

# **EXO Routers and Extenders**

# FAQ Ver.1.1

Model No.	HW Version	FW Version	Router App	<b>SHP Services App</b>		
<b>DIR-2660</b>	<b>A1</b>	1.02				
<b>DIR-1360</b>	<b>A1</b>	1.01	D-Link Wi-Fi: 1.1.8 build 12 for Android; 1.1.8 build 16 for iOS	D-Link defend:		
<b>DIR-1960</b>	<b>A1</b>	1.01		3.1.66 for Android;		
<b>DIR-1760</b>	<b>A1</b>	1.01		3.03.25 for iOS		
<b>DIR-3060</b>	<b>A1</b>	TBD				
<b>DAP-1620</b>	<b>A1</b>	V2.01		NA		
<b>DAP-1820</b>	<b>A1</b>	V1.01				
DRA-1360	<b>A1</b>	V1.00				
DRA-2060	A1	V1.00				

# Written By

# **Revision History**

Revision	Date	Description	
1.0	04/25/2019	First Release	
		Modify the content of Chapter 3.	
		Since there's a Wi-Fi mesh enable/disable selection after EXO route	
1.1	05/29/2019	firmware upgrade, add the notice to remind user to make sure if Wi-	
		Fi mesh feature is enabled before user starts to build up the Wi-Fi	
		mesh network.	

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# 1. Setting up EXO routers

In this chapter, we will introduce how to set up and configure your EXO routers.

### 1-1: How do I set up EXO routers?

Please follow the below procedure:

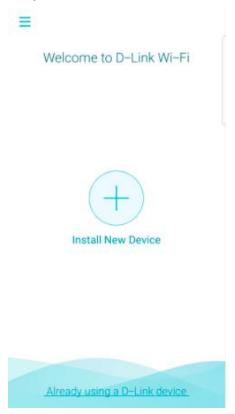
Step 1: Download the D-Link Wi-Fi app from the App Store or Google Play.







**Step 2:** Launch the D-Link Wi-Fi app. Then, tap **Install New Device**.



**Note:** For android users, the D-Link Wi-Fi app will ask the permission to access your device's location after you launch the app. Please tap **ALLOW**.



ALLOW DENY

**Step 3:** Tap **Yes** to scan the QR code on your EXO router, or tap **No** to manually choose a model.



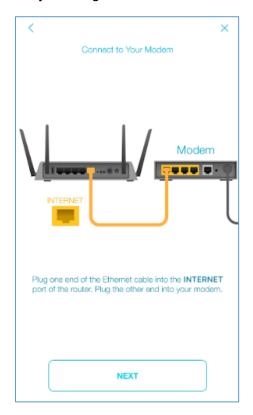




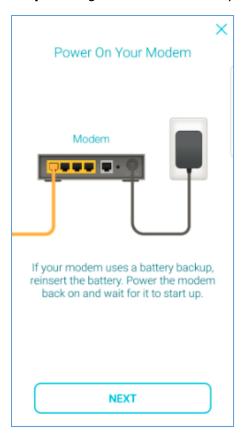
**Step 4:** Unplug your modem or gateway.



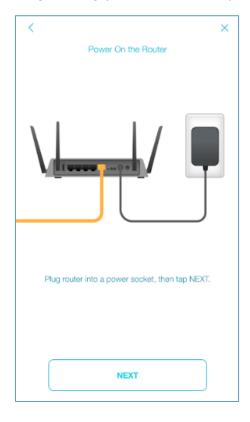
**Step 5:** Plug one end of the Ethernet cable into the **INTERNET** port of your EXO router.



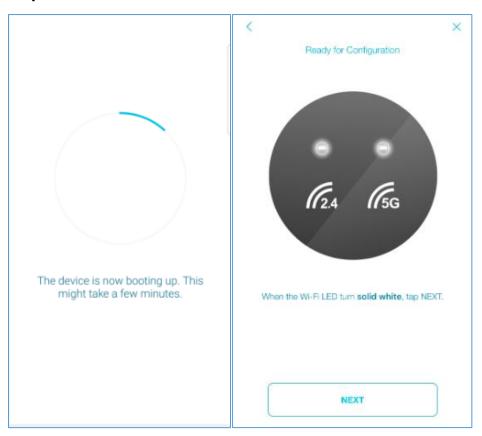
**Step 6:** Plug the other end into your modem or gateway. Then, power the modem back on.



**Step 7:** Plug your router into a power socket. Then, tap **NEXT**.



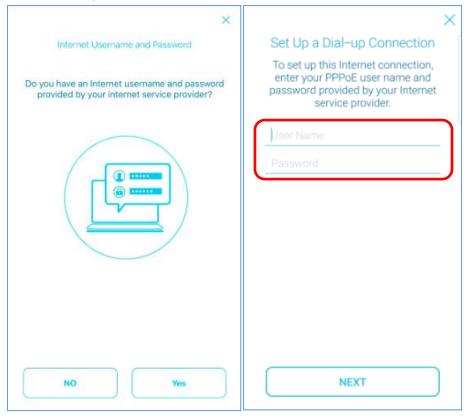
Step 8: Push the Power button. Wait till the Wi-Fi LED turns solid white. Then, tap NEXT.



If you don't have a QR code, the D-Link Wi-Fi app will ask you to connect your mobile device to your EXO router's Wi-Fi network.



**Step 9:** If a PPPoE connection is detected, enter your PPPoE username and password provided by your ISP. Then, tap **NEXT**.



Step 10: Enter a Wi-Fi name (SSID) and password for your Wi-Fi network. Then, tap NEXT.



**Step 11:** Give your device a password. Tap **NEXT** to continue.

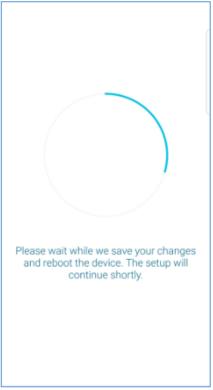


**Step 12:** You'll be prompted to update your device firmware automatically or manually. Selecting "**Keep my device to be up to date automatically**" is highly recommended.

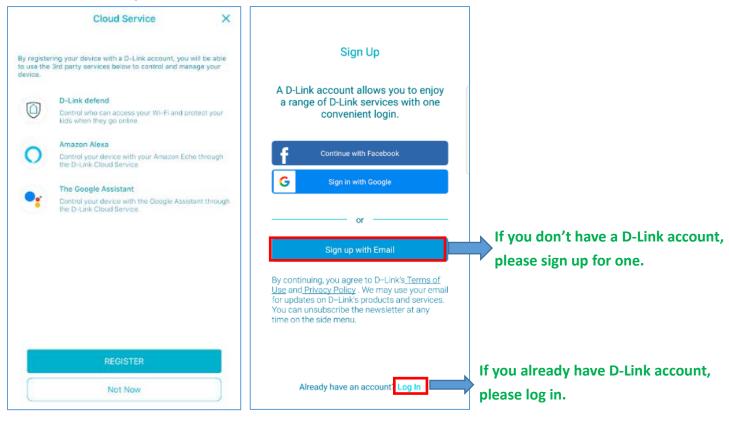


**Step 13:** Your settings display. Tap **SAVE** to save your settings.





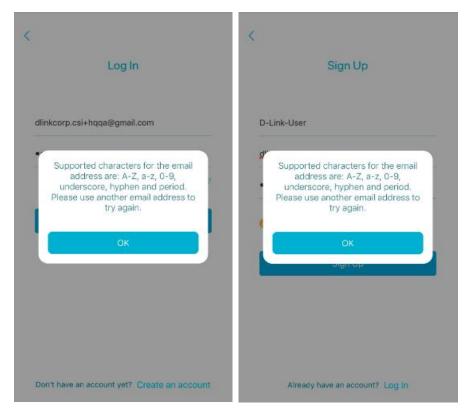
**Step 14:** Register your mydlink account to enable 3<sup>rd</sup> party services, including D-Link defend, Amazon Alexa and The Google Assistant.



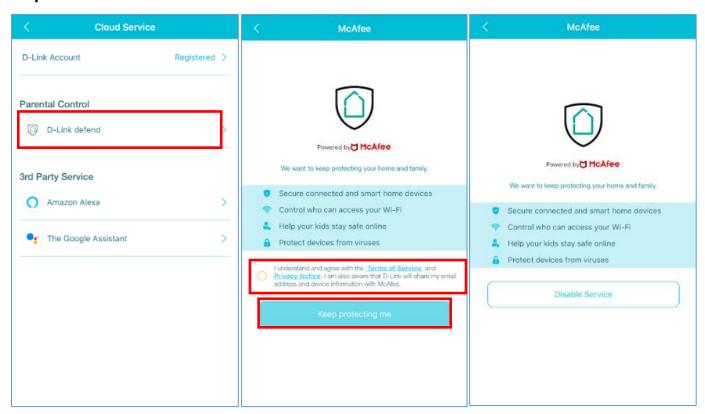
**Note:** There are some characters which are not allowed to be applied in your account. See the chart below.

Special Characters					
@@		;	?		
:\\	//	((	\$		
))	xp_	<b>\</b>			
>	%	II	[		
	::	=/	]		
0x	*	+	(		
)					

The supported characters for the email address are A-Z, a-z, 0-9, underscore, hyphen and period. Make sure that you use the characters in your account.



Step 15: Enable D-Link defend service.



**Step 16:** Your setup is complete. Tap **FINISH** to finish the process.



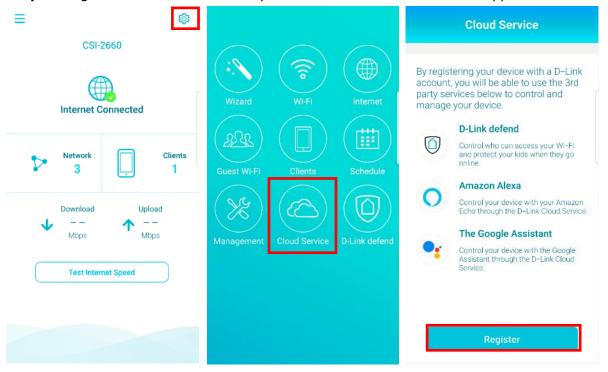
## 1-2: Do EXO routers support Amazon Alexa and The Google Assistant?

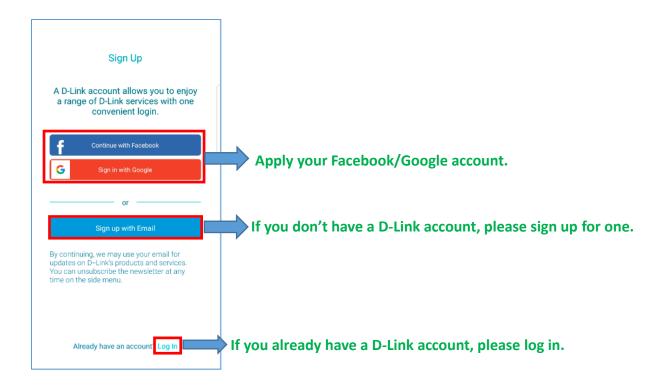
Yes, EXO routers support Amazon Alexa and The Google Assistant for functions below:

- Enable/disable Guest Wi-Fi
- Find out Guest Wi-Fi credentials
- Reboot router
- Firmware upgrade

### 1-2-1: Google Assistant

**Step 1:** Register a D-Link account to your EXO router via D-Link Wi-Fi app:



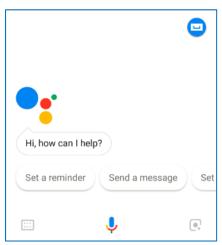


#### Step 2:

- (1) For Android devices, login to **Google app** as your own Google account. Please set the language of your mobile device as English.
- (2) For iOS devices, please download **Google Assistant app** from App Store, and then login to it as your own Google account.
- (3) If using Google Assistant device, see (3) in Step 3.

#### Step 3:

(1) For Android devices, launch Google Assistant, and speak "talk to D-Link Wi-Fi" to Google Assistant:

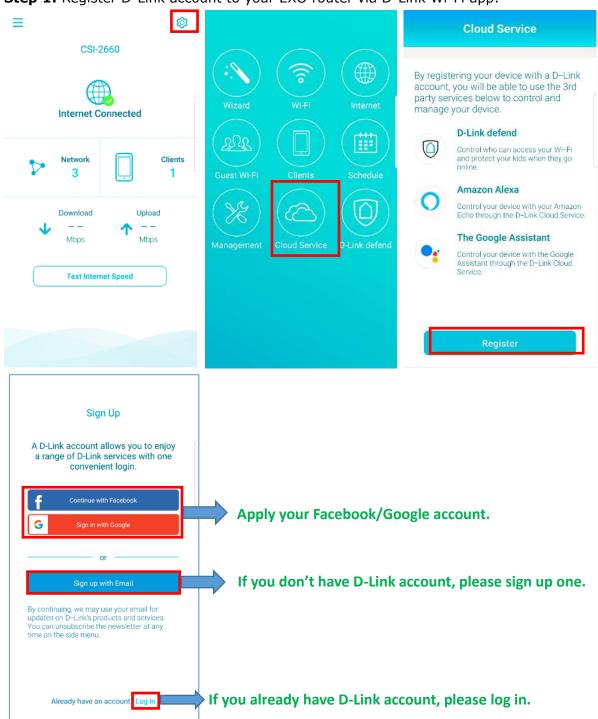


- (2) For iOS devices, please launch "Google Assistant", and speak "talk to D-Link Wi-Fi" to Google Assistant.
- (3) If you use Google Assistant devices, directly speak "talk to D-Link Wi-Fi" to start voice control.

**Step 4:** Follow the command table as below:

-			Supported Google Assistant Devices			
Control First Com	First Commands	Commands			Google Home Max	Others
Help		Help	V	V	V	V
Reboot	Talk to D-Link Wi-Fi	router	V	V	V	V
Upgrade firmware		Upgrade my router	V	V	V	V
Check Guest Wi-Fi SSID/Passw ord		What are my guest network credentials?		V	V	V
		Enable my guest zone	V	V	V	V
	Disable my guest zone	V	V	V	V	

**Note:** When a round of conversation ends, speak "**talk to D-Link Wi-Fi**" again to Google Assistant to activate a new round of conversation.



**Step 1:** Register D-Link account to your EXO router via D-Link Wi-Fi app:

**Step 2:** Download **Amazon Alexa** app from App Store/Google Play, and then login to it with your Amazon account.

**Note:** Please make sure Amazon Alexa app service is ready in your country.

**Step 3:** Open Alexa app, and then follow the instruction below:

- Go to the setting menu from top-left side, and select "Skills".
- Search for **D-Link Wi-Fi** and tap it to open the Skill details page.
- Tap the **Enable Skill** button.
- Login with your D-Link Wi-Fi account and tap **Authorize** to link your account to Alexa.

You can now control your router with Amazon Alexa app or any Amazon Alexa devices.

