

## Lab 8.4.5: Configuring a WLAN on a Ruckus WiFi LAN Controller

*From TestOut CompTIA Security+ Course*

In this lab I will be configuring security settings for a Ruckus Wireless LAN Controller / Zone Controller. This controller manages various Access Points in a theoretical Corporate Network.

### **The scenario for this lab is as follows:**

**“You are a network technician for a small corporate network. You just installed a Ruckus zone controller and wireless access points throughout your office buildings using wired connections. You now need to configure basic wireless network settings.**

**Access the Wireless Controller console through Chrome on <http://192.168.0.6> with the username admin and the password password. The username and password are case-sensitive.**

In this lab, your task is to:

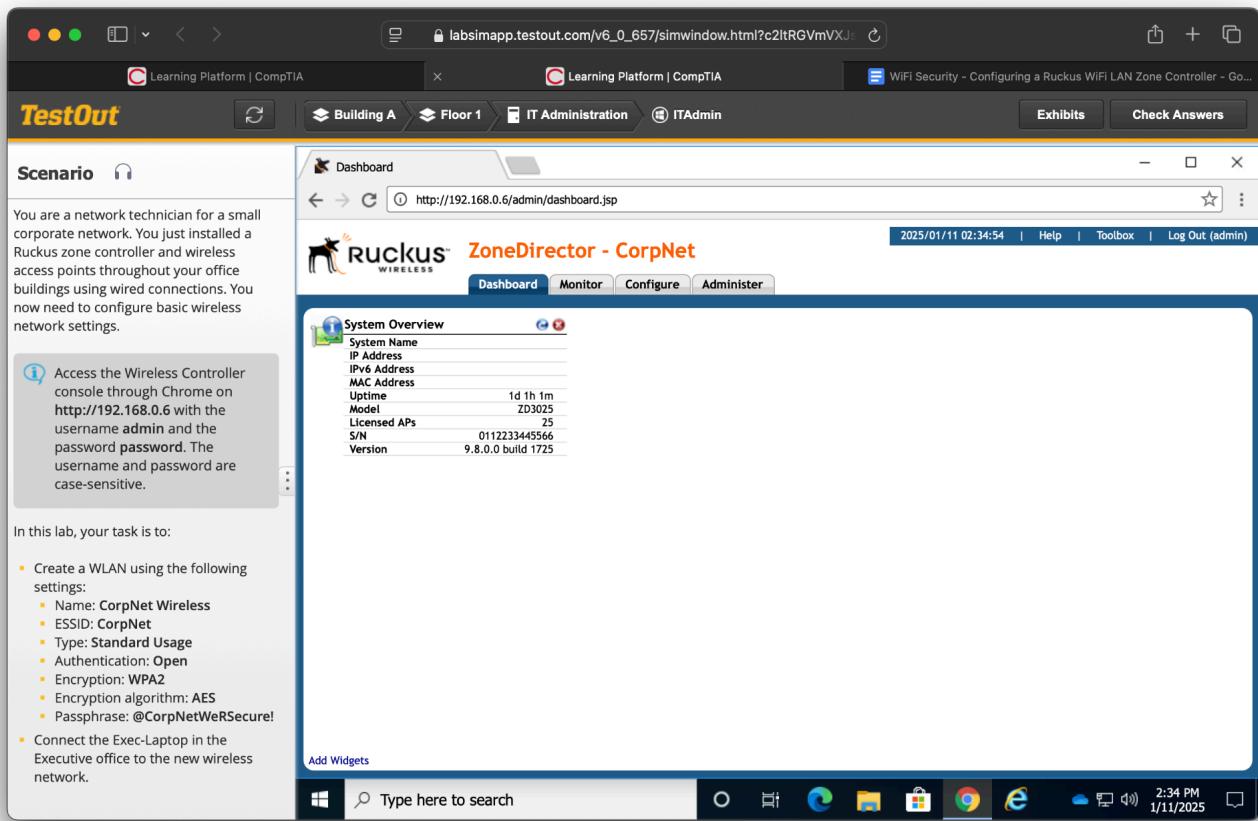
- Create a WLAN using the following settings:
  - Name: CorpNet Wireless
  - ESSID: CorpNet
  - Type: Standard Usage
  - Authentication: Open
  - Encryption: WPA2
  - Encryption algorithm: AES
  - Passphrase: @CorpNetWeRSecure!
- Connect the Exec-Laptop in the Executive office to the new wireless network.”

