

Configure WiFi

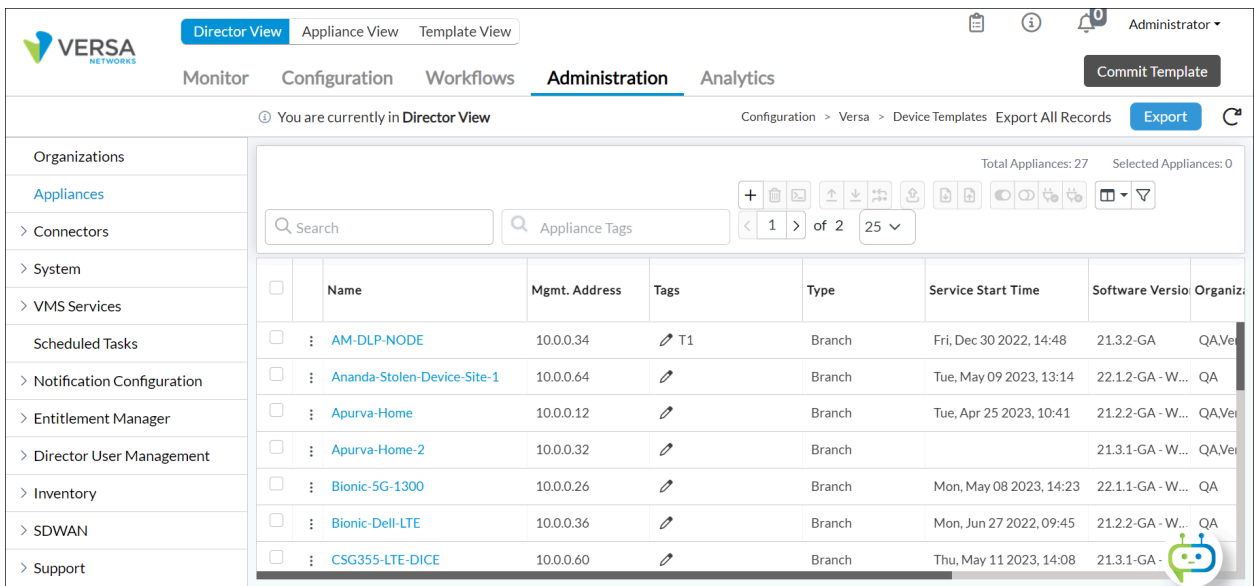
 For supported software information, click [here](#).

To configure WiFi and a WiFi access point on a Versa Operating System™ (VOS™) device, you do the following:

- Configure the WiFi interface
- Configure the WLAN to activate the access point

Configure a WiFi Interface

1. In Director view:
 - a. Select the Administration tab in the top menu bar.
 - b. Select Appliances in the left menu bar.
 - c. Select an appliance from the main panel. The view changes to Appliance view.



The screenshot shows the Versa Director web interface. The top navigation bar includes tabs for Director View, Appliance View, and Template View. The left sidebar contains a menu with options like Organizations, Appliances, Connectors, System, VMS Services, Scheduled Tasks, Notification Configuration, Entitlement Manager, Director User Management, Inventory, SDWAN, and Support. The main panel displays the 'Administration' tab, showing a list of appliances. The list includes columns for Name, Mgmt. Address, Tags, Type, Service Start Time, Software Version, and Organization. The following table represents the data shown in the screenshot:

	Name	Mgmt. Address	Tags	Type	Service Start Time	Software Version	Organization
<input type="checkbox"/>	AM-DLP-NODE	10.0.0.34	T1	Branch	Fri, Dec 30 2022, 14:48	21.3.2-GA	QA,Ver
<input type="checkbox"/>	Ananda-Stolen-Device-Site-1	10.0.0.64		Branch	Tue, May 09 2023, 13:14	22.1.2-GA - W...	QA
<input type="checkbox"/>	Apurva-Home	10.0.0.12		Branch	Tue, Apr 25 2023, 10:41	21.2.2-GA - W...	QA,Ver
<input type="checkbox"/>	Apurva-Home-2	10.0.0.32		Branch		21.3.1-GA - W...	QA,Ver
<input type="checkbox"/>	Bionic-5G-1300	10.0.0.26		Branch	Mon, May 08 2023, 14:23	22.1.1-GA - W...	QA
<input type="checkbox"/>	Bionic-Dell-LTE	10.0.0.36		Branch	Mon, Jun 27 2022, 09:45	21.2.2-GA - W...	QA
<input type="checkbox"/>	CSG355-LTE-DICE	10.0.0.60		Branch	Thu, May 11 2023, 14:08	21.3.1-GA -	