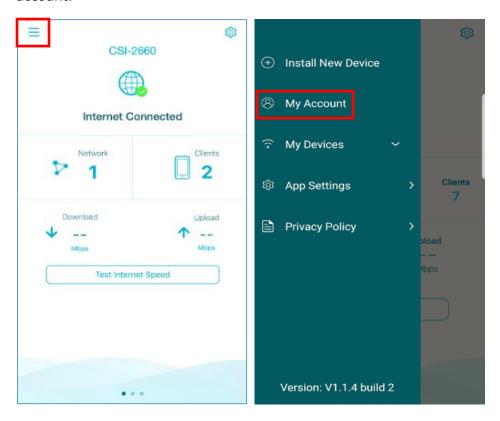
**Step 4:** Start to control your router via talking to Amazon Alexa app or Amazon Alexa device by following the command instruction as below:

	First Commands	Second Commands	Alexa devices			
Control			Echo Dot	Echo	Echo show	Others
Help	Reboot  Upgrade firmware  Check Guest Wi-Fi SSID/Passw ord  Guest Wi-Fi	Help	V	V	V	V
Reboot		Reboot my router	V	V	V	V
Upgrade firmware		Upgrade my router	V	V	V	V
Check Guest Wi-Fi SSID/Passw ord		What are my guest network credentials?	V	V	V	V
		Enable my guest zone	V	V	V	V
Guest Wi-Fi		Disable my guest zone	V	V	V	V

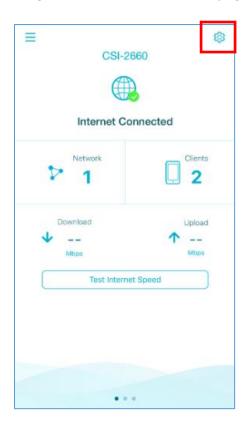
**Note:** When a round of conversation ends, D-Link Wi-Fi will leave the conversation. If you'd like to use Amazon Alexa app or Amazon Alexa Echo device to control D-Link Wi-Fi again, please speak "**Open D-Link Wi-Fi**" again to Amazon Alexa app or Amazon Alexa device to activate a new round of conversation.

## 1-3: How do I enable D-Link defend service for EXO routers?

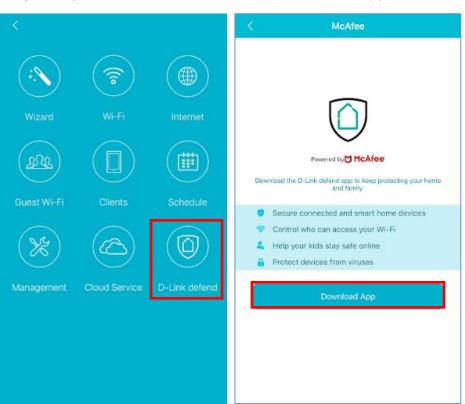
**Step 1:** If D-Link defend can't be launched, please make sure if you already logged in to your mydlink account.



**Step 2:** Go back to the Home page, and then tap icon in the upper right corner.



**Step 3:** Tap **D-Link defend** to launch D-Link defend App.

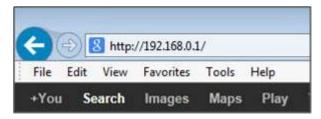


**Note:** If you use another mobile device to launch D-Link defend, please make sure if you already logged in to your mydlink account in D-Link Wi-Fi first.

### 1-4: How do I log in to EXO routers?

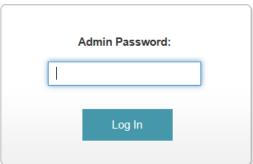
Verify that your computer is connected to the router via either wirelessly or wired. Then follow the steps below.

**Step 1:** Open your web browser and enter the IP address of the router into the address bar. The default IP address is 192.168.0.1, or you can also use the link: <a href="http://dlinkrouter.local">http://dlinkrouter.local</a>.



**Step 2:** You will be prompted to enter your admin password. The password is blank by default.



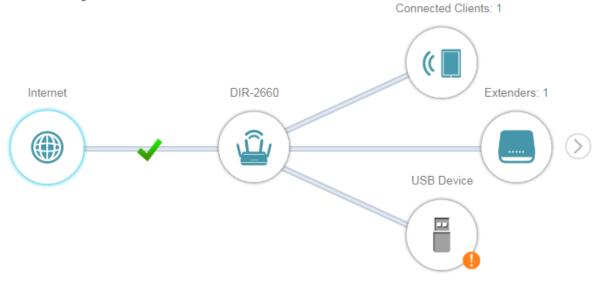


**Step 3:** You'll see the Home Page after you successfully log in to your router:



# Internet Connected

Click on any item in the diagram for more information.



# Internet

IPv4 / <u>IPv6</u>

Cable Status: Connected MAC Address:

Connection Type: Dynamic IP (PPPoE)

Network Status: Connected

Connection Uptime: 0 Day 18 Hour 1 Min 36 Sec

MAC Address: 84:C9:C6:0C:C5:73

 IP Address:
 36.225.41.150

 Subnet Mask:
 255.255.255.255

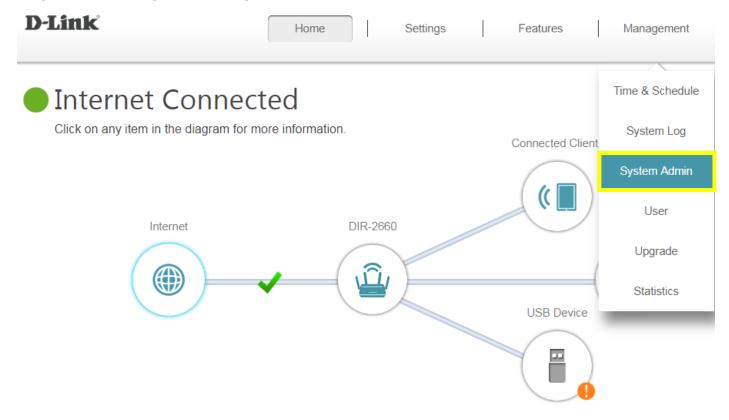
 Default Gateway:
 168.95.98.254

Primary DNS Server: 168.95.1.1 Secondary DNS Server: 168.95.192.1

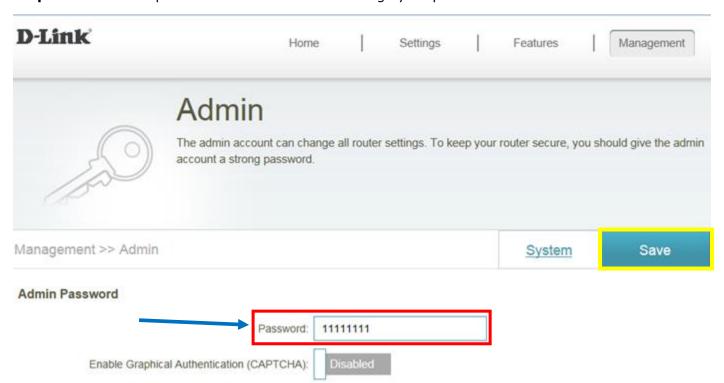
## 1-5: How do I change the admin password of EXO routers?

Please launch your browser and enter <a href="http://dlinkrouter.local">http://192.168.0.1</a> into the address bar. Then, log in to your router, and follow the steps below:

Step 1: Click Management -> System Admin



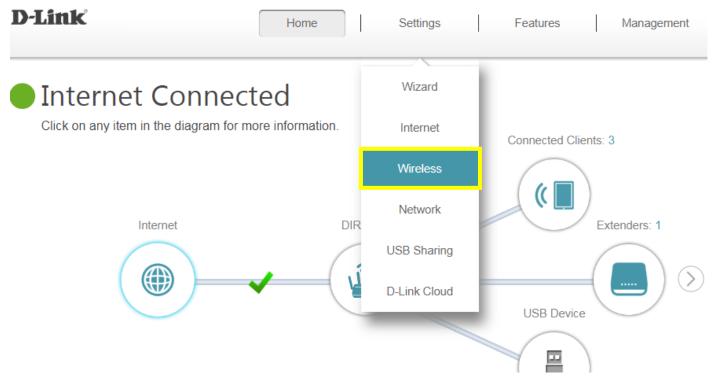
**Step 2:** Fill in a new password and click **Save** to change your password.



### 1-6: How do I set up and secure my wireless connection of EXO routers?

Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

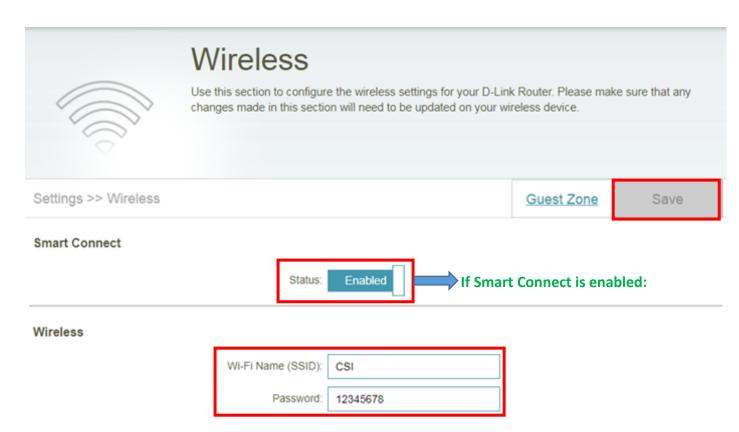
Step 1: Click Settings -> Wireless



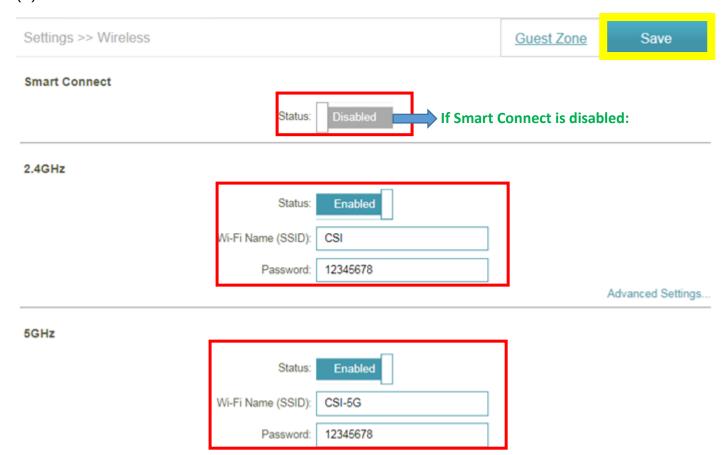
**Step 2:** In the wireless **Wi-Fi name (SSID)** field (for both the 2.4GHz and 5GHz bands), enter your wireless network name. This is the name you will see when scanning for wireless networks on your computer/wireless devices.

Enter a new password in the password field. Make sure that the password must be at least 8 characters. Then, click **Save.** 

### (1) Smart Connect enabled:



### (2) Smart Connect disabled:



#### Note:

Smart Connect: Creates a 'single' wireless network for your devices to connect to. The router automatically determines whether to connect a device to the 2.4GHz or 5GHz band, thereby providing the best speed and range for each device and optimally distributing devices to each network.

# 1-7: How do I turn off the LEDs of my EXO routers?

Please launch your browser and enter <a href="http://dlinkrouter.local">http://192.168.0.1</a> into the address bar. Then, log in to your router, and follow the steps below:

### **Step 1:** Click **Management -> System Admin**

**Step 2:** Toggle **Status LED** to **Off**, and then click **Save**. To turn the Status LED back on, toggle **Status LED** to **On**.

Management>>Admin		<u>System</u>	Save
Admin Password			
	Password:		
LED Control			
	Status LED: Off		

#### Note:

1. The Power LED will always remain on even if you toggle **Status LED** to **Off**.

## 2. Setting up EXO Extenders

In this chapter, we will introduce how to set up and configure your EXO extenders in your existing network with a non-mesh router. Under this scenario, EXO extenders will work as traditional range extenders. They do NOT possess the D-Link Wi-Fi mesh feature.

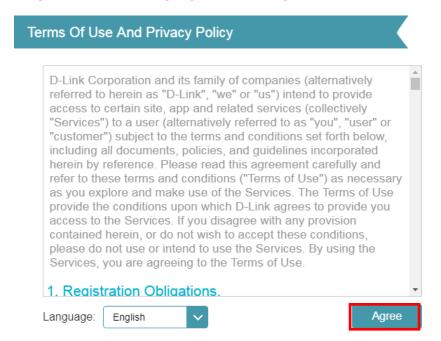
### 2-1: How do I set up the extenders behind a router?

#### Method 1: Using web UI

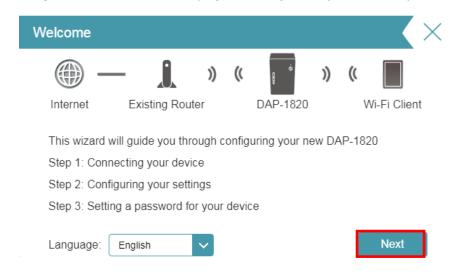
**Step 1:** Find an available outlet near your wireless router. Plug in the EXO extender and wait until the Status LED becomes blinking amber.

**Step 2:** Connect your PC to the default wireless SSID, which is dlink-xxxx. You can find it on the device label and the Quick Installation Card. Open your web browser and enter <a href="http://dlinkap.local./">http://dlinkap.local./</a> to access the web UI.

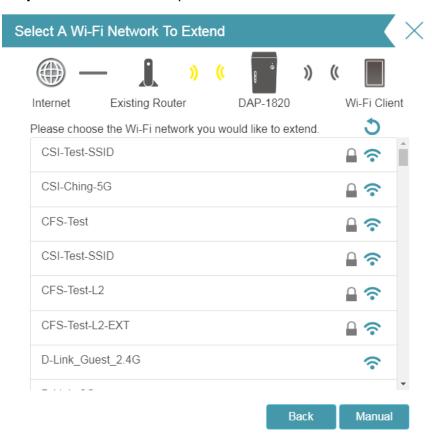
Step 3: Select the language and then agree "Terms Of Use And Privacy Policy".



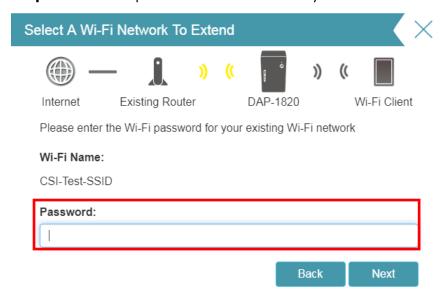
**Step 4:** See the Welcome page which guides you to set up the EXO extender. Click **Next**.



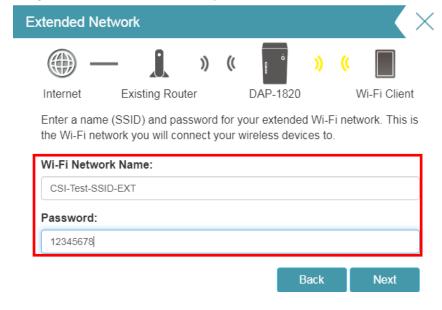
**Step 5:** Select a network you'd like to extend.



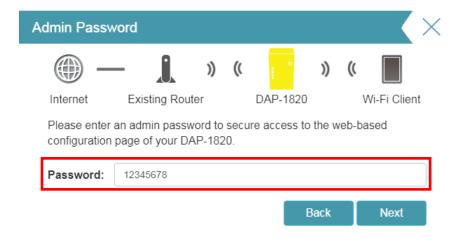
**Step 6:** Enter the password for the network you'd like to extend.



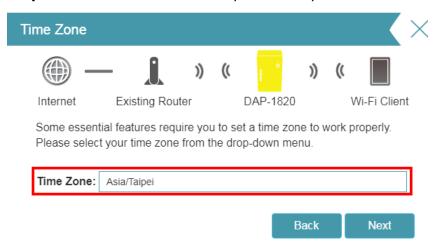
**Step 7:** Enter an SSID and a password for the EXO extender.



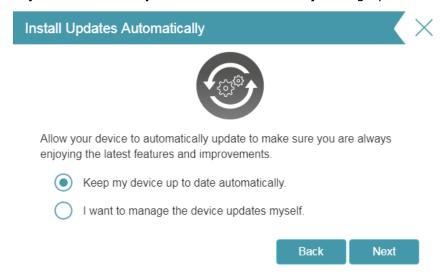
**Step 8:** Enter the admin password for your EXO extender.



