

# NETGEAR®

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## ProSecure Unified Threat Management Appliances UTM9S and UTM25S Wireless Quick Start Guide



## Support

Thank you for selecting NETGEAR products.

After installing your device, locate the serial number on the label of your product and use it to register your product at <https://my.netgear.com>.

You must register your product before you can use NETGEAR telephone support. NETGEAR recommends registering your product through the NETGEAR website.

Phone (US only): 1-888-NETGEAR

Phone (Other Countries):

Visit <http://support.netgear.com/general/contact/default.aspx>.

NETGEAR recommends that you use only the official NETGEAR support resources.

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**Warning:** Do not stack equipment, or place equipment in tight spaces or in drawers. Be sure that your equipment is surrounded by at least 2 inches (5 cm) of air space.

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# Introduction

This quick start guide provides basic wireless configuration information for the ProSafe UTM9S and UTM25S. For information about advanced wireless features, and for complete configuration steps, see the reference manual at [downloadcenter.netgear.com](http://downloadcenter.netgear.com).

## Default Wireless Settings

The default wireless settings work well for most wireless networks, but you need to configure the country of operation and wireless security.

The country is initially set to the default country for the region where the UTM is sold. You need to select the actual country of operation from the country list. The countries in each region are listed in alphabetic order.

These are the default settings:

Item	Description
Wireless radio	Enabled
Region	Not configurable. It is set to the region in which you purchased the UTM.
Country	The selection is limited to the countries in the region in which you purchased the UTM. The default regional settings are: <ul style="list-style-type: none"><li>• <b>Africa.</b> Algeria</li><li>• <b>Asia.</b> Azerbaijan</li><li>• <b>Europe.</b> Albania</li><li>• <b>Middle East.</b> Bahrain</li><li>• <b>North America, Latin America, and The Caribbean.</b> United States</li><li>• <b>Oceania.</b> Australia</li></ul>

Item	Description
Operating frequency	Configurable to 2.4 GHz or 5 GHz
Default security profile	UTM9S or UTM25S
Default network name (SSID)	netgear-1
Broadcast SSID	Enabled
Security	Open
Encryption	None
Authentication	None
Default transmit power	Full
802.11 wireless mode	g and b (the default for most countries)
802.11b/g/n radio frequency channel	Auto
802.11n channel spacing	20 MHz
<b>Advanced wireless settings</b>	
Beacon interval	100 ms
DTIM interval	2
RTS threshold	2346 bytes
Fragmentation threshold	2346 bytes
Preamble mode	Long
Protection mode	None
Power save	Disabled

# Wireless Equipment Placement and Range Guidelines

The range of your wireless connection can vary based on the location of the UTM. The latency, data throughput performance, and notebook power consumption of wireless adapters also vary depending on your configuration choices.

**Note:** Failure to follow these guidelines can result in significant performance degradation or the inability to connect wirelessly to the UTM. For complete performance specifications, see the data sheet at [downloadcenter.netgear.com](http://downloadcenter.netgear.com).

For best results, place your UTM according to the following general guidelines:

- Near the center of the area in which your wireless devices operate.
- In an elevated location such as a high shelf where the wirelessly connected devices have line-of-sight access (even if through walls).
- Away from sources of interference such as computers, microwaves ovens, and 2.4 GHz cordless phones.
- Away from large metal surfaces or water.
- Placing the antennas in the upright position provides the best horizontal coverage.
- If you are using multiple wireless access points such as the UTM, it is better if access points use different radio frequency channels to reduce interference. The recommended channel space between adjacent access points is five channels (for example, use Channels 1 and 6, or 6 and 11, or 1 and 11).
- The time that it takes to establish a wireless connection can vary depending on both your security settings and placement. WEP connections can take slightly longer to establish. Also, WEP encryption can consume more battery power on a notebook computer.

# Configure the Country of Operation and Operating Frequency

The region of operation is not configurable. It is set for the region in which you purchased the UTM. The selection of the country is limited to the countries in the region in which you purchased the UTM. As an option, you can change the operating frequency from the default setting of 2.4 GHz to 5 GHz.

## ➤ To configure the country and frequency settings:

1. Select **Network Config > Wireless Settings > Radio Settings**. The Radio Settings screen displays:

The screenshot shows the 'Radio Configuration' screen with the following settings:

- Region: North America, Latin America and The Caribbean
- Country: United States(US) (highlighted with a blue oval)
- Operating Frequency: 2.4GHz
- Mode: g and b
- Channel Spacing: 20MHz
- Current Channel: Auto
- Channel: Auto
- Default Transmit Power: Full

Buttons: Apply, Reset

2. Select the country from the Country drop-down list.
3. (Optional) From the Operating Frequency drop-down list, select **5GHz** to change the frequency from the default 2.4 GHz band to the 5 GHz band.

**Warning:** When you change to the 5-GHz band, only 802.11na devices can connect to the UTM. (In Greenfield mode, only 802.11n devices can connect to the UTM.) 802.11b and 802.11g devices cannot connect to the UTM.

4. Click **Apply** to save your settings. The wireless network module (not the UTM9S or UTM25S) reboots.

**Note:** Other wireless settings that you can configure on the Radio Settings screen are explained in “Configure the Basic Radio Settings” in Appendix B, “Wireless Network Module for the UTM9S and UTM25S,” of the reference manual.

## Configure WPA+WPA2 with PSK Security

NETGEAR recommends that you configure wireless authentication and encryption to secure your wireless traffic. WPA+WPA2 with a pre-shared key (PSK) is easy to configure and works well in most situations. However, if your network uses 802.11n devices only, select WPA2 to enable the 802.11n devices to function at full speed.