To begin I will first navigate to the navigation portal at **192.168.0.6**.

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The screenshot shows a TestOut learning environment. At the top, there are three tabs: "Learning Platform | CompTIA" (active), "Building A", "Floor 1", "IT Administration", and "ITAdmin". On the right, there are buttons for "Exhibits" and "Check Answers". The main area has a yellow header bar with "TestOut" and navigation icons. Below this is a "Scenario" section with a speaker icon. The scenario text describes the user as a network technician for a small corporate network, having installed a Ruckus zone controller and wireless access points. The user needs to configure basic wireless network settings. To the left of the scenario is a callout box with an info icon containing instructions to access the Ruckus Zone Director console at <http://192.168.0.6> with the username "admin" and password "password". The task list below the scenario lists two items: creating a WLAN and connecting a laptop to it. The central part of the screen displays a web browser window for the "ZoneDirector CorpNet" login page. The URL in the address bar is <http://192.168.0.6/admin/login.jsp>. The login form has fields for "Admin Name" and "Password", and a "Login" button. The Ruckus logo is visible above the form. At the bottom of the screen is a Windows taskbar with a search bar, pinned icons for File Explorer, Edge, and File History, and system status icons.

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The screenshot shows a TestOut simulation interface. On the left, there's a sidebar with a "Scenario" section containing text about being a network technician for a small corporate network. Below it is a callout box with instructions to access the wireless controller console through Chrome on <http://192.168.0.6>. The main area displays the "ZoneDirector - CorpNet" dashboard. At the top, it shows the URL <http://192.168.0.6/admin/dashboard.jsp>. The dashboard has tabs for Dashboard, Monitor, Configure, and Administer. The "System Overview" section provides details about the device:

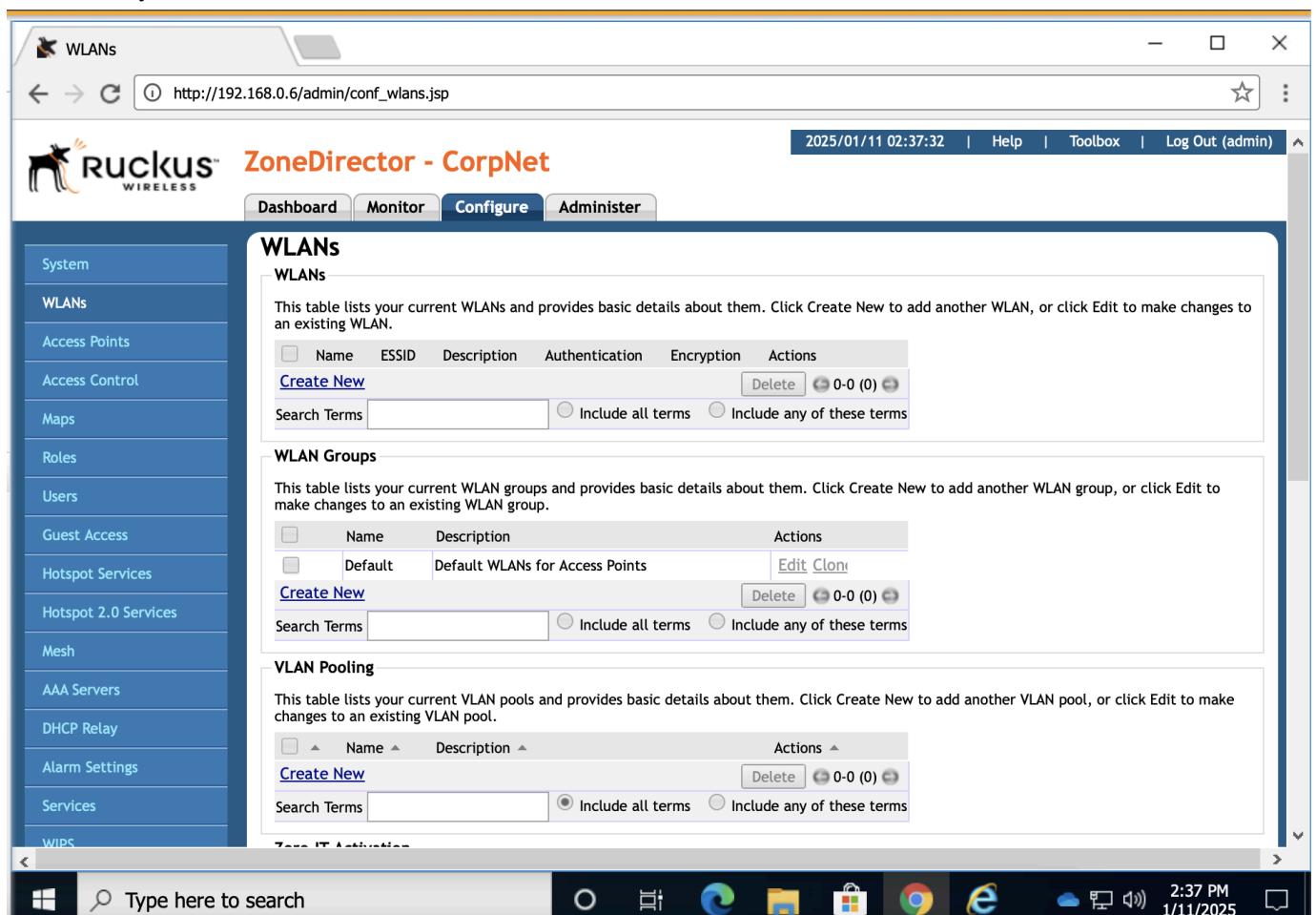
System Name	CorpNet Wireless
IP Address	
IPv6 Address	
MAC Address	
Uptime	1d 1h 1m
Model	ZD3025
Licensed APs	25
S/N	0112233445566
Version	9.8.0.0 build 1725

At the bottom of the dashboard, there's a "Add Widgets" button. The Windows taskbar at the bottom shows the date and time as 1/11/2025, 2:34 PM.

Now that I am logged in to the dashboard, I can complete the first task of this lab which is to create a new WLAN. This will setup a LAN exclusively for our access points to our Wireless LAN Controller, which can then route those upstream to the greater Corp Network.

Within Ruckus I will need to go to **Configure** on the top menu and head to **WLANs**.