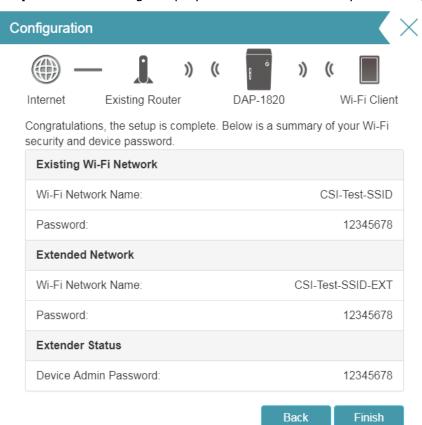
**Step 9:** Choose the time zone of your country and click **Next**.



**Step 10:** You'll be prompted to update your device firmware automatically or manually. Selecting "**Keep my device to be up to date automatically**" is highly recommended.



**Step 11:** Your settings display. Click **Finish** to save your settings or click **Back** to change your settings.



#### Method 2: Using WPS (Wi-Fi Protected Setup)

**Step 1:** Find an available outlet near your wireless router. Plug in the EXO extender and wait until the Status LED is blinking amber.

**Step 2:** Press the WPS button on your wireless router.

**Step 3:** Press the WPS button on the EXO extender within one minute. The Status LED will start to blink amber.



**Step 4:** When the Status LED turns solid green, the EXO extender is securely connected to your wireless router. You can now unplug and move the EXO extender to a location between your wireless router and the area that you need wireless coverage.



**Step 5:** You are now able to enjoy your wireless coverage. If you want to change your SSID and password, please login to the EXO web UI.

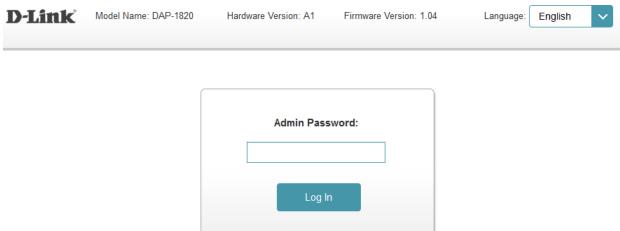
# 2-2: How do I login to EXO extenders?

**Step 1:** Please connect your PC to the SSID of your EXO extender or the uplink router. Then enter any of the URLs below to log in to your extenders:

http://dlinkap.local (If you have more than one extender, it will connect to the 1<sup>st</sup> extender added in the network)

http://dlinkapXXXX.local (XXXX indicates the last 4 digits of MAC address)

**Step 2:** You will be prompted to the login page.



# 2-3: How do I add the existing EXO extender to another network?

Step 1: Login to your EXO extender.

**Step 2:** Click **Setting** -> **Extender**.



**Step 3:** Click **Scan** to select the wireless network.

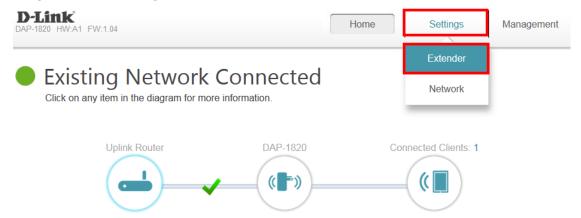
Existing Network			
	Existing Network:	Wi-Fi	~
	Wi-Fi Name (SSID):	CSI-Test-SSID	Scan
	Password:	12345678	

Step 4: Click Save to finish.

# 2-4: How do I set up and secure my wireless connection of EXO extenders?

**Step 1:** Login to your extender.

**Step 2:** Click **Setting** -> **Extender**.



Step 3: Change SSID and password, and then click Save.

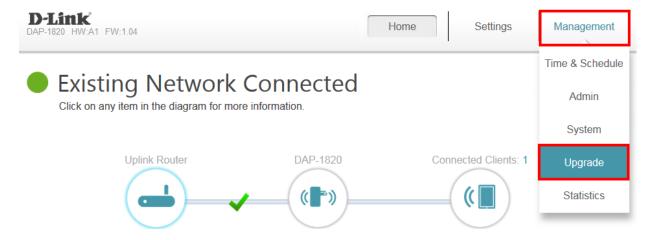
Extended Wi-Fi



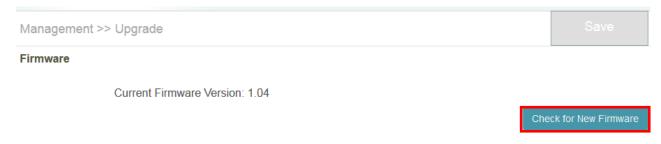
# 2-5: How do I check and upgrade the firmware of EXO extenders?

**Step 1:** Login to your extender.

**Step 2:** Click **Management** -> **Upgrade**.



**Step 3:** To find a newer firmware for your device, click **Check for New Firmware**.



**Step 4:** The firmware will be automatically upgraded every day at 3:30-4:00 AM by default.

#### **Automatic Firmware Upgrade**



Or you can choose another time for upgrading firmware by enabling **Choose Upgrade Time** as well.

#### **Automatic Firmware Upgrade**



Or you can manually upgrade your firmware by selecting the file.

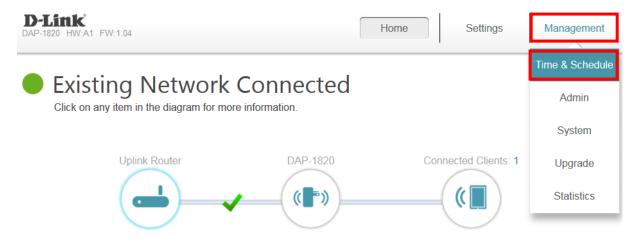
#### **Upgrade Manually**



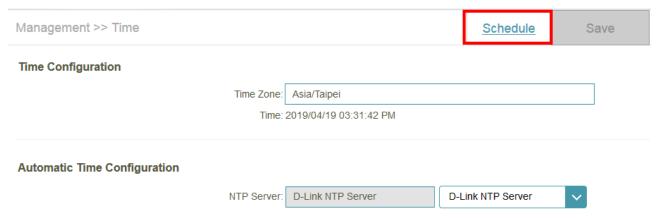
# 2-6: How do I set up the web time schedule of EXO extenders?

Step 1: Log in to your EXO extender.

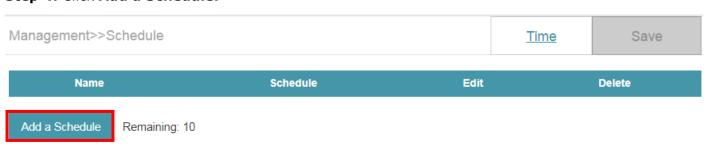
Step 2: Click Management -> Time & Schedule.



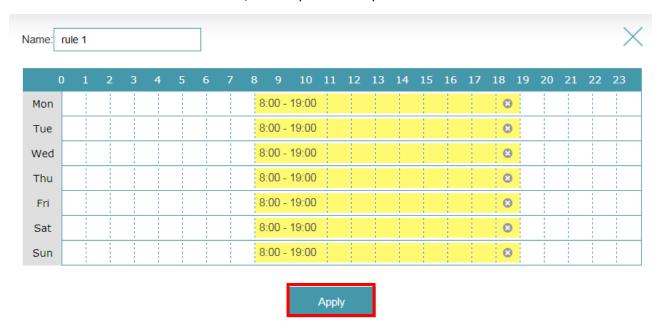
**Step 3:** Click **Management -> Time & Schedule**.



#### Step 4: Click Add a Schedule:



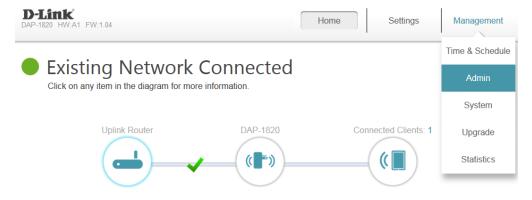
**Step 5:** Create a schedule for your web access time and click **Apply.** The example below shows the scheduled time is from 8:00-19:00, Monday to Sunday.



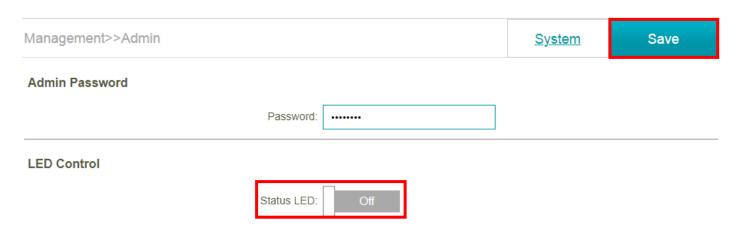
### 2-7: How do I turn off the status LED of EXO extenders?

**Step 1:** Log in to your extender.

**Step 2:** Click **Management** -> **Admin**.



**Step 3:** Toggle **Status LED** to **Off**, then click **Save**.



Note: You can switch the Status LED to On to turn on the status LED and the signal LEDs.

# 3. Setting up extenders to build up a D-Link Wi-Fi mesh network

In this chapter, we will introduce how to setup and configure your EXO extenders and an EXO router. Under this scenario, EXO extenders will possess the D-Link Wi-Fi mesh feature, and D-Link Wi-Fi mesh network will be formed up.

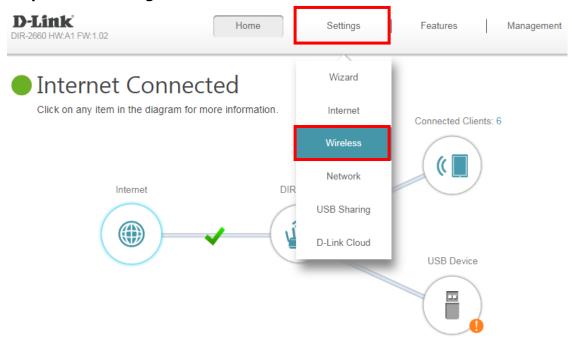
Before you start to build up D-Link Wi-Fi mesh network, please upgrade your EXO router to the latest firmware version, and make sure that the Wi-Fi mesh feature is enabled on your EXO router. Refer to the steps below.

**Step 1:** Log in to your EXO router. Please refer to the link below:

How do I log in to EXO routers?

**Step 2:** Upgrade your EXO router to the latest firmware version. Please refer to the link below. How do I upgrade firmware for my EXO routers?

Step 3: Click Setting -> Wireless.



**Step 4:** If Wi-Fi mesh status is disabled, enable Wi-Fi mesh feature, and then click **Save**.

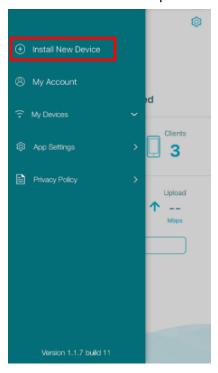


3-1: How do I set up the EXO extenders along with the existing EXO router to build up the D-Link

### Wi-Fi mesh network?

**Step 1:** Launch the D-Link Wi-Fi app.

**Step 2:** Please connect your mobile device to the SSID of your EXO router. Tap the menu in the upper left corner and then tap **Install New Device.** 



Step 3: Tap Yes to scan the QR code of your EXO extender, or No to manually choose a model.



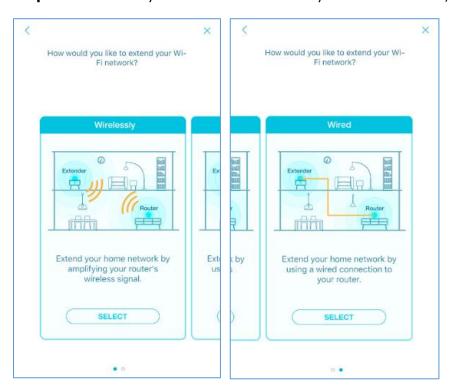




**Step 4:** Make sure that you are connected to your EXO router you'd like to extend the coverage range.

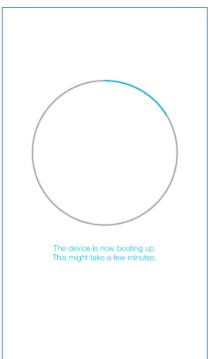


Step 5: Select how you would like to extend your Wi-Fi network, either wired or wirelessly.

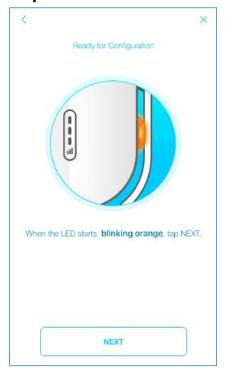


**Step 6:** Power up your EXO extender.

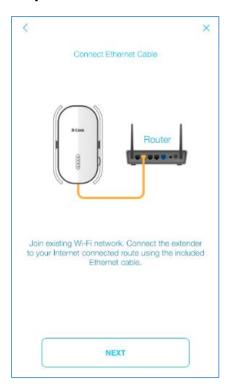




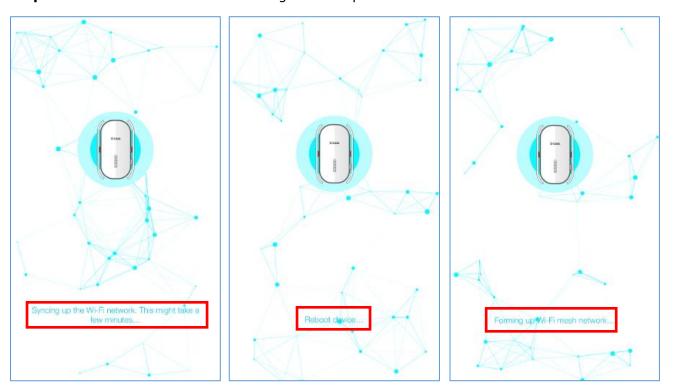
**Step 7:** When the status LED starts blinking orange, tap **NEXT**.



**Step 8:** Connect the extender to your Internet-connected EXO router with the Ethernet cable.



**Step 9:** The Wi-Fi mesh network is being formed up. It will take a few minutes.

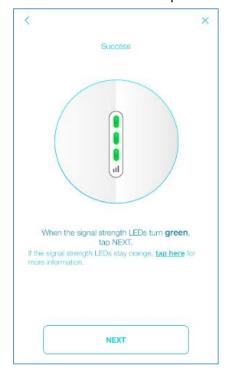


**Step 10:** If you choose "wireless" setup, place your EXO extender to anywhere between your router and the area where you want the wireless coverage. Power up it after you decide the position to put. Wait till the EXO extender LED starts blinking orange, and then tap **NEXT**. If choosing "wired" in Step 4, skip this step.



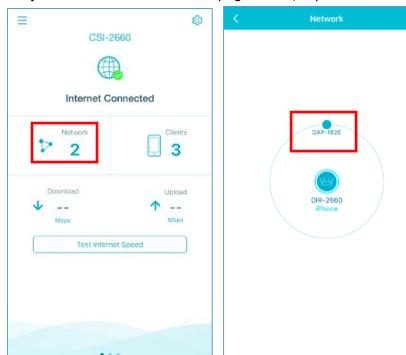


**Step 11:** After both the status LED and signal strength LEDs turn solid green, you can start to enjoy the Wi-Fi mesh network. Tap **NEXT** to finish the setup process.



Note: Make sure all 3-bar signal strength LEDs turn solid green to obtain the optimal performance.

**Step 12:** Go back to the Home page. Then, tap **Network** to make sure if you can see your extender(s):



# 3-2: What do the LED behaviors of EXO extenders mean?

For more information about LED behaviors, please refer to chart below. If Signal Strength Indicators are "Very Weak" or "Weak", please move your extender to another place closer to the EXO router.

