting

11.1 Quick tips
This section describes common issue which you can encounter.

Sequence to restart the device and network:
1. Turn off and unplug the modem power plug.
2. Turn off the W6d router.
3. Plug in the modem power plug and then turn it on. Wait for two minutes till the modem LED steady as before.
4. Turn on the W6d router and wait for the device upper deck main LED steady breathing.

11. 2 Frequently Asked Questions (FAQs)

11.2.1 What can I do if I forget my wireless password?
- Connect to the W6d router via Ethernet cable LAN.
- Visit device portal http://acerconnect.com and login admin.
- Go to WiFi -> Basic settings/Retrieve or reset the WiFi passwords.

11.2.2 What can I do if I forget the router's web portal admin password?
Reset the device by pressing and holding the reset key until the LED start blinking white. After the device restore to factory default, please login web admin portal with admin PWD, label printed on bottom of the device.

Note 1: The device web admin will be locked after 5 wrong password attempts. The user is required to reboot the device to disable the web admin.
Note 2: Remember to setup the device internet connection after reset. Remember to also change the admin password.
Note 3: If you ever bind the device via Predator Connect mobile app; remember to unbind it after factory data reset.

11.2.3 What can I do if I can't log into router's web admin portal?
Please follow the steps below to check on your client's device.
- Check whether the client allocated IP and DNS server IPs both are with same subnet and gateway.
- Clean the browser cookies or use private/Incognito mode to access the router admin.

11.2.4 What can I do if I can't surf the internet even though the configuration is finished?
Please follow the step below to check on your W6d router:
- Login to the web admin portal dashboard to check Internet status.
- Continuingly, if the Internet status is up and connect. Go to WAN setting, manually configure DNS server using below IP and apply:

<div align="center">

Primary DNS server: 8.8.8.8
Secondary DNS server: 8.8.4.4

</div>

- If the issue still there, please restart the modem and router accordingly.

12. Appendix Factory Default Setting

Router web admin	
URL	http://acerconnect.com or http://192.168.76.1
Login password (case-sensitive)	AcerXXXX (XXXX is randomized variables. Please check device bottom label)
Local Network (LAN)	
Gateway address	192.168.76.1
Subnet mask	255.255.255.0
DHCP server	192.168.76.1
DHCP range	192.168.76.100 to 192.168.76.254
Time zone	Depends on country or region you bought the router.
DHCP starting IP address	192.168.76.100
DHCP ending IP address	192.168.76.254
Time adjusted for daylight save time	Enabled.
Wireless LAN (WLAN)	
WiFi SSID (case-sensitive)	2.4 GHz : PredatorW6d-YYYY-2.4GHz 5 GHz : PredatorW6d-YYYY-5GHz (YYYY is randomized variables. Please check device bottom label)
Security	2.4 GHz : WPA2/WPA3 5 GHz : WPA2/WPA3
SSID Broadcast	Enabled.
Country / Region	United States in the US; otherwise, varies by region.
RF channel	2.4 GHz : Auto 5 GHz : Auto
Default operation mode (with AX enabled)	2.4 GHz : Up to 600 Mbps 5 GHz : Up to 4804 Mbps
Guest WiFi	Disabled.
Smart Home WiFi	Disabled.
Home Network Security	Disabled.

13. Router Basic Specification

Processor	System	MT7986A (Panther + Merlin)
	CPU	Quad A53 2.0GHz
Memory	LPDDR	1GB
	Storage	4GB
Wireless LAN	IEEE standard	802.11 a/b/g/n/ac/ax
	MU-MIMO	
	Band	Dual band, 2.4/5GHz
	Throughput	
Ethernet	WAN	1 x 2.5Gbps
	LAN	4 x 1Gbps with 1 Game port
USB	Port	USB 3.0 Type-A
	Storage	FTP, Samba
Button	Power	Power-ON/OFF
	WPS	
Form factor	Dimension	
	Weight	
DC Power Jack	Input Voltage	AC 100-240V, 50-60Hz, 1.6A
	Power Adapter	12V/3A 36W