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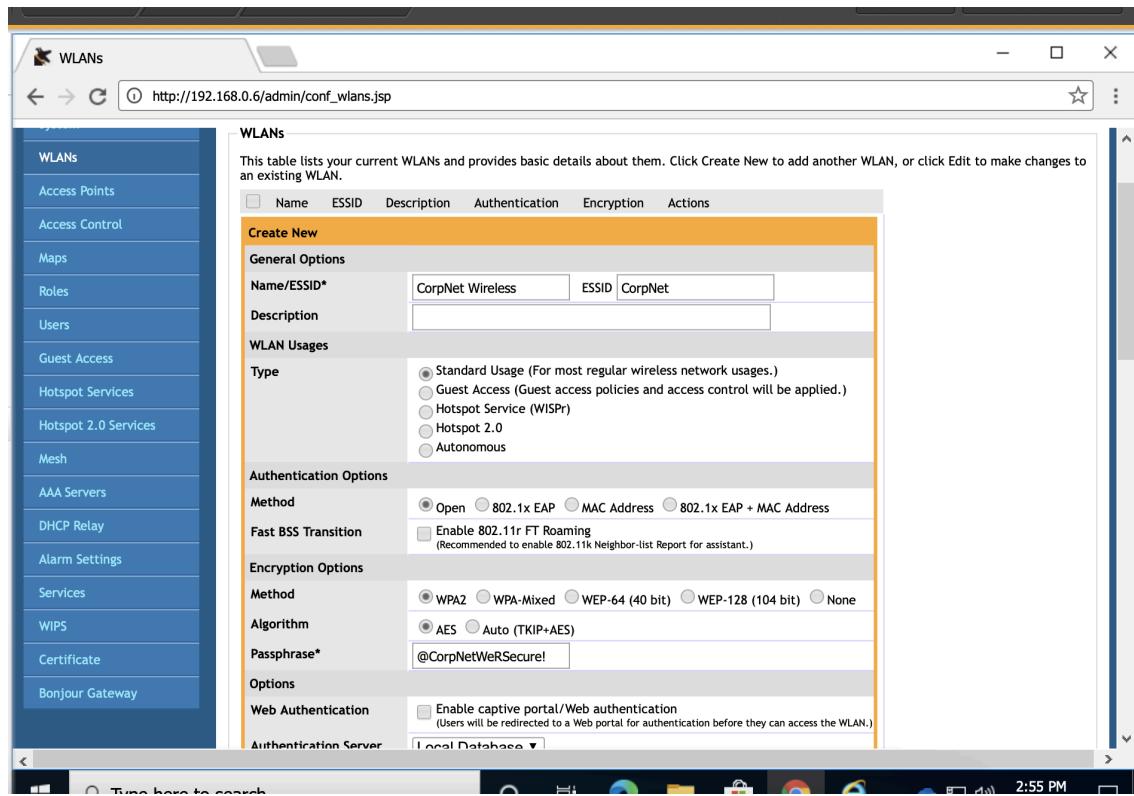


The screenshot shows the Ruckus ZoneDirector - CorpNet web interface. The left sidebar has a blue header "WLANS" and a list of system components: System, WLANS, Access Points, Access Control, Maps, Roles, Users, Guest Access, Hotspot Services, Hotspot 2.0 Services, Mesh, AAA Servers, DHCP Relay, Alarm Settings, Services, and WIPS. The main content area is titled "WLANS" and contains a table for managing WLANs. The table has columns: Name, ESSID, Description, Authentication, Encryption, and Actions. A "Create New" button is available. Below the table is a search bar and search term options. The next section, "WLAN Groups", also has a table with columns: Name, Description, and Actions. It lists a group named "Default" with a description "Default WLANs for Access Points". A "Create New" button is available. Below this is a search bar and search term options. The final section, "VLAN Pooling", has a table with columns: Name, Description, and Actions. A "Create New" button is available. Below this is a search bar and search term options. At the bottom of the interface is a Windows taskbar with icons for File Explorer, Mail, Photos, OneDrive, Google Chrome, Edge, and Task View.

On this page I'll select **Create New**, and enter in the information given to me by the lab instructions which are:

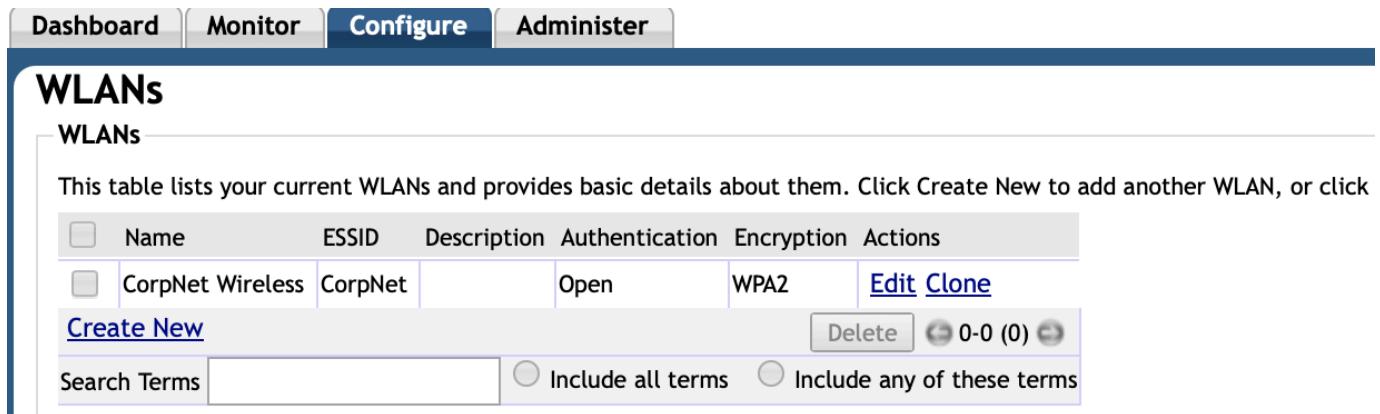
- Name: **CorpNet Wireless**
- ESSID: **CorpNet**
- Type: **Standard Usage**
- Authentication: **Open**
- Encryption: **WPA2**
- Encryption algorithm: **AES**
- Passphrase: **@CorpNetWeRSecure!**

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The screenshot shows a web-based management interface for configuring WLANs. On the left, a sidebar lists various network-related options like WLANS, Access Points, Access Control, Maps, Roles, Users, Guest Access, Hotspot Services, Hotspot 2.0 Services, Mesh, AAA Servers, DHCP Relay, Alarm Settings, Services, WIPS, Certificate, and Bonjour Gateway. The main panel is titled 'WLANS' and contains a table with columns: Name, ESSID, Description, Authentication, Encryption, and Actions. A 'Create New' button is at the top of the table. The 'General Options' section includes fields for 'Name/ESSID\*' (set to 'CorpNet Wireless') and 'Description'. The 'WLAN Usages' section has a 'Type' field with several radio button options, one of which is selected. The 'Authentication Options' section includes 'Method' (radio buttons for 'Open', '802.1x EAP', 'MAC Address', and '802.1x EAP + MAC Address'), 'Fast BSS Transition' (checkbox for 'Enable 802.11r FT Roaming'), and 'Encryption Options' (radio buttons for 'WPA2', 'WPA-Mixed', 'WEP-64 (40 bit)', 'WEP-128 (104 bit)', and 'None'). The 'Algorithm' section shows 'AES' selected. The 'Passphrase\*' field contains the value '@CorpNetWeRSecure!'. The 'Options' section includes a checkbox for 'Enable captive portal/Web authentication'. At the bottom of the table is a dropdown for 'Authentication Server' and a large orange 'OK' button.

After entering in those settings I can hit the **OK** button towards the bottom of the Orange square to apply them.