LED	Color	Status	Description	
Status LED	Red	Solid	The device is powering on.	
	Amber	Blinking	The device is ready but not connected to a router.	
	Green	Solid	Indicates that the DAP-1820 is securely connected to your wireless router or access point.	
		Blinking	The WPS button has been pushed and the device is processing a connection.	

Signal Strength Indicators					
Very Weak (Amber)					
Weak (1 x Green)					
Good (2 x Green)					
Strong (3 x Green)					

# 3-3: How do I log in my EXO extender(s)?

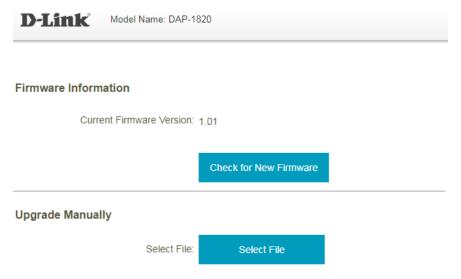
**Step 1:** Please connect your PC to the SSID of your EXO extender or the uplink router. Then enter any of the URLs below to log in to your extenders:

http://dlinkap.local (If you have more than one extender, it will connect to the 1<sup>st</sup> extender added in the network)

http://dlinkapXXXX.local (XXXX indicates the last 4 digits of MAC address)

Step 2: You will be prompted to the login page. The admin password is the same as your EXO router.

**Step 3:** The home page of extender displays.



# 3-4: How do I change the admin password of EXO extenders?

The admin password of EXO extender is the same with EXO router. It can't be changed.

# 3-5: How do I turn off the LEDs of EXO extender(s)?

You're not able to turn off the LEDs of EXO extenders.

# 4. General Setting

# 4-1: How do I configure DHCP reservations?

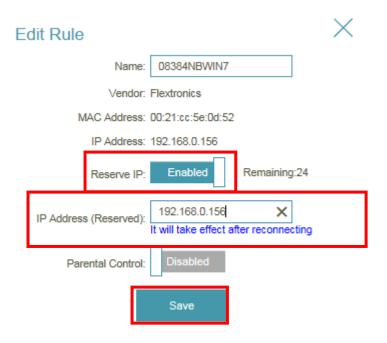
Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

### **Step 1:** Click **Connected Clients** from the Home Tab:

Step 2: Click the Pencil Icon next to your device name you'd like to adjust:



**Step 3:** Click **Reserve IP** to **Enabled**, and fill in the reserved IP address, and then click **Save**.

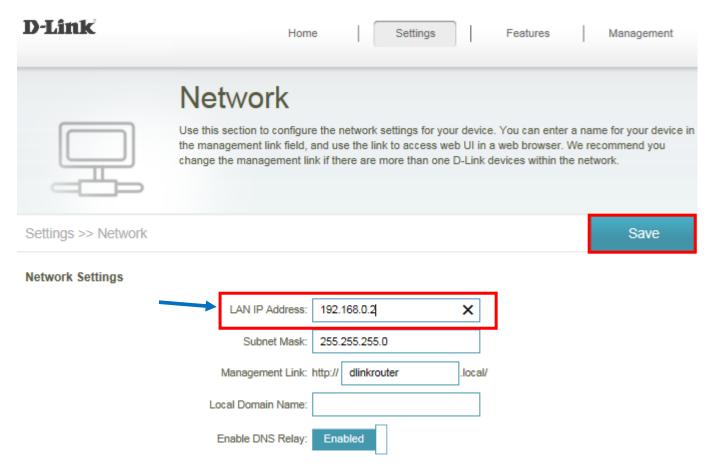


# 4-2: How do I change the EXO router's IP address?

Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

Step 1: Click Settings -> Network

Step 2: Under Network Setting, change a new IP address and then click Save



**Note:** If you have more than one D-Link router at home, we highly recommend you to set different IP addresses for each one to acquire more efficient management of your network.

# 4-3: How do I access the USB storage on my EXO router?

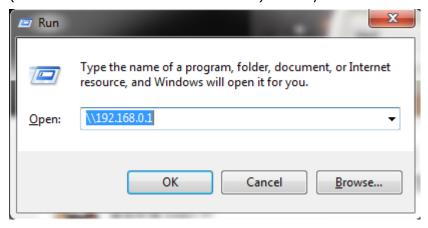
Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

**Step 1:** Connect your USB drive to the USB port on your router.

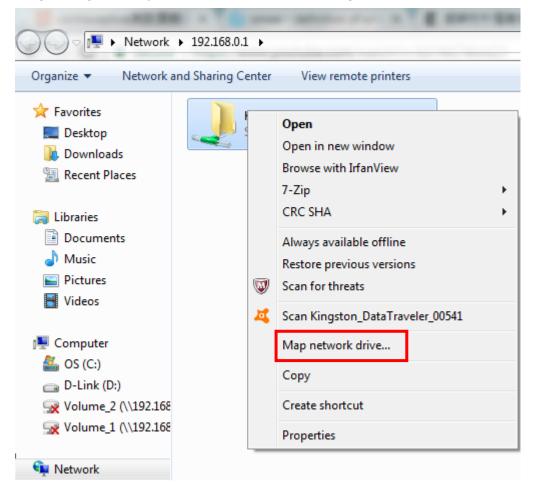
**Step 2:** Click on the Setting -> USB Sharing, and confirm if "Windows File Sharing (SAMBA)" is enabled:



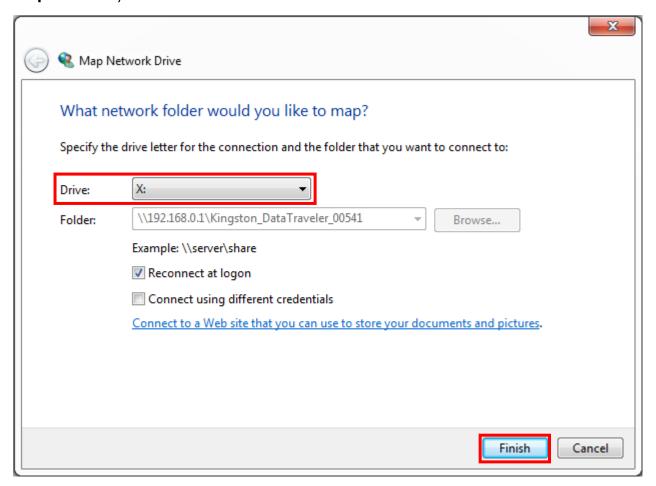
Step 3: Click on "Windows key ♣ + R" on your key board. Then type "\\192.168.0.1" and press OK (192.168.0.1: Your router IP address). Then your USB drive shall be accessible.



Step 4: Right click your USB Drive and select Map Network Drive.



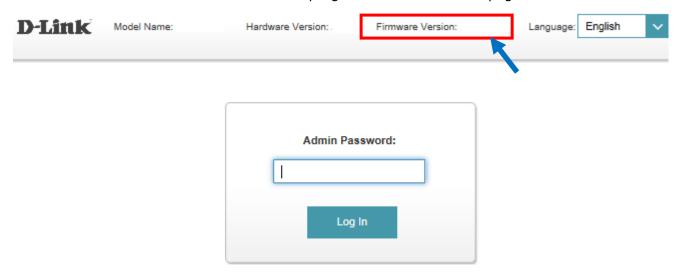
Step 5: Select your desired Drive Letter and click Finish



### 4-4: How do I check firmware version of EXO router & extender?

#### **For EXO routers:**

Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. The firmware version can be found at the top right-hand corner of the page.



#### **For EXO extenders:**

**Step 1:** Please connect your PC to the SSID of your EXO extender or the uplink router. Then enter any of the URLs below to log in to your extenders:

http://dlinkap.local (If you have more than one extender, it will connect to the 1<sup>st</sup> extender added in the network)

http://dlinkapXXXX.local (XXXX indicates the last 4 digits of MAC address)

**Step 2:** You will be prompted to log in to the web UI. The admin password is the same as your EXO router.

**Step 3:** The firmware version of your EXO extender displays.



### Firmware Information

Current Firmware Version: 1.01

Check for New Firmware

### **Upgrade Manually**

Select File:

Select File

### 4-5: How do I upgrade firmware for EXO routers & extenders?

To ensure that you are always enjoying the latest features and improvements, it is recommended to always keep your device up-to-date with the latest firmware.

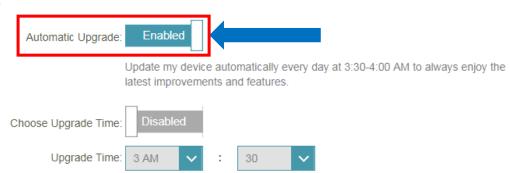
#### **For EXO routers:**

Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

#### Step 1: Click Management -> Upgrade

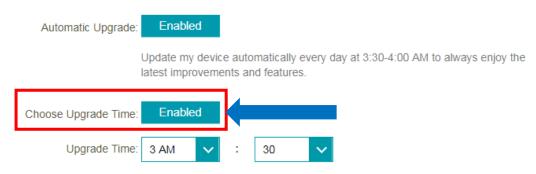
**Step 2:** The firmware will be automatically upgraded every day at 3:30-4:00 AM by default.

#### **Automatic Firmware Upgrade**



Or you can choose another time for upgrading firmware by enabling **Choose Upgrade Time** as well.

#### **Automatic Firmware Upgrade**



#### **For EXO extenders:**

**Step 1:** Please connect your PC to the SSID of your EXO extender or the uplink router. Then enter any of the URLs below to log in to your extenders:

http://dlinkap.local (If you have more than one extender, it will connect to the 1<sup>st</sup> extender added in the network)

http://dlinkapXXXX.local (XXXX indicates the last 4 digits of MAC address)

**Step 2:** To find a newer firmware for your device, click **Check for New Firmware**.



### Firmware Information

Current Firmware Version: 1.01

Check for New Firmware

### **Upgrade Manually**

Select File:

Select File

# 4-6: How do I reset my EXO router to factory default settings?

Example: If you forget the admin password of your EXO router, you can do a factory reset to return the settings to the factory defaults.

**Note:** Performing a factory reset will erase all current settings. It will also remove the configurations in the D-Link defend app for McAfee SHP services.

**Step 1:** With the unit turned on, use the end of a paperclip to press the reset button for ten seconds. The power LED will turn solid red.

**Step 2:** The unit will reboot automatically. Once the power LED, Wi-Fi 2.4GHz & 5GHz LED become solid white, the unit has been reset and is ready to use. Please note that resetting the router does not reset the firmware to the previous version.

**Step 3:** If you have EXO extenders in the network, make sure you reset your EXO extenders by pressing the reset button for 10 seconds as well.

# 4-7: How do I backup/restore the configurations on my EXO router?

 $\textbf{Note:} \ \ \textbf{The configurations here do NOT include D-Link defend settings for McAfee SHP services.}$ 

Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar.

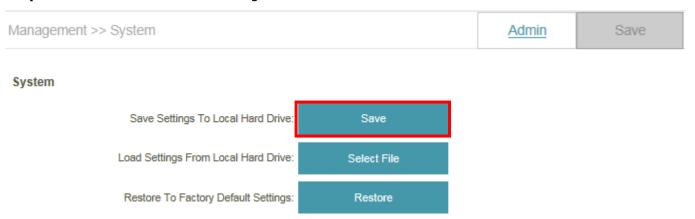
Then, log in to your router and follow the steps below:

**Step 1:** Click **Management -> System Admin** 

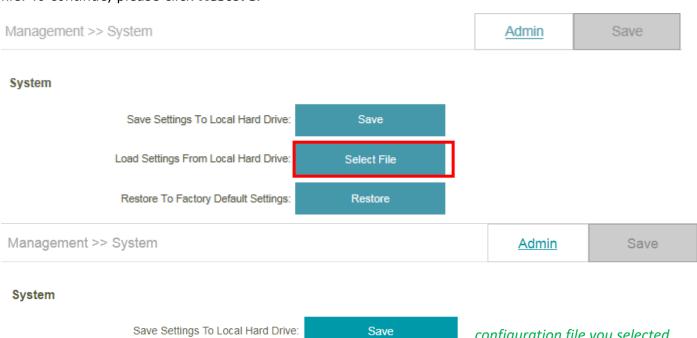
### Step 2: Click System

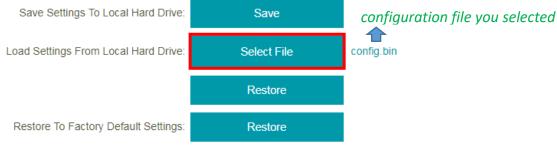
Management >> Admin	<u>System</u>	Save
Admin Password		
Password:		
Enable Graphical Authentication (CAPTCHA): Disabled		
		Advanced Settings

**Step 3:** Click **Save** to save the configurations:



**Step 4:** To restore your configurations, click the **Select File** button and select your configuration backup file. To continue, please click **Restore**.



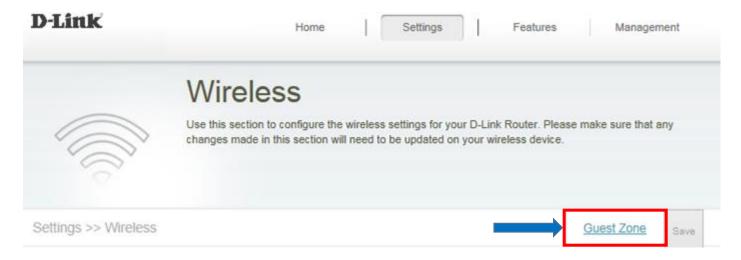


# 4-8: How do I enable Guest Zone/Guest Access on my EXO router?

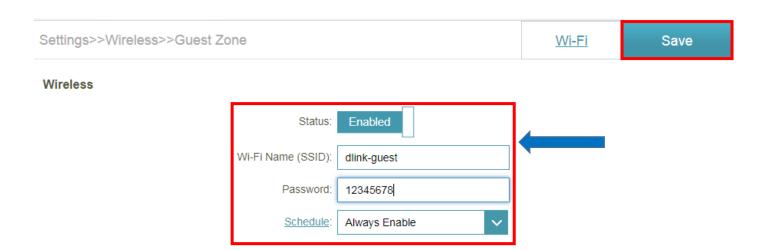
Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

Step 1: Click Settings -> Wireless

Step 2: Click the Guest Zone tab:



**Step 3:** Configure **Guest Zone** and click **Save**:



### 4-9: What can I do if I'm having wireless connection problems?

An easy way to determine if the issue is with the router or with the wireless device is to see if the issue exists on multiple devices. If your internet is slow or is only dropping on one of multiple devices/computers, then the issue is probably not with the router. If the router is the cause, all devices connected will be affected.

If you are experiencing any of the wireless problems on multiple devices below:

- Slow wireless speeds
- Wireless connection drops
- Low wireless signal
- 1. Check or change the location of your router— even a subtle change (2-3 feet) can make a big difference.
  - Ensure the router is in a well ventilated and open area (Do not put the router in a cabinet or enclosed area)
  - Other devices that use the 2.4Ghz/5Ghz wireless band will interfere with your wireless network, these include- (Microwaves, wireless cameras, baby monitors). If needed, place the router or the other devices in a different area if they are close to each other.
  - Wireless signals will degrade or die completely when going through bricks, metal, steel, lead, mirrors, water, large appliances, glass, etc.
- 2. **Ensure that your router is running the latest firmware version.** Please follow this link for instructions of how to upgrade the firmware- How to upgrade firmware for EXO router?
- 3. Change the wireless channel:

Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

Step 1: Click Settings -> Wireless

**Step 2:** Disable Smart Connect:

Settings >> Wireless

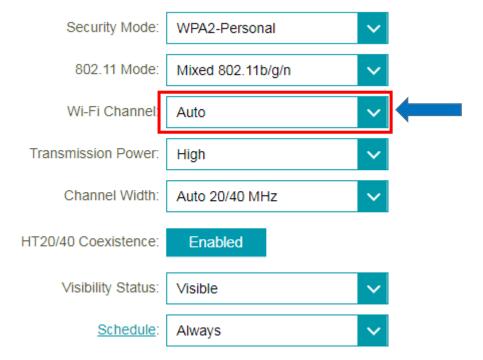
Guest Zone
Smart Connect

Status: Disabled

**Step 3:** Click **Advanced Settings** for both 2.4Ghz and 5Ghz bands:

# 2.4GHz Status: Enabled Wi-Fi Name (SSID): CSI-2660 Password: 12345678 Advanced Settings. 5GHz Enabled Status: Wi-Fi Name (SSID): CSI-2660 12345678 Password: Advanced Settings.