- **To configure WPA+WPA2 with PSK security for the UTM9S or UTM25S default wireless profile:**

1. Select **Network Config > Wireless Settings > Wireless Profiles**. The Wireless Profiles screen displays:

The screenshot shows the Netgear web interface for configuring wireless profiles. The breadcrumb trail is: Network Config > Network Security > Application Security > WPA > Users > Administration > Monitoring > Support > Wizards > WAN Settings > Wireless Settings > Protocol Binding > Dynamic DNS > WAN Metering > LAN Settings > DMZ Setup > Routing > Radio Settings > Wireless Profiles > WDS Configuration. Below the breadcrumb trail is a table titled "List Of Wireless Profiles". The table has the following columns: Status, Profile Name, SSID, Broadcast, Security, Encryption, Authentication, Schedule, Start Time, Stop Time, and Action. The first row shows a profile with Status "Enabled", Profile Name "UTM9S", SSID "netgear-1", Broadcast "ON", Security "OPEN", Encryption "NONE", Authentication "NONE", Schedule "No", Start Time "0:0", and Stop Time "0:0". The "Action" column for this row contains an "Edit" button, which is circled in red. Below the table are several action buttons: Select All, Enable, Disable, Delete, ACL, WMM..., Status, and Add...

Status	Profile Name	SSID	Broadcast	Security	Encryption	Authentication	Schedule	Start Time	Stop Time	Action	
<input type="checkbox"/>	Enabled	UTM9S	netgear-1	ON	OPEN	NONE	NONE	No	0:0	0:0	Edit



- Click the **Edit** button in the Action column for the UTM9S or UTM25S default wireless profile. The Edit Wireless Profiles screen displays:

The screenshot shows the 'Edit Wireless Profile' configuration page. At the top, there is a navigation bar with tabs for Network Config, Network Security, Application Security, VPN, Users, Administration, Monitoring, Support, and Wizards. Below this is a breadcrumb trail: WAN Settings > Wireless Settings > Protocol Binding > Dynamic DNS > WAN Metering > LAN Settings > DHCP Setup > Routing > Edit Wireless Profile. The main content area is titled 'Edit Wireless Profile' and contains a message 'Operation succeeded.' Below this is the 'Wireless Profile Configuration' section, which includes the following fields: SSID (netgear-1), Broadcast SSID (checked), Security (WPA+WPA2), Encryption (TKIP+AES), Authentication (PSK), WPA Password (masked with dots), Schedule (unchecked), Start Time (0 Hour 0 Minutes AM), Stop Time (0 Hour 0 Minutes AM), and VLAN (defaultVlan). A blue oval highlights the Security, Encryption, and Authentication settings. Below the Wireless Profile Configuration section is the 'Wep Index and Keys' section, which includes Authentication (Open System), Encryption (64 bit WEP), WEP Passphrase (with a Generate button), and four Wep Key fields (Wep Key 1, Wep Key 2, Wep Key 3, Wep Key 4). At the bottom of the page are 'Apply' and 'Reset' buttons.

- From the Security drop-down list, select **WPA+WPA2**. The Encryption drop-down list automatically selects TKIP+AES, which is the default encryption setting for WPA+WPA2.
- From the Authentication drop-down list, select **PSK**.
- In the WPA Password field, enter a password (also referred to as a pre-shared key) of at least 8 characters.

**Warning:** *If you use a wireless computer to configure the wireless security settings, you are disconnected when you click Apply. Reconfigure your wireless computer to match the new settings, or access the UTM from a wired computer to make further changes.*

6. Click **Apply** to save your settings.

**Note:** For other types of security (WEP, WPA, WPA2, and RADIUS authentication) and for the other wireless profile settings, see “Wireless Security Profiles” in Appendix B, “Wireless Network Module for the UTM9S and UTM25S,” of the reference manual.

## Test Wireless Connectivity

After you have configured the UTM as explained in the previous sections, test your wireless clients for wireless connectivity before you place the UTM at its permanent position.

### ➤ To test for wireless connectivity:

1. Configure the 802.11 wireless clients so that they all have the same SSID that you have configured on the UTM, for example, netgear-1 (the default SSID). Make sure that the wireless mode on the UTM supports the wireless capacity of the wireless clients.
2. Verify that your wireless clients have a link to the UTM.
3. Verify network connectivity by using a browser such as Internet Explorer 7.0 or later or Mozilla Firefox 4.0 or later to browse the Internet, or check for file and printer access on your network.

If you have trouble connecting to the module, try to connect without security by selecting **OPEN** from the Security drop-down list on the Edit Wireless Profiles screen for the profile that you are using (see the figure on [page 9](#)).

## For More Information

Appendix B, “Wireless Network Module for the UTM9S and UTM25S,” of the reference manual provides information about the following wireless topics:

- Configuring the basic radio settings
- Wireless data security options
- Wireless security profiles, including information about restricting wireless access by MAC address
- Configuring advanced radio settings
- Configuring a Wireless Distribution System
- Configuring WMM QoS priority settings



## Reference Manual

The reference manual and other UTM9S and UTM25S documentation is available from the user interface and the NETGEAR download center:

[downloadcenter.netgear.com](http://downloadcenter.netgear.com)

## Declarations of Conformity

For complete EU Declarations of Conformity, visit

[http://kb.netgear.com/app/answers/detail/a\\_id/11621/](http://kb.netgear.com/app/answers/detail/a_id/11621/).



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