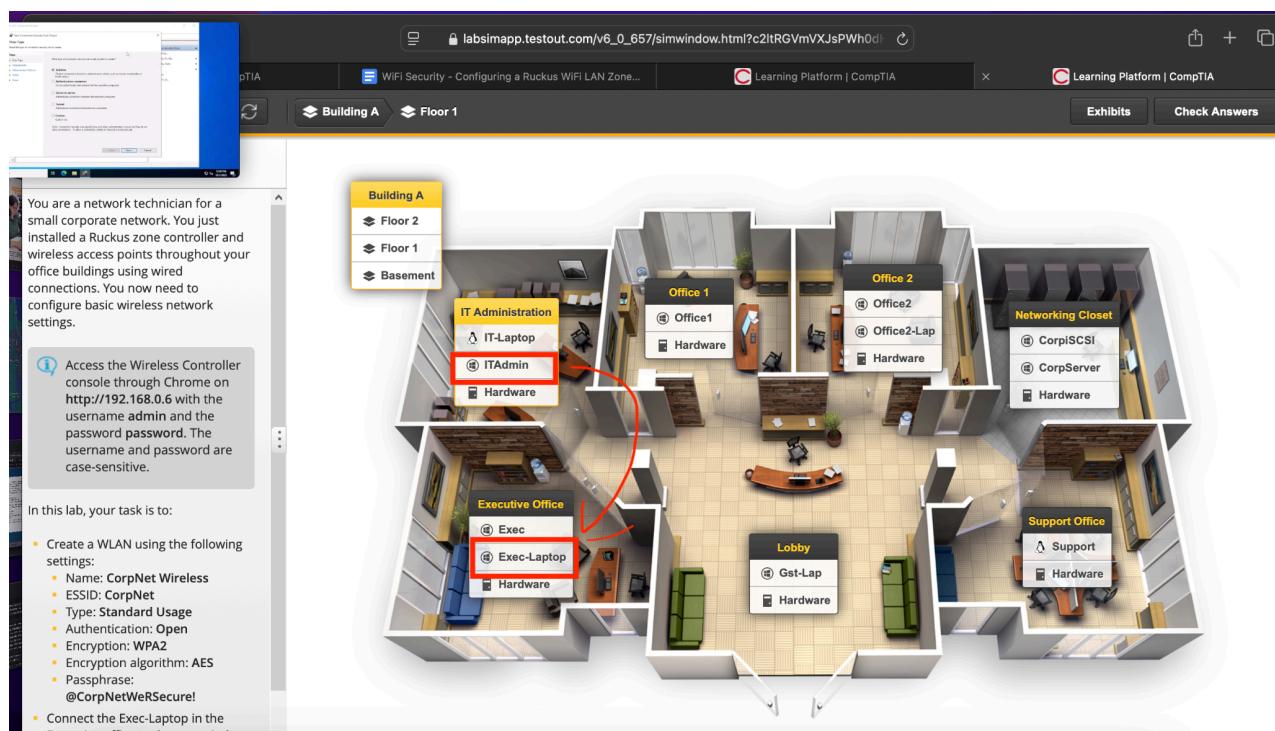


The screenshot shows the 'WLANS' configuration page after the new WLAN was created. The top navigation bar includes 'Dashboard', 'Monitor', 'Configure' (which is active), and 'Administer'. Below the navigation is a title 'WLANS' and a subtitle 'WLANS'. A descriptive text states: 'This table lists your current WLANs and provides basic details about them. Click Create New to add another WLAN, or click'. A table lists the existing WLANs with columns: Name, ESSID, Description, Authentication, Encryption, and Actions. One entry is shown: 'CorpNet Wireless' (Name), 'CorpNet' (ESSID), 'Open' (Authentication), 'WPA2' (Encryption), and 'Edit Clone' (Actions). Below the table is a 'Create New' button, a search bar labeled 'Search Terms', and two radio buttons for search terms: 'Include all terms' and 'Include any of these terms'.