Step 4: Click Wi-Fi Channel box, and select your desired channel and click Save



### 4-10: How do I enable DMZ on my EXO router?

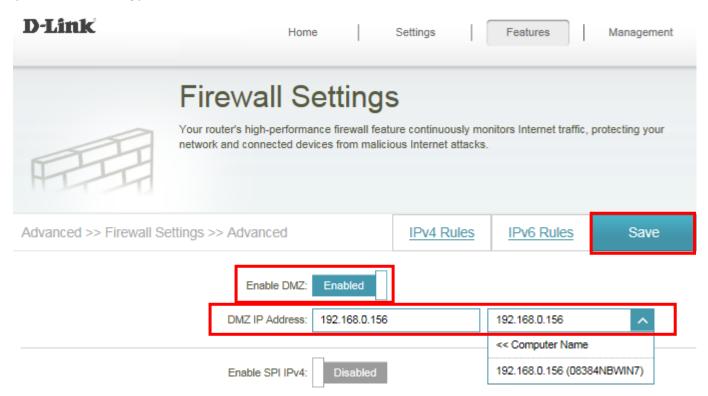
DMZ should only be used if you have a computer/device that cannot run Internet applications properly from behind the router.

**Note:** By enabling the DMZ (Demilitarized Zone) feature, you are allowing the router to forward all incoming traffic from the internet to the device specified, virtually disabling the routers "firewall protection". This may expose the device to a variety of security risks, so only use this option as a last resort.

Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

### Step 1: Click Features -> Firewall

**Step 2:** Click **Enable DMZ** to toggle the DMZ state, and fill in the IP address of the specified device (**One device only**), then click **Save**.



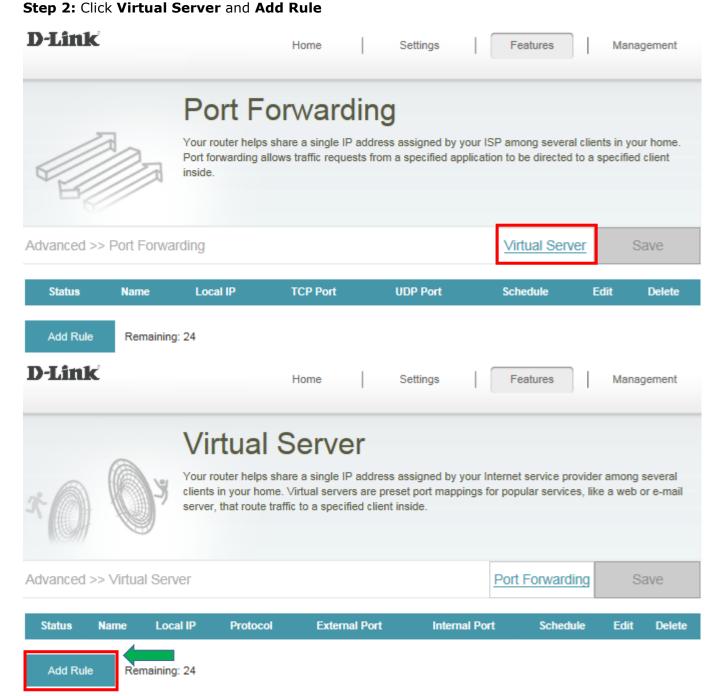
### 4-11: How do I open ports for EXO routers?

### Scenario 1: Single Port:

By default, your router will block all incoming connections (into your network) and allow all Outgoing connections to the Internet. In some cases, you may need to allow some connections into your network (for Example: Using the Remote Desktop Application). To do this, you must open ports on your router.

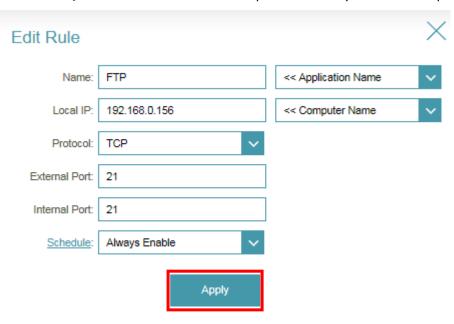
Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

**Step 1:** Click **Features** -> **Port Forwarding** 

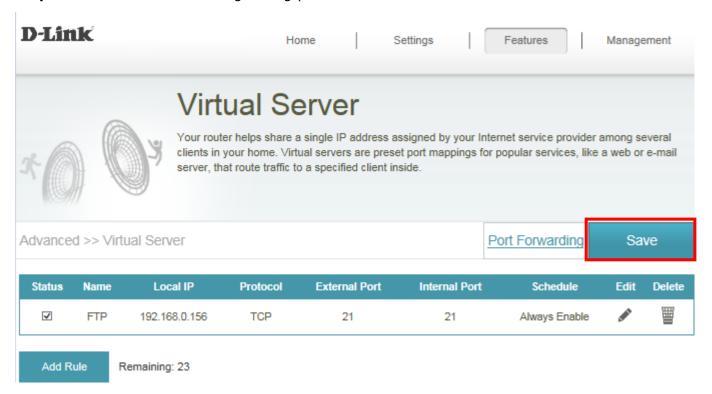


### Step 3: Create your rule (FTP server as example), then apply

- Name: Enter a name for the rule (i.e. Web Server 1)
- Local IP: Specify the IP address of the device you are opening the port for
- Protocol: Specify the traffic type (TCP or UDP) Note: If you are not sure, choose BOTH
- External/Internal Port: Enter the port number you want to open (i.e. 21, for FTP)



**Step 4:** Click **Save** after finishing adding your rule.



### **Scenario 2: Multiple Ports:**

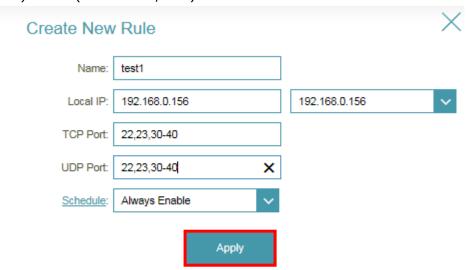
Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

### Step 1: Click Features -> Port Forwarding

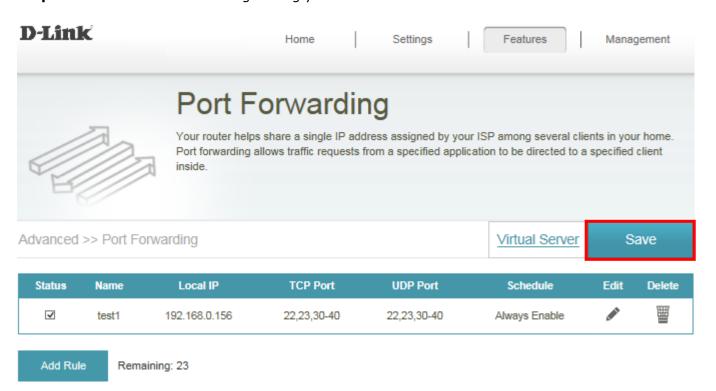
**Step 2:** Enter the TCP port numbers you want to open:

- Name: Enter a name for the rule (i.e. Web Server 1)
- Local IP: Specify the IP address of the device you are opening the port for
- TCP Port: Enter the TCP port numbers you want to open
- UDP Port- Enter the UDP port numbers you want to open

**Note:** You can enter the ports in multiple different ways- Range (50-100) Individual (80, 68, 888) Mixed (1020-5000, 689)



**Step 3:** Click **Save** after finishing adding your rule.

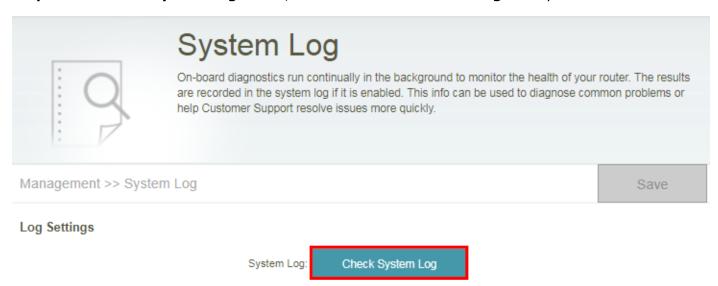


# 4-12: How do I check the system log for EXO routers?

Select **Management** -> **System Log**, and follow the methods as below:

### **Downloading current Syslog:**

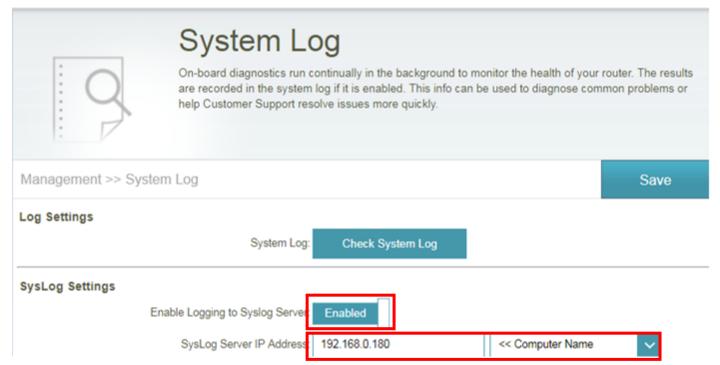
Step 1: Click Check System Log button, and download the file "messages" to your local hard drive.



**Step 2:** Open the file using a text editor to the check the system log.

### **Using Syslog Server:**

**Step 1**: Enable "**Enable Logging to Syslog Server**", and fill in the IP address of the PC which you'd like to set as syslog server:



**Step 2**: Download a system log server application you prefer to use, and configure the required settings.

# 4-13: How do I configure Dynamic DNS on my EXO router?

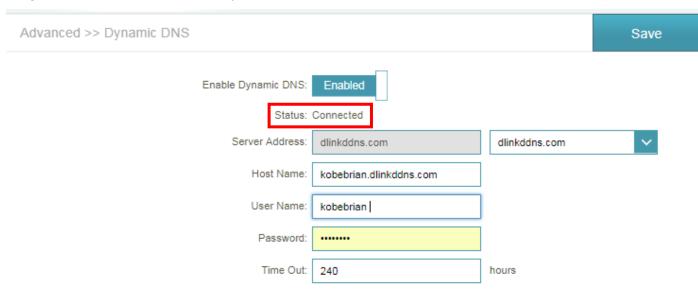
Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

### Step 1: Click Features -> Dynamic DNS

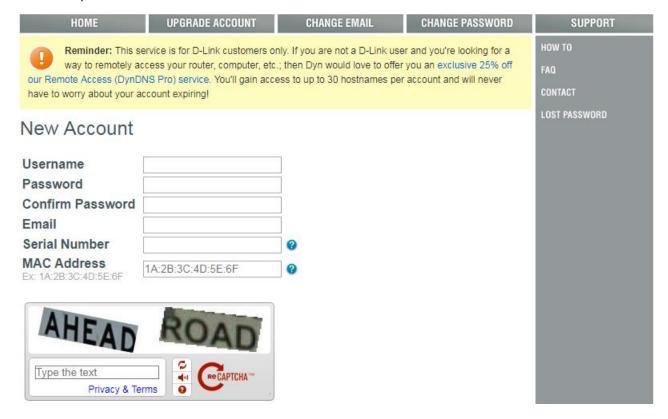
Step 2: Enable Dynamic DNS, enter your Dynamic DNS account information, and then click Save:

Advanced >> Dynamic DNS				Save
	Enable Dynamic DNS Status:	Enabled Disconnected		
	Server Address:	dlinkddns.com	dlinkddns.com	~
	Host Name:	kobebrian.dlinkddns.com		
	User Name:	kobebrian		
	Password:			
	Time Out:	240	hours	

**Step 3:** Your DDNS is successfully established after **Status** shows **Connected**:



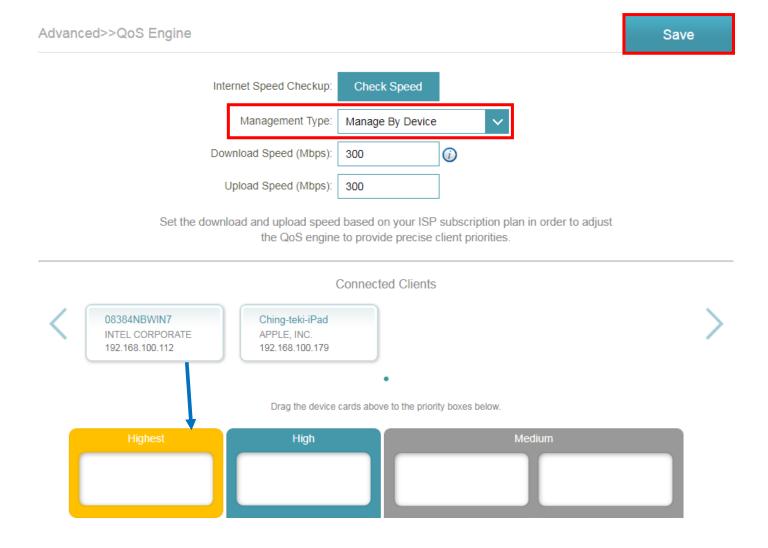
**Note:** To register for the dlinkddns service, please visit: <a href="https://www.dlinkddns.com/signin/">https://www.dlinkddns.com/signin/</a>. Then, fill in the required information.



### 4-14: How do I configure QoS on my EXO router?

Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

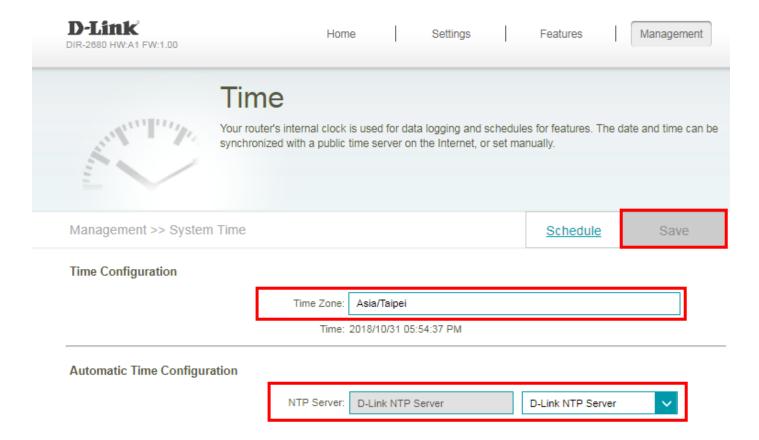
- Step 1: Click Features -> QoS Engine
- **Step 2:** Select **Manage By Device** from the dropdown list of Management Type.
- **Step 3:** To assign a priority level to a device, drag the device card from the **Connected Clients** list to an empty box and release the mouse button. The card will move to the priority boxes. If you want to remove a priority assignment from a device and return it to the All Devices list, click the cross icon in the top right of the device card.
  - A maximum of one device can be assigned **Highest** priority.
  - A maximum of two devices can be assigned High priority.
  - A maximum of eight devices can be assigned **Medium** priority.



