UniFi Express Setup Guide

This guide will walk you through setting up a UniFi Express system for a home network with the following features:

- **Two SSIDs:** Home and Guest
- **Three VLANs:** Home, Guest, and IoT
- **PPSK (Private Pre-Shared Key):** Different keys for Home and IoT networks

Prerequisites

1. **UniFi Express Device**: Make sure your UniFi Express device is plugged in and powered on.
2. **UniFi Controller Software**: Install the UniFi Network Controller on a computer or server. You can download it from the Ubiquiti website.
3. **Basic Network Setup**: Ensure you have an internet connection and basic network setup ready.

Step-by-Step Setup

Step 1: Access UniFi Controller

1. Open a web browser and navigate to the UniFi Controller URL (e.g., `https://<controller-ip>:8443`).
2. Log in with your UniFi account credentials.

Step 2: Adopt UniFi Device

1. Go to the **Devices** section.
2. Find your UniFi Express device in the list and click **Adopt**.
3. Wait for the device to show as "Connected."

Step 3: Create VLANs

1. Navigate to **Settings** > **Networks**.
2. Click **Create New Network**.

Home VLAN

- **Name**: Home
- **Purpose**: Corporate
- **VLAN ID**: 10 (Example)
- **Gateway/Subnet**: 192.168.10.1/24 (Example)

Guest VLAN

- **Name**: Guest
- **Purpose**: Guest
- **VLAN ID**: 20 (Example)
- **Gateway/Subnet**: 192.168.20.1/24 (Example)

IoT VLAN

- **Name**: IoT
- **Purpose**: Corporate
- **VLAN ID**: 30 (Example)
- **Gateway/Subnet**: 192.168.30.1/24 (Example)

Step 4: Create Wireless Networks (SSIDs)

1. Navigate to **Settings** > **Wireless Networks**.
2. Click **Create New Wireless Network**.

Home SSID

- **SSID Name**: Home
- **Security**: WPA Personal
- **VLAN**: Use VLAN 10
- **PPSK**: Enable PPSK and configure keys for Home and IoT VLANs.

Guest SSID

- **SSID Name**: Guest
- **Security**: WPA Personal
- **VLAN**: Use VLAN 20

Step 5: Configure PPSK for Home SSID

1. Go to **Settings** > **Wireless Networks** > **Home SSID**.
2. Under the **Security** settings, enable **PPSK**.
3. Create multiple PPSKs:
   - **Home Access Key**: Associate with VLAN 10.
   - **IoT Access Key**: Associate with VLAN 30.

Step 6: Guest Network Configuration

1. Ensure that the **Guest SSID** is configured to isolate traffic and restrict access to internal resources.
2. Under **Settings** > **Guest Control**, enable **Guest Portal** if you want to use a captive portal.

Step 7: Apply Settings and Test

1. Review your settings and apply changes.
2. Connect devices to each SSID and verify connectivity.
   - Home devices should connect to the Home SSID and be assigned to VLAN 10.
   - IoT devices should use the designated PPSK for the IoT VLAN.
   - Guest devices should connect to the Guest SSID and be isolated.

Additional Tips

- **Monitoring**: Use the UniFi Controller to monitor network traffic and performance.
- **Security**: Regularly update firmware and review security settings to protect your network.
- **Support**: For any issues, consult the UniFi support forums or documentation.

https://ui.com/uk/en/cloud-gateways/wifi-integrated/express

Revision #2
Created 9 August 2024 04:50:47 by Jarryd
Updated 30 September 2025 04:54:14 by Jarryd