2. Select the Configuration tab from the top menu bar.
3. Select Networking > Interfaces from the left menu bar. The Interfaces dashboard displays.
4. Select the WiFi tab from the horizontal menu in the main pane, and then click the + Add icon to create a new WiFi

interface.

The screenshot shows the Versa Networks Director interface in the 'Appliance View' for configuration. The left sidebar lists various configuration categories under 'Networking', with 'Interfaces' selected. The main panel displays the 'Wi-Fi' configuration tab, which is currently empty, showing a message 'No Wi-Fi Added' and an 'Add' button. The top navigation bar includes tabs for 'Director View', 'Appliance View', and 'Template View', and a 'Commit Template' button. The top right shows the user 'Administrator' and a 'Build' button with a 'SYNC: UNKNOWN' status.

Director View | **Appliance View** | Template View

Monitor | Analytics | **Configuration** | Administration

Appliance: AM-DLP-NODE | You are currently in Appliance View | Build | SYNC: UNKNOWN

Networking | Services | Objects & Connectors | Others

Interfaces

- WLAN
- T1/E1 Auth
- Networks
- Virtual Wires
- Global Routers
- Virtual Routers
- Virtual Switches
- > IP-SLA
- TWAMP

VNI | AE | ENet | IRB | T1/E1 | Tunnel | DSL | WWAN | **Wi-Fi** | uCPE | Loopback | Fabric | Management

Search

Name	Description	Interfaces	IP Address/Prefix	Encryption Protocol	Security Mode
No Wi-Fi Added					

Add

5. Click the + Add icon. In the Add WiFi popup window, enter information for the following fields.

Add Wi-Fi

✕

Interface *

--Select--

☐ Disable

Description

Tags

MTU

72...9000

☐ Virtual Wire
☐ Promiscuous

Bandwidth

Access Point

Uplink (Kbps)

1...10000000

Downlink (Kbps)

1...10000000

Subinterfaces

+

	Unit	VLAN ID	IP Address/Mask		DHCPv4	DHCPv6	MTU
			IPv4	IPv6			
<input type="checkbox"/>	0						

OK

Cancel

Field	Description
Interface	Select the Ethernet interface on which to configure WiFi.
Disable	Click to disable the WiFi configuration on the interface.
Description	Enter a text description of the interfaces.
Tags	Enter a keyword or phrase that allows you to filter the WiFi interface. This is useful when you have many profiles and want to view those that are tagged with a particular keyword.
MTU	Enter a value for the maximum transmission unit (MTU), which is the size, in bytes, of the largest

https://docs.versa-networks.com/Secure_SD-WAN/01_Configuration_from_Director/Common_Configuration/Configure_WiFi

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Field	Description
	protocol data packet that the port can receive or transmit.
Virtual Wire	Click to enable virtual wire on the interface.
Promiscuous	Click to enable promiscuous mode on the interface so that the interface forwards all traffic it receives.
Bandwidth Tab	
◦ Autoconfiguration	Click to disable autoconfiguration. Then, enter the URI for the WiFi interface.
◦ URI	If you disable autoconfiguration, enter the Uniform Resource Identifier (URI) for the WiFi interface.
◦ Uplink	Enter the data uplink limit, in Kbps. The default depends on the type of Ethernet. For example, a 1-GB Ethernet interface supports a maximum of 1 GB of data.
◦ Downlink	Enter the data downlink limit, in Kbps. The default depends on the type of Ethernet. For example, a 1-GB Ethernet interface supports a maximum of 1 GB of data.
◦ Subinterfaces	Click to create VLAN based subinterface. For more information, see Configure Interfaces .