# 4-15: How do I configure the time zone on my EXO router?

Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

- Step 1: Click on the Management -> Time & Schedule
- Step 2: Select your time zone. The D-Link NTP server is enabled by default.

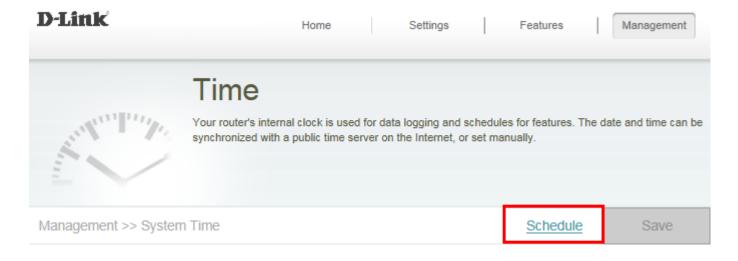


# 4-16: How do I create a web time schedule on my EXO router?

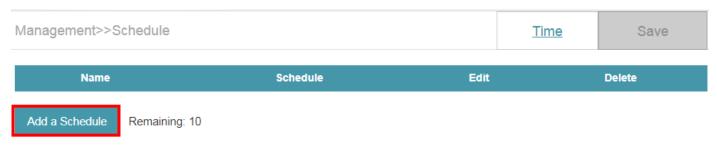
Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

Step 1: Click on the Maintenance -> Time & Schedule

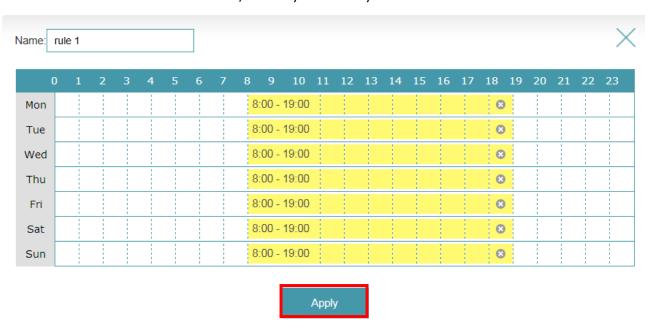
Step 2: Click Schedule:



### Step 3: Click Add a Schedule:



**Step 4:** Create your schedule for web access time and click **Apply.** The example below shows the scheduled time from 8:00 to 19:00, Monday to Sunday.



# 4-17: How do I set up VPN connection on my EXO routers?

Please launch your browser and enter http://dlinkrouter.local or http://192.168.0.1 into the address bar. Then, log in to your router and follow the steps below:

### Step 1: Click on the Features -> Quick VPN

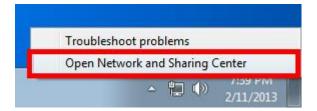
**Step 2:** Enable L2TP over IPSec, and set up your username, password and PSK.

Features >> Quick VPN		<u>User</u>	Save
General			
L2TP ove	er IPSec: Enabled		
Us	sername: vpn		
P	assword: vpn		
	PSK: ikRlq46041		

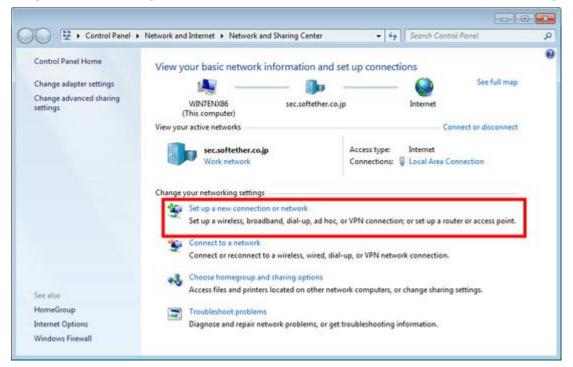
# Note: to connect the VPN connection on your PC or mobile device, please follow the steps below

#### On PC

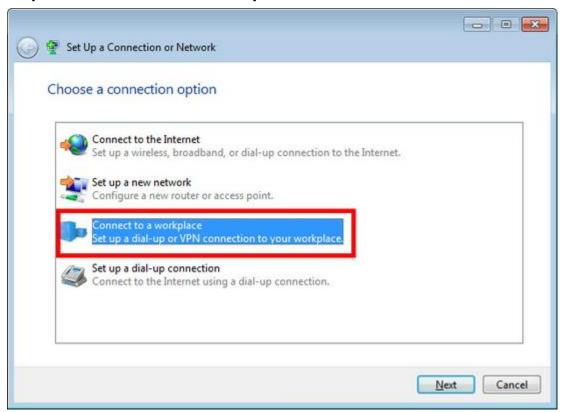
**Step 1:** Initial configurations (only once at the first time): Right-click the network icon on the bottom-right side of Windows screen, and click "Open Network and Sharing Center".



Step 2: Click "Set up a new connection or network" on the "Network Sharing Center":



Step 3: Select "Connect to a workplace":



Step 4: Select "Use my Internet connection (VPN)":



Step 5: You have to input the destination SoftEther VPN Server's IP address or hostname here:

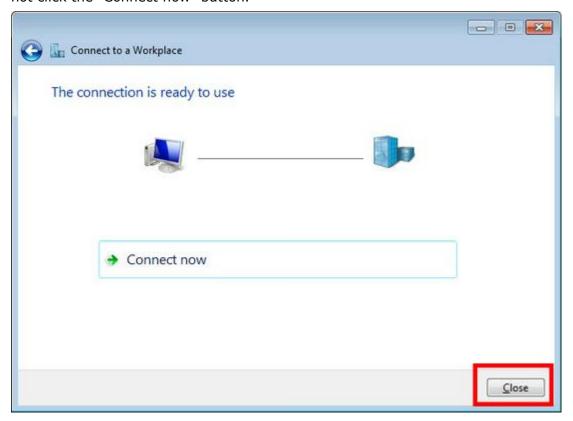


Enter either hostname or IP address on the "Internet address" field on the configuration wizard.

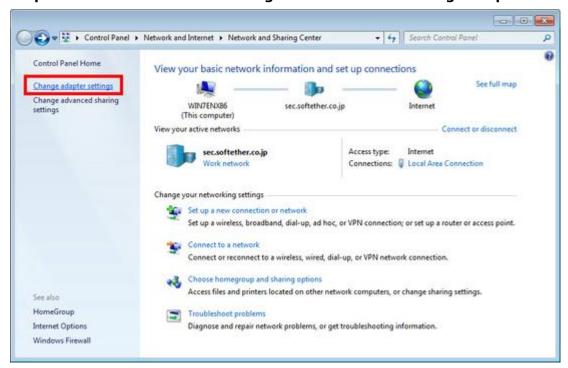
**Step 6:** Type your username and password you set on the router:



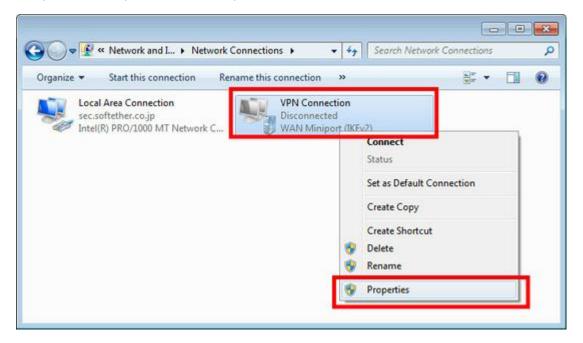
**Step 7:** When "**The connection is ready to use**" message appears, click the "**Close**" button. Do not click the "Connect now" button.



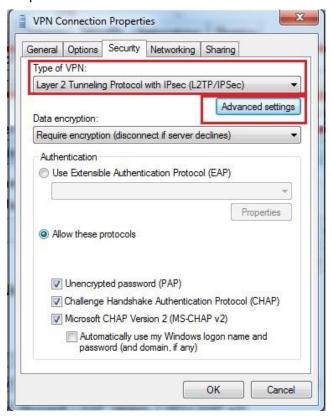
Step 8: Go to "Network and Sharing Center" and click "Change adapter settings":



**Step 9:** The currently defined VPN connection settings are listed. Right click the icon you created in the previous step, and click "Properties":



**Step 10:** On the Properties screen, switch to the "Security" tab. (In Windows XP, switch to the "Network" tab.) Choose "Layer 2 Tunneling Protocol with IPsec (L2TP/IPSec)" on the "Type of VPN" drop-down list.



The following screen will appear. Click "Use preshared key for authentication" and input the preshared key on the "Key" field.



**Step 11:** Connect to the VPN Server: Double-click the created VPN connection setting, the below screen will appear. "User name" and "Password" fields should be filled automatically if you enable password-saving options in previous steps. If not, input both "User name" and "Password" fields. Click the "**Connect**" button to start the VPN connecting attempts.



**Step 12:** If the VPN connection is successfully established, a VPN connection icon will be listed on the screen which appears when you click the network icon on the bottom-right of Windows screen. The status of the VPN connection icon should be "**Connected**".

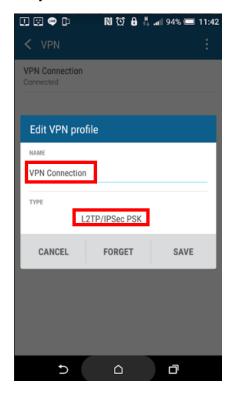


### On Android mobile devices

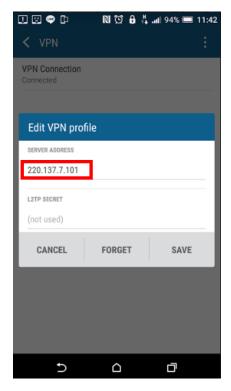
Step 1: Add new VPN profile:



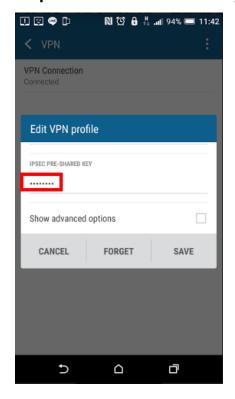
**Step 2:** Edit the name of VPN connection and select VPN type as **L2TP/IPSec PSK**:



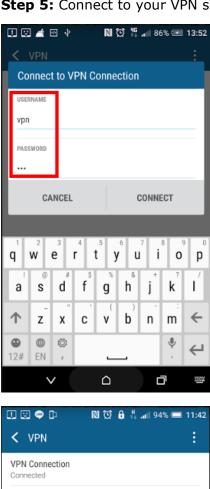
Step 3: Fill in the WAN IP address:

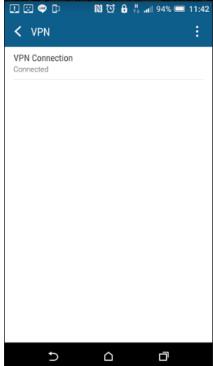


Step 4: Fill in the Pre-shared key:

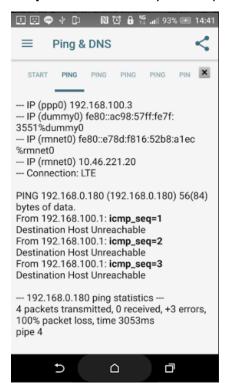


**Step 5:** Connect to your VPN server:





**Step 6:** Make sure if you can ping your client under DUT:



### On iOS mobile devices

**Step 1:** Setup the required information for VPN connection:



**Step 2:** Make sure if you can ping your client under DUT:



# 5. D-Link defend App for McAfee services

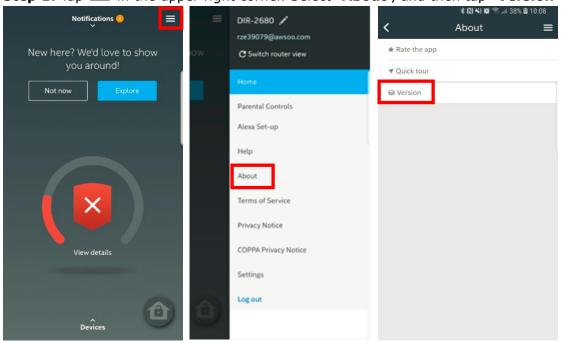
### 5-1: What is Secure Home Platform?

For more information, please visit the McAfee website.

https://goo.gl/ox518X

# 5-2: How do I check the SHP and D-Link defend app version?

**Step 1:** Tap in the upper right corner. Select "**About**", and then tap "**Version**":

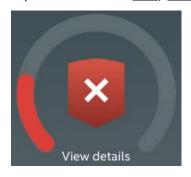


**Step 2:** Both the SHP and D-Link defend App version display.

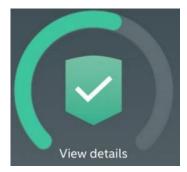


### 5-3: What do the security levels mean?

The color is not dependent on the security level applied by the user. It is determined based on the output of an algorithm used by SHP taking few parameters into consideration – some of the parameters include installation of AV, parental controls enabled, device assigned etc. When user takes any action on any of the security card suggestions/recommendations, the score is expected to change. At present, there are 3 possible colors: Red, Amber and Green.







User actions ultimately determine whether the user is in a green, amber, or red zone.

### Security level:

High: Green with a check

Middle: Yellow with an exclamation point

- Low: Red with an x.

The security level is assessed by whether the below actions are taken out or not:

- Tour walkthrough
- Device update Edit Device for unidentified devices
- Antivirus installation
- Parental Controls setup
- Time controls setup
- Device assignment to profiles

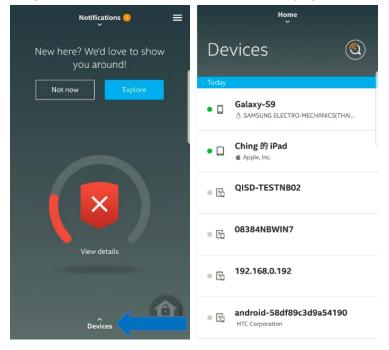
By tapping **View Details**, parents can access tips to increase the security level of their network.



# 5-4: What information can we check of each client device in the device list?

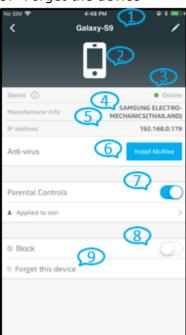
By tapping on **Devices** from the Home page, parents can view all the devices connected to their network.

**Step 1:** Click on **Devices** from the Home page. Then, select a specific client device:



### **Step 2:** The device information includes:

- 1. Device name
- 2. Device type
- 3. Online/offline status
- 4. IP address
- 5. Manufacturer
- 6. Install the McAfee LiveSafe app
- 7. Parental control status
- 8. If this device is blocked
- 9. Forget the device



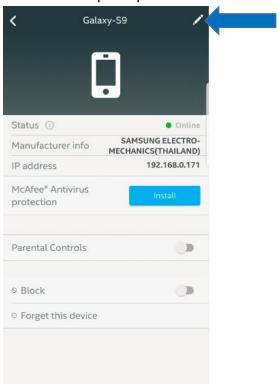
### 5-5: How do I edit a device?

There are 2 ways to edit a device: Swiping left in the device list and clicking Edit, or clicking the pencil icon on the device details page.

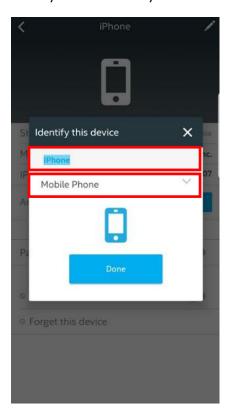
**Method 1:** Swipe left on a device in the device list, and click **Edit**.



**Method 2:** Tap the pencil icon on the device page:



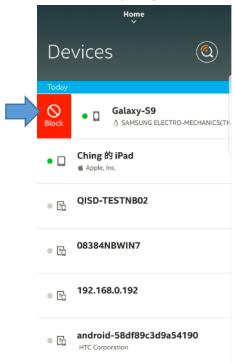
Then you can identify the device by entering a name, and choosing the device type:



# 5-6: How do I block a device from the Internet access?

There are 2 ways to block a device.

**Method 1:** Swipe right on the device list and tap **Block**:



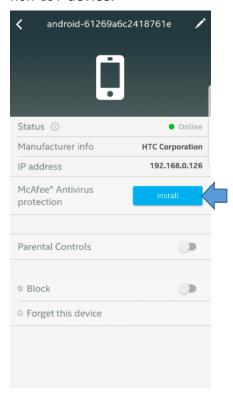
Method 2: Toggle the slider beside Block on the device page.



## 5-7: How do I install McAfee Antivirus protection on a mobile device or PC?

McAfee LiveSafe (MLS) features antivirus software with identity and privacy protection for all the computing devices (smartphone, PC and laptop) by blocking viruses, malware, ransomware, spyware, unwanted programs, and more malicious online attacks.

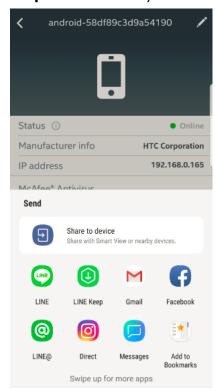
**Step 1:** Go to a client device, and click "**Install**" to install MLS. Please note that you need to select a non-IoT device.



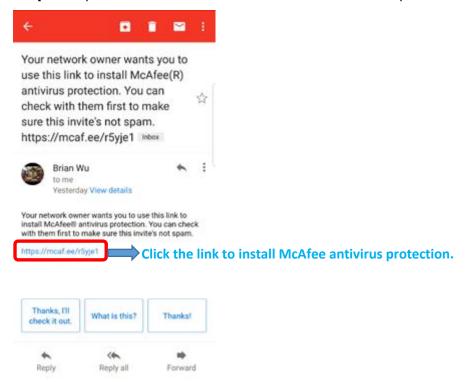
**Step 2:** Tap "SEND" to send the download link:



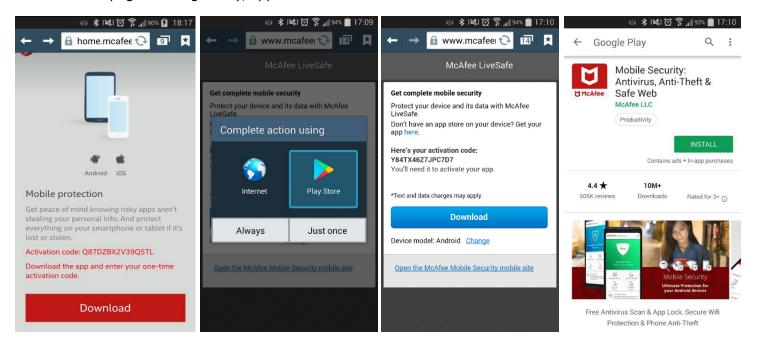
**Step 3:** Select how you would like to send the download link.



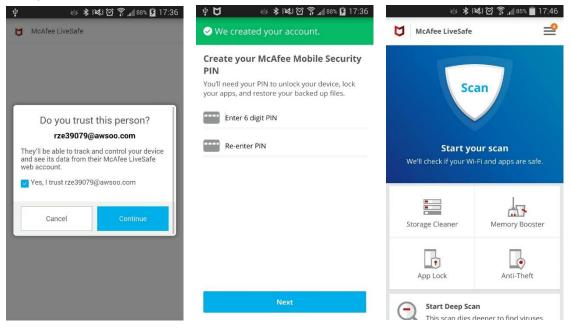
**Step 4:** Tap the download link to install McAfee antivirus protection.



**Step 5:** You will receive the activation code of the app. Tap "Download", and then you'll be redirected to the download page of Google Play/App Store:

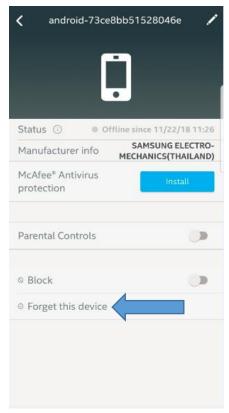


**Step 6:** Trust the inviter, and create a password for the app. Then the McAfee antivirus protection is ready to use.



# 5-8: How do I remove a device which you no longer manage?

Forgetting a device removes the device from the device list.



5-9: If a client device switches from a wired connection to wireless (or from wireless to wired),

will the client device be discovered as a new device?

When a client device switches from a wired connection to wireless (or from wireless to wired), the device is discovered as a new device. This is because SHP identifies a device by its **MAC address**, and the wired and wireless adapters each assign a different MAC address to the device.

Note: You need to set up all the rules again for the device as it is now considered as a new device.

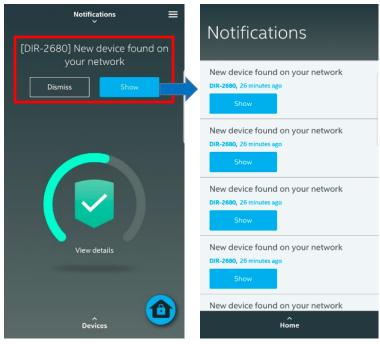
5-10: When a device is disconnected from the network, why does it still appear as online in the

## D-Link defend app?

When a device disconnects from the router's network, the device would appear as online for a few minutes. The SHP determines whether the device is offline by waiting for them to miss multiple heartbeats before it can safely conclude that it is offline. This helps SHP to avoid the online devices show as offline.

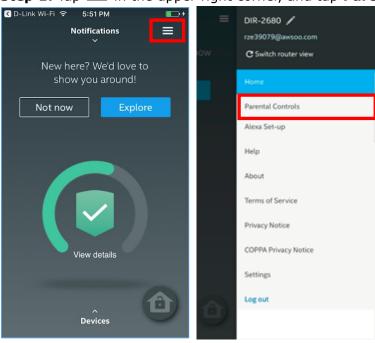
## 5-11: Can parents be notified if new devices connect to your router?



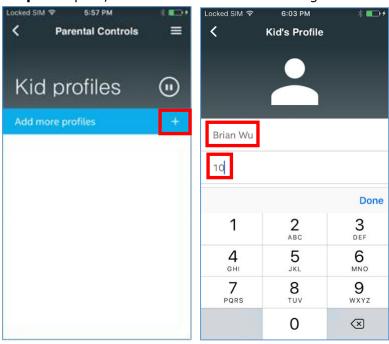


## 5-12: How do I set up Parental Controls via D-Link defend app?

**Step 1:** Tap in the upper right corner, and tap **Parental Controls**.

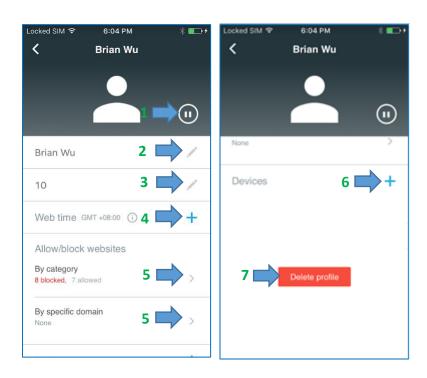


**Step 2:** Tap '+', and enter a kid's name and age to create a new kid's profile.



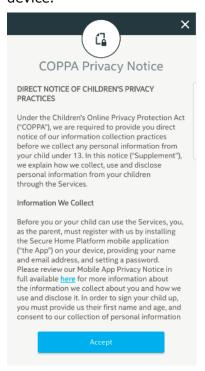
**Step 3:** A kid profile is created. Parents can manage the profile and set up rules.

- 1. Pause/resume the internet access of all the devices added to that kid's profile.
- 2. Edit profile's name
- 3. Edit profile's age
- 4. Set the time your kids can access the network.
- 5. Set what your kids can access on the network and what specific sites are blocked.
- 6. Add devices to their kid's profile.
- 7. Delete profile.



#### **Notes:**

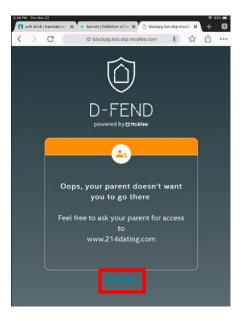
1. If the kid age is less than 13 years, then COPPA (Children's Online Privacy Policy Protection) notice will be displayed after you add a device to it. Parents must accept the COPPA notice before adding a device.



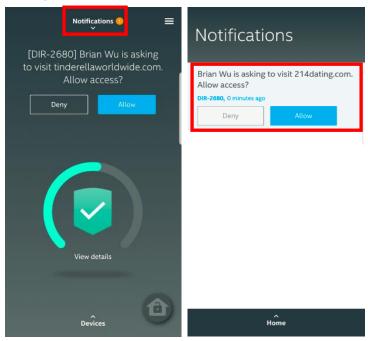
2. If kids are trying to access the internet outside the time set by their parents, they will receive this block page on their browser.



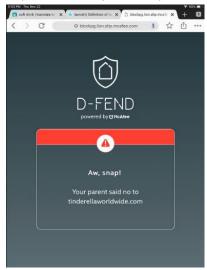
3. If kids are trying to access the website which is categorized as blocked, they will receive the error message below in their browser. They can click **Ask Now** to send a request to their parents to access the site.



Their parents will receive this notification in the D-Link defend app.



- If parents allow the request, their kids will be able to visit the website.
- If parents deny the request, the block page will display on their devices:



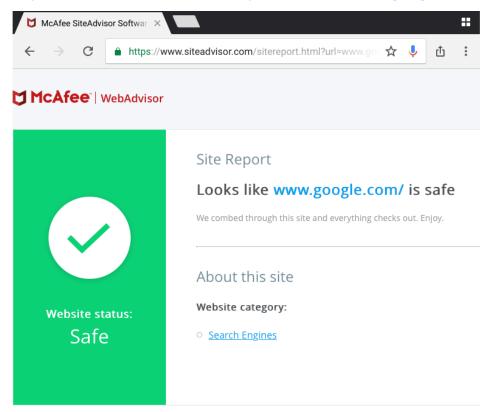
4. Website categories that are allowed or blocked by default depend on kids' age

	categories that are allowed or blocked by de				<u> </u>				
Range	Blocked				Allowed				
1-7	Dating,				Email				
	Drugs, Alco	hol, Tobac	cco,		Entertainment and Streaming Services				
	File transfer	and shar	ing, Gambli	ng	Games,	Search	Engines,	Shopping	and
	Malicious	Sites,	Parental	Control	advertising				
	Bypassing,	School	Cheating,	Sexual					
	Content,	Socia	ıl Net	working,					
	Uncategoriz	ed, Violer	nt Content						
8-12	Dating,				Email				
	Drugs, Alco	hol, Tobac	cco, Gamblir	ng	Entertainment and Streaming Services				
	Malicious	Sites,	Parental	Control	Games,	Search	Engines,	Shopping	and
	Bypassing,	School	Cheating,	Sexual	advertisi	ng, <b>File t</b>	ransfer aı	nd sharing	,
	Content, Un	categoriz	ed, Violent (	Content	Social Networking				
Above 12	Dating,				Email				
	Drugs, Alcohol, Tobacco, Gambling				Entertainment and Streaming Services				
	Malicious	Sites,	Parental	Control	Games,	Search	Engines,	Shopping	and
	Bypassing,	School	Cheating,	Sexual	advertisi	ng, File t	ransfer and	d sharing, S	Social
	Content				Networking, Uncategorized, Violent				olent
					Content				

#### 5-13: How does SHP make sure that a specific website is categorized as blocked or allowed?

You can check the website below to make sure that a browsed website is classified as a blocked category. (Below is for the website <a href="www.google.com">www.google.com</a>. If you'd like to check other websites, please change the address)

https://www.siteadvisor.com/sitereport.html?url=www.google.com/



## 5-14: Why does a certificate warning page appear when kids browse a blocked webpage?

If your kid visits the https-based websites that is blocked by parental control policies, certificate warning page will appear. Browsers do this as a security precaution to prevent malicious attacks. SHP will protect you from inappropriate websites (http or https), but because of the browser behavior for https sites it is unable to show you the block page. It shows certificate warning instead.

5-15: Can SHP still prevent a device from visiting malicious sites when VPN is enabled or when

### proxy is set?

Data through SSL/VPN/proxy connections can't be filtered. Parents must be vigilant if the filtering feasibility of kid's devices is ensured.

5-16: When the Internet is paused, why do some mobile apps, such as Facebook, stay connected

#### to the Internet?

That is because some of these mobile apps cache the DNS requests for a longer time than the browser. Please wait for few more minutes to let the mobile apps finish caching the DNS request.

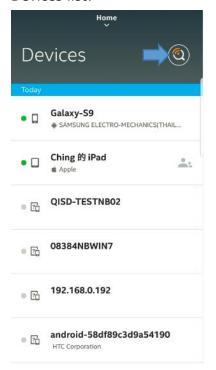
5-17: Why are video streaming still running after pausing the Internet?

DNS requests have already been granted for them. Video streaming will continue until they request for DNS again.

## 5-18: What does vulnerability scan do?

Vulnerability Scan helps users detect any vulnerabilities found on their network. The Scan ensures that devices have the latest firmware provided by the manufacturer and that they do not retain default credentials for any of their smart devices.

Users can initiate a vulnerability scan from the D-Link defend application by tapping the scan icon on the Devices list:



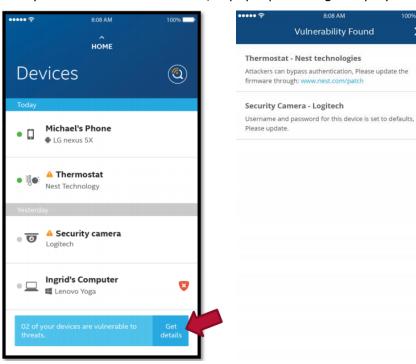
Note: Vulnerabilities will be scanned only if port 22 or 23 is opened, that is, telnet/SSH is enabled.

## 5-19: What kinds of devices will be scanned when users scan vulnerability?

Devices that are online and identified as IoT devices are scanned:

Device Type	Scanned
Phone	N
Tablet	N
Laptop	N
Mobile Device	N
Desktop	N
Thermostat	Υ
Game Console	Υ
TV	Υ
IP Camera	Υ
Multimedia	Y
Smart Lighting	Υ
Other IoT Device	Y

If any vulnerabilities are found, a pop-up message displays. To view more details, tap **Get Details**.

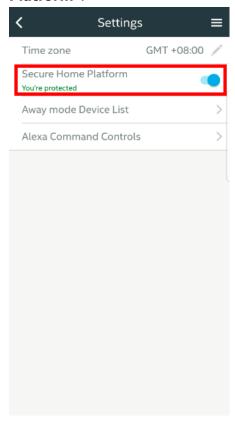


#### Notes:

- 1. For now, only two kinds of vulnerabilities are shown:
  - Default user ID password check using CVE (Common Vulnerabilities & Exposures).
  - Update firmware/patch for a device based on information we get from NIST Feed: <a href="https://nvd.nist.gov/vuln/data-feeds">https://nvd.nist.gov/vuln/data-feeds</a>.
- 2. For vulnerabilities, users need to contact their device manufacturer.