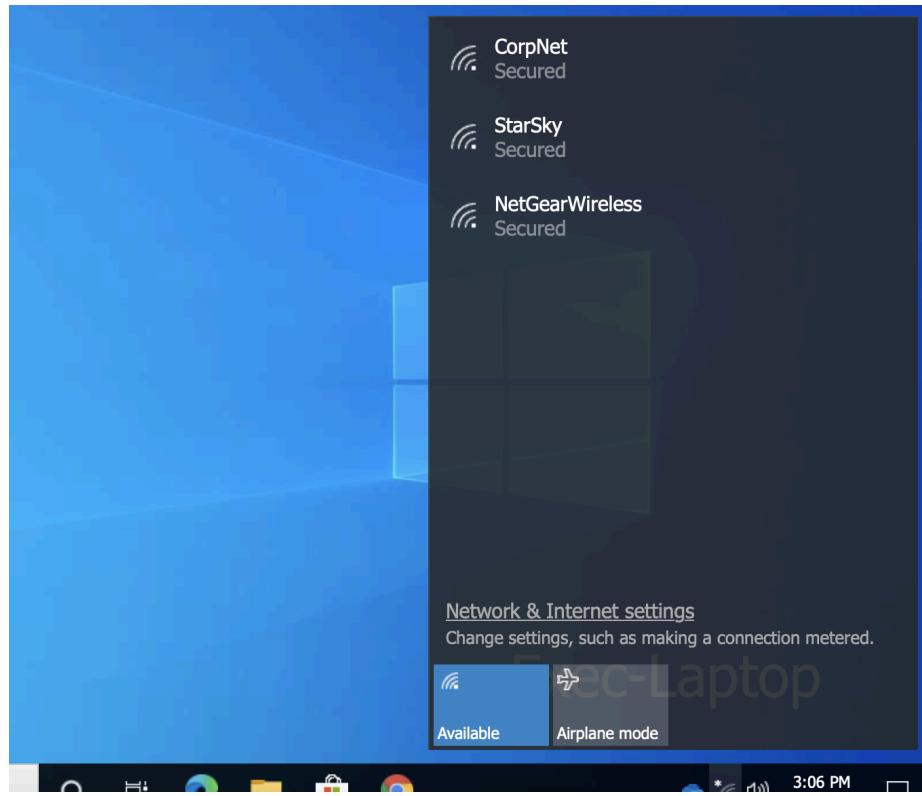
I can see the new WLAN I created in the list here! That means the WLAN was successfully created after entering in the settings.

The next part of the Lab is to join the new wireless network on the **Exec-Laptop** to test if the Ruckus Wireless LAN Controller created the new network. Currently I am on the **IT Admin** Windows 10 system so I'll need to "walk" over to that laptop (in the virtual lab environment).

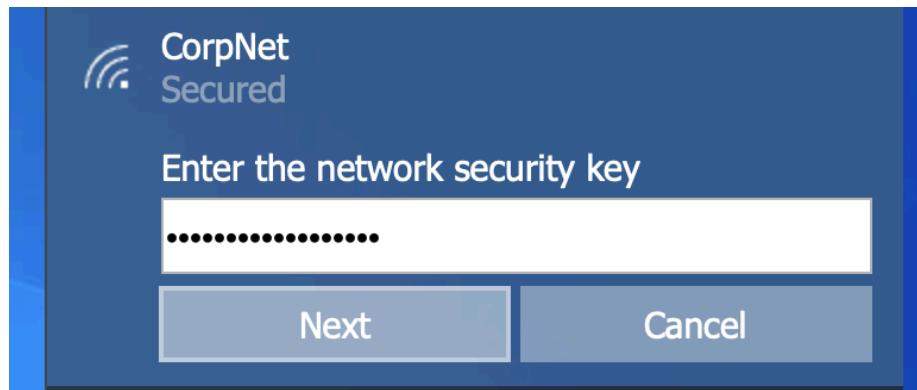
I'll do that now:



Now that I'm on the **Exec-Laptop** Windows 10 system , connecting to a WLAN is very easy and straightforward. It can be done at any time in the OS by accessing the taskbar in the lower right hand corner. Clicking the WiFi symbol bring sup all the SSIDs that are broadcasting.



As you can see, CorpNet is the strongest signal in the list. Our configuration on the Ruckus WLAN Controller was successfully applied, and our APs are accepting connections. I will click the **CorpNet** SSID to connect now by entering the PSK (Pre Shared Key passphrase):



After clicking **Next** I can see that that WIndows 10 has Successfully initiated and completed the WPA2 handshake. We are now connected to the WLAN I created on the Ruckus WLAN Controller!

Now that I have completed the following:

- **Create a WLAN using the following settings:**
  - **Name: CorpNet Wireless**
  - **ESSID: CorpNet**
  - **Type: Standard Usage**
  - **Authentication: Open**
  - **Encryption: WPA2**
  - **Encryption algorithm: AES**
  - **Passphrase: @CorpNetWeRSecure!**
- **Connect the Exec-Laptop in the Executive office to the new wireless network.**

I can now submit this lab for a score since I have completed all the tasks! This now concludes this Lab Report.

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