6. Select the Access Point tab, and enter information for the following fields.

Bandwidth
Access Point

☒ Broadcast SSID
☐ AP Isolation

SSID Name *

Encryption Protocol
Auto

Maximum Clients
1...255

Timeout Interval Of Client

Security Mode *
none

Frequency *
--Select--

Radius IP

Radius Port
1812

Radius Shared Secret

OK
Cancel

Field	Description
Broadcast SSID	Click to allow the access point to broadcast its SSID to nearby devices.
AP Isolation	This option is not supported.
SSID Name	Enter the Service Set Identifier (SSID) for the network. The SSID name can be from 1 through 32 characters, and it can contain alphanumeric and special characters.
Encryption Protocol	Select the encryption protocol to use to access the AP: <ul style="list-style-type: none"> ◦ CCMP ◦ TKIP
Maximum Clients	Enter the maximum number of clients that can connect to the AP.
Timeout Interval of Client	Enter the timeout interval for the client to connect to the AP.
Security Mode	Select the security mode to use to transmit data from the AP:

Field	Description
	<ul style="list-style-type: none"> ◦ wep-auto ◦ wep-open ◦ wep-shared-key ◦ we-enterprise ◦ wep-psk ◦ wpa/wpa2-auto-enterprise ◦ wpa/wpa2-auto-psk ◦ wpa2-enterprise ◦ wpa2-psk
Radius IP	For WPA-enterprise authentication, enter the IP address of the RADIUS server to use for authentication.
Radius Port	For WPA-enterprise authentication, enter the port number of the RADIUS server to use for authentication.
Radius Shared Secret	Enter the password for the RADIUS server.

5. Click OK.

If you are using WPA2-enterprise authentication for users connecting, via WiFi, to a RADIUS server, the following is a sample configuration for the RADIUS server:

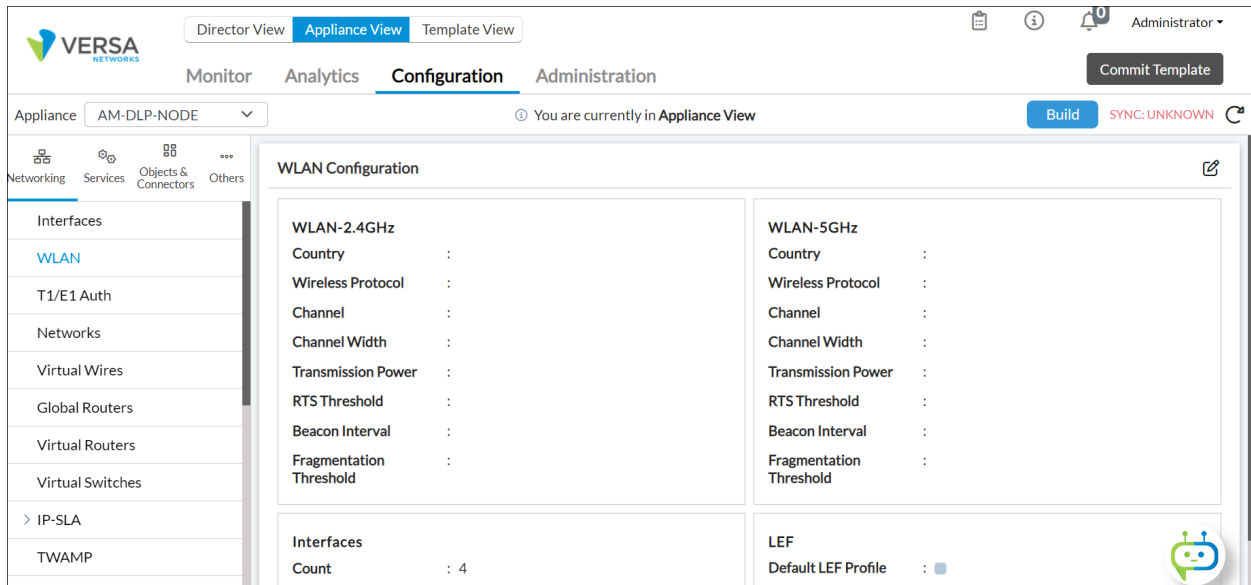
```
admin:/usr/local/etc/raddb$ sudo cat eap.conf | grep eap
## eap.conf -- Configuration for EAP types (PEAP, TTLS, etc.)
# EAP types NOT listed here may be supported via the "eap2" module.
eap {
    default_eap_type = peap
    ignore_unknown_eap_types = no
    private_key_file = /usr/local/etc/raddb/eap-user1/newkey.pem
    certificate_file = /usr/local/etc/raddb/eap-user1/newcert.pem
    CA_file = /usr/local/etc/raddb/eap-user1/cacert.pem
    dh_file = /usr/local/etc/raddb/eap-user1/dh
    random_file = /usr/local/etc/raddb/eap-user1/random
    peap {
        default_eap_type = mschapv2
    }
}


admin:/usr/local/etc/raddb$ sudo cat users | grep user1
User1LteWifi Cleartext-Password := "versa123"

admin:/usr/local/etc/raddb$ sudo cat clients.conf
client LteWifiuser1 {
    ipaddr = 10.128.0.21
    secret = versa123
}
```

Configure the WLAN

1. In Director view, select the Configuration tab in the top menu bar.
2. Select Networking > WLAN in the left menu bar to view the WLAN and interfaces configuration details.



3. Click the  Edit icon in the WLAN configuration section to modify the WLAN configuration. In the Edit WLAN Configuration popup window, enter information for the following fields, in both the 2.4 Frequency tab (for b,g and n radios) and the 5 Frequency tab (for n and ac radios).

The screenshot shows the 'Edit WLAN Configuration' popup window. It has a title bar with a close button (X). Below the title, there are tabs: '2.4 Freq' (selected), '5 Freq', 'Interfaces', and 'LEF'. The form contains several input fields: 'Country' and 'Wireless Protocol' are dropdown menus with '--Select--' as the current value. 'Channel' is a dropdown menu with '--Select--'. 'Channel Width' is a dropdown menu with '40MHz'. 'Transmission Power' is a dropdown menu with '--Select--'. 'Beacon Interval' is a text input field with '20...1000'. 'RTS Threshold' is a text input field with '1...2347'. 'Fragmentation Threshold' is a text input field with '256...2346'. At the bottom right, there are 'OK' and 'Cancel' buttons.

Field	Description
Country	Select the country where the device is located.
Wireless Protocol	Select the wireless protocol range for the radios.
Channel	Select the WLAN channel for the wireless protocol range.
Channel Width	Select the channel width.
Transmission Power	<p>Select the transmission power. Based on the wireless protocol range and channel, each country applies its own power levels. The power can be:</p> <ul style="list-style-type: none"> ◦ High ◦ Medium ◦ Low
RTS Threshold	<p>Enter the request to Send (RTS) threshold for the access point, in bytes. The RTS threshold is the maximum size of the data packet before it is fragmented into multiple packets.</p> <p><i>Range:</i> 1 through 2347 bytes</p> <p><i>Default:</i> None</p>
Beacon Interval	<p>Enter a value for the beacon frequency interval, in milliseconds. A beacon is a packet broadcast from the router to synchronize the wireless network.</p> <p><i>Range:</i> 20 through 1000 milliseconds</p> <p><i>Default:</i> None</p>
Fragmentation Threshold	<p>Enter the fragmentation threshold limit, in bytes. This value limits the maximum frame size and reduces the time required to transmit a frame.</p> <p><i>Range:</i> 256 through 2346 bytes</p> <p><i>Default:</i> None</p>

4. (For Releases 21.2.1 and later.) Click Interfaces tab, and enter the number of WiFi interfaces to configure. You can configure 1 through 8 interfaces, and the default is 4 interfaces. If you change the WiFi interface count value, then you must do a service restart.

Edit WLAN Configuration [X]

2.4 Freq 5 Freq Interfaces LEF

Count

4

OK Cancel

5. Click OK.
6. Click LEF tab, and click Default LEF Profile to use the default LEF profile.

Edit WLAN Configuration [X]

2.4 Freq 5 Freq Interfaces LEF

☐ Default LEF Profile

OK Cancel

7. Click OK.

Supported Software Information

Releases 20.2 and later support all content described in this article, except:

- Releases 21.2.1 and later support configuring the WiFi interfaces count.

Additional Information

[Configure Interfaces](#)

[Monitor Devices in Customer Organizations](#)