# 5-20: How do I check the SHP status in D-Link defend app?

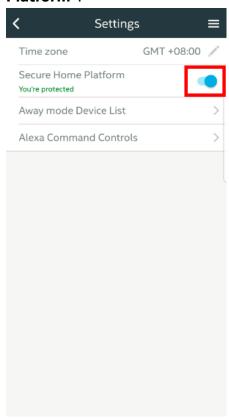
Tap on the in the upper right corner. Select "**Setting**". Then check the status of "**Secure Home**":



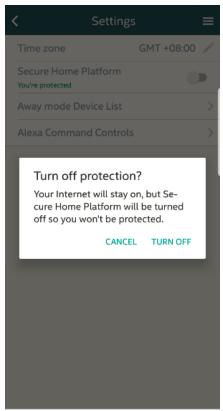
## 5-21: Can users turn off SHP services in the D-Link defend app?

Yes, users can turn off SHP services in the D-Link defend app anytime. Please note that your internet will stay on, but you won't be protected after you turn off the SHP services.

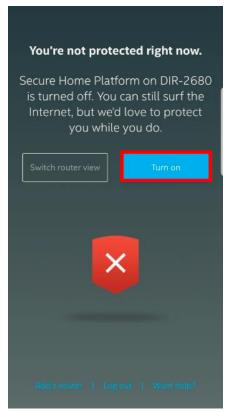
**Step 1:** Tap in the upper right corner. Select "**Setting**". Then toggle the status of "**Secure Home Platform**":



**Step 2:** You will be prompted to ensure that you really want to turn off the SHP services. Tap **TURN OFF** to disable the SHP services, or tap **CANCEL** to leave.



**Note:** After turning SHP off, users are re-directed to the Home screen, and there is a message showing that SHP services have been turned off. If users want to continue using the app and SHP features, they need to activate SHP by tapping **Turn On**.



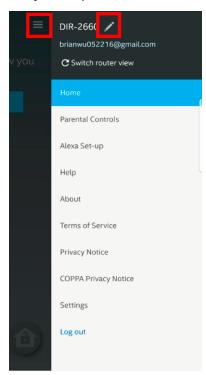
## 5-22: How do I manage my SHP-enabled routers in the D-Link defend app?

If you have more than 1 SHP-enabled routers in the D-Link defend app, you can manage your router settings by tapping **Switch Router view**.

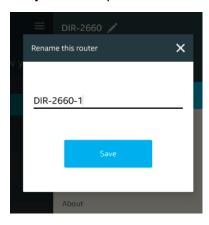


To easily identify your routers, you can change router names by tapping the pencil icon.

**Step 1:** Tap the menu in the upper right corner. Then tap the pencil icon :



**Step 2:** Then you're able to rename each router:



**Step 3:** The setting is saved.



## 5-23: How do I use D-Link defend features by Amazon Alexa voice commands?

**Step 1:** Download **Amazon Alexa** app from App Store/Google Play, and then log in to it with your Amazon account.

Note: Please make sure Amazon Alexa app service is ready in your country.

**Step 2:** Open Alexa app, and then follow the instruction below:

- Go to the setting menu from top-left side, and select "Skills".
- Search for **McAfee** or **D-Link defend** and tap it to open the Skill details page.
- Tap the **Enable Skill** button.
- Log in with your D-Link Wi-Fi account and tap **Authorize** to link your account to Alexa.

You can now use Amazon Alexa voice control service to configure D-LINK DEFEND function.

**Step 4:** Start to control your router via talking to Amazon Alexa app or Amazon Alexa device by following the command instruction as below:

			Alexa devices				
Control	First Commands	Second Commands	Echo Dot	Echo	Echo show	Others	
Check network summery		What's up with my network	V	V	V	V	
Find out how many devices are connected to the network		How many devices are online right now?	V	V	V	V	
	Open D- Link defend	What	V	V	V	V	
Scan for vulnerabilities to threats		Initiate/start a vulnerability scan	V	V	V	V	

			1	T	1			
Get the result of vulnerability scan	Open D- Link defend	If there are any vulnerabilities found	V	V	V	V		
Block a device from accessing network			Block {device's name}	V	V	V	V	
Unblock a device from accessing network			Unblock {device's name}					
Pause the internet for everyone under all parental control policies		Pause the internet for all kids	V	V	V	V		
Restart the internet for everyone under all parental control policies		-	Resume the internet for all kids	V	V	V	V	
Pause the internet for everyone under a particular parental control policy			-	Pause the internet for {policy name}	V	V	V	V
Resume the internet for everyone under a particular parental control policy			Resume the internet for {policy name}	V	V	V	V	
Set web time for a particular parental control policy			Assign web time for {policy name}	V	V	V	V	
Which router am I connecting to? (If there are 2 or more than 2		Which router am I currently connecting?	V	V	V	V		

SHP-enabled routers)					
Switch router (If there are 2 or more than 2 SHP-enabled routers)	Switch to {router name}	V	V	V	V

**Note:** When a round of conversation ends, D-Link defend will leave the conversation. If you'd like to use Amazon Alexa app or Amazon Alexa Echo device to control D-Link defend again, please speak "**Open D-Link defend**" again to Amazon Alexa app or Amazon Alexa Echo device to activate a new round of conversation.

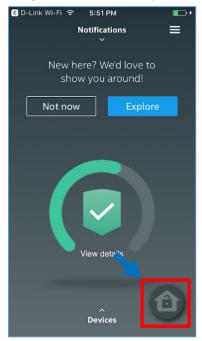
## 5-24: Does D-Link defend support The Google Assistant?

No, D-Link defend supports Amazon Alexa only.

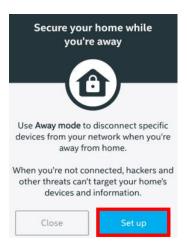
## 5-25: How do I set up Away mode?

Away mode allows users to disconnect any devices they want with a single click when they leave home. When Away mode is enabled, no internet is available for devices which are added to the Away device list.

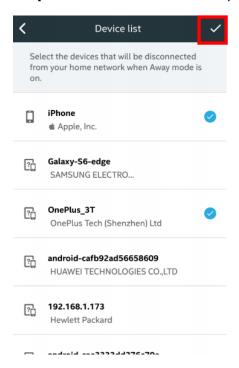
**Step 1:** Activate Away Mode from the Home screen in the D-Link defend app:



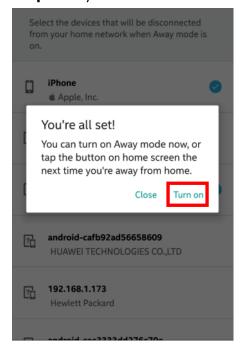
**Step 2:** Tap **Set up** to choose which devices will be disconnected from the network when Away Mode is enabled:



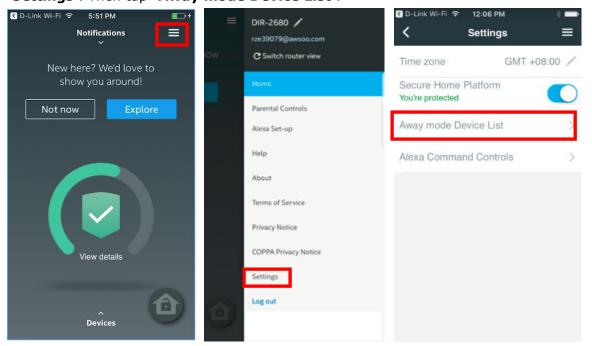
**Step 3:** Add devices in the Away Mode list and then tap  $\sqrt{}$  to continue.



**Step 4:** If you want to turn on Away mode now, tap **Turn on**. Or tap **Close** to turn it on later.



**Step 5:** If you want to manage devices from the Away Mode list, tap in the upper right corner, select "**Settings**". Then tap "**Away mode Device List**".



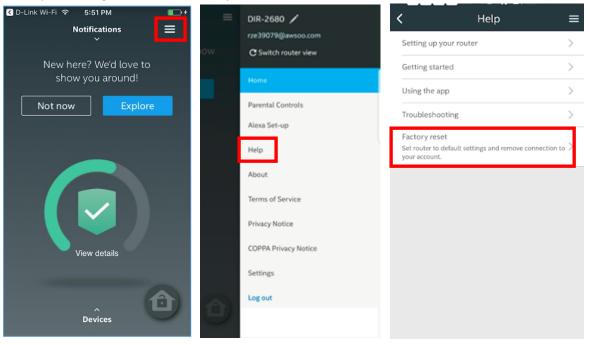
## 5-26: How do I perform factory reset in the D-Link defend app?

There are 2 ways to carry out factory reset. Please note that performing a factory reset will:

- Remove all SHP settings like devices, kids' profiles, etc. from the router and the McAfee cloud.
- Forces a logout for the parent on the D-Link defend app.

**Note:** Parents can still use the same email address to re-install their router and enable the McAfee SHP services.

1. Tap Factory Reset in the Help Menu.



#### 5-27: What features are available for SHP devices?

This table shows what features are available for SHP devices:

Devices	Block	Forget Device	Parental Controls	Device Status	Detect AV	Block Page on Device	Sends Admin Notifications if Accesses Malicious Site
Mobile Phone	Y	Υ	Y	Υ	Υ	Υ	N
Tablet	Y	Υ	Υ	Υ	Y	Υ	N
Personal Computer	Y	Y	Υ	Y	Y	Y	N
Thermostat	Y	Υ	Υ	Υ	N	N	Υ
Game Console	Y	Y	Y	Y	N	N	Y
TV	Y	Y	Υ	Υ	N	Y	N
Camera	Y	Y	Y	Y	N	N	Y
Media Devices	Y	Υ	Υ	Υ	N	N	Υ
Lights	Y	Y	Y	Y	N	N	Y
Switch and Sockets	Y	Y	Y	Y	N	N	Υ
Locks	Y	Y	Y	Y	N	N	Y
Other IoT Devices	Υ	Υ	Υ	Υ	N	N	Υ
Generic	Y	Y	Y	Y	Y	Y	N

Note: AV: Anti-Virus.

### 5-28: Can I remotely control the D-Link defend app of my SHP-enabled router?

Yes, you can directly launch D-Link defend app when you're outside of your home and have mobile network only. Launching D-Link defend from D-Link Wi-Fi is only required for the 1<sup>st</sup> time setup. You can remotely manage the D-Link defend app afterwards.

## 5-29: If your network uses IPv6 only, would SHP work correctly on SHP-enabled router?

No, if your network **only** uses IPv6, our security products will fail to work correctly. IPv4 has been available for much longer than IPv6 and is more widely used, so SHP continues to **depend on IPv4 to function normally**.

#### 6. D-Link Wi-Fi Mesh

#### 6-1: What is D-Link Wi-Fi mesh?

D-Link Wi-Fi mesh system consists of a main router that connects directly to your modem, and a series of extenders placed around your house for full Wi-Fi coverage. They are all part of a single wireless network and share the same SSID and password.

D-Link Wi-Fi mesh provides a blanket of Wi-Fi coverage all throughout the home, so it does a very good job of eliminating weak Wi-Fi signals or dead spots in the home. Once this is established, the EXO router and extenders will all talk to each other to create a seamless internet connection that covers your entire home for all your wired and wireless devices to connect to. It's all one network with a single SSID, so if you have a wireless laptop or mobile device that is connected to your mesh Wi-Fi, you can move from room to room seamlessly because as you move to different areas in your home, it will always automatically connect to the node which has the most rapid speed.

For more information, please visit the websites below.

https://www.dlink.com/en/wi-fi-mesh

http://wifimesh.dlink.com/demo/

#### 6-2: What are the differences between EXO routers/extenders and other routers/extenders?

#### 1. D-Link Wi-Fi mesh: One network and seamless roaming.

The name "mesh network" itself implies that every component of your Wi-Fi system is working together, and seamless roaming is the primary point of that. When you use a traditional router and range extender, you have to switch between the networks manually as you move from one coverage zone to the other.

But with seamless roaming, you only have one network with one Wi-Fi name (SSID) and password—that means that as you move about your home, you'll always be connected to the node which has the most rapid speed automatically, and never have to manually switch from one network to the other. So go ahead, stream video in the living, kitchen, or bedroom without worrying about buffering or a dropped connection.



#### 2. D-Link Wi-Fi mesh: Overcome performance degrading issue.

Most range extenders cut your bandwidth in half since wireless is half duplex. In a large space where Wi-Fi struggles to reach every corner, a range extender can actually diminish the overall performance of your network, creating a bottlenecking effect.

D-Link Wi-Fi mesh systems can overcome the "half duplex" problem by using multiple radios to send and receive information simultaneously. Put simply: With mesh networks, you'll have less congestion, better speeds, and less hassle connecting to the Wi-Fi as you roam around the house.

#### 3. D-Link Wi-Fi mesh: Easy management.

Setting up and managing your network are significantly easier with D-Link mesh network. Instead of dealing with multiple configuration pages, you can manage the entire network from one user-friendly

D-Link Wi-Fi app. D-Link Wi-Fi mesh systems also update their firmware automatically, which is a huge step up over most routers, which require you to check the manufacturer's web page for updates, download a file, and send it to your router manually.

#### 4. D-Link Wi-Fi mesh: Self-heals your mesh automatically.

For the traditional range extenders, if one node unexpectedly fails, the killed connections stay down till you manually fix it. But if you use D-Link Wi-Fi mesh system, it can be self-healed by automatically establishing an alternative path to the EXO or the adjacent EXO extender.

#### 6-3: How many EXO extenders can I add in the network with my EXO router?

You can add up to 8 Wi-Fi EXO extenders behind your EXO router. You can have one EXO router in the mesh network. EXO routers cannot work as extenders.

#### 6-4: What are the tips to set up D-Link Wi-Fi mesh network?

Please refer to the tips below:

- (1) Please apply wired connection between nodes as the first choice if it's available.
- (2) Alternatively, apply the wireless connection if there's a difficulty for wired backhaul connection.
- (3) Please utilize wired backhaul connection if the nodes are far away from each other.
- (4) Three wireless hops is not recommended. Please utilize wire backhaul connection to ensure optimal wireless performance.



Wired backhaul gets the optimal performance. Apply the wireless connection as alternative if there's a difficulty for wired backhaul connection.



The  $3^{rd}$  hop is recommended to be applied as wired connection.

## 6-5: Which EXO router or EXO extender in the mesh network am I connecting to?

It depends on the path speed. The D-Link Wi-Fi mesh system will measure expected path speed of all available EXO devices, and find out the optimal one for your device.

### 6-6: Can I install multiple EXO extenders simultaneously?

Yes, you can connect multiple Wi-Fi mesh extenders to EXO router by Ethernet cables to establish the Wi-Fi mesh between router and extenders simultaneously.

6-7: If wired backhaul between nodes is removed, will wireless backhaul be established

### automatically to keep the mesh network operative?

Yes, it's the mechanism of D-Link Wi-Fi mesh system. Wireless connection will be applied as alternative if the wired backhaul between two nodes is removed. If an Ethernet cable is plugged again, the wired backhaul will be re-established.

6-8: Can I set up EXO extenders via WPS to establish a D-Link Wi-Fi mesh network? What are the

differences between the Wi-Fi mesh pairing via WPS and Ethernet?

Yes, you can set up EXO extenders via WPS to establish a D-Link Wi-Fi mesh network with your EXO router.

For optimal performance, it is highly recommended to build up a mesh network via wired backhaul.

#### 6-9: Could Guest Wi-Fi network be extended if I add EXO extenders?

Yes, a guest Wi-Fi network can also be extended if you add Wi-Fi mesh extenders.

Using a guest network keeps your primary Wi-Fi network safe from intrusion, blocking outside users from accessing your personal data.

### 6-10: Do D-Link EXO extenders support MOD (IPTV)?

(For internal use) No, currently, D-Link Wi-Fi mesh extenders do NOT support MOD (